US Chartbook

v0.1.5; Last updated: August 7, 2025

Open source notes on the United States economy

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About the Chartbook

The US chartbook is a collection of notes describing economic and social developments in the United States since 1989. The notes are grouped into sections, each covering one macroeconomic sector or one major aspect of the economy. Each section contains charts, tables, descriptive text, and links to relevant materials.

The chartbook is kept up to date by connecting to public data sources. The latest version of the chartbook is located at uschartbook.com, and the source code is available on GitHub.

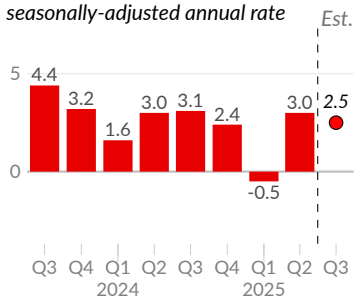
Ultimately, the chartbook aims to be useful for macroeconomic analysis, to inspire researchers and students, and to facilitate research and exploration.

Key Economic Indicators

The following six charts summarize recent economic developments. Each topic: output, prices, productivity, employment, wage growth, and job growth, is covered in more depth in the chartbook. Click the chart icon to go to the relevant chartbook section.

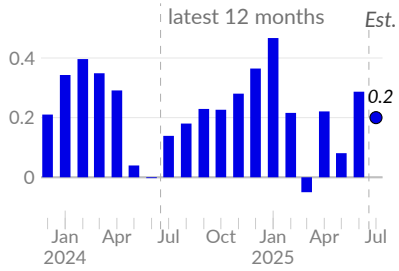
Real GDP Growth

seasonally-adjusted annual rate



Consumer Price Index

percent change from previous month

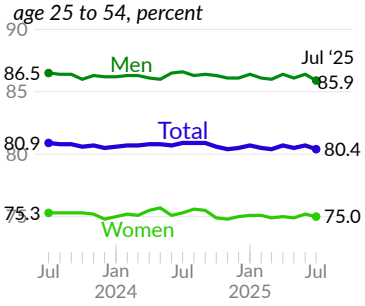


Productivity Growth

total economy, annual rate

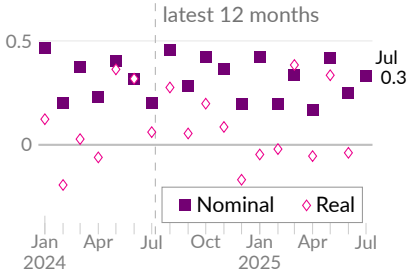
Employment Rate

age 25 to 54, percent



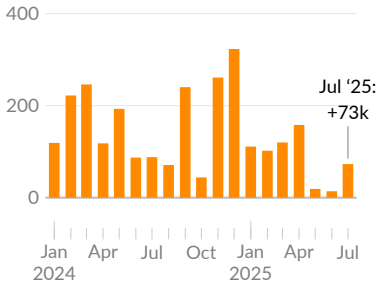
Average Hourly Earnings

percent change from previous month



Private Nonfarm Payrolls

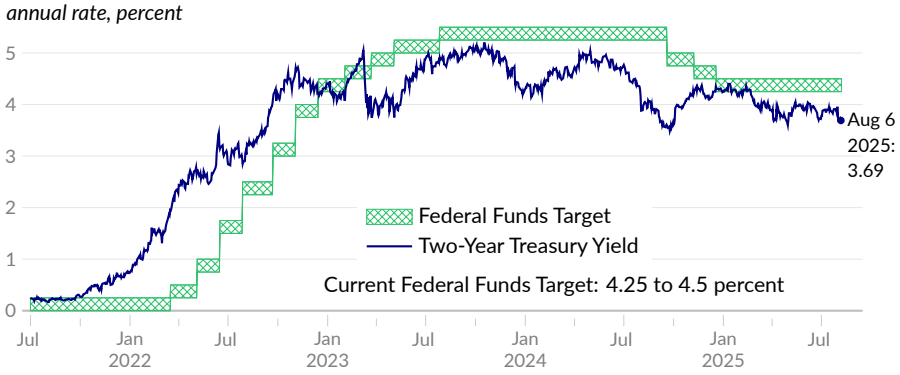
change from previous month, thousands



Additionally, interest rates offer a high-frequency summary of expected inflation, output, and risk. Comparing the two-year treasury yield to the federal funds rate suggests interest rates will decrease in the near term.

Short-Term Interest Rates

annual rate, percent



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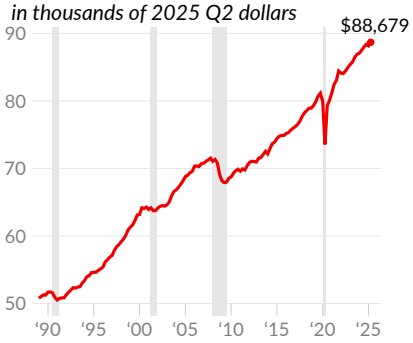
Overall Economic Activity

This analysis of the United States economy begins with the most popular measure of overall economic activity, gross domestic product (GDP). GDP is the value of goods and services produced in the US in a given time period. According to the Bureau of Economic Analysis, the seasonally-adjusted annualized US GDP was $30,331 billion in the second quarter of 2025, compared to an inflation-adjusted equivalent of $26,873 billion in 2019 Q4, and $11,995 billion in the first quarter of 1989.

The US population is growing by about six-tenths of a percent per year. GDP per capita (see —), adjusted for inflation to 2025 Q2 dollars, had increased to $81,138 in 2019 Q4 from $49,122 in 1989 Q1, and is currently $88,679, as of the second quarter of 2025.

GDP per capita
in thousands of 2025 Q2 dollars

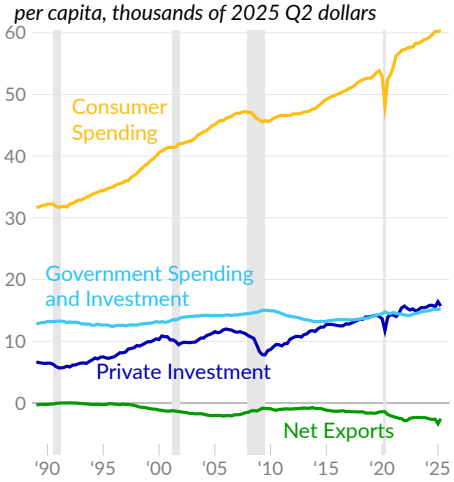


Source: Bureau of Economic Analysis

Types of Economic Activity

The expenditures approach approach to calculating GDP starts with the sum of major types of domestic spending on finished goods and services: consumer spending, private investment, and government spending and investment. To capture only domestic production, foreign spending on US produced goods and services is added, while imports (spending on non-US-produced goods and services) are subtracted.

Expenditures, by Type
per capita, thousands of 2025 Q2 dollars



Source: Bureau of Economic Analysis

Much of the increase in GDP over the past 30 years comes from consumer spending. Consumer spending (see —) is equivalent to $60,347 per person in 2025 Q2, a price-adjusted increase of $28,652 since 1989.

Gross private domestic investment (see —) is equivalent to $15,709 per person in 2025 Q2. Government spending and investment (see —) totals $15,173 per person. The trade deficit, equivalent to $2,551 per person, is subtracted, to capture only domestic production (see —).

Each of these categories of spending is discussed in more detail in subsequent sections of the chartbook.

Expenditures, by Type
per capita, seasonally-adjusted annualized rate, 2025 Q2 dollars

	2025 Q2	2025 Q1	2019 Q4	2000 Q1	1989 Q1
— Gross Domestic Product	$88,679	88,147	81,139	63,178	50,773
— Consumer Spending	60,347	60,210	53,839	40,568	31,695
— Gross Private Domestic Investment	15,709	16,411	14,019	10,293	6,626
— Government Spending & Investment	15,173	15,176	14,334	13,077	12,772
— Net Exports	-2,551	-3,382	-1,442	-1,151	-329
Exports	9,478	9,533	9,229	5,617	2,933
Less: Imports	12,029	13,180	10,333	6,651	3,112

Source: Bureau of Economic Analysis

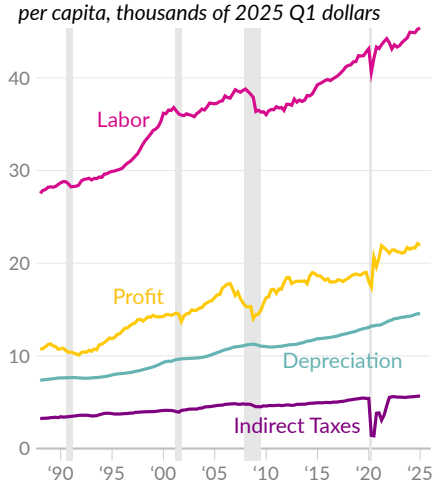
The **income approach** calculates total economic activity as the sum of production income and certain production expenses. Production income is the payment for labor and capital. Labor income, or "compensation of employees" in the national accounts, includes wages and salaries as well supplements such as employer-paid health insurance premiums and retirement account contributions. Capital income, or profit, is listed as the "net operating surplus" in national accounts and includes interest payments, rental profits, business proprietor profits, and corporate profits.

Not all revenue from production provides income directly to people. Tariffs, sales tax, property tax, and licensing fees are indirect business taxes that are not levied directly on income but considered part of the cost of production. Government subsidies, which are income payments for production that did not occur, are subtracted from income measures of production. Lastly, replacing and maintaining buildings and equipment is a growing portion of production costs. This depreciation expense is recorded as "consumption of fixed capital" in national accounts.

The Bureau of Economic Analysis report seasonally-adjusted annualized gross domestic income (GDI) of $29,886 billion in 2025 Q1, which is $87,490 per capita. Net domestic income (NDI), equal to GDI less depreciation, is $24,922 billion in 2025 Q1, or $72,959 per capita.

Income, by Type

per capita, thousands of 2025 Q1 dollars



Source: Bureau of Economic Analysis

Labor receives 62.2 percent of NDI in 2025 Q1. Gross labor income per capita is $45,369 in 2025 Q1 (see —) and $42,804 in 2019 Q4, on an annualized, seasonally-adjusted, and inflation-adjusted basis.

Profits comprise 30.1 percent of NDI in 2025 Q1. Profits per person total $21,933 in 2025 Q1 (see —) and $19,019 in 2019 Q4, following the same adjustments. Indirect taxes less subsidies per capita total $5,657 in 2025 Q1 (see —) and $5,410 in 2019 Q4.

Lastly, depreciation per capita is $14,531 in 2025 Q1 (see —) and $12,991 in 2019 Q4. Depreciation makes up 16.6 percent of GDI in 2025 Q1.

Income, by Type

per capita, seasonally-adjusted annualized rate, 2025 Q1 dollars

	2025 Q1	2024 Q1	2019 Q4	2012 Q1	2000 Q1	1989 Q1
Gross Domestic Income	$87,490	86,249	80,225	71,426	63,834	50,364
— Labor Income	45,369	44,922	42,804	37,148	36,181	28,237
Wages and Salaries	37,439	37,136	34,930	30,037	29,910	23,302
Supplements	7,930	7,786	7,874	7,110	6,271	4,934
— Profit	21,933	21,489	19,019	18,432	14,251	11,297
— Indirect Taxes	5,657	5,572	5,410	4,707	4,107	3,328
Taxes on Production & Imports	5,964	5,865	5,715	4,963	4,391	3,585
Less: Subsidies	307	293	304	256	283	256
— Depreciation	14,531	14,267	12,991	11,140	9,296	7,503

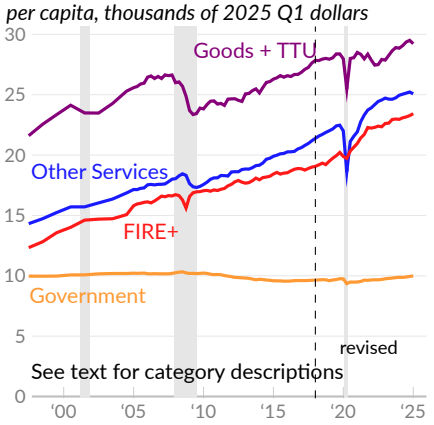
Source: Bureau of Economic Analysis

The **production approach** to GDP identifies how individual industries contribute to domestic production by calculating the value added by each industry during the production process. The value added by an industry or sector group is its sales or gross output minus any intermediate inputs used in production. The Bureau of Economic Analysis report GDP by industry, which is summarized briefly in this subsection by grouping the various private industries into broad categories.

The first category combines private goods producing industries: agriculture, forestry, fishing, and hunting (0.8 percent of GDP in 2025 Q1); mining (1.4 percent of GDP); construction (4.5 percent); and manufacturing (9.7 percent), with trade, transportation, and utilities (TTU, combined 17.0 percent of GDP). The second category is finance, insurance, and real estate (FIRE, 21.3 percent of GDP in 2025 Q1) combined with the information industry (5.4 percent of GDP), labeled as FIRE+.

The remaining private services-providing industries include: professional and business services (13.3 percent of GDP in 2025 Q1); education, health care, and social services (8.8 percent of GDP); and arts, entertainment, and recreation (4.4 percent). Separately, public-sector value added in production, at the federal, state, and local levels, is captured by the government category (11.4 percent of GDP).

Production, by Type
per capita, thousands of 2025 Q1 dollars



Source: Bureau of Economic Analysis

In 2025 Q1, private goods-producing industries and the trade, transportation, and utilities industries add $29,224 per person in domestic production, on an annualized basis, compared to $28,380 in 2019 Q4 (see —). Private finance, insurance, real estate, and information industry services add $23,431 in combined value, per capita in 2025 Q1 and $20,218 in 2019 Q4 (see —).

All other private services-producing industries combined value added per person is $25,074 in 2025 Q1 and $22,476 in 2019 Q4 (see —). Government value added is $9,985 per person in 2025 Q1 and $9,759 in 2019 Q4 (see —).

Production, by Type
per capita, annualized, 2025 Q1 dollars

	2025 Q1	2024 Q4	2019 Q4	2005 Q1	1997 (A)
— Goods and TTU	$29,224	29,505	28,380	25,585	21,604
Manufacturing	8,486	8,497	8,114	7,588	6,076
Construction	3,930	3,941	4,101	4,933	4,595
Retail Trade	5,522	5,573	4,951	4,182	3,293
— FIRE+	23,431	23,269	20,218	15,807	12,333
Finance & Insurance	6,580	6,701	6,698	6,142	4,561
Information	4,722	4,607	3,387	1,616	984
— Other Services	25,074	25,225	22,476	17,148	14,318
Education & Healthcare	7,706	7,695	6,797	5,105	4,387
Professional & Business	11,625	11,648	9,374	6,623	5,344
— Government	9,985	9,948	9,759	10,215	9,969

Source: Bureau of Economic Analysis

Household Inputs to Production

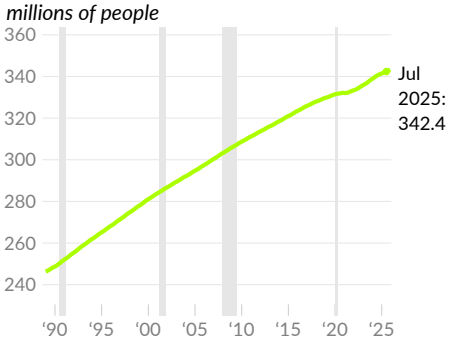
It is useful to consider household inputs when analyzing economic output. For example, is the population growing? Are more people working? Are people working more hours? Is the economy more productive in its use of labor? These household inputs are summarized below and covered in more depth in subsequent chartbook sections.

First, the US **population** is 342 million, as of July 2025 (see —), an increase of 96 million since 1989. Since 1989, the population has grown at an average annual rate of 0.9 percent; the current rate is around 0.6 percent. To maintain a constant standard of living, real GDP would need to increase by the same amount.

Next, the **employment rate** (see —) measures the share of the population that is working. The rate climbs during economic expansions and falls during recessions. Separately, population aging has gradually reduced the potential employment rate. The current rate is 0.8 percentage point above the 30-year average.

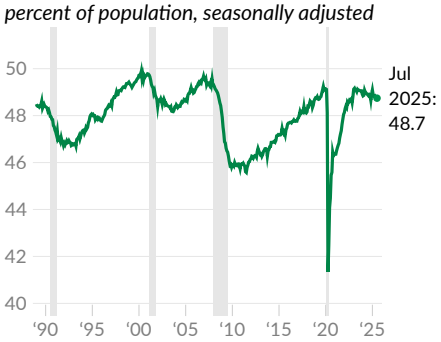
Trends in the length of the **average workweek** (see —) are more complicated. Economic output is typically correlated with work hours. However, as workers become more productive, they may increase their leisure time, resulting in shorter workweeks. In July 2025, the average workweek is 36.8 hours.

Population
millions of people



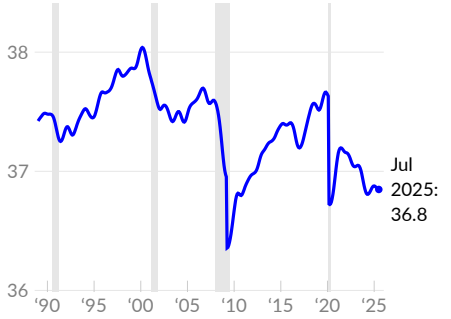
Source: BEA, Census

Employment Rate
percent of population, seasonally adjusted



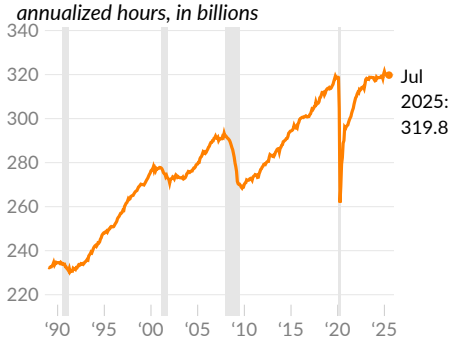
Source: CPS Microdata

Average Workweek
average hours per worker per week, trend



Source: CPS Microdata

Total Hours Worked
annualized hours, in billions



Source: Author's Calculations

Combining the population, employment rate, and average workweek, we can estimate the **total hours worked** (see —). Total hours worked represent all households' labor dedicated to production; the total hours of labor that create GDP. Since 1989, total hours worked have increased at an average annualized rate of 1.2 percent. Since the pre-pandemic peak in October 2019, hours worked have increased by a total of 0.1 percent.

After estimating household inputs to production as the total hours worked, we can calculate the **productivity of labor**. The productivity of labor is the relationship between household inputs to production (labor, or hours of work) and economic output (GDP). Specifically, labor productivity is calculated as real GDP divided by hours of work.

An increase in labor productivity means more output is produced per hour of work. As such, labor productivity is major determinant of income levels and quality of life. Labor productivity is discussed in more depth in the labor markets section, but this subsection provides an estimate that is useful for examining the connection between GDP and labor.

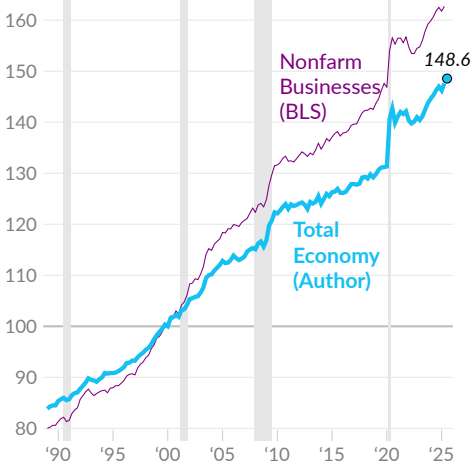
Dividing GDP by the previously calculated total hours worked yields an estimate for labor productivity (see —) for the entire economy that is reasonably methodologically consistent with the official estimate of nonfarm business labor productivity (see —). Nonfarm businesses are about three-quarters of the economy and exclude general government, non-profits, and household services.

Labor productivity has increased substantially over the long term. From 1989 to 1999, labor productivity for the total economy increased 17.2 percent. From 1999 to 2009, labor productivity increased 18.9 percent, and from 2009 to 2019, labor productivity increased 11.1 percent.

From 1989 to 2019, total economy productivity growth averaged 1.5 percent per year; GDP growth averaged 2.5 percent per year and work hours increased one percent per year. Since 2019, total economy labor productivity growth averages 2.2 percent per year, with average GDP growth of 2.2 percent and virtually no change in work hours.

Labor Productivity

Real GDP per hour of work, index, 2000=100



Source: BLS, Author's Calculations

More-recent data show annualized total economy productivity growth of 3.8 percent in 2025 Q2. The estimate for 2025 Q3 (see ●), based on the Federal Reserve Bank of Atlanta GDPNow, suggests annualized productivity growth of 2.6 percent.

Household Inputs to Production

index, January 2000=100, or as noted

	2025 Q3 Est.	2025 Q2	2025 Q1	2024 Q3	2019 Q4	2014	1989
— Labor Productivity (index)	*148.6*	147.6	146.2	146.3	131.2	125.1	84.3
Real GDP (index)	*171.7*	170.7	169.4	168.6	151.2	131.6	71.1
Total Hours Worked (index)	*115.6*	115.6	115.9	115.3	115.3	105.2	84.4
Population (millions)	*342.6*	342.0	341.6	340.6	331.2	319.6	247.4
Employment Rate (percent)	*48.7*	48.8	48.9	48.9	49.2	46.9	48.4
Average Workweek (hours)	*36.8*	36.9	36.9	36.8	37.7	37.3	37.5
Labor Productivity Growth (percent)	*2.6*	3.8	-2.0	2.6	0.2	0.0	1.1

Source: Bureau of Economic Analysis, Federal Reserve Bank of Atlanta, and Author's Calculations. Growth is the quarterly annualized rate.

Economic Growth

Economists are particularly concerned with economic growth, measured as changes in the level of economic activity. This subsection discusses economic growth, recessions, and their contributors.

Real GDP Growth

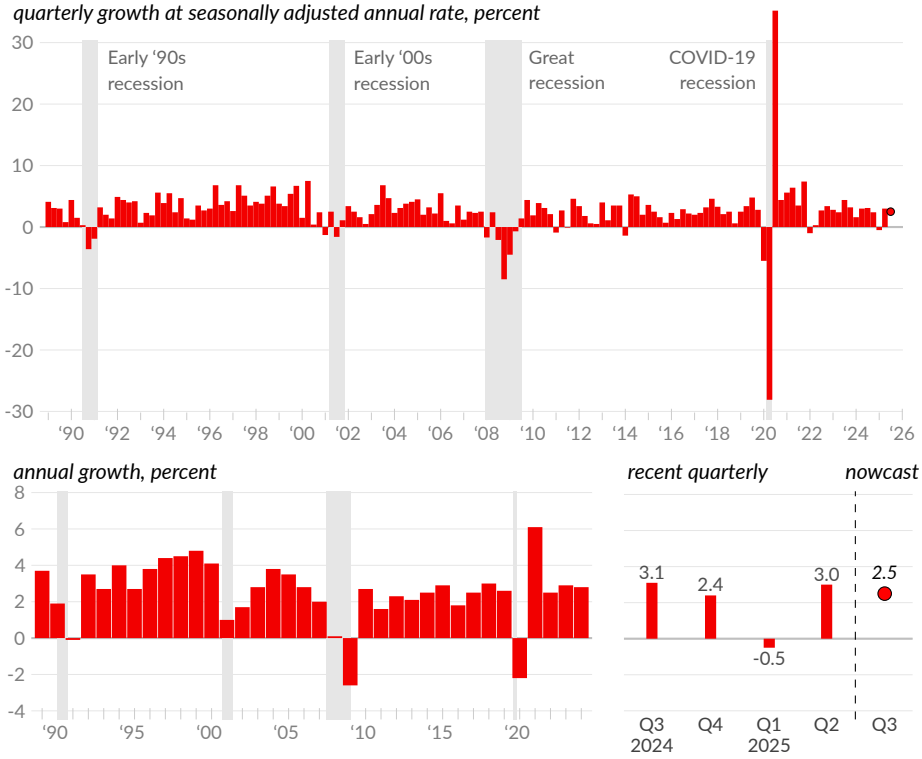
Real GDP growth measures changes in economic activity. As seen in the previous subsection, real GDP has increased steadily over the long-term. Since 1989, growth averages 2.5 percent per year (see ■). Growth rates were relatively high during the mid- to late-1990s, averaging 3.9 percent from 1993 to 2000.

In the 2000s, the housing bubble boosted GDP but then collapsed, leading to average growth of only 1.9 percent from 2001 to 2013. Growth was slightly stronger from 2014 to 2019, averaging 2.8 percent per year.

In 2020, COVID-19 caused an economic shutdown, followed by monetary and fiscal stimulus, resulting in large swings in GDP. Annualized real GDP decreased 28.1 percent in Q2, and increased by 35.2 percent in Q3, by far the largest changes in recent history. Since 2019 Q4, real GDP has grown at an average annual rate of 2.2 percent.

Real Gross Domestic Product Growth

quarterly growth at seasonally adjusted annual rate, percent



Source: Bureau of Economic Analysis, Federal Reserve Bank of Atlanta

The bottom-left chart shows annual growth, to make trends more visible. The bottom-right chart shows the most-recent four quarters and the estimate for the current quarter. In the **latest data**, covering the second quarter of 2025, real GDP increased at an annual rate of three percent, compared to a decrease of 0.5 percent in Q1, and an increase of 2.4 percent in 2024 Q4.

The Federal Reserve Bank of Atlanta uses available economic indicators to **nowcast** the current growth rate. The latest nowcast for 2025 Q3 is 2.5 percent, as of August 5, 2025 (see ●).

Recessions

The long-term pattern in economic growth is often described as the business cycle. Typically, periods of economic growth lasting 7–12 years are interrupted by an **economic recession**, a period where economic activity decreases. The National Bureau of Economic Research (NBER) identifies four recessions since 1989.

During the early 1990s recession, output contracted for eight months and unemployment was higher than its pre-recession average for 63 months. The drop in output was smaller during the early 2000s recession, but unemployment rates took almost 16 years to recover.

The 2008–2009 great recession, caused by the collapse of a housing bubble, was very severe. The recession lasted 18 months, with higher rates of unemployment lasting 89 months. The most-recent COVID-19 recession was extremely severe and also extremely short-lived, lasting only two months, but with output reduced 9.2 percent.

US Recessions since 1989

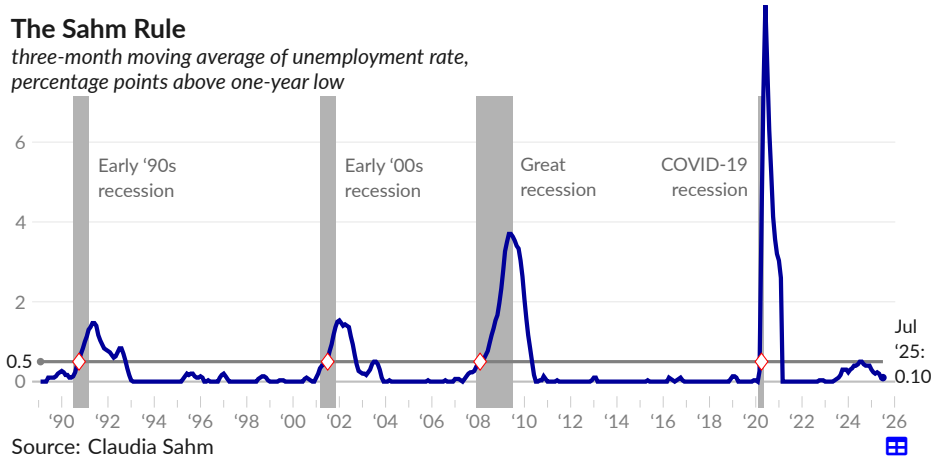
	Start Month	End Month	Recession Duration, Months	GDP Percent Change	Unemp. Rate Change*	Unemp. Rate Recovery, Months**
Early '90s Recession	Aug 1990	Mar 1991	8	-1.4	+2.4	63
Early '00s Recession	Apr 2001	Nov 2001	8	-0.1	+2.1	191
Great Recession	Jan 2008	Jun 2009	18	-3.8	+5.2	89
COVID-19 Recession	Mar 2020	Apr 2020	2	-9.2	+10.9	20

Sources: NBER, BEA, BLS
*Percentage point change from average unemployment rate during three years prior to recession to peak unemployment rate. **Months from recession start until unemployment rate returns to pre-recession three-year average.

The most-reliable indication that the US has entered a recession (see ■) was identified by Claudia Sahm, and is called the **Sahm rule**. The Sahm rule indicates the start of a recession (see ◊) when the three-month moving average unemployment rate rises by half a percentage point or more above its low during the previous twelve months (see —). In effect, the Sahm rule identifies increases in unemployment that are significant enough to cause or indicate a recession.

The Sahm Rule

three-month moving average of unemployment rate, percentage points above one-year low



Source: Claudia Sahm

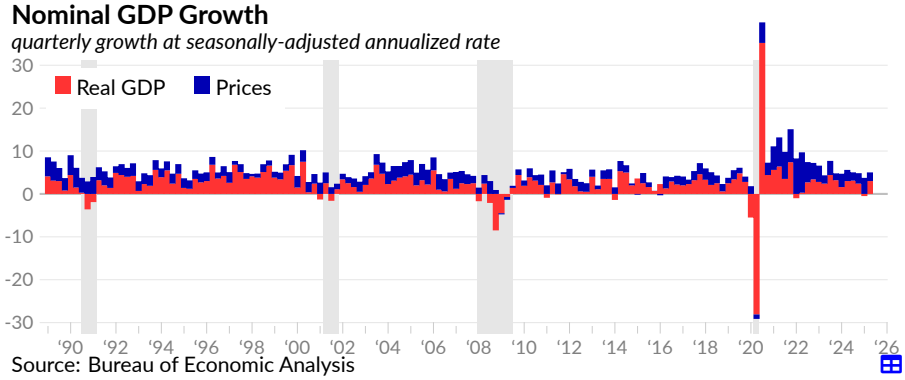
Nominal GDP

Thus far, the chartbook has used *real* GDP, to distinguish changes in activity from changes in prices. There are, however, instances where **nominal GDP** is useful.

Nominal GDP growth serves as a barometer for overall demand. For example, if demand for goods and services increases and supply is able to keep up, both real and nominal GDP will increase. If supply is not able to keep up with higher demand, prices will rise, increasing nominal GDP without increasing real GDP.

In the second quarter of 2025, nominal GDP increased at an annual rate of five percent, following increases of 3.2 percent in Q1 and 4.8 percent in 2024 Q4. From 1989 to 2019 Q4, nominal GDP increased at an annual rate of 4.6 percent. Since 2019 Q4, the annualized growth rate is 6.1 percent.

Nominal GDP Growth
quarterly growth at seasonally-adjusted annualized rate



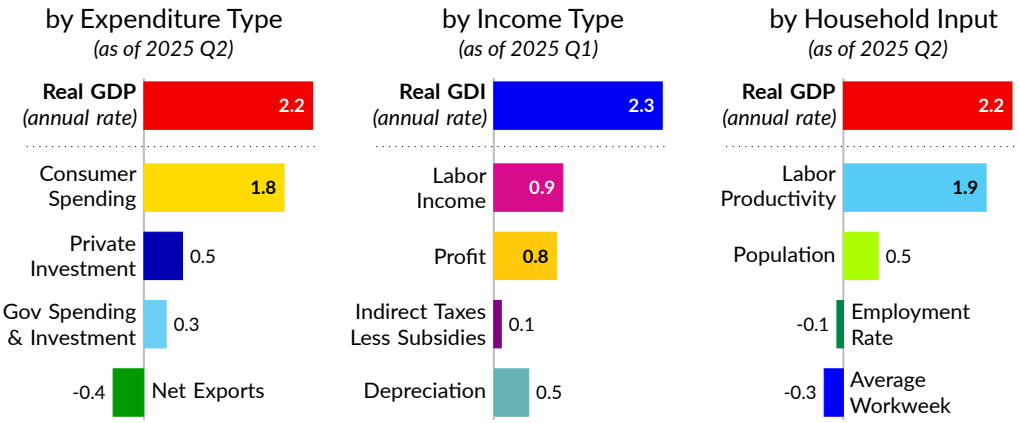
Source: Bureau of Economic Analysis

Components of Growth

This subsection examines how different activities contribute to economic growth. The percent change in real GDP is decomposed, using the categories from previous subsections, to show each category's importance to the overall increase or decrease.

First, an overview of contributions to economic growth since 2019. This is followed by an examination of longer-term trends and recent developments for each approach to calculating overall economic activity. Subsequent sections of the chartbook dig deeper into the contributions from subcategories, such as consumer spending on goods.

Contribution to Growth Since 2019 Q4
percentage point contribution to annualized cumulative growth rate



Source: BEA, Author's Calculations

Expenditure Approach

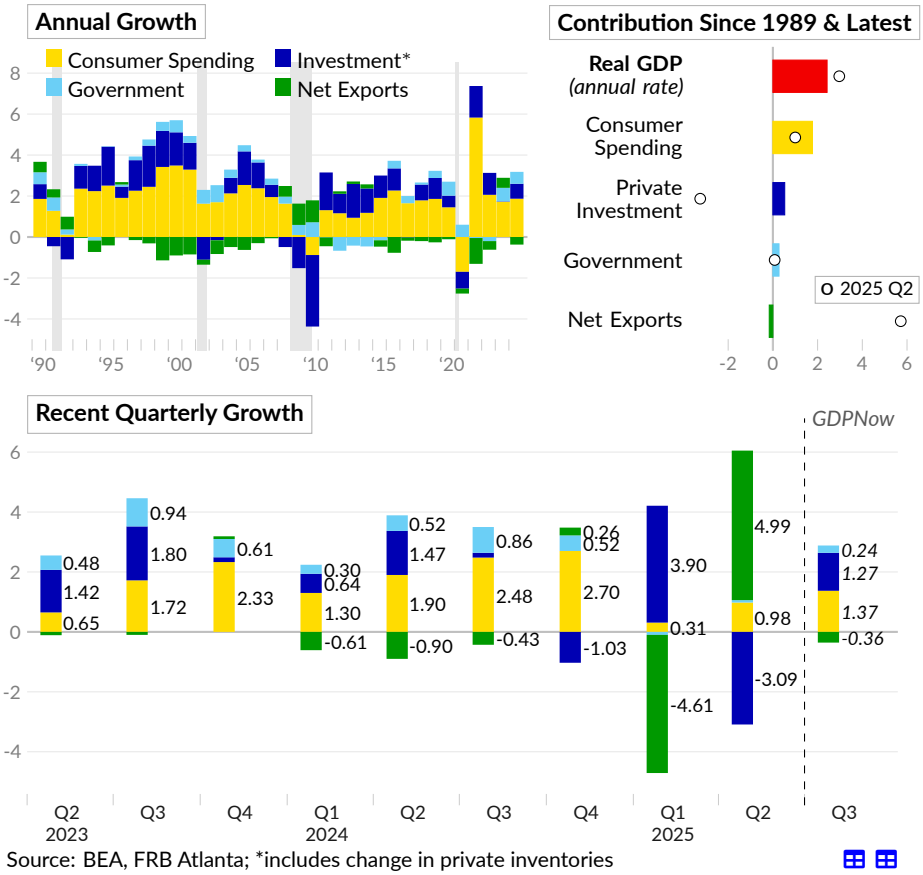
The **expenditures approach** to calculating overall economic activity also gives insight into changes in activity. The Bureau of Economic Analysis publish the contribution to GDP growth for each major category of spending. Long-term patterns in these data can provide context for recent developments.

Since 1989, real GDP has grown 2.4 percent per year. Over this period, consumer spending contributed 1.8 percentage points to the annualized change, gross private domestic investment added 0.5 percentage point, government spending and investment added 0.3 point, and net exports subtracted 0.2 point.

In the latest full year of data, covering 2024, GDP growth of 2.8 percent is the result of contributions from consumer spending of 1.9 percentage points, private investment of 0.7 percentage point, government spending and investment of 0.6 percentage point, and net exports of negative 0.4 point.

Real GDP Growth by Expenditure Type

percentage point contribution to GDP growth



Source: BEA, FRB Atlanta; *includes change in private inventories

In 2025 Q2, consumer spending (see ■) contributed 0.98 percentage point to real GDP growth. Private domestic investment (see ■) subtracted 3.09 percentage points, government spending and investment (see ■) did not contribute, and net exports (see ■) added 4.99 percentage points.

The Federal Reserve Bank of Atlanta GDPNow estimate for 2025 Q3 of 2.5 percent is based on a contribution of 1.37 percentage points from consumer spending, a contribution of 1.27 percentage points from private investment, a contribution of 0.24 point from government, and a subtraction of 0.36 point from net exports.

Income Approach

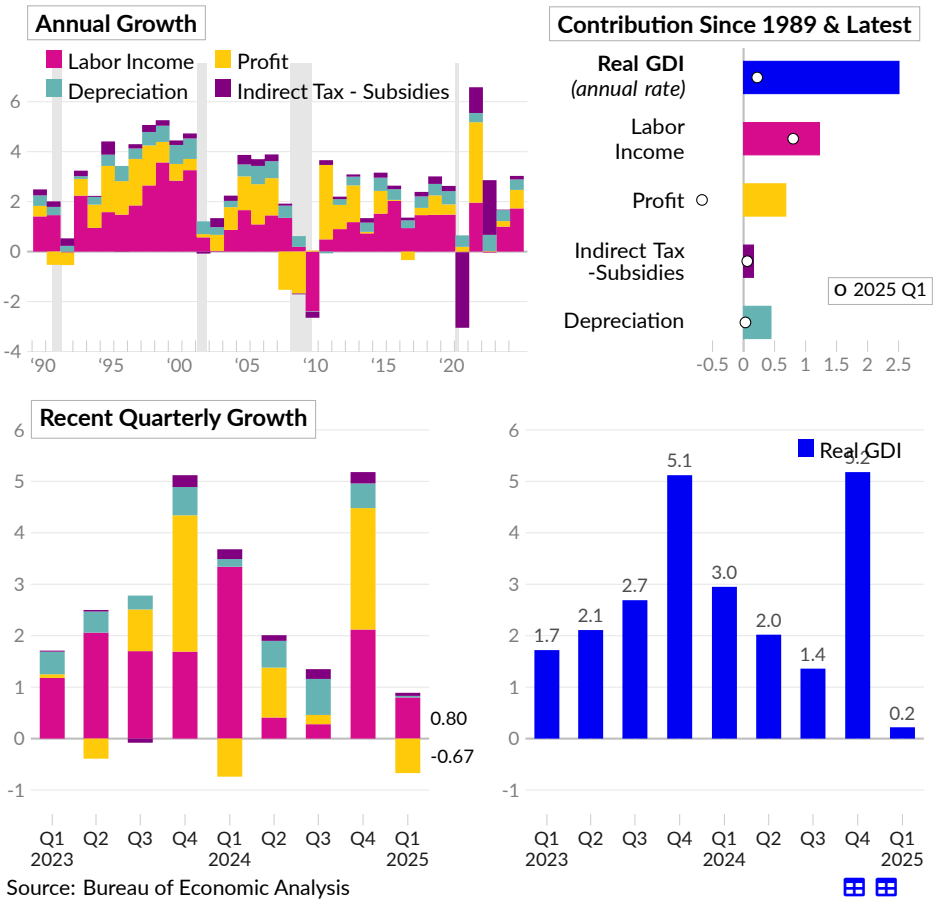
The **income approach** to calculating overall economic activity enables decomposing annualized growth into labor income (see), profit (see), indirect taxes less subsidies (see), and depreciation (see). This decomposition shows the destination of the gross domestic income (GDI) generated by increased production.

Since 1989, real GDI has grown at an annualized rate of 2.5 percent. Labor receives 1.2 percentage points of this growth, profit claims 0.7 percentage point, indirect taxes minus subsidies receive 0.2 point, and 0.4 point go to depreciation.

In the latest full year of data, 2024, real GDI increased three percent. Labor income contributed 1.7 percentage points, profit added 0.7 percentage point, indirect taxes less subsidies added 0.1 point, and 0.4 point went to depreciation.

Real GDI Growth by Expenditure Type

percentage point contribution to real GDI growth



Source: Bureau of Economic Analysis

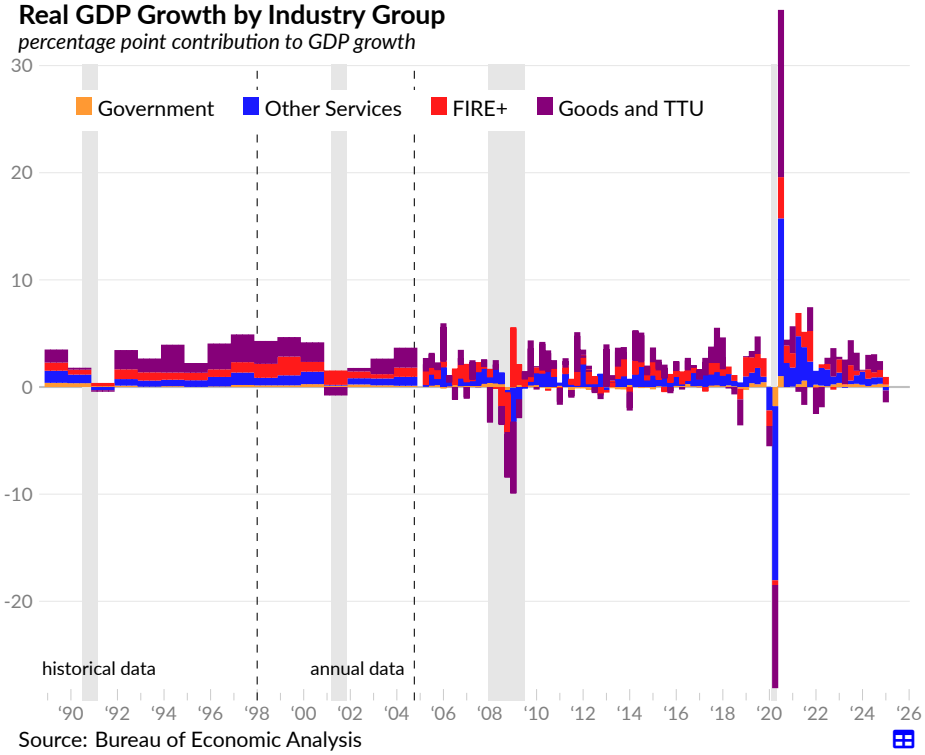
In the first quarter of 2025, real GDI increased at an annual rate of 0.2 percent, following increases of 5.2 percent in 2024 Q4 and 1.4 percent in 2024 Q3. In the latest quarter, labor income contributed 0.80 percentage point to annualized growth, profit subtracted 0.67 percentage point, changes in indirect tax revenue and subsidies added 0.06 point, and 0.03 point went to depreciation growth.

Production Approach

The **production approach** calculates GDP as the sum of value added–gross output minus intermediate inputs–in each sector. The broad groupings discussed above are used to identify contributions from: goods-producing sectors combined with trade, transportation, and utilities (see ■), finance, insurance, and real estate plus information (see ■), other service-providing sectors (see ■), and government (see ■).

In 2025 Q1, the combined contribution to GDP growth from private goods-producing industries and trade, transportation, and utilities is -1.1 percentage points, following a contribution of 0.8 percentage point in 2024 Q4, and compared to virtually no contribution in 2019 Q4. The group of private service-providing industries that include finance, insurance, real estate, as well as the information industry, contributed 0.7 percentage point in 2025 Q1, contributed 0.7 percentage point in 2024 Q4, and contributed 1.7 percentage points in 2019 Q4.

Other private services-providing industries, which are wide-ranging and described above, subtracted 0.3 percentage point from real GDP growth in 2025 Q1, following a contribution of 0.6 percentage point in 2024 Q4, and compared to a contribution of 0.5 percentage point in 2019 Q4. Combined federal, state, and local government contributed 0.2 percentage point in 2025 Q1, contributed 0.3 percentage point the prior quarter, and contributed 0.5 percentage point in 2019 Q4, prior to the pandemic.



Source: Bureau of Economic Analysis

Household Inputs

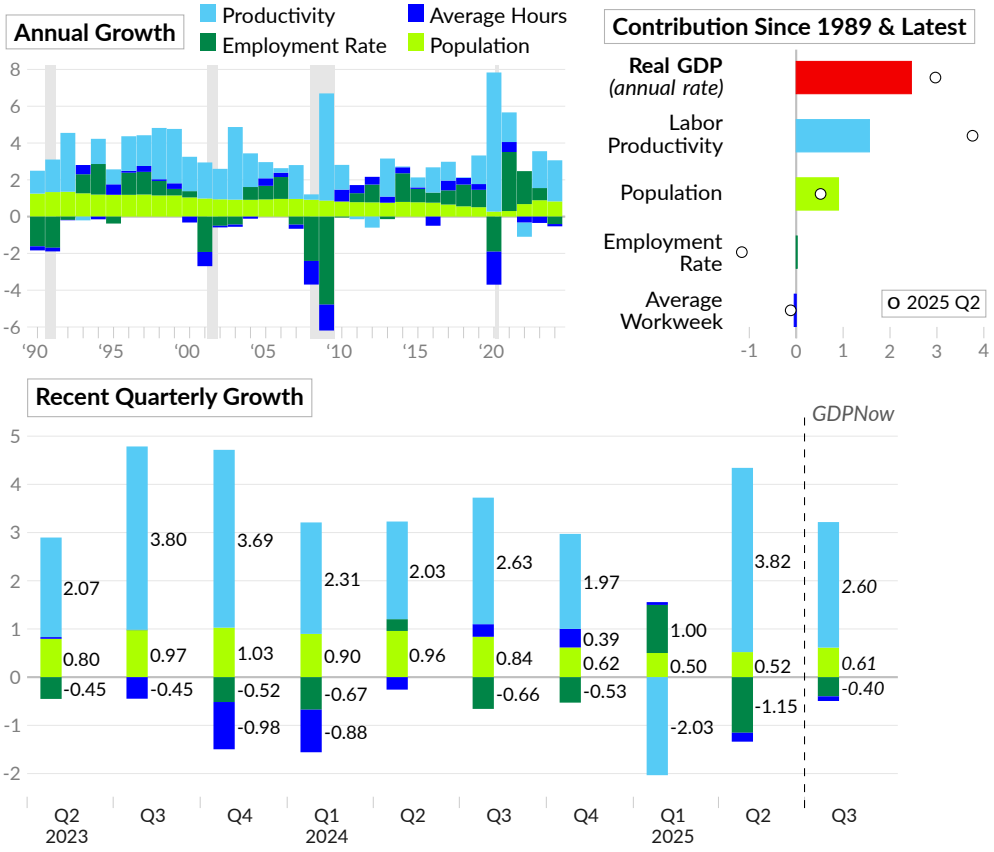
Changes to GDP can also be assigned to changes in **household inputs**: population (see), employment rates (see), average hours worked (see), and total economy productivity (see). A key distinction is whether economic growth is associated with more labor, or higher productivity.

Since 1989, and in the long-run, in general, real GDP growth is explained by population growth and labor productivity. The employment rate and average workweek have large swings during any given business cycle, but remain relatively constant since 1989. Real GDP growth of 2.5 percent per year since 1989 is explained by annualized productivity growth of 1.6 percent and population growth of 0.9 percent.

In the latest full year of data, covering 2024, growth is driven largely by an increase in labor productivity, and supported by an increase in population. Labor productivity added 2.2 percentage points, population growth added 0.8 point, and the lower employment rate subtracted 0.4 point from overall growth.

Real GDP Growth by Household Inputs

percentage point contribution to real GDP growth



Source: BEA, FRB Atlanta, BLS, Author's Calculations

In 2025 Q2, labor productivity contributed 3.76 percentage points to GDP growth of three percent. The lower employment rate subtracted 1.16 points in the period and population growth added 0.52 point. Average hours worked was little changed in the period.

Using the Atlanta Fed GDPNow and the latest available population and labor force data, we can estimate contributions to growth for 2025 Q3. Real GDP is estimated to increase by 2.5 percent, with contributions of 2.6 percentage points from labor productivity and 0.6 percentage point from population growth.

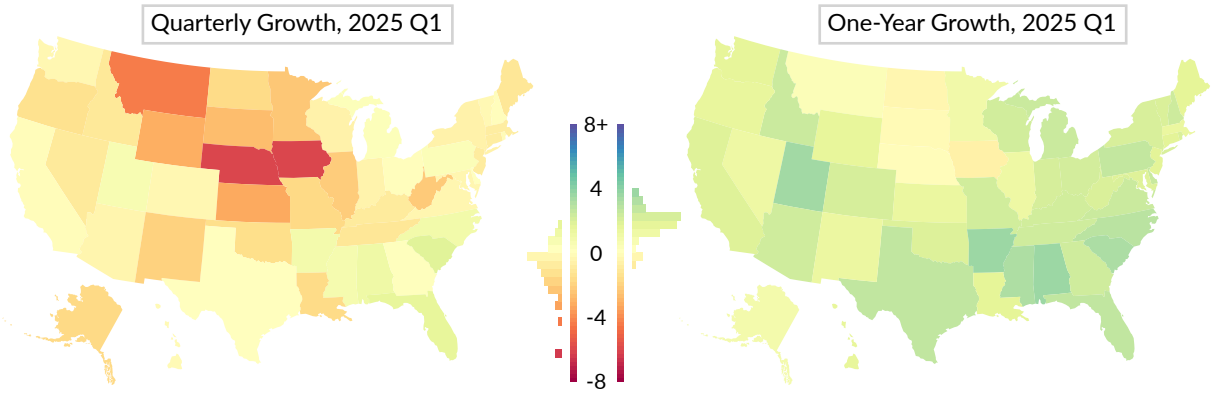
Components of Economic Growth

annualized percentage point contribution to real GDP/GDI growth *moving averages*

	2025 Q2	2025 Q1	2024 Q4	2024 Q3	2024 Q2	3-year	10-year	30-year
Gross Domestic Product	3.0	-0.5	2.4	3.1	3.0	2.6	2.6	2.6
Consumer Spending	0.98	0.31	2.70	2.48	1.90	1.62	1.89	1.86
Durable Goods	0.27	-0.28	0.87	0.54	0.40	0.26	0.42	0.46
Non-Durable Goods	0.18	0.29	0.42	0.63	0.23	0.21	0.42	0.36
Services	0.53	0.30	1.41	1.31	1.27	1.15	1.06	1.04
Gross Investment	-3.09	3.90	-1.03	0.16	1.47	0.32	0.59	0.66
Residential	-0.19	-0.05	0.22	-0.18	-0.11	-0.15	0.06	0.04
Non-Residential	0.27	1.36	-0.41	0.55	0.53	0.61	0.53	0.58
Change in Inventories	-3.17	2.59	-0.84	-0.22	1.05	-0.14	0.00	0.04
Net Exports	4.99	-4.61	0.26	-0.43	-0.90	0.16	-0.20	-0.19
Exports	-0.19	0.04	-0.01	1.01	0.12	0.30	0.20	0.41
Imports	5.18	-4.66	0.27	-1.44	-1.01	-0.13	-0.40	-0.60
Government	0.08	-0.10	0.52	0.86	0.52	0.52	0.34	0.27
Federal	-0.24	-0.31	0.25	0.55	0.27	0.13	0.13	0.11
State and Local	0.32	0.21	0.27	0.31	0.25	0.39	0.21	0.15
Goods and TTU	–	-1.11	0.83	1.68	1.35	0.89	0.69	–
Manufacturing	–	0.00	0.07	0.33	0.79	0.10	0.15	–
Construction	–	-0.03	0.21	-0.01	0.23	0.02	0.07	–
Retail Trade	–	-0.20	0.17	1.10	-0.03	0.54	0.26	–
FIRE+	–	0.72	0.68	0.48	0.88	0.55	0.78	–
Information	–	0.56	0.09	0.33	0.08	0.34	0.40	–
Other Services	–	-0.32	0.61	0.67	0.68	0.73	0.92	–
Education & Healthcare	–	0.09	0.37	0.40	0.33	0.35	0.27	–
Professional & Business	–	-0.04	0.34	0.27	0.25	0.35	0.58	–
Government	–	0.22	0.30	0.23	0.09	0.22	0.14	–
Population	0.52	0.50	0.62	0.84	0.96	0.80	0.61	0.84
Employment Rate	-1.15	1.00	-0.53	-0.66	0.24	0.22	0.71	0.21
Average Hours	-0.18	0.06	0.39	0.26	-0.26	-0.24	-0.14	-0.06
Productivity	3.82	-2.03	1.97	2.63	2.03	1.85	1.69	1.69
Gross Domestic Income	–	0.2	5.2	1.4	2.0	2.1	2.5	2.6
Labor	–	0.80	2.12	0.28	0.41	1.05	1.20	1.27
Profit	–	-0.67	2.36	0.18	0.97	0.55	0.65	0.75
Depreciation	–	0.03	0.48	0.70	0.52	0.43	0.44	0.45
Indirect Taxes	–	0.06	0.22	0.19	0.11	0.11	0.21	0.18

Source: Bureau of Economic Analysis and Author's Calculations
TTU is trade, transportation and utilities; FIRE+ includes the finance, insurance, real estate, and information industries.

Real GDP Growth by State
percentage point change in real GDP



Source: Bureau of Economic Analysis

Finally, the Bureau of Economic Analysis also report real GDP growth by state. Over the year ending 2025 Q1, no states had real GDP growth of more than five percent, 46 states and the District of Columbia had growth between zero and five percent, and four states had a decrease in output.

Real GDP Growth by State
quarterly growth at seasonally adjusted annualized rate *annual growth, as of 2025 Q1*

	2025 Q1	2024 Q4	2024 Q3	2024 Q2	2024 Q1	1-year	2-year	6-year
United States	-0.5	2.5	3.1	3.0	1.6	2.0	2.4	2.4
East South Central	-0.4	3.2	4.6	3.2	0.5	2.6	2.3	2.5
Alabama	1.0	3.8	6.0	3.4	-0.1	3.5	3.0	2.4
Mississippi	0.7	4.2	5.1	2.5	0.0	3.1	2.5	2.2
Tennessee	-1.2	3.0	4.1	3.0	0.3	2.2	2.0	2.9
Kentucky	-1.0	2.4	4.0	3.5	1.6	2.2	2.0	1.8
West South Central	-0.3	3.5	4.1	2.7	0.1	2.5	3.5	3.2
Arkansas	0.8	5.1	6.9	1.5	5.1	3.5	3.1	3.1
Texas	-0.1	3.5	4.2	2.8	0.2	2.6	3.7	3.7
Oklahoma	-1.6	3.4	3.5	2.3	-2.5	1.9	2.9	1.3
Louisiana	-1.7	2.9	2.3	3.0	-1.3	1.6	2.9	0.8
South Atlantic	0.5	2.8	3.2	3.2	2.7	2.4	2.9	2.9
South Carolina	1.7	3.6	3.0	4.5	4.2	3.2	3.6	2.8
North Carolina	0.8	3.1	3.9	3.5	2.9	2.8	3.1	3.0
Florida	1.4	2.4	3.3	3.2	3.6	2.6	3.0	4.0
Delaware	0.0	3.2	3.1	3.2	-1.8	2.4	2.6	1.6
Virginia	-0.5	3.4	3.2	3.2	1.1	2.3	2.8	2.6
Georgia	0.1	2.7	2.6	3.5	3.5	2.2	2.9	2.5
West Virginia	-2.3	3.2	4.7	2.1	3.1	1.9	2.9	1.5
Maryland	-0.5	2.3	3.0	2.3	1.5	1.8	1.9	1.5
District of Columbia	-0.0	2.9	2.0	2.1	-1.1	1.8	1.7	1.5

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	2025 Q1	2024 Q4	2024 Q3	2024 Q2	2024 Q1	1-year	2-year	6-year
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Middle Atlantic	-0.5	2.7	2.6	3.4	1.4	2.0	2.2	1.6
Pennsylvania	0.3	2.5	4.1	3.2	-0.5	2.5	2.4	1.4
New York	-0.7	3.1	1.8	3.8	2.4	2.0	2.2	1.6
New Jersey	-1.0	2.1	3.0	2.4	0.8	1.6	1.9	1.8
Mountain	-0.8	2.7	3.1	3.1	0.9	2.0	2.6	3.2
Utah	0.5	3.9	4.5	4.8	4.8	3.4	4.0	3.9
Idaho	-1.1	-0.0	4.8	5.9	1.5	2.4	2.8	3.9
Arizona	-0.5	3.3	3.1	3.1	2.1	2.2	2.3	3.7
Colorado	-0.4	2.4	3.4	2.7	-1.7	2.0	2.3	3.1
Wyoming	-3.1	3.8	1.9	3.5	-7.2	1.5	1.9	1.1
New Mexico	-2.1	2.6	2.6	1.7	-1.8	1.2	2.7	2.4
Nevada	-1.1	1.9	1.8	1.8	2.8	1.1	2.2	2.5
Montana	-4.4	2.7	-0.1	3.2	-0.1	0.3	1.5	2.7
East North Central	-0.8	1.9	2.8	3.4	0.2	1.8	1.9	1.5
Michigan	0.2	2.1	2.9	4.2	1.2	2.3	2.1	1.8
Wisconsin	-0.6	0.7	4.4	4.2	-1.1	2.1	2.4	1.3
Ohio	-0.1	2.6	2.5	3.4	0.0	2.1	2.4	1.7
Indiana	-0.6	2.0	3.9	2.8	4.9	2.0	2.9	2.4
Illinois	-2.2	1.8	2.0	2.8	-1.8	1.1	0.9	0.8
Pacific	-0.3	1.5	3.0	2.7	4.8	1.7	2.6	2.6
California	-0.2	1.4	3.1	2.8	6.3	1.8	2.6	2.6
Washington	-0.4	1.4	3.0	2.2	1.5	1.6	3.3	3.3
Hawaii	-0.3	2.2	2.6	1.4	1.2	1.5	1.6	0.4
Oregon	-1.5	1.2	2.6	3.3	-1.9	1.4	1.1	2.0
Alaska	-1.8	4.0	2.2	-1.1	-1.2	0.8	2.4	1.0
New England	-0.8	1.9	2.9	2.2	3.6	1.5	2.2	2.0
New Hampshire	-0.1	2.8	4.5	2.1	4.3	2.3	2.7	2.5
Rhode Island	-0.2	1.9	3.6	2.5	4.9	1.9	2.5	1.6
Vermont	-0.3	0.6	4.2	3.3	-1.5	1.9	2.0	1.5
Connecticut	-0.9	1.8	3.0	2.8	-0.3	1.7	2.3	1.4
Maine	-1.2	2.2	3.6	1.7	2.8	1.6	2.5	3.0
Massachusetts	-0.9	1.9	2.3	1.9	5.6	1.3	2.1	2.2
West North Central	-3.3	2.3	1.4	3.0	-4.3	0.8	1.1	1.6
Missouri	-1.8	2.8	3.8	3.9	-0.5	2.2	2.1	2.1
Kansas	-3.3	1.6	1.4	5.6	-6.0	1.3	1.3	1.7
Minnesota	-2.4	2.9	2.0	1.3	-2.8	0.9	1.2	1.4
Nebraska	-6.1	2.0	-1.4	5.3	-4.6	-0.2	0.3	2.4
South Dakota	-2.7	0.0	-0.8	2.3	-3.9	-0.3	0.4	1.8
North Dakota	-1.7	2.1	-2.3	0.1	-8.8	-0.5	0.9	0.2
Iowa	-6.1	1.7	0.0	1.6	-10.4	-0.7	-0.1	1.0

Source: Bureau of Economic Analysis

Financial Accounts

Economists are concerned with the level of assets and liabilities, at a given point in time, along with associated activities like lending, borrowing, saving, and investing. Data on financing and investing activities provide insight into current economic conditions and future prospects. This section provides a high-level overview of the US **financial accounts**, including liabilities, sectoral balances, wealth, and investment dynamics.

Liabilities

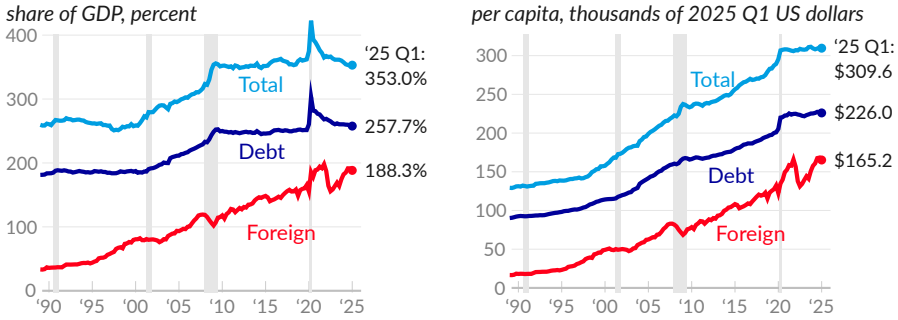
The Federal Reserve US Financial Accounts cover **liabilities**, both in levels and transactions. Using these accounts, we can summarize US financial obligations to others in a few different ways.

The first and most-common approach to analyzing US liabilities looks at **debt**, encompassing loans and debt securities like bonds. This approach aggregates the debt across all nonfinancial sectors—households, businesses, and government. As of the first quarter of 2025, the total debt for the sectors stands at $77.2 trillion, which is 257.7 percent of GDP, or $226,010 per capita.

The second approach considers **total liabilities**, which extend beyond debt to encompass all financial commitments, such as accounts payable, tax obligations, pensions, intercompany debts, and various other liabilities. The aggregate liabilities for nonfinancial sectors reach $105.8 trillion in 2025 Q1, or 353.0 percent of GDP.

The last approach looks at **foreign financial claims** on the US. From a net US wealth perspective, domestic liabilities to domestic creditors net out. It is therefore of interest to look what is owed to foreign creditors. Foreign financial claims on the US total $56.4 trillion in 2025 Q1, translating to 188.3 percent of GDP, or $165,203 per capita.

Liabilities



share of GDP, percent

	2025 Q1	'24 Q4	'24 Q1	'19 Q4	2010	1989
Total Liabilities (—)	353.0	352.8	357.5	362.0	351.5	259.6
Debt (—)	257.7	258.2	260.4	251.5	248.9	182.1
Debt Securities	135.9	135.3	135.1	123.0	104.4	72.1
Loans	121.9	122.9	125.3	128.5	143.9	109.5
Foreign Financial Claims (—)	188.3	191.5	182.2	165.5	118.4	34.3

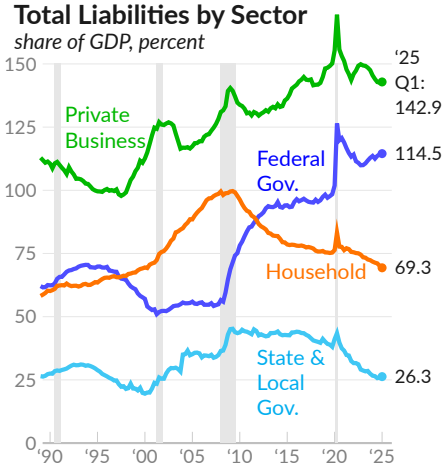
Source: Federal Reserve, Bureau of Economic Analysis
Note: Domestic figures are for nonfinancial sectors and foreign financial claims on the US do not include US claims on the rest of the world.

Liabilities vary **by sector** and vary over time within sectors. Households and nonprofits (see —) have $20.3 trillion in debt in 2025 Q1, equivalent to 67.6 percent of GDP. During the collapse of the housing bubble, in 2010, household and nonprofit debt was equivalent to 92.1 percent of GDP.

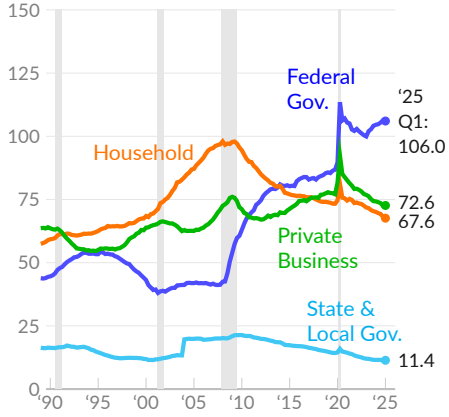
In 2025 Q1, Private nonfinancial businesses (see —), corporate and noncorporate, have total liabilities of $42.8 trillion and debt of $21.8 trillion. In 2025 Q1, nonfinancial business debt is equivalent to 72.6 percent of GDP, slightly below the pre-COVID ratio of 73.3 percent. Nonfinancial corporations have $30.1 trillion in total liabilities and $14.0 trillion in debt.

Federal government debt (see —) is equivalent to 106.0 percent of GDP in the latest data and 86.8 percent in 2019 Q4. Federal government debt has increased substantially since the great recession. State and local government debt (see —) is equivalent to 11.4 percent of GDP in 2025 Q1 and 21.1 percent of GDP in 2010. Total liabilities for the sector, which include pensions, are 26.3 percent of GDP in the latest data and 44.2 percent in 2010.

Total Liabilities by Sector
share of GDP, percent



Debt by Sector
share of GDP, percent, seasonally adjusted



Debt by Sector
share of GDP, percent

	2025 Q1	'24 Q4	'24 Q1	'19 Q4	2010	1989
Debt of Nonfinancial Sectors	257.7	258.2	260.4	251.5	248.9	182.1
Households & Nonprofits (—)	67.6	68.1	70.1	73.3	92.1	58.1
Home Mortgages	46.4	46.6	47.3	49.0	68.7	39.7
Consumer Credit	16.5	16.8	17.4	19.1	16.8	13.8
Nonfinancial Businesses (—)	72.6	72.4	74.2	77.1	69.5	63.7
Corporate	46.6	46.3	47.6	49.8	42.9	42.8
Debt Securities	28.9	28.6	29.2	31.9	26.6	20.7
Loans	17.7	17.7	18.3	17.9	16.3	22.2
Noncorporate	26.1	26.2	26.7	27.3	26.6	20.9
Commercial Mortgages	7.3	7.4	7.6	8.3	9.6	8.6
Government	117.4	117.7	116.1	101.1	87.3	60.2
State & Local (—)	11.4	11.4	11.5	14.3	21.1	16.3
Federal (—)	106.0	106.4	104.6	86.8	66.2	44.0

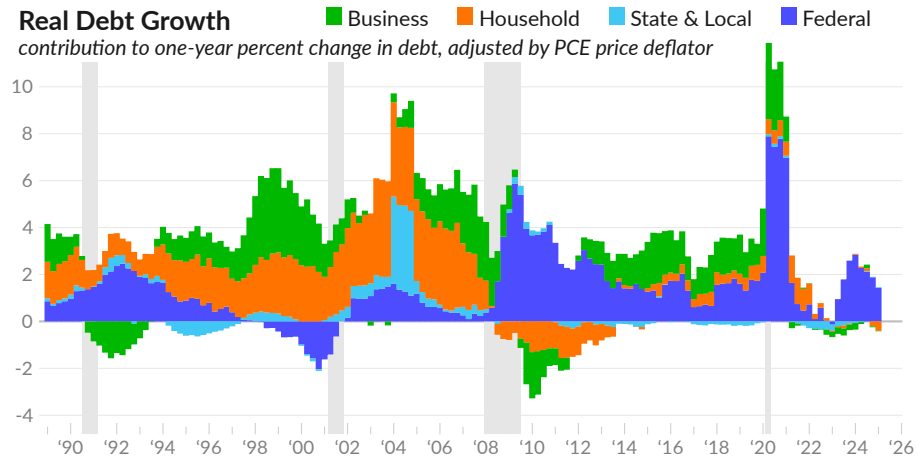
Source: Federal Reserve, Bureau of Economic Analysis

Higher rates of **real debt growth** may highlight economic risks. For example, the tech bubble that popped in 2001 shows up as an increase in corporate borrowing, and the housing bubble that popped in 2008 shows up as an increase in mortgage debt.

Since the first quarter of 2020, inflation-adjusted US debt has increased at an annualized rate of 2.5 percent, substantially below the long-term rate of 3.7 percent. Over this five-year period, growth is driven largely by an increase in federal government debt. Federal government debt contributed 2.1 percentage points to annualized growth, and nonfinancial business debt contributed 0.3 percentage point.

Over the year ending 2025 Q1, real debt increased one percent, far below the long-term average. Federal government borrowing (see) contributed 1.4 percentage points to the overall change, while the state and local government did not contribute (see). Households and nonprofits subtracted 0.4 percentage point (see), and nonfinancial businesses did not contribute (see).

Real Debt Growth



Real Debt Growth by Sector

contribution to one-year real growth, percentage points — *long-term, annualized*

	2025 Q1	'24 Q4	'24 Q3	'24 Q2	'24 Q1	5-year	10-year	30-year
Total Real Debt Growth	1.05	1.65	2.42	2.22	2.53	2.55	2.98	3.69
Household & Nonprofit	-0.40	-0.21	0.12	0.06	0.04	0.18	0.33	0.83
Home Mortgages	0.05	0.06	0.07	0.04	0.01	0.22	0.23	0.56
Consumer Credit	-0.24	-0.21	-0.02	-0.07	-0.03	-0.03	0.10	0.22
Business	-0.02	-0.04	0.15	-0.08	-0.28	0.33	0.80	1.02
Corporate Business	-0.01	-0.03	0.18	-0.01	-0.18	0.18	0.50	0.61
Debt Securities	0.11	0.08	0.17	0.03	-0.04	0.05	0.25	0.39
Loans	-0.11	-0.11	0.01	-0.04	-0.15	0.13	0.25	0.22
Noncorporate Business	-0.01	-0.01	-0.02	-0.07	-0.10	0.14	0.30	0.41
Commercial Mortgages	-0.06	-0.04	-0.04	-0.04	-0.01	-0.00	0.03	0.10
State & Local Government	0.03	0.02	0.03	-0.03	-0.07	-0.09	-0.09	0.10
Federal Government	1.43	1.88	2.12	2.28	2.84	2.13	1.94	1.76

Source: Federal Reserve, Bureau of Economic Analysis

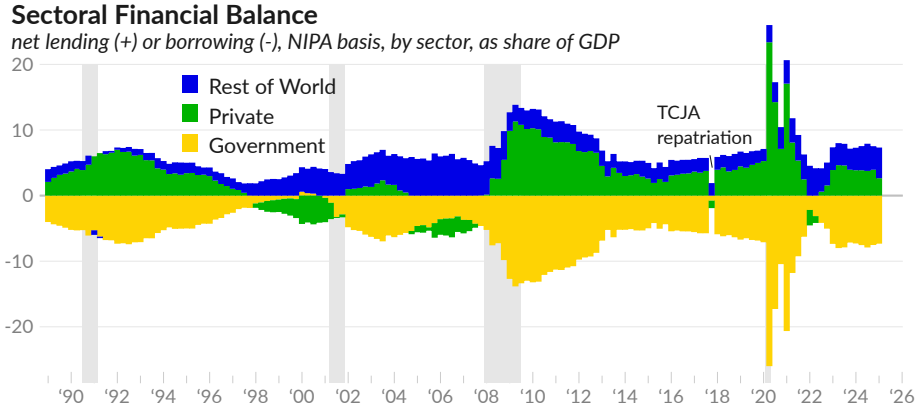
Sectoral Balances

The **sectoral financial balances** provide a high-level summary of US financial activities, by dividing the world into three sectors: the US private sector (see), the US government (see), and the rest of the world (see). This framework analyzes the net lending and borrowing among these sectors. Since one sector's borrowing is another's lending, the sum of all sectors' balances is always zero.

A sector runs a surplus for a given accounting period when its income exceeds its expenditures, allowing it to lend out the resulting savings. Conversely, a sector that spends more than its income must borrow to cover the shortfall. For instance, when the public sector incurs a deficit, it becomes a net borrower, effectively generating a surplus for other sectors by spending beyond its tax revenues.

Sectoral Financial Balance

net lending (+) or borrowing (-), NIPA basis, by sector, as share of GDP



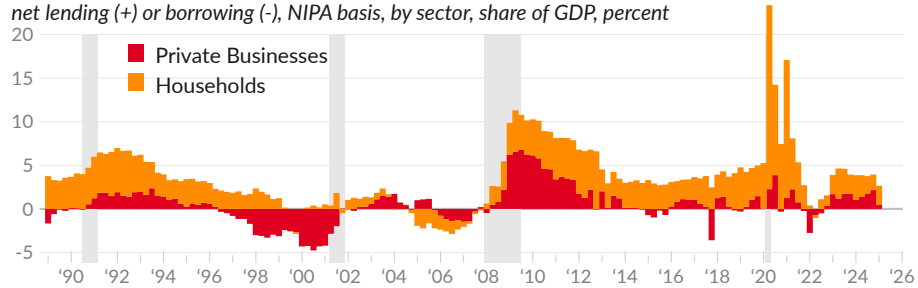
Source: Bureau of Economic Analysis

In 2025 Q1, the US private sector was a net lender (running a surplus) of the equivalent of 2.7 percent of GDP, substantially below the 4.6 percent surplus in 2019. The rest of the world was a net lender to the US to the equivalent of 4.7 percent of GDP in 2025 Q1, compared to 2.1 percent in 2019. Balancing these transactions, the government (federal, state, and local combined) was a net borrower (running a deficit) of the equivalent of 7.3 percent of GDP in 2025 Q1, compared to 6.7 percent in 2019.

Breaking out the two main categories in the private sector, households were net lenders (ran a surplus) of the equivalent of 2.2 percent of GDP in 2025 Q1 (see), while private businesses–corporate and noncorporate–were net lenders of the equivalent of 0.4 percent of GDP (see). In 2019, households were net lenders of 4.0 percent, and private businesses were net lenders of 0.6 percent.

Domestic Private Sector Financial Balance

net lending (+) or borrowing (-), NIPA basis, by sector, share of GDP, percent



Source: Bureau of Economic Analysis

Wealth

Wealth or **net worth** is the sum of domestic tangible assets, such as land (excluding public land), structures, and equipment, minus foreign financial claims on these assets, plus domestic claims on foreign assets. US wealth totals $155.1 trillion in 2025 Q1, equivalent to $454,100 per capita, or 5.18 years of GDP (517.7 percent of GDP.)

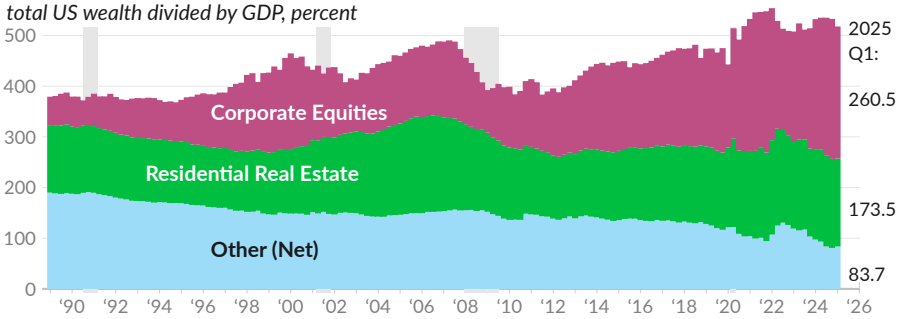
The ratio of US wealth to GDP has increased 134.6 percentage points since 1989, driven largely by increases in the market value of corporate equities and residential real estate. The market value of corporate equities was equivalent to 260.5 percent of GDP in 2025 Q1, compared to 170.6 percent in 1999–2000, during the tech bubble, and to 60.1 percent in 1989 (see ■).

The market value of domestic residential real estate was equivalent to 173.5 percent of GDP in 2025 Q1, compared to 185.0 percent in 2005–2007, during the housing bubble, and 134.2 percent in 1989 (see ■).

On a net basis, all other US wealth is equivalent to 83.7 percent of GDP in 2025 Q1 and 188.7 percent in 1989 (see ■). The other category includes tangible assets of noncorporate businesses and governments, and domestic financial claims on foreign assets. The category also subtracts foreign financial claims on US assets, for example foreign holdings of US corporate equities and Treasury bonds.

Wealth to GDP Ratio

total US wealth divided by GDP, percent



Source: Federal Reserve

The tangible assets of each major domestic sector are shown below, along with the summary of financial claims between the rest of the world and the US.

Derivation of US Wealth

share of GDP, percentage points

	2025 Q1	'24 Q4	'24 Q3	'24 Q1	2019	2005 –'07	1989
US Net Wealth	517.7	532.6	535.0	532.2	472.4	478.6	383.0
Households & Nonprofits	204.5	206.4	209.7	209.3	182.2	217.8	169.2
Noncorporate Businesses	64.0	64.5	64.8	65.6	67.6	73.1	71.1
Domestic Corporations	252.2	272.6	265.5	254.1	198.9	130.3	74.4
Federal Government	16.1	16.0	16.0	16.2	16.7	18.3	25.7
State & Local Government	56.4	56.1	56.5	57.3	55.3	48.7	41.9
Net Claims on ROW	-75.5	-83.0	-77.5	-70.3	-48.3	-9.6	0.8
US Claims on ROW	112.9	108.5	114.0	111.9	112.4	95.9	35.1
Less: ROW Claims on US	188.3	191.5	191.6	182.2	160.7	105.6	34.3

Source: Federal Reserve, Bureau of Economic Analysis

Investment

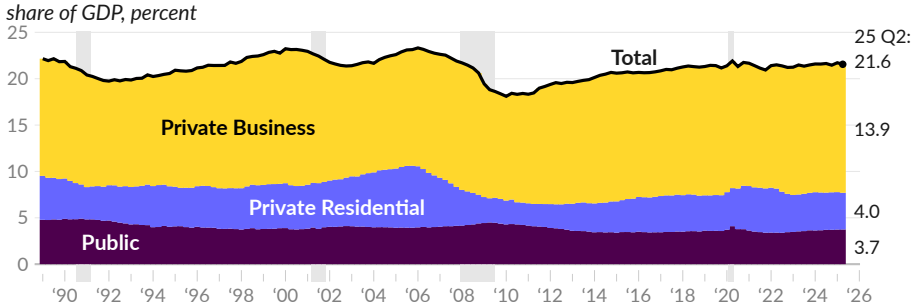
Investment is the process through which tangible (nonfinancial) domestic fixed assets are created and improved. In the national accounts, investment assets have a useful life of more than one year and do not include consumer durable goods such as cars, furniture, or appliances. As such, investment is considered an exchange of assets, and distinguished from consumer spending.

In the second quarter of 2025, annualized US **gross fixed investment**, both public and private, totals $6.5 trillion, or 21.6 percent of GDP (see —). Gross fixed investment is equivalent to 21.6 percent of GDP one year prior, in 2024 Q2, and averages 21.3 percent of GDP in 2019.

In 2025 Q2, private nonresidential (business) fixed investment comprises 64 percent of the total and translates to 13.9 percent of GDP (see ■). Private residential makes up 18 percent of the total and four percent of GDP (see ■). Public investment is 17 percent of the total and 3.7 percent of GDP (see ■).

Gross Domestic Fixed Investment

share of GDP, percent



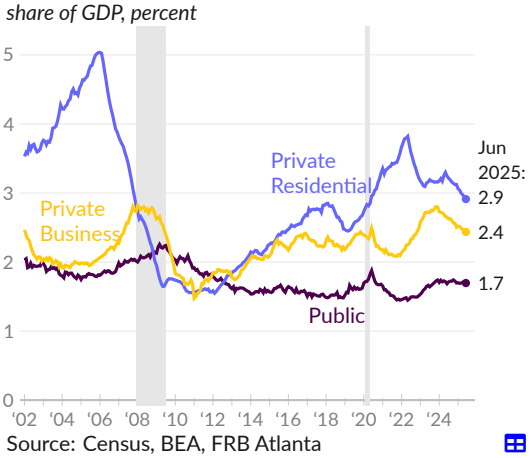
Source: Bureau of Economic Analysis

Construction Spending

Traditionally, **construction spending** makes up a large portion of fixed investment, and a substantial portion of GDP. Each month, the Census Bureau report the dollar value of construction work done in the US. In June 2025, the annualized value of construction put-in-place is $2.1 trillion, equivalent to seven percent of GDP.

Construction Spending

share of GDP, percent



Source: Census, BEA, FRB Atlanta

By sector, private residential construction is 2.9 percent of GDP (see —) in June 2025, private nonresidential construction is 2.4 percent (see —), and government construction is 1.7 percent (see —).

Over the past year, construction spending subtracted 0.22 percentage point to nominal GDP growth. Private residential construction subtracted 0.20 percentage point, private nonresidential subtracted 0.11 point, and public construction added 0.09 point.

Investment Contribution to Growth

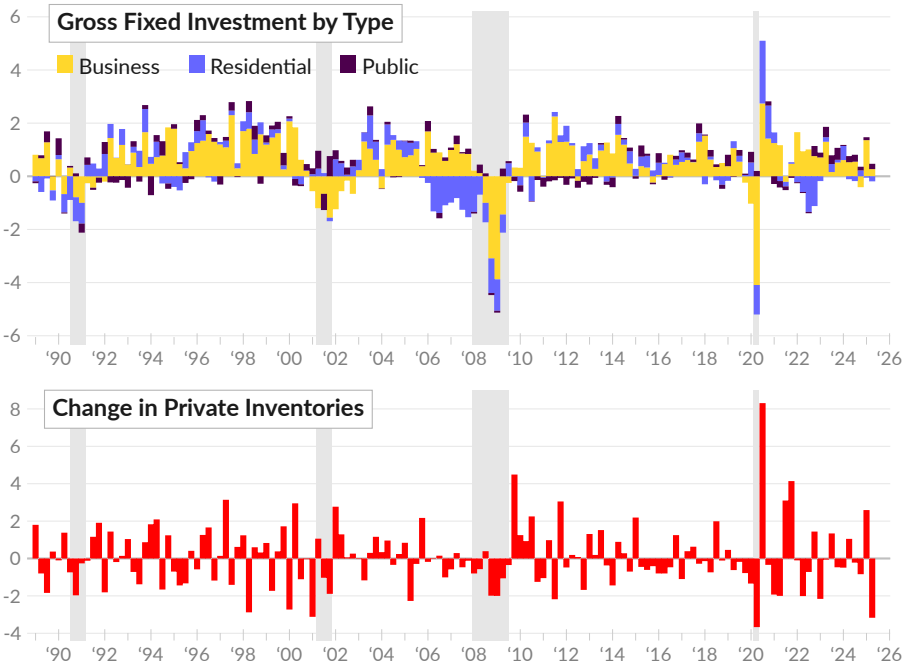
As gross investment usually represents a fifth of GDP or more, investment tends to also represent a sizable **contribution to GDP growth**. During periods of particularly strong investment, the category explains nearly half of overall economic growth. For example, from 1996 to 1999, gross domestic fixed investment added an average of 1.75 percentage points to annual real GDP growth.

In the second quarter of 2025, gross domestic fixed investment contributed 0.28 percentage point to annualized real GDP growth, following a contribution of 1.42 points in the first quarter. Over the past year, gross fixed investment contributed 0.95 percentage point to real GDP growth.

In 2025 Q2, by type of gross fixed investment, private nonresidential contributed 0.27 percentage point to annualized real GDP growth (see), private residential subtracted 0.19 percentage point (see), and public contributed 0.20 percentage point (see). Over the past year, nonresidential or business gross fixed investment contributed 0.64 percentage point, residential contributed 0.06 point, and public contributed 0.26 point.

Domestic Investment Contribution to Growth

percentage point contribution to real GDP growth



Source: Bureau of Economic Analysis

Gross domestic investment includes fixed investment, discussed above, and also the **change in private inventories**. Inventories are goods that were produced but not sold. While periods with low inventories balance out periods of overstock in the long-term, changes in private inventories can swing GDP growth in a given quarter.

In 2025 Q2, changes in private inventories subtracted 3.17 percentage points from annualized real GDP growth (see), following a contribution of 2.59 percentage points in 2025 Q1. Over the past year, changes in private inventories subtracted 0.44 percentage point from real GDP growth.

Each of these categories of investment is discussed further in the chartbook section for the relevant sector. The next subsection examines net fixed investment, which adjusts for the depreciation of assets over time, in order to capture new or expanded investment.

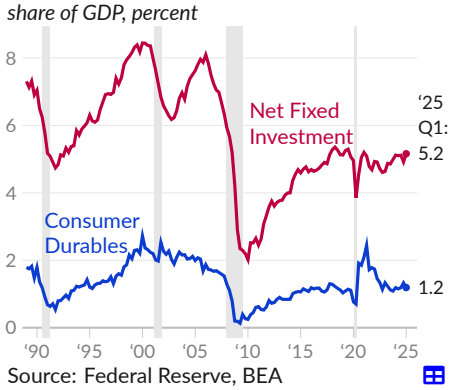
Net Fixed Investment

Gross investment includes new fixed investment as well as depreciation, the wearing down of existing assets. Gross investment less depreciation is referred to as **net investment**, and represents new or expanded investment. The net investment figures below are derived from the US financial accounts.

In 2025 Q1, gross fixed investment was $6.5 trillion, depreciation was $5.0 trillion, and net fixed investment was $1.5 trillion, equivalent to 5.2 percent of GDP (see —). In 2019, net fixed investment was 5.2 percent of GDP.

The financial accounts also tabulate net spending on consumer durable goods, such as autos, furniture, and appliances. Net spending on consumer durables was $357 billion in 2025 Q1, or 1.2 percent of GDP (see —). Net consumer durable goods spending was 1.1 percent of GDP in 2019.

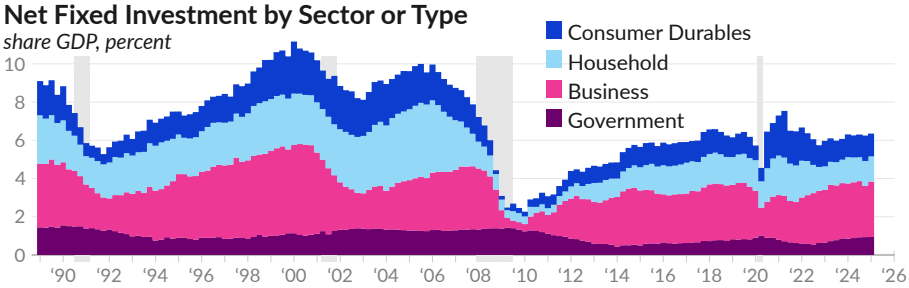
Net Fixed Investment
share of GDP, percent



Source: Federal Reserve, BEA

Levels of net fixed investment vary by sector and over time. In 2025 Q1, household sector net fixed investment, excluding consumer durables, was equivalent to 1.3 percent of GDP, compared to 1.5 percent in 2019 (see). From 2003 to 2006, during the housing bubble, household net fixed investment averaged 3.5 percent of GDP. Business sector net fixed investment is equivalent to 2.9 percent of GDP in 2025 Q1, and 2.9 percent in 2019 (see). Government net fixed investment is equivalent to 0.9 percent of GDP in 2025 Q1 and 0.8 percent in 2019 (see).

Net Fixed Investment by Sector or Type
share GDP, percent



Source: Federal Reserve, Bureau of Economic Analysis

	2025 Q1	'24 Q4	'24 Q3	'24 Q1	2019	2003 –'06	1999 –'01
— Net Fixed Investment	5.16	4.92	5.12	5.12	5.19	7.33	8.03
■ Business	2.90	2.68	2.94	2.89	2.88	2.55	4.27
Nonfin. Noncorp. Business	0.42	0.40	0.44	0.47	0.46	0.58	0.61
Nonfin. Corporations	2.32	2.16	2.37	2.31	2.15	1.72	3.15
■ Government	0.94	0.94	0.93	0.86	0.82	1.31	1.10
State & Local Gov.	0.70	0.70	0.69	0.67	0.66	1.08	1.13
Federal Gov.	0.24	0.24	0.24	0.19	0.15	0.23	-0.03
■ Household & Nonprofit	1.32	1.31	1.25	1.38	1.49	3.46	2.67
— / ■ Consumer Durables	1.19	1.33	1.19	1.19	1.09	1.97	2.27

Source: Federal Reserve, Bureau of Economic Analysis

Households

This section covers the household sector of the economy. Households are the source of labor for production and the source of saving for investment. Households are also the primary consumers in the economy. The core topics in the households section include demographics, personal and household income and outlays, consumer sentiment, residential investment, household balance sheets, home ownership, housing, and poverty.

Demographics

Demographics provide a foundation for examining the household sector. Demographics provide insight on the structure and characteristics of the population. The demographics subsection covers population, population growth, household formation and headship, age, life expectancy, and education.

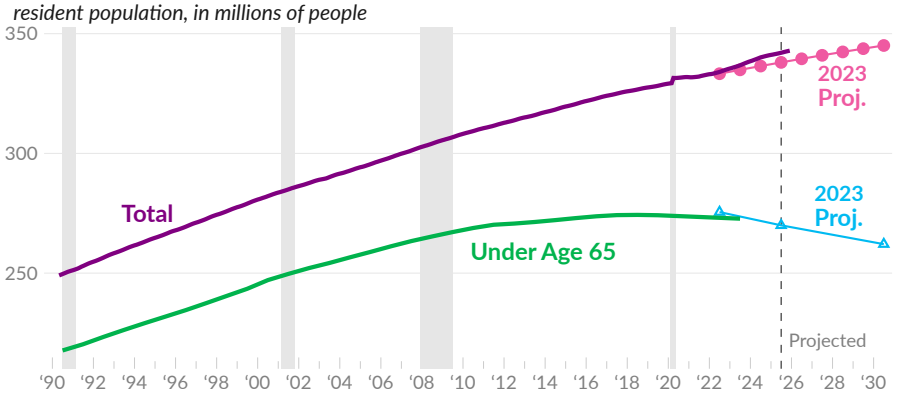
Population

The Census Bureau provides estimates and projections of the **US population**. Population levels and growth rates affect the economy and are critical pieces of information in determining and evaluating economic policies and outcomes. Population projections are based on assumptions, for example about the future level of net migration to the US, but are useful for thinking about future US demographics.

The US resident population is 342.0 million in July 2025, from the latest population estimates, released in December 2024 (see —). The 2023-based projections of the future US resident population show a 2030 population of 345.1 million people (see —●—). The resident population under age 65 was estimated to be 272.7 million in 2023 (see —) and is projected to be 262.1 million in 2030 (see —△—).

Population Estimates and Projections

resident population, in millions of people



Source: Census Bureau

Population Estimates and Projections

resident population, in millions of people

	Jul 2025	2023	2019	2010	2000	1990	*Projected* 2030
Total Resident Population	342.0	336.8	328.2	309.3	282.2	249.6	345.1
Under Age 65	–	272.7	274.2	268.8	247.1	217.7	262.1
Age 65 Plus	–	64.1	54.1	40.5	35.1	31.9	83.0

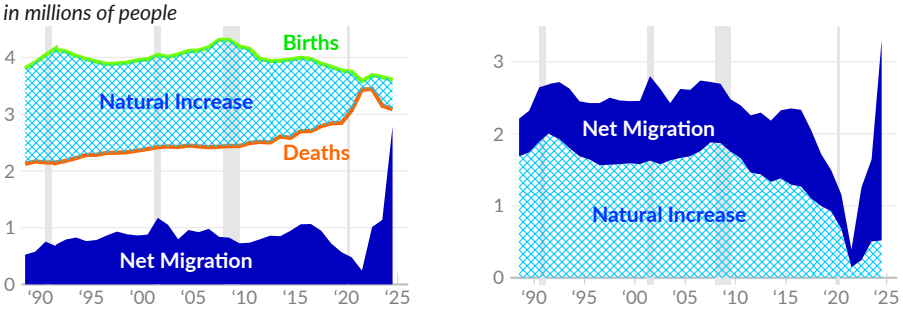
Source: Census Bureau

Population Growth

Population growth comes from two sources, natural increases (births minus deaths) and net migration. In the latest estimate, the US added 3,304,800 people over the year ending July 2024, a population growth rate of one percent. There were a total of 3.61 million births (see —), and 3.09 million deaths (see —), resulting in a natural increase of 518,600 people (see ⊠). In the same period, net migration from abroad increased the resident population by 2,786,100 people (see ■). For comparison, in 1989, there were 3.91 million births, 2.17 million deaths, and 578,200 net migrants to the US.

Components of US Population Growth

in millions of people



Source: Census Bureau

Related Measures

There are multiple measures of population, based on different definitions. As of July 2025, the **resident** population is 342.0 million, while the more-comprehensive resident population **including armed forces overseas** is 342.3 million, and the more-narrow **civilian noninstitutionalized** population, which is used in labor statistics, is 337.3 million. The Bureau of Economic Analysis (BEA) use midyear resident population estimates from the Census Bureau for per capita measures. Chartbook measures that use both population and BEA data use the resident population, while chartbook measures based on the Current Population Survey use the civilian noninstitutionalized population.

The Census Bureau further divides the population into those living in households and those living in group quarters. As of July 2025, the **household** population is 333.6 million, or 97.5 percent of the total resident population. The **group quarters** population is measured in depth as part of the 2020 Census. The 2020 group quarters population is 8.2 million, of which 3.8 million are institutionalized. Of these, two million are in prisons and jails, and 1.6 million are in nursing and skilled-care facilities. An additional 2.8 million people live in dormitories or student housing, 328,000 live in barracks, and 1.4 million live in other noninstitutional facilities such as shelters and group homes.

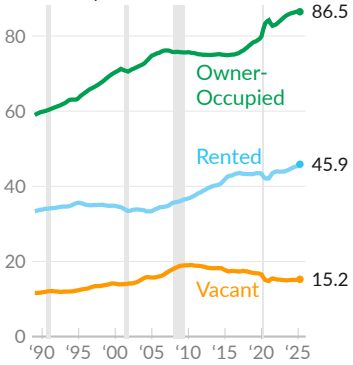
Lastly, an important related concept, **households**, are measured as occupied housing units. The number of households varies over time, separately from the population, as people make changes in their living arrangements. Over the year ending 2025 Q2, there were an average of 132.3 million households, compared to 94.2 million in 1990.

Household Formation

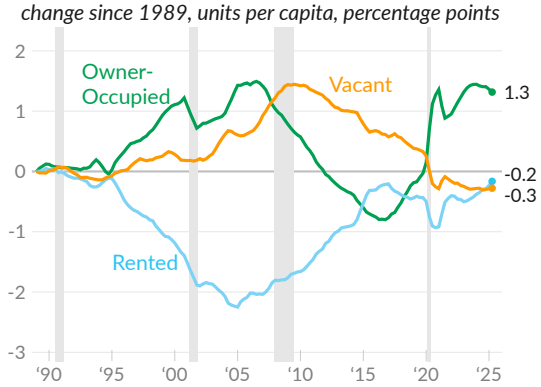
Households are measured as **occupied housing units**, whether occupied by the owner or rented. Over the year ending 2025 Q2, there were an average of 132.3 million total occupied housing units in the US, of which 45.9 million (34.7 percent) were rented, and 86.5 million (65.3 percent) were owner-occupied. Since 1989, the US has experienced the boom and bust of a major housing bubble. By 2016, the end result of the bubble bursting was a shortage of housing, as housing units per capita fell from 1995 to 2016.

Housing by Type

one-year moving averages
millions of units



change since 1989, units per capita, percentage points



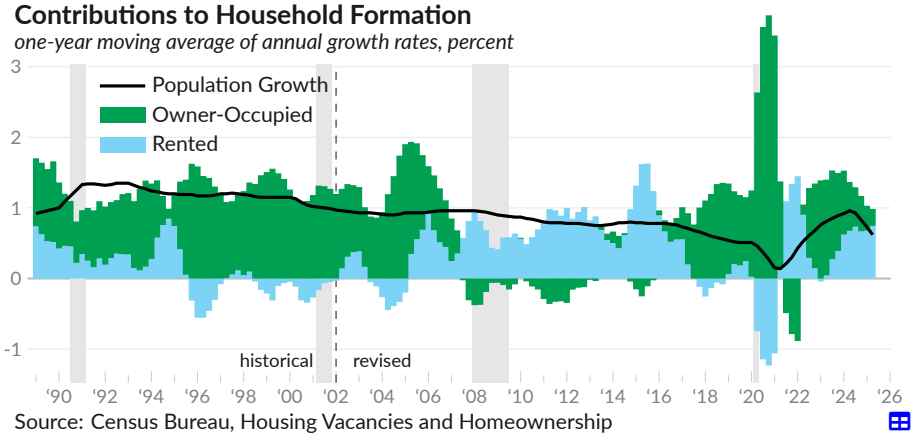
Source: Census Bureau

Household formation measures the change in occupied housing units. During the housing bubble, housing construction exceeded population growth and the homeownership rate increased. Following the collapse of the housing bubble, household formation was below population growth and homeownership decreased as foreclosures converted homeowners into renters.

From 2019 Q4 to 2025 Q2, the average annual **household formation rate** was 1.4 percent, while annual population growth averaged 0.6 percent. Changes in the number of owner-occupied households contributed 1.1 percentage points on an average basis (see ■), and changes in rented households contributed 0.3 percentage point (see ■). Over the year ending 2025 Q2, the household formation rate averaged 1.0 percent, of which owner-occupied households contributed 0.2 percentage point, and rented households contributed 0.7 percentage point.

Contributions to Household Formation

one-year moving average of annual growth rates, percent



Source: Census Bureau, Housing Vacancies and Homeownership

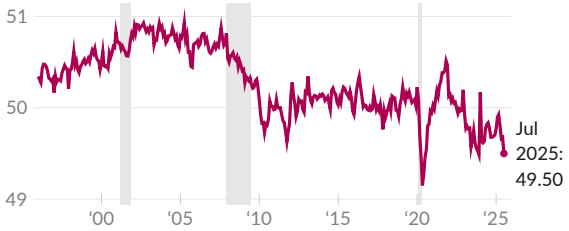
Headship Rate

Individual decisions about starting a household or living with family are influenced by economic conditions. The ratio of households to people age 16 and older is referred to as the aggregate headship rate. The headship rate is higher when people are more likely to head their own household.

The headship rate fell following the collapse of the housing bubble and during the COVID-19 pandemic, as more people moved in with family. The headship rate reached a low of 49.15 percent during May 2020, and is currently 49.50 percent, as of July 2025 (see —).

Aggregate Headship Rate

people age 16 and older, percent, seasonally adjusted



Source: Author's Calculations from CPS

Living with Family

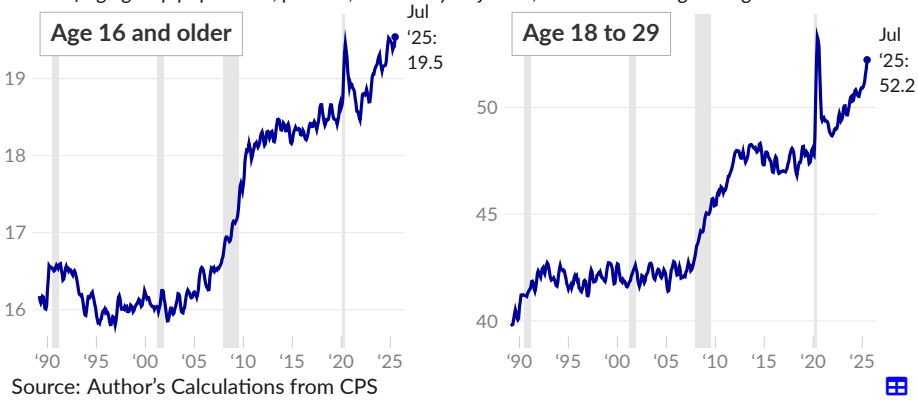
Underneath changes in headship are changes in living arrangements, including in the rate at which adults live with family members who are not their spouses. Specifically, **living with family**, in this context, measures the share of people age 16 and older who are living with their parents, grandparents, kids, or other nonspouse relative.

Living with family became more common after the collapse of the housing bubble. An additional two percent of adults, or roughly 4.8 million people, live with family in 2010 compared to 2003. Rates of living with family spiked early in the COVID-19 pandemic, particularly for young adults.

Over the three months ending July 2025, 19.5 percent of those age 16 and older, and 52.2 percent of those age 18 to 29, are living with family. Relative to 2019, an additional 2.3 million young adults now live with family, equivalent to 4.4 percent of the age group.

Living with Family

share of age group population, percent, seasonally-adjusted, 3-month moving average



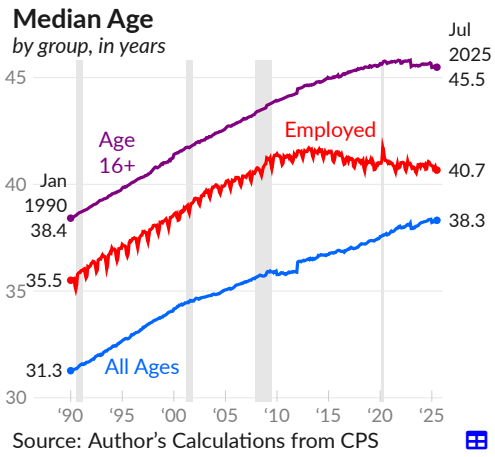
Source: Author's Calculations from CPS

Age

In discussions on demographics, **aging** is often described as a serious headwind to economic growth in major advanced economies. The increased share of many countries' population that is of retirement age means a smaller share are working and borrowing and a larger share are receiving pension benefits and lending to the financial system. These trends can be overcome by a workforce that is more efficiently able to provide goods and services. In part due to a shorter life-expectancy in the US, this problem is more pronounced in Japan and western Europe, but is still an important issue for the US.

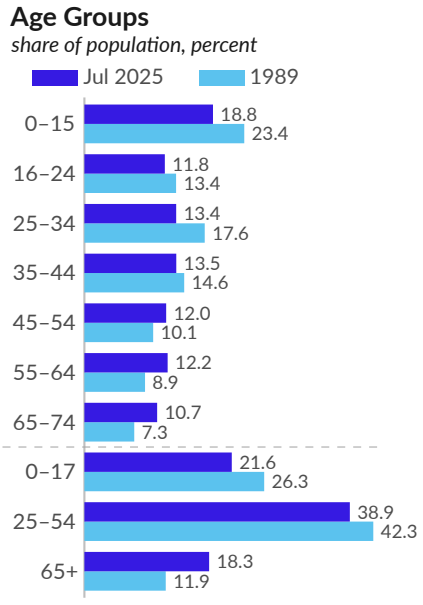
The **median age** is the midpoint for the age of a group; half of the group is older and half is younger. Tracking this point over time summarizes the age composition of the group. As a population ages, the median age will increase.

The median age of the overall civilian noninstitutionalized population, calculated from the Current Population Survey (CPS), is 38.3, as of July 2025, compared to 31.3 in January 1990 (see —). The median worker is 40.7 in July 2025, and 35.5 in January 1990 (see —).



Source: Author's Calculations from CPS

Economic indicators are sometimes based on specific **age groups**. As examples, labor statistics often exclude those under age 16, the retirement-age population is above a certain age, such as 64, and a popular measure of labor market slack is the age 25 to 54 employment rate. It is therefore useful to know what share of the overall population is in each major age group, and how the current age distribution compares with the past.



Source: Author's Calculations from CPS

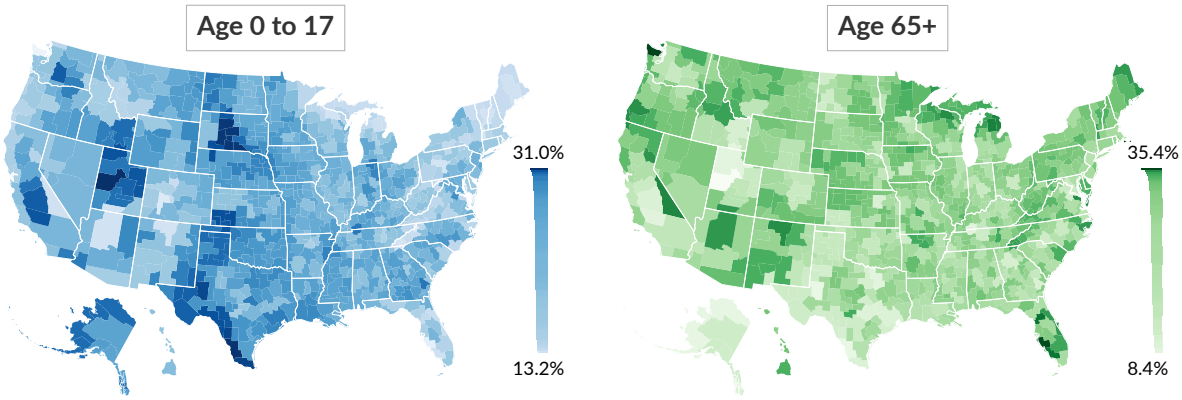
The noninstitutionalized civilian population used in most labor statistics totals 337.3 million in July 2025. Of this, 18.8 percent are under the working age of 16, equivalent to 63.6 million people. In 1989, the under-16 population was 23.4 percent of the total. The juvenile population, those under 18, is 72.8 million, equivalent to 21.6 percent of the population in July 2025, and compared to 26.3 percent in 1989.

Traditionally, the prime working age is between 25 and 54. In July 2025, 131.2 million people, 38.9 percent of the population, are age 25 to 54. In 1989, 42.3 percent of the population is age 25 to 54. The age 55 to 64 group is 12.2 percent of the population in the latest data and 8.9 percent in 1989. Those above the age of 65 comprise 18.3 percent in July 2025 and 11.9 percent in 1989.

Mapping American Community Survey data to commuter zones gives insight on the **age composition of local areas**. In 2023, among commuter zones with a population of at least 100,000, the commuter zone (listed by largest city) with the highest share of its population under 18 is Provo, UT (31.0 percent), followed by Laredo, TX (30.7 percent), and Brownsville, TX (29.6 percent). The commuter zones with lowest share of the local population under 18 were Port Angeles, WA (14.3 percent), Sarasota, FL (14.9 percent), and Pittsfield, MA (16.1 percent).

The age 65 and older population is disproportionately concentrated in Florida. The commuter zone with the highest share of its population over 64 is Port Angeles, WA (35.4 percent), followed by Sarasota, FL (34.8 percent), and Ocala, FL (31.0 percent). The commuter zones with lowest local over-64 population share were Provo, UT (8.4 percent), Laredo, TX (10.9 percent), and Odessa, TX (11.0 percent).

Age Group Share of Commuter Zone Population, 2023



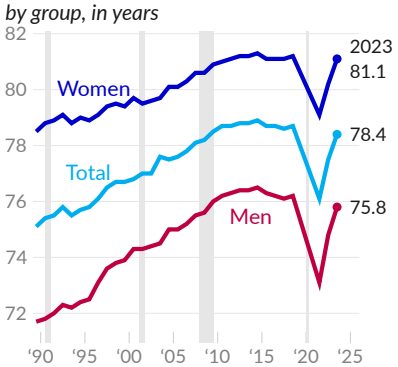
Source: American Community Survey, Dorn

Life expectancy

Life expectancy at birth summarizes the health and mortality of a population. The measure indicates the number of years a newborn is expected to live if mortality rates do not change. Life expectancy estimates are produced by the National Center for Health Statistics.

Life Expectancy at Birth

by group, in years



Source: NCHS

In 2023, US life expectancy at birth is 78.4 years (see —), a decrease of 0.5 year since 2014, but an increase of 3.3 years since 1989. Life expectancy for men is 75.8 years in 2023, compared to 76.5 years in 2014 and 71.7 years in 1989 (see —). Women born in 2023 are expected to live 81.1 years, based on current mortality rates, compared to estimates of 81.3 years for 2014 and 78.5 years for 1989 (see —).

Falling life expectancy from 2014 to 2018 is generally associated with increased overdose deaths and the opioid epidemic. Life expectancy fell further during the COVID-19 pandemic, according to early estimates.

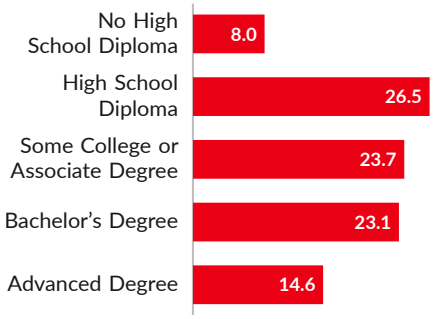
Education

Education is central in many discussions of the future of the US economy. In recent decades, there has been a significant rise in both college tuition fees and enrollment rates. Households may be spending more on education as a response to changing job opportunities from globalization and other policy decisions. Consequently, the population is now more educated but also bears greater student debt burdens.

Over the year ending July 2025, 37.7 million people over the age of 25, or 39.3 percent of the total, have at least a bachelor's degree, with 14.6 million of those, or 15.2 percent of the total, holding an advanced degree such as a master's degree, medical or law degree, or PhD.

An additional 23.7 million people have some college coursework but no degree or have an associate degree. A total of 26.5 million have a high school diploma but no college, while 8.0 million have no high school diploma.

Highest Level of Education
millions of people, age 25+, July 2025
12-month moving average

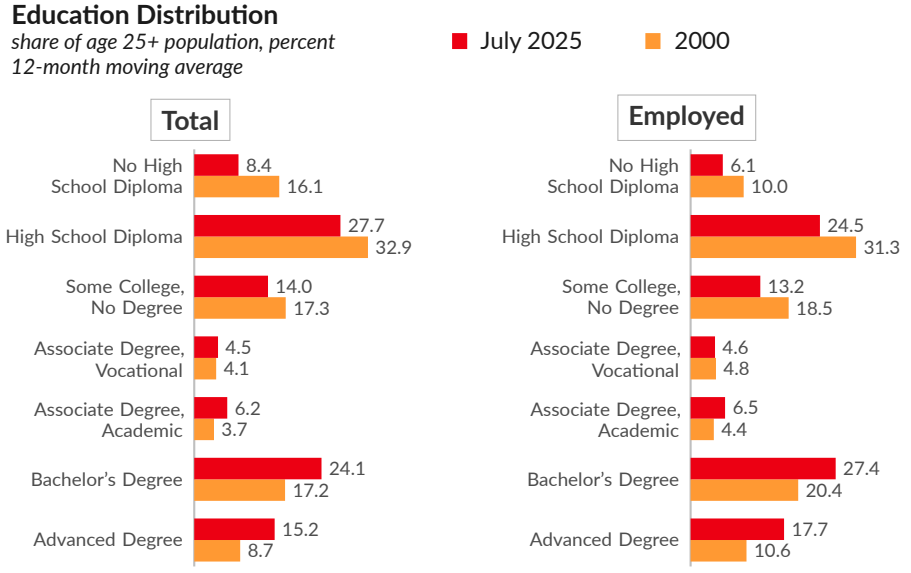


Source: Author's Calculations from CPS

The share of the population with a bachelor's degree or advanced degree increased by 13.4 percentage points since 2000. The increase is even more pronounced among those who are employed; 45.1 percent have a college degree or advanced degree during the year ending July 2025, an increase of 14.2 percentage points since 2000.

Increased education may be connected to a changing labor market and lack of worker bargaining power. Behind the increase in education is a large increase in student debt. The burden of this debt is severe for many, as the more-educated workforce is not necessarily receiving the historical wage premium from education.

Education Distribution
share of age 25+ population, percent
12-month moving average



Source: Author's Calculations from CPS

Income, Spending, and Saving

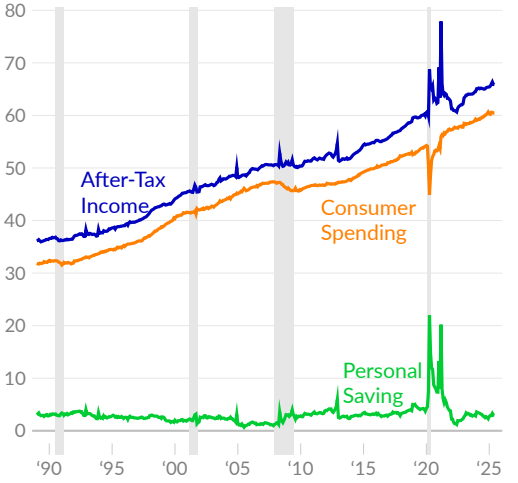
The next subsections cover household and personal income, consumer spending, and personal saving. This subsection offers an overview, with mean and median per capita measures, adjusted for inflation to June 2025 dollars.

In the national accounts, disposable personal income, or **after-tax income**, totals $22.5 trillion, on an annualized basis, in June 2025, equivalent to $65,860 per person (see —). Personal consumption expenditures, or **consumer spending**, totals $20.7 trillion in June 2025, or $60,448 per person (see —). **Personal saving**, calculated as after-tax income minus consumer spending and other outlays such as interest payments, totals $1.01 trillion, or $2,945 per person (see —).

The Consumer Expenditure Surveys report spending by income level, including for the median household. The median is not affected by the activities of the highest income households, which skew the average (mean). Personal saving is calculated as after-tax income minus spending, excluding spending on pensions.

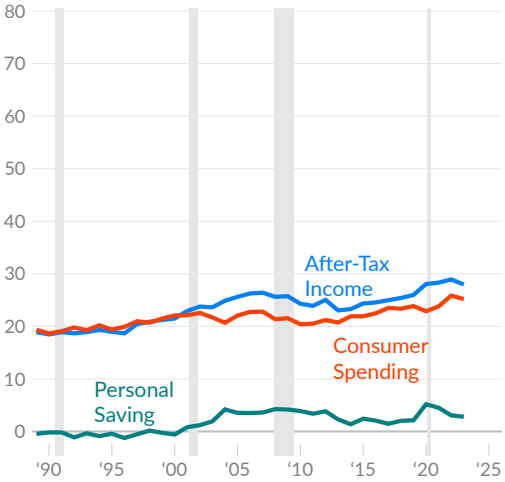
In 2023, inflation-adjusted after-tax income is $27,985 per person for the middle fifth of households (see —). Spending for these households is $25,186 per person (see —), and saving is $2,798 per person (see —).

Average Income, Spending, and Saving
per capita, thousands of June 2025 US dollars



Source: Bureau of Economic Analysis

Median (Middle Quintile Average)
per householder, thousands of June 2025 US dollars



Source: Census Bureau

Average Income, Spending, and Saving
per capita, seasonally-adjusted annualized rate, June 2025 US dollars

	Jun '25	May '25	Apr '25	Mar '25	Jun '24	Jun '19
Personal Income	$75,378	75,416	75,874	75,425	74,256	67,827
Personal Current Taxes	9,518	9,518	9,488	9,453	9,103	8,219
— After-Tax Income	65,860	65,898	66,386	65,971	65,153	59,608
Personal Outlays	62,915	62,919	63,075	63,071	62,045	55,379
— Consumer Spending	60,448	60,442	60,592	60,584	59,543	53,333
Interest Payments	1,640	1,648	1,654	1,660	1,677	1,272
— Personal Saving	2,945	2,979	3,311	2,900	3,108	4,228

Source: Bureau of Economic Analysis

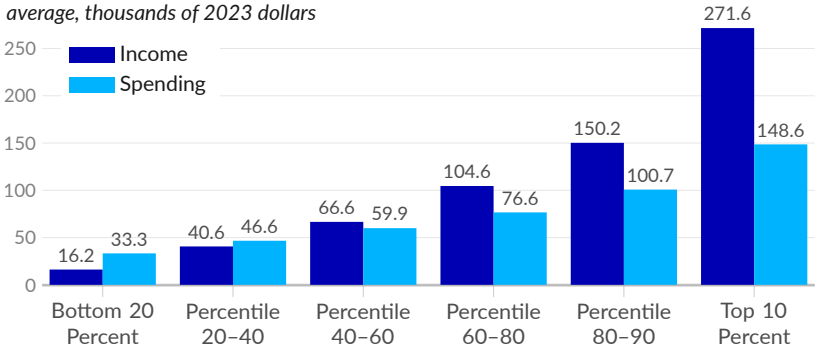
Distribution by Income

Income varies massively by household. While some spending is non-discretionary, spending increases with income. The bottom 40 percent of households, by total money income, have expenses exceeding after-tax income. This includes retirees who are dissaving and low-income families taking on debt to cover expenses. Meanwhile, the top ten percent of households save nearly half of their income.

In 2023, after-tax household income (see ■) ranges from $16,200 for the bottom 20 percent to $271,600 for the top 10 percent. Spending, excluding pensions, (see ■) ranges from $33,300 for the bottom 20 percent by income, to $148,600 for the top 10 percent income group.

Household Income and Spending, by Income Percentile

average, thousands of 2023 dollars



Income is after taxes; spending does not include spending on pensions
Source: Census Consumer Expenditure Surveys

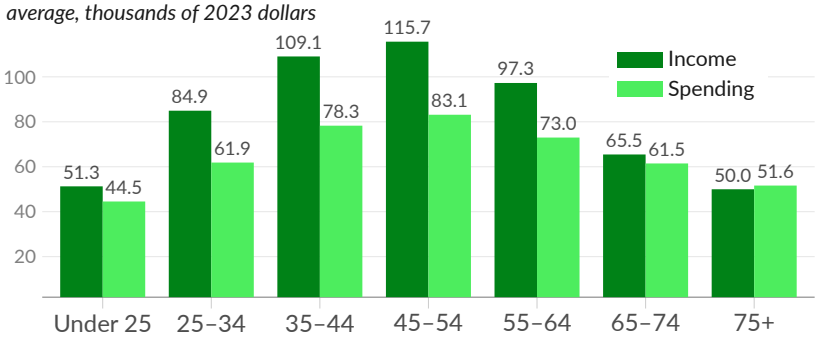
Distribution by Age

Income and spending vary by age and tend to peak between ages 45 and 54. Saving, the difference between income and spending, also varies by age and generally peaks during ages 45 to 54. In 2019, the oldest and youngest age groups in the data have income near or below their expenses, resulting in low or negative saving rates. In contrast, during the pandemic in 2020, income was above average and spending was below average, and saving rates were positive and far above average.

In 2023, after-tax household income (see ■) ranges from $50,000 for the oldest age group to $115,700 for the 45 to 54 age group. Spending, excluding pensions, (see ■) ranges from $44,500 for the youngest age group to $83,100 for the 45 to 54 age group.

Household Income and Spending, by Age of Reference Person

average, thousands of 2023 dollars



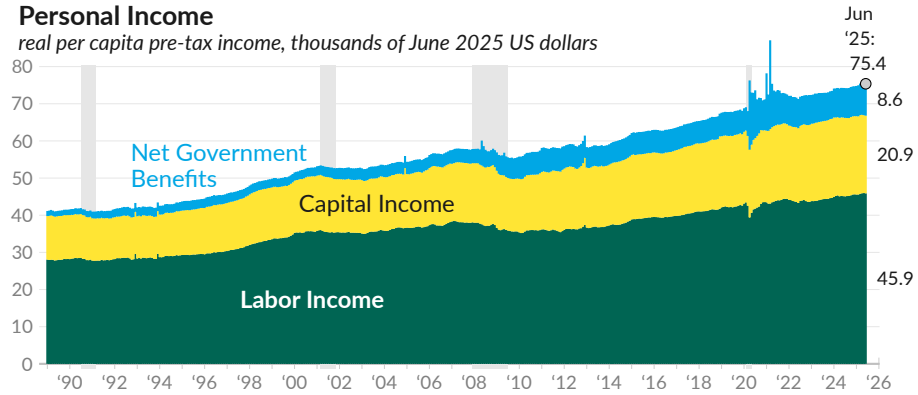
Income is after taxes; spending does not include spending on pensions
Source: Census Consumer Expenditure Surveys

Personal Income

Personal income, the income US residents get before taxes, can be grouped into three major categories: labor income, capital income, and net government benefits. Labor income (see) encompasses wages and salaries and other job benefits, and is measured as compensation of employees in the national accounts. Capital income (see) sums proprietor, rental, dividend, and interest income. Net government social benefits (see) are measured as government social benefits less contributions to social insurance.

Personal Income

real per capita pre-tax income, thousands of June 2025 US dollars



Source: Bureau of Economic Analysis, Author

In June 2025, annualized personal income is $75,378 per capita (see). Labor income totals $45,897 per person, capital and proprietor income is $20,890 per person, and net government benefits total $8,591 per person.

Personal Income by Source

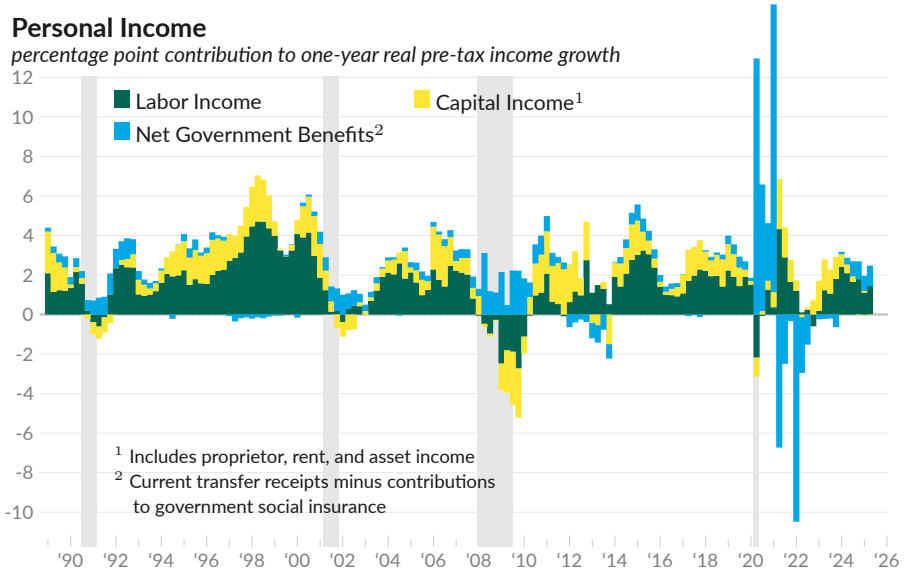
per capita, annualized, June 2025 US dollars

	Jun '25	May '25	Apr '25	Jun '24	Jun '19
Personal Income (Pre-Tax Income)	$75,378	75,416	75,874	74,256	67,827
Labor	45,897	45,965	45,900	45,131	42,207
Wages & Salaries	37,830	37,904	37,858	37,254	34,368
Supplements to Wages & Salaries	8,067	8,061	8,042	7,877	7,840
Capital	20,890	20,962	21,160	21,173	19,203
Proprietors' Income	6,004	6,014	6,187	6,057	5,695
Rental Income	3,172	3,197	3,221	3,154	2,540
Personal Interest Income	5,868	5,876	5,877	5,976	5,984
Personal Dividend Income	5,846	5,876	5,875	5,986	4,984
Net Government Benefits	8,591	8,489	8,813	7,951	6,416
Government Social Benefits	13,952	13,864	14,185	13,260	11,457
Social Security	4,629	4,558	4,927	4,356	3,812
Medicare	3,486	3,466	3,441	3,239	2,933
Medicaid	2,892	2,887	2,865	2,793	2,290
Unemployment Insurance	110	107	105	107	100
Veterans' Benefits	723	711	698	658	477
Other	2,113	2,134	2,148	2,106	1,844
Less: Social Insurance Contributions	-5,783	-5,795	-5,790	-5,703	-5,258

Source: Bureau of Economic Analysis

Personal Income

percentage point contribution to one-year real pre-tax income growth



Source: Bureau of Economic Analysis

Aggregate real personal income increased 2.44 percent over the year ending 2025 Q2. Labor income contributed 1.44 percentage points to overall growth, capital income subtracted 0.03 percentage point, and net government benefits contributed 1.03 percentage point.

Personal Income by Source

percentage point contribution to one-year real pre-tax income growth

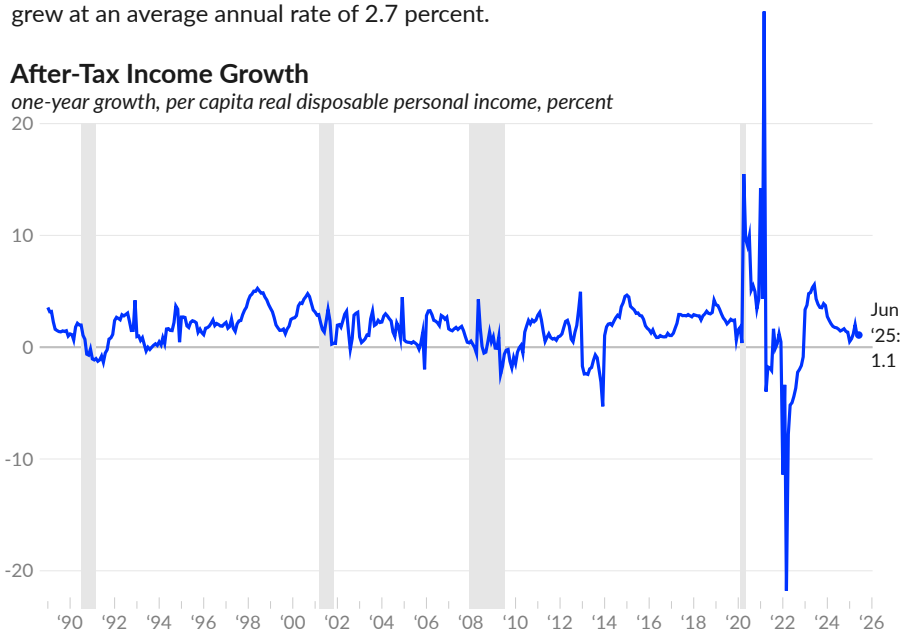
	2025 Q2	'25 Q1	'24 Q4	'24 Q3	'24 Q2	*moving averages* 1-year	10-year	30-year
Personal Income (Pre-Tax Income)	2.44	1.97	2.65	2.69	2.87	2.44	2.66	2.72
Labor	1.44	1.11	1.79	1.65	2.09	1.50	1.43	1.53
Wages & Salaries	1.11	0.83	1.46	1.29	1.68	1.17	1.26	1.28
Supplements to Wages & Salaries	0.33	0.29	0.33	0.36	0.40	0.33	0.17	0.25
Capital	-0.03	0.08	-0.03	0.28	0.44	0.07	0.74	0.78
Proprietors' Income	0.08	0.13	0.07	0.06	0.07	0.08	0.13	0.25
Rental Income	0.05	0.08	0.14	0.16	0.18	0.11	0.14	0.16
Personal Interest Income	-0.04	-0.03	-0.16	0.06	0.20	-0.04	0.14	0.08
Personal Dividend Income	-0.12	-0.09	-0.08	0.00	-0.01	-0.07	0.33	0.29
Net Government Benefits	1.03	0.77	0.90	0.76	0.34	0.86	0.49	0.41
Government Social Benefits	1.16	0.82	0.95	0.81	0.47	0.94	0.65	0.58
Social Security	0.52	0.27	0.25	0.25	0.22	0.32	0.18	0.17
Medicare	0.35	0.30	0.24	0.20	0.17	0.27	0.15	0.15
Medicaid	0.14	0.12	0.28	0.19	-0.04	0.18	0.13	0.12
Unemployment Insurance	0.00	-0.00	-0.00	0.00	0.01	0.00	0.03	0.01
Veterans' Benefits	0.08	0.06	0.06	0.07	0.07	0.07	0.05	0.03
Other	0.05	0.08	0.13	0.11	0.05	0.09	0.10	0.10
Less: Social Insurance Contributions	-0.16	-0.10	-0.11	-0.09	-0.16	-0.12	-0.19	-0.19

Source: Bureau of Economic Analysis

The Bureau of Economic Analysis report an inflation-adjusted one-year change in after-tax income per person of 1.1 percent in June 2025, 1.1 percent in May 2025, and 1.7 percent in June 2024 (see —). Over the past year, the measure has averaged 1.3 percent. During the three years before the COVID-19 pandemic, per capita after-tax income grew at an average annual rate of 2.7 percent.

After-Tax Income Growth

one-year growth, per capita real disposable personal income, percent



Source: Bureau of Economic Analysis

Distribution of Personal Income

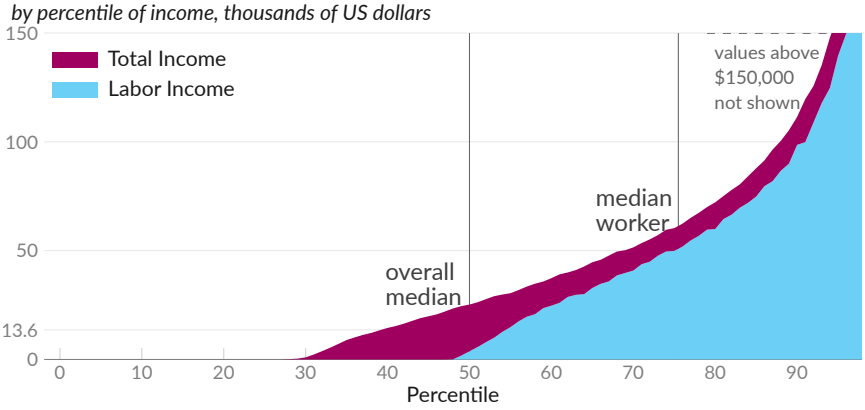
Labor income, which includes wages and salaries as well as self-employment income, is the vast majority of personal income. Over calendar year 2023, 51 percent of people have any labor income (see ■). Only 44 percent of people have labor income above the single-person poverty threshold of $13,590.

Total income, which includes after-tax labor income plus welfare and capital income, (see ■) reaches 71 percent of people in 2023. People who did not receive any income by the total income measure typically live with people who receive income.

In 2023, 5.8 percent of people have total income of more than $150,000. Note that the chart cuts off income above $150,000.

Distribution of Personal Income, 2023

by percentile of income, thousands of US dollars



Source: Author's Calculations from CPS ASEC

Personal Income
number of recipients in thousands, income amounts in 2023 US dollars

	2023			2019		
	Total with Income	Median Income	Mean Income	Total with Income	Median Income	Mean Income
Total	241,800	$42,220	$63,510	235,292	$43,013	$64,716
Earnings	173,100	50,310	68,130	169,802	49,661	69,063
Social Security	57,020	18,880	19,910	54,985	18,559	19,722
Supplemental Security Income	5,870	10,350	9,956	5,715	10,074	10,118
Public Assistance	1,685	2,900	4,561	1,383	3,241	4,847
Veterans' Benefits	5,068	17,110	21,920	4,406	16,444	21,082
Survivor Benefits	3,174	11,100	20,690	3,197	11,638	20,492
Disability Benefits	2,879	11,420	16,130	2,729	10,588	16,591
Unemployment Compensation	3,325	4,150	5,921	3,345	4,457	6,304
Workers' Compensation	1,317	9,834	16,060	1,485	9,605	17,036
Property Income	156,000	1,764	7,699	146,025	2,032	7,435
Retirement Income	30,940	16,720	27,980	30,731	17,356	30,852
Pension Income	21,140	18,010	26,030	20,850	19,031	30,552
Alimony	177	13,660	45,930	216	15,907	22,091
Child Support	3,129	4,326	6,356	3,788	4,974	7,035
Educational Assistance	7,488	5,883	9,733	7,848	6,247	10,380
Outside Financial Assistance	3,004	5,050	9,529	2,587	4,809	10,761
Other	2,307	1,631	6,287	2,407	2,176	15,490

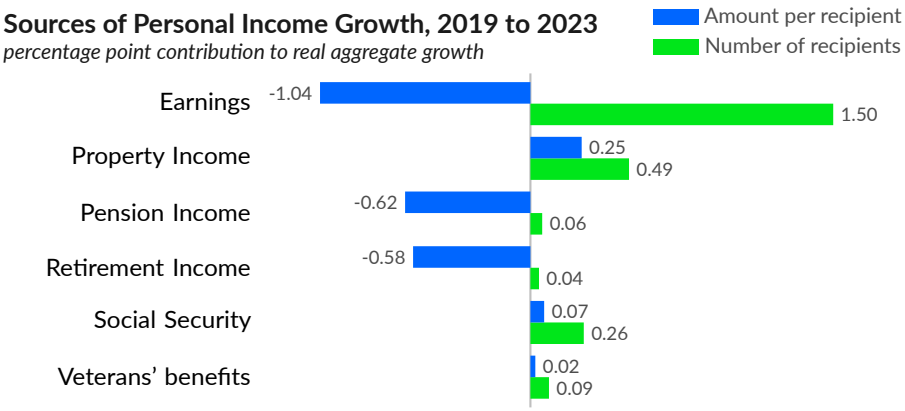
Source: Census Bureau, Bureau of Labor Statistics

Contributions to Personal Income Growth

Annual data on personal income describe the number of people receiving various categories of income, and the average payment. As a result, it is possible to match changes in aggregate personal income with changes in payment amounts (see) and changes in how many people are receiving payments (see).

From 2019 to 2023, aggregate pre-tax personal income increased by a total of 0.85 percent, after adjusting for changes in prices. Compared to 2019, average amounts received are down across nearly all categories. Property, pension, and retirement income were hit by higher inflation and a weak stock market. Earnings did not keep up with inflation over this period, though more people are working.

Sources of Personal Income Growth, 2019 to 2023
percentage point contribution to real aggregate growth



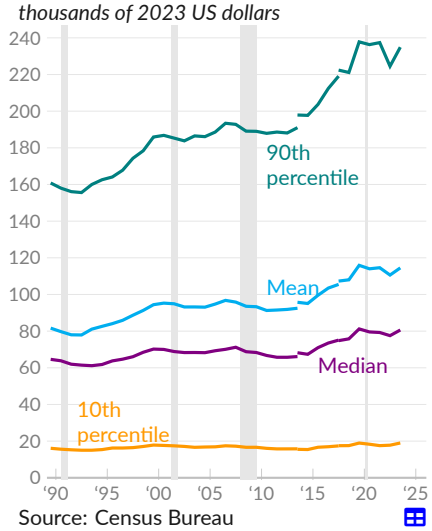
Source: Census Bureau, Bureau of Labor Statistics

Household Income

Given the variance in personal income, with many people receiving no income at all, individuals often live together and combine their income and expenses. This subsection covers household income, the combined income of all people in a given housing unit.

As with personal income, household income is distributed very unevenly in the US. The Census Bureau and Bureau of Labor Statistics report historical household income data, adjusted for changes in prices. The mean or average household income is $114,500 in 2023 (see —), compared to $110,600 in 2022, and $114,600 in 2021. In 2000, real mean household income was $95,280.

Real Household Income
thousands of 2023 US dollars



Source: Census Bureau

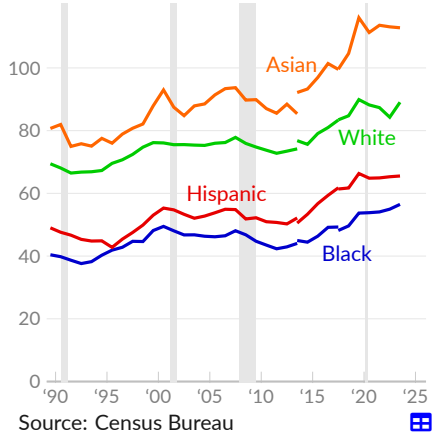
Real median household income (see —), the price-adjusted midpoint among household incomes, is $80,610 in 2023, $77,540 in 2022, and $79,260 in 2021. For comparison, real median household income was $70,020 in 2000. Since 2000, real median income increased by a total of 15.1 percent.

The price-adjusted income limit for the 90th percentile is $234,900 in 2023 (see —), $224,500 in 2022, $237,400 in 2021, and $186,800 in 2000. Ten percent of households make more than this level.

On the opposite end of the income distribution, the 10th percentile income limit is $18,980 in 2023 (see —), $17,780 in 2022, $17,540 in 2021, and $17,650 in 2000. Ten percent of households make less than this level.

The Census Bureau also report household income based on the race or ethnicity of the householder. Household income varies substantially by race, in the US, and the racial income gap has been persistent, over time.

Real Median Household Income
thousands of 2023 US dollars



Source: Census Bureau

Black median household income is $56,490 in 2023, compared to an inflation-adjusted equivalent of $54,960 in 2022 (see —). Non-Hispanic white median household income is $89,050 in 2023 and $84,280 in 2022 (see —). Hispanic (any race) median household income is $65,540 in 2023 and $65,300 in 2022 (see —). Asian median household income is $112,800 in 2023 and $113,100 in 2022 (see —).

Two values are shown for 2013 and 2017 to mark revisions to the survey design (2013) and the processing of survey data (2017). These data are not perfectly comparable over time.

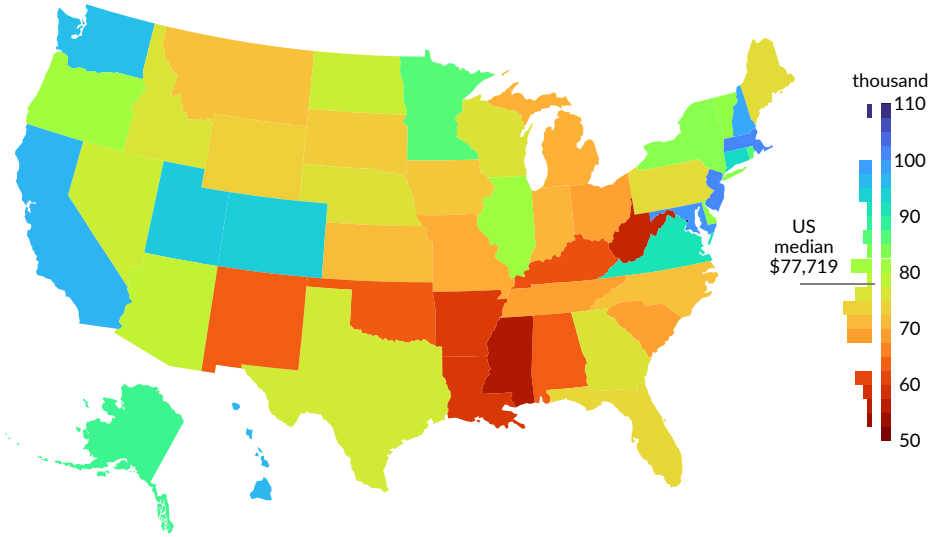
Lastly, the Census Bureau report median household income by state, calculated using the American Community Survey. In 2023, the median US household income, using this measure, is $77,719. In the same year, the median income in 19 states and the District of Columbia is above the national median, and the median income in 31 states is below the national median.

In 2023, the District of Columbia tops the list, with a median household income of $108,210. Massachusetts has the second highest income ($99,858), followed by New Jersey ($99,781). Other high-income states include Maryland ($98,678), New Hampshire ($96,838), California ($95,521), Hawaii ($95,322), Washington ($94,605), Utah ($93,421), and Colorado ($92,911).

The state with the lowest 2023 median household income is Mississippi ($54,203), followed by West Virginia ($55,948), Louisiana ($58,229), Arkansas ($58,700), Kentucky ($61,118), and Oklahoma ($62,138). Median household income in Puerto Rico is $25,621.

Household Income, 2023

median household income by state, 2023 US dollars



Source: Census Bureau, American Community Survey

Household Spending and Saving

The preceding subsection focused on household income, whereas this subsection covers household **spending and saving**. Consumer spending encompasses household outlays on goods and services, including government-provided benefits like Medicare and Medicaid, and imputed services such as the assumed rental value of owner-occupied housing.

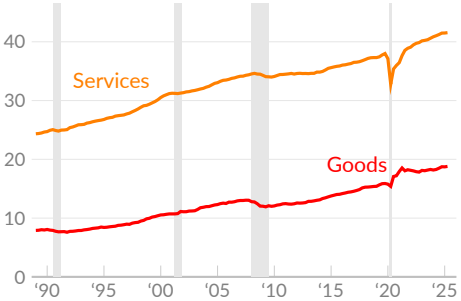
Personal saving occurs when households have income in excess of their expenses. Savings are invested, often providing additional income, and are used for future expenses, such as costs incurred during retirement. Both topics are covered in more depth below.

Consumer Spending

Over the last three decades, the expansion of **consumer spending** has been a primary driver of economic growth. Consumer spending usually increases when households have more income and falls when households have less income. This effect is visible in both the long-run and during the course of a business cycle, with consumer spending generally falling or slowing during a recession. Some categories of spending fell sharply during COVID-19 business closures and restrictions.

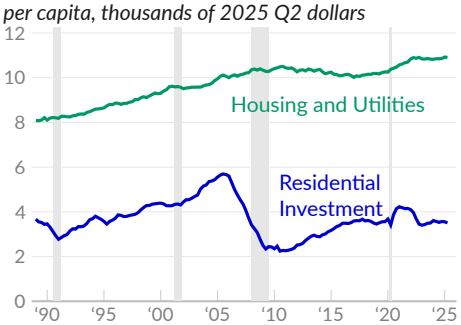
Consumer spending is comprised of two broad expenditure types: goods and services. Spending on goods includes durable goods (goods with a useful life of at least three years), such as cars, furniture, or recreational goods, and nondurable goods, such as groceries, clothing, and gasoline. Spending on services includes housing, health care, restaurants and bars, transportation services, financial services, and other services.

Expenditures, by Type
per capita, thousands of 2025 Q2 dollars



Source: Bureau of Economic Analysis

Shelter Costs
per capita, thousands of 2025 Q2 dollars



Source: Bureau of Economic Analysis

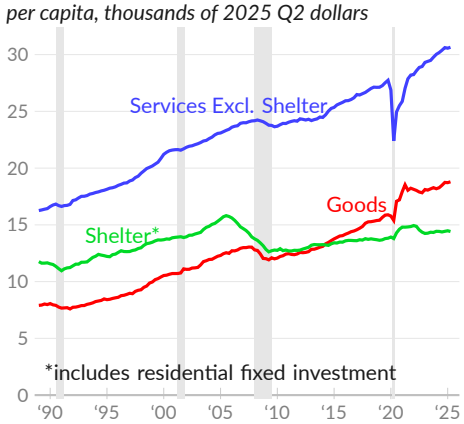
Total consumer spending is $20.6 trillion in 2025 Q2, compared to a price-adjusted $20.6 trillion in 2025 Q1 and $17.8 trillion in 2019 Q4. On a per person basis, consumer spending is $60,347 in 2025 Q2, of which $18,794 are spent on goods (see —) and $41,553 on services (see —). In the fourth quarter of 2019, before the pandemic, consumer spending on goods was $15,886 per person, and spending on services was $38,002 per person, after adjusting for inflation.

Within consumer spending on services, housing and utilities spending totals $10,906 on an annualized and per person basis in 2025 Q2 (see —) and $10,262 in 2019 Q4. Construction or improvement of housing is considered residential fixed investment, not consumer spending, but can be combined with spending to analyze patterns in shelter costs. In 2025 Q2, residential investment totals $3,507 per person (see —), compared to $3,561 in the pre-COVID data covering 2019 Q4.

Consumer Spending and Residential Fixed Investment

The previous two charts cover spending on goods, spending on services other than shelter, and spending on housing, utilities, and residential fixed investment. Investment is not typically grouped with spending, as investment is a form of saving. Spending reduces a household's cash balance, while investment exchanges cash for another asset. The two categories are grouped in the following charts to provide a more broad overview of what households are doing with their income.

Expenditures, by Type
per capita, thousands of 2025 Q2 dollars



Source: Bureau of Economic Analysis

Consumer spending on services other than housing and utilities totals $30,647 per person, on an annualized basis, in 2025 Q2 (see —), compared to an inflation-adjusted $30,566 in 2025 Q1, and $27,740 in 2019 Q4. Spending on non-housing services has increased 10.5 percent since 2019 Q4.

Shelter costs, which combine housing, utilities, and residential fixed investment, are $14,413 per person in 2025 Q2 (see —), $14,479 in 2025 Q1, and $13,823 in 2019 Q4. Shelter spending peaked at $15,812 per person in the third quarter of 2005, during the housing bubble.

Expenditures, by Type
per capita, seasonally-adjusted annualized rate, 2025 Q2 dollars

	2025 Q2	2025 Q1	2024 Q2	2019 Q4	2000 Q1	1989 Q1
Consumer Spending	$60,347	60,210	59,299	53,839	40,568	31,695
— Goods	18,794	18,718	18,273	15,886	10,537	7,907
Motor Vehicles & Parts	2,268	2,187	2,118	2,086	1,755	1,320
Furniture & HH Equipment	1,461	1,472	1,422	1,205	600	416
Recreational Durable Goods	1,998	2,020	1,930	1,253	261	76
Groceries	4,451	4,455	4,416	4,193	3,401	3,378
Clothes & Shoes	1,582	1,566	1,521	1,328	954	708
— Services Excluding Shelter	30,647	30,566	30,180	27,740	21,215	16,261
Health Care Services	10,238	10,175	9,860	8,778	5,764	5,219
Transportation	1,989	2,007	2,014	1,963	1,740	1,208
Recreational	2,351	2,340	2,356	2,263	1,743	1,244
Food & Accommodations	4,328	4,300	4,294	4,047	3,126	2,871
Financial & Insurance	4,828	4,810	4,749	4,445	4,558	2,701
— Shelter Including Investment	14,413	14,479	14,424	13,823	13,692	11,760
Housing Services & Utilities	10,906	10,926	10,850	10,262	9,303	8,085
Residential Fixed Investment	3,507	3,553	3,574	3,561	4,389	3,674

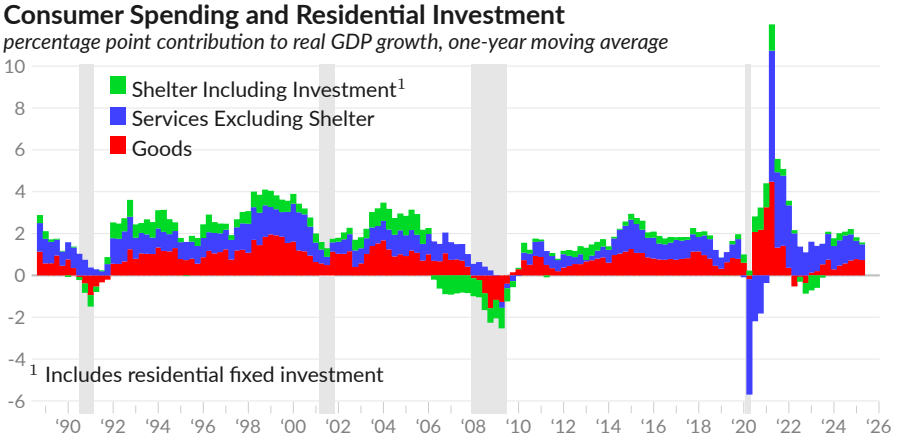
Source: Bureau of Economic Analysis

Contributions to Economic Growth

Next, we examine the effect on GDP growth from changes in consumer spending on goods (see), services excluding housing and utilities (see), and shelter (see), calculated as housing and utilities plus residential fixed investment. These categories contributed one percentage point to GDP growth in 2025 Q2 and contributed 0.3 percentage point in 2025 Q1, compared to an addition of 1.8 percentage points in 2019 Q4, before the pandemic.

Consumer Spending and Residential Investment

percentage point contribution to real GDP growth, one-year moving average



Source: Bureau of Economic Analysis

In the second quarter of 2025, household spending on goods contributed 0.5 percentage point to GDP growth, household spending on services other than housing and utilities added 0.6 percentage point, and shelter spending and investment subtracted 0.2 percentage point.

Consumer Spending and Residential Investment

percentage point contribution to real GDP growth

	2025 Q2	'25 Q1	'24 Q4	'24 Q2	*moving averages* 1-year	10-year	30-year
Consumer Spending	0.98	0.31	2.70	1.90	1.62	1.89	1.86
Goods	0.46	0.01	1.30	0.63	0.74	0.83	0.82
Motor Vehicles & Parts	0.38	-0.30	0.46	0.16	0.19	0.07	0.09
Furniture & HH Equipment	-0.04	0.02	0.09	0.13	0.05	0.09	0.09
Recreational Durable Goods	-0.09	0.01	0.30	0.11	0.09	0.21	0.22
Groceries	0.01	0.05	0.09	0.11	0.07	0.13	0.10
Clothes & Shoes	0.08	0.12	0.09	-0.06	0.08	0.07	0.08
Services Excluding Shelter	0.55	-0.05	1.28	1.04	0.75	0.90	0.85
Health Care Services	0.35	0.35	0.53	0.35	0.50	0.40	0.32
Transportation	-0.07	0.03	0.08	0.31	-0.02	0.05	0.05
Recreational	0.06	-0.14	0.12	0.05	0.01	0.05	0.06
Food & Accommodations	0.16	-0.09	0.14	-0.01	0.07	0.12	0.10
Financial & Insurance	0.11	0.00	0.16	-0.04	0.12	0.06	0.11
Shelter Including Investment	-0.21	0.30	0.35	0.12	0.09	0.22	0.23
Housing Services & Utilities	-0.02	0.35	0.13	0.23	0.14	0.16	0.19
Residential Fixed Investment	-0.19	-0.05	0.22	-0.11	-0.05	0.06	0.04

Source: Bureau of Economic Analysis

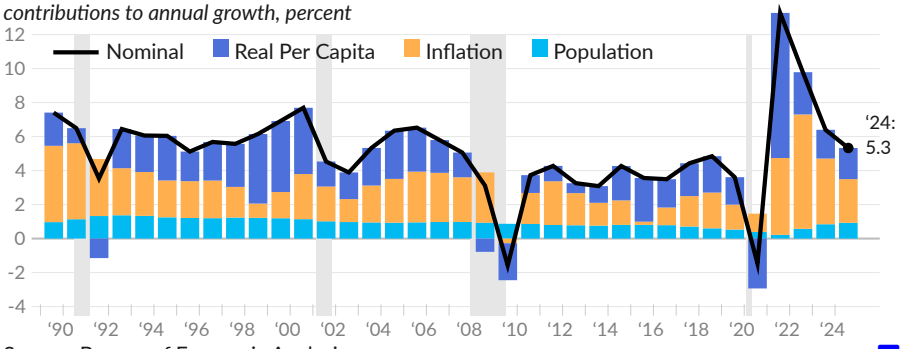
Consumer Spending Growth

While the previous charts are inflation- and population-adjusted, actual transactions in the economy are not. The following charts consider changes in all three factors: real per capita consumer spending (see), inflation (see), and population growth (see).

Since 1989, total US consumer spending increased at an annual rate of five percent. Real per capita spending increased by 1.8 percent per year, inflation added 2.3 percentage points, and population growth added 0.9 percentage point. In the latest full year of data, 2024, nominal consumer spending growth is 5.3 percent, real per capita growth is 1.8 percent, inflation is 2.6 percent, and population growth is 0.9 percent.

Consumer Spending Growth

contributions to annual growth, percent



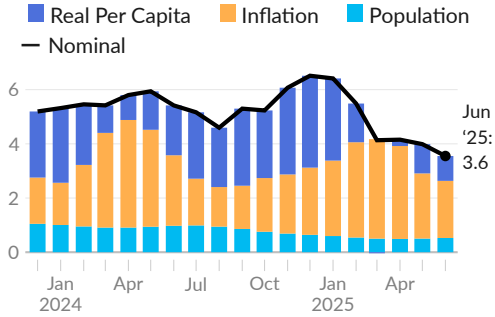
Source: Bureau of Economic Analysis

Next, recent growth is calculated as the latest three months growth from the previous three (3M/3M). This measure reflects newer data than annual growth rates and is steadier than monthly rates.

Using this measure, nominal consumer spending increased at an annual rate of 3.6 percent in June 2025. Real per capita growth was 0.9 percent, inflation contributed 2.1 percent, and population growth added 0.5 percent.

Recent Consumer Spending Growth

last 3 months growth from prev. 3 months, annualized



Source: Bureau of Economic Analysis

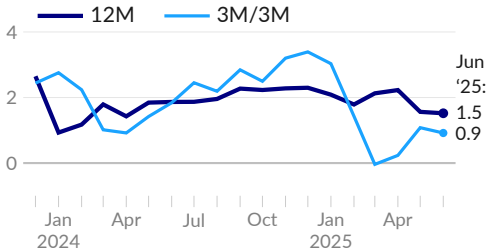
Real per capita consumer spending is the core of consumer spending. Recent growth rates can be an important economic indicator, and are presented below, as both 12-month growth (12M) and the last three months growth from the prior three (3M/3M).

Over the 12 months ending June 2025, real per capita consumer spending increased 1.5 percent, following increases of 1.6 percent in May and 1.9 percent in June 2024 (see —).

The three month growth rate (3M/3M) is 0.9 percent in June, 1.1 percent in May, and 1.8 percent one year prior (see —).

Recent Real Per Capita Growth

real per capita consumer spending growth, percent



Source: Bureau of Economic Analysis

Sources of Consumer Spending Growth

Researchers typically decompose changes in spending based on categories of spending, but we can also view **spending as the result of income and saving**. Ultimately, spending comes from income. Income, however, is more volatile than spending, and households use saving to smooth their consumption across spikes in income and across their lifespan.

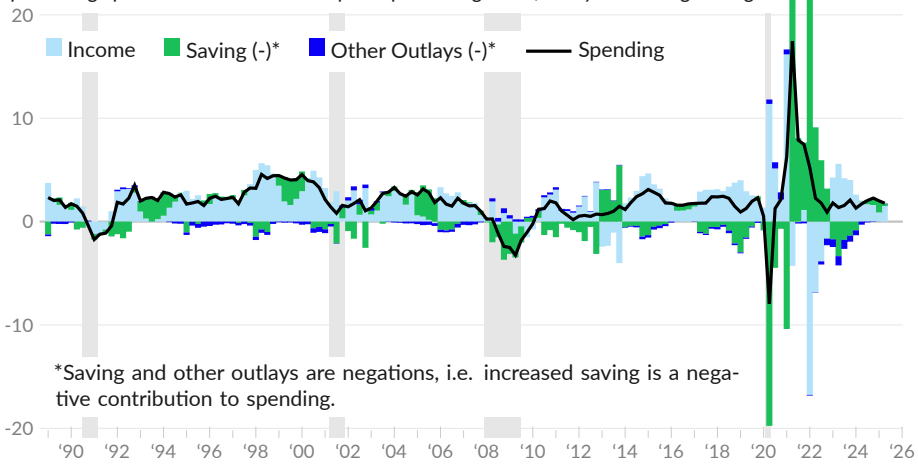
To see this pattern, the following charts show the contribution to changes in real per capita consumer spending (see —) from changes in income (see), changes in personal saving (see), and changes in other outlays (see) such as interest payments, fines, fees, and charitable giving. Changes in spending and other outlays are negations in this approach, as increased saving means reduced spending. In the charts below, a *reduction* in saving or other outlays positively contributes to spending.

Since 1989, annualized real per capita consumer spending growth of 1.8 percent is explained by a 1.9 percent increase in disposable income. Saving was virtually unchanged, while increases in other outlays subtracted 0.1 percentage point per year.

Spending increased at an average rate of 1.8 percent over the four quarters ending 2025 Q2. Higher income added 1.5 percentage points, decreased saving added 0.2 percentage point, and decreases in other outlays didn't affect the total.

Contributions to Consumer Spending Growth

percentage point contribution to real per capita PCE growth, one-year moving average



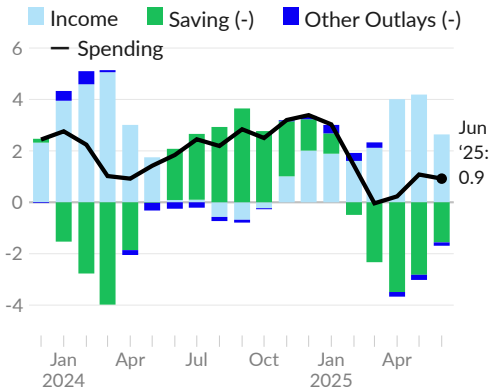
Source: Bureau of Economic Analysis

Real per capita consumer spending over the past three months compared with the previous three months shows annualized growth of 0.9 percent in June 2025. Higher income contributed 2.6 percentage points, increased saving subtracted 1.6 percentage points, and increases in other outlays subtracted 0.1 percentage point.

Higher interest rates, which count as other outlays, can eat into consumer spending. Since the start of 2022, increases in other outlays have reduced consumer spending by 0.4 percentage point per year.

Recent Contributions

last 3 months growth from prev. 3 months, annualized



Source: Bureau of Economic Analysis

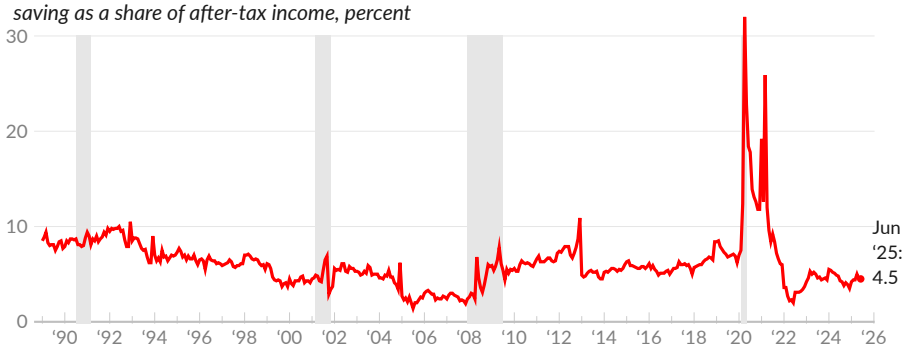
Personal Saving

The after-tax income that people do not spend is considered **personal saving**, from an economic accounting perspective. Peoples' savings are invested through the financial system and become the current fixed investment or consumption activities of other groups in the economy. Savers generally receive a return from this investment.

In June 2025, the Bureau of Economic Analysis report a personal saving rate of 4.5 percent (see —). The personal saving rate decreased by a total of three percentage points since February 2020.

Personal Saving Rate

saving as a share of after-tax income, percent



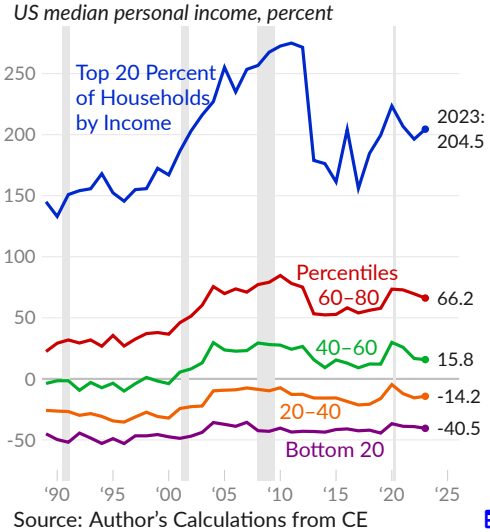
Source: Bureau of Economic Analysis

Distribution of Saving

With such a wide distribution of after-tax income, **saving rates vary massively between households**. Some households dissave and others save more than two typical incomes. Saving by income quintile is calculated using the Consumer Expenditure Surveys (CE) as after-tax income minus spending (other than spending on pensions). The following chart shows the average saving of each group divided by the US median personal income, thus reporting saving, or dissaving, in terms of a typical annual US income.

Saving Rate by Income Quintile

income quintile average saving, as share of US median personal income, percent



Source: Author's Calculations from CE

The 20 percent of households with the least income dissave the equivalent of 40.5 percent of the US median personal income in 2023 (see —). This group includes people going into debt and retirees dissaving. In the same period, the top 20 percent of households save the equivalent of 204.5 percent of the median income (see —).

The middle fifth of households by income, percentiles 40–60, saved the equivalent of 15.8 percent of the median income (see —). The fifth of households below the middle group, in percentiles 20–40, did not save in 2023, but dissaved less than previous years (see —).

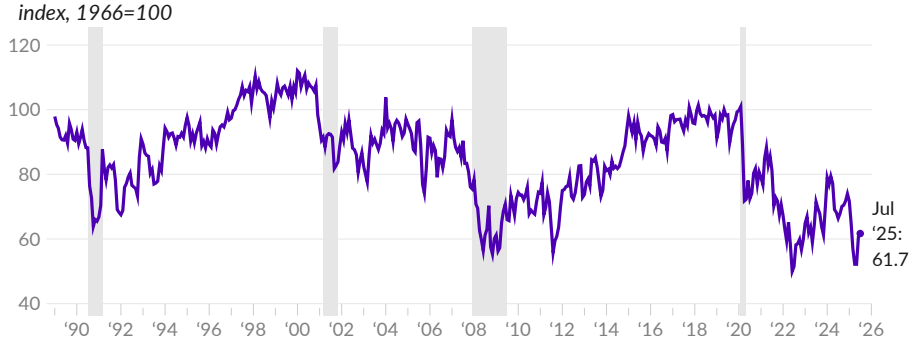
Consumer Sentiment

The University of Michigan conducts a monthly survey of **consumer sentiment** (see —). The survey asks about personal finances, business conditions, and buying conditions. An increase in consumer sentiment means individuals feel more confident about economic conditions and are more willing to make large purchases or take on debt.

As of July 2025, the latest value of the consumer sentiment index is 61.7, following 60.7 in June 2025, and compared to 66.4 one year prior, in July 2024. As a pre-COVID baseline, the index average value was 97.3 during the year ending February 2020; the consumer sentiment index is currently 36.6 percent below this level.

Consumer Sentiment

index, 1966=100



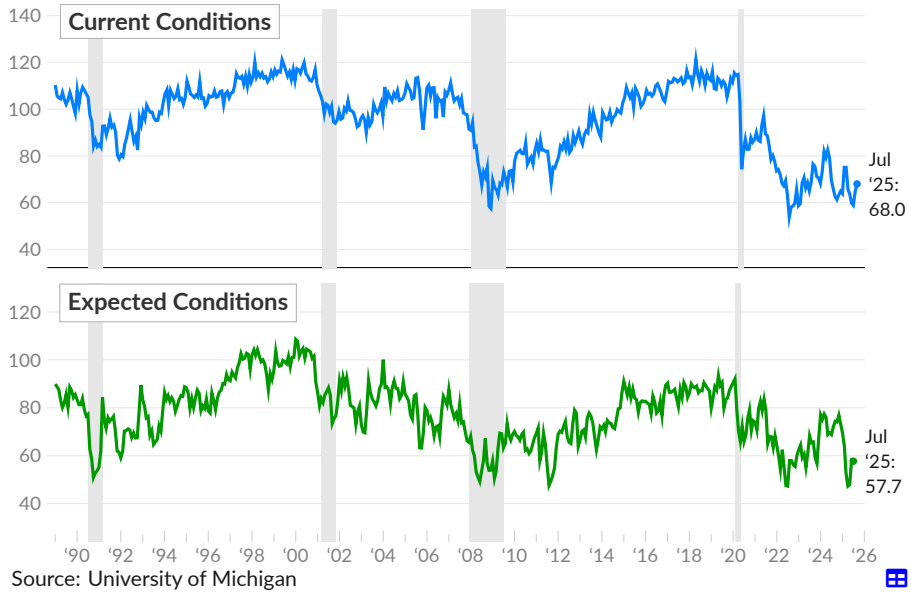
Source: University of Michigan

The consumer sentiment index combines views on current and future economic conditions. In July 2025, the index tracking views on current economic conditions was 68.0, compared to 64.8 in June 2025, and 110.8 in 2019 (see —).

In July 2025, the index tracking consumer expectations for future economic conditions was 57.7, compared to 58.1 in June 2025, and 86.5 in 2019 (see —).

Consumer Sentiment Index Components

index, 1966=100



Source: University of Michigan

Household Balance Sheets

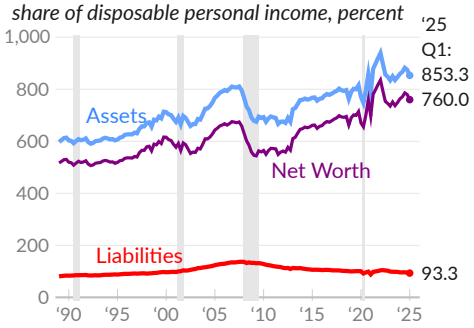
The vast majority of US wealth is found on private **household balance sheets**. Households own residential real estate and consumer durable goods, but also own equity in businesses, directly and indirectly, and hold financial claims on businesses and on the public sector. This subsection discusses household debt, assets, and net worth.

According to the US financial accounts, the combined household and nonprofit sectors have $190.1 trillion in assets and $20.8 trillion in liabilities, resulting in a net worth of $169.3 trillion, as of 2025 Q1.

Household balance sheets have grown relative to income. In 2025 Q1, assets are equivalent to 853.3 percent of disposable personal income (DPI), compared to 607.1 percent in 1989 (see —). Household liabilities are currently 93.3 percent of DPI, compared to 82.3 percent in 1989 (see —).

Household net worth is equivalent to 760.0 percent of DPI in 2025 Q1, 701.5 percent in 2019, and 524.7 percent in 1989 (see —).

Household & Nonprofit Balance Sheet
share of disposable personal income, percent



Source: Federal Reserve

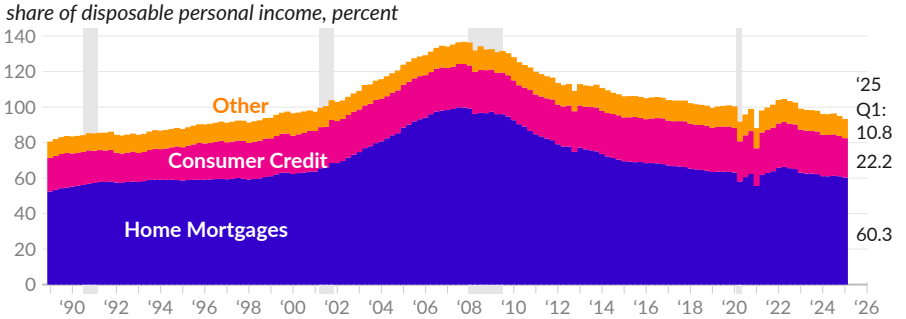
Liabilities

Household liabilities affect consumer behavior and can signal potential economic risks. The primary form of household debt is home mortgages, but there has been a substantial increase in consumer debt as well. This subsection examines household debt using two data sources: the financial accounts, and the Federal Reserve Bank of New York's Consumer Credit Panel.

The liabilities of households and nonprofit institutions total $20.8 trillion in 2025 Q1, as reported by the Federal Reserve. Home mortgages are the main household liability, and total $13.4 trillion (see ■). Consumer credit liabilities include auto loans, credit card debt, student loans, and other personal loans, and total $4.9 trillion (see ■). The remaining liabilities are primarily attributable to nonprofits (see ■).

The ratio of household and nonprofit debt to disposable personal income has fallen to 93.3 percent in 2025 Q1 from the housing bubble peak of 136.8 percent in 2007. Over the past five years, household and nonprofit debt has increased 25.2 percent while disposable personal income increased 24.6 percent. As a result, the debt-to-income ratio has fallen by 7.1 percentage points.

Household and Nonprofit Debt by Type
share of disposable personal income, percent

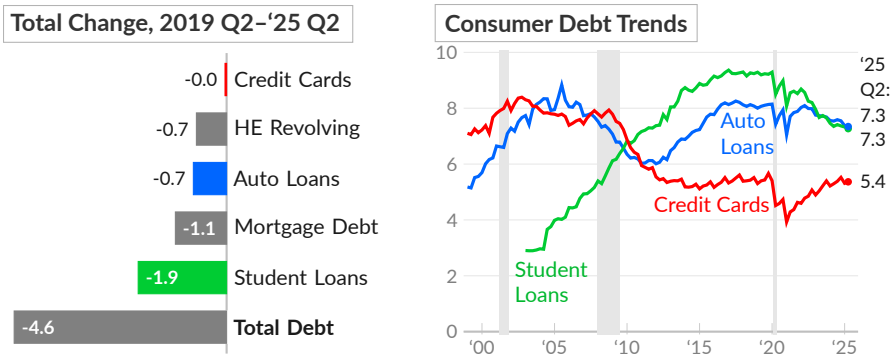


Source: Federal Reserve, Bureau of Economic Analysis

Federal Reserve Bank of New York (FRBNY) data show $18.4 trillion in **household debt** in the second quarter of 2025, which translates to 81.6 percent of disposable personal income. Over the past six years, household debt increased by $4.53 trillion, compared to a $6.46 trillion increase in disposable personal income. As a result, the ratio of debt to income dropped by 4.6 percentage points over this period.

Household Debt

share of disposable personal income, percent



Source: Federal Reserve Bank of New York and Bureau of Economic Analysis

The FRBNY data show mortgage debt, including home equity lines of credit, totals $13.35 trillion in the second quarter of 2025, equivalent to 59.2 percent of disposable personal income. Student loans total $1,638 billion, or 7.3 percent of income; auto loans total $1,655 billion (7.3 percent of income); and credit card debt is $1,209 billion (5.4 percent of income).

Over the past six years, the ratio of total mortgage debt to disposable personal income fell by 1.8 percentage points, compared to a decrease of 1.9 percentage points for student loans, a decrease of 0.7 percentage point for auto loans, and virtually no change for credit card debt.

Household Debt Outstanding

trillions of US dollars

			share of disposable personal income				
	2025 Q2	2025 Q1	'25 Q2	'25 Q1	'19 Q2	'13 Q1	'03 Q1
Financial Accounts Total	–	$20.78T	–	93.3	100.3	113.0	109.1
Mortgage Debt Total	–	$13.43T	–	60.3	63.6	77.1	74.7
Consumer Credit	–	$4.94T	–	22.2	25.2	23.8	24.0
Other	–	$2.41T	–	10.8	11.5	12.0	10.4
Consumer Credit Panel Total	$18.39T	$18.20T	81.6	81.8	86.2	91.7	87.3
Mortgage Debt Total	$13.35T	$13.21T	59.2	59.3	61.0	69.2	62.6
Mortgage	$12.94T	$12.80T	57.4	57.5	58.5	64.7	59.6
Home Equity Revolving	$0.41T	$0.40T	1.8	1.8	2.5	4.5	2.9
Consumer Credit	$5.04T	$5.00T	22.4	22.5	25.2	22.4	24.7
Auto Loan	$1.66T	$1.64T	7.3	7.4	8.1	6.5	7.7
Credit Card	$1.21T	$1.18T	5.4	5.3	5.4	5.4	8.3
Student Loan	$1.64T	$1.63T	7.3	7.3	9.2	8.0	2.9
Other	$0.54T	$0.54T	2.4	2.4	2.6	2.5	5.8

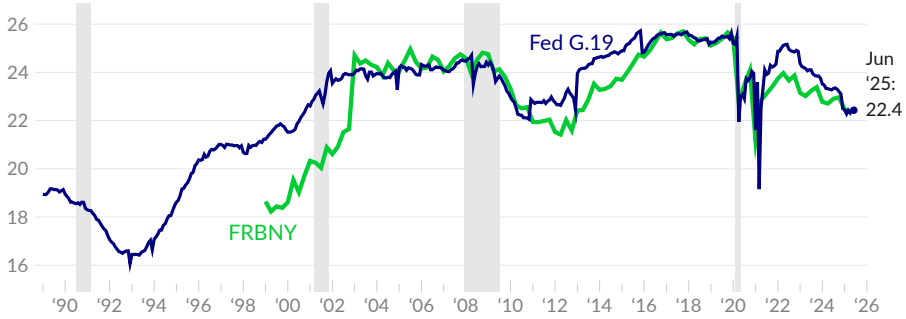
Source: Federal Reserve, Federal Reserve Bank of New York, Bureau of Economic Analysis
Financial Accounts include debt of nonprofit institutions and the Consumer Credit Panel does not include people without a social security number.

Consumer Credit

The Federal Reserve also report **consumer credit** on a monthly basis. In the monthly measure, consumer credit totals $5.05 trillion US dollars on a seasonally-adjusted and annualized basis in June 2025. Over the past year, consumer credit increased by 0.5 percent, while after-tax income increased by 4.3 percent. As a result, the ratio of consumer credit to disposable income decreased by a total of 0.8 percentage point. In June 2025, total consumer credit is equivalent to 22.4 percent of annualized June 2025 disposable income (see —).

The latest comparable figure from the FRBNY data discussed in the previous section, which covers 2025 Q2, shows consumer credit is equivalent to 22.4 percent of annual disposable personal income (see —). Over the past year, the ratio decreased by a total of 0.3 percentage point.

Consumer Credit
share of disposable personal income, percent



Source: Federal Reserve, FRBNY

Financial Obligations

Payments to service debt, along with rent, auto lease payments, homeowner's insurance, and property tax are considered financial obligations. The Federal Reserve report debt service as a share of disposable personal income. The ratio of debt service payments and rent to income gives insight into the overall financial burden faced by households.

The ratio of debt service and rent payments to disposable personal income peaked at 18.8 percent in 2007 Q4, during the housing bubble.

As of 2025 Q1, **debt service and rent** are 14.6 percent of after-tax income (see —), an increase of 0.09 percentage point from the year prior. The ratio fell by 0.39 percentage point since 2019.

In the latest quarter, the ratio of **debt service** payments to income is 11.2 percent (see —). The debt service ratio fell by 0.48 percentage point since 2019. In 2025 Q1, the ratio of mortage debt service to income is 5.8 percent, and the ratio of consumer credit debt service to income is 5.4 percent.

Debt Service and Rent Obligations
share of disposable personal income, percent

Source: Federal Reserve, BEA

Assets

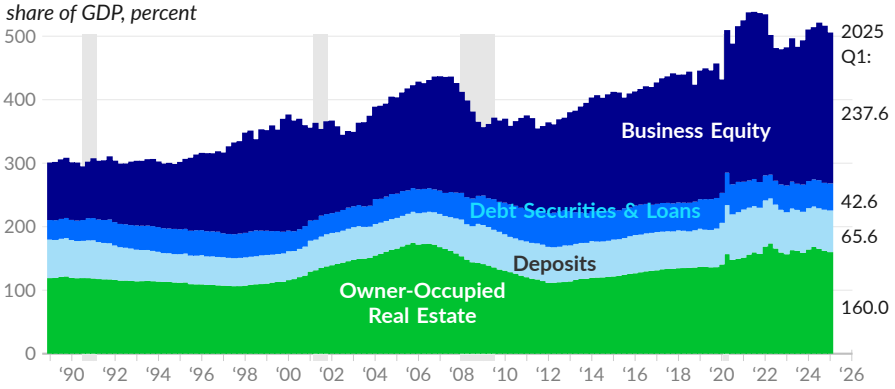
According to the US Financial Accounts produced by the Federal Reserve, the market value of **household and nonprofit assets** is $190.1 trillion in 2025 Q1, equivalent to 634 percent–or 6.34 years–of GDP. Of this, $61.3 trillion, or 32.2 percent of the total, are tangible (non-financial) assets and $128.8 trillion, or 67.8 percent, are financial assets.

Tangible assets include peoples' homes as well as consumer durable goods, such as cars, furniture, and appliances. Owner-occupied real estate is valued at $47.9 trillion in 2025 Q1, equivalent to 160 percent of GDP (see ■). The replacement value of consumer durable goods is $8.3 trillion, or 28 percent of GDP.

Financial assets include equity in businesses–corporate and non-corporate–with a market value of $71.2 trillion, or 238 percent of GDP (see ■), in 2025 Q1. Debt securities and loan assets total $12.8 trillion, or 43 percent of GDP (see ■). Cash and deposits, including money market accounts, total $19.7 trillion, or 66 percent of GDP (see ■). Other financial assets total $25.2 trillion.

Selected Household and Nonprofit Assets

share of GDP, percent

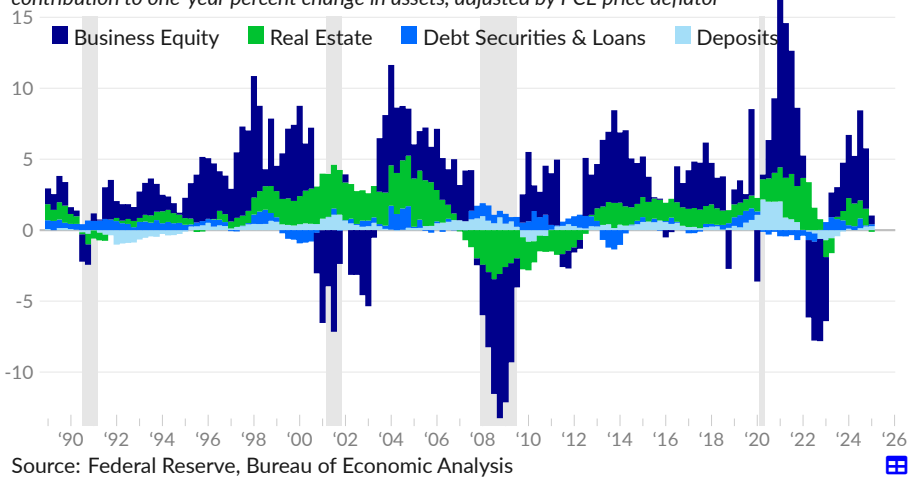


Source: Federal Reserve, Bureau of Economic Analysis

The inflation-adjusted value of household and nonprofit assets grew 0.9 percent over the year ending 2025 Q1. The low growth is largely the result of an increase in the market value of business equity, and partially offset by a decrease in other categories.

Contributions to Real Growth in Household and Nonprofit Assets

contribution to one-year percent change in assets, adjusted by PCE price deflator



Source: Federal Reserve, Bureau of Economic Analysis

Household and Nonprofit Assets

various measures:	*trillions of USD*	*share of GDP*		*real annual growth rate*		
	2025 Q1	2025 Q1	2024 Q1	One-year	Three-year	20-year
Total Assets	$190.1	634.4	641.9	0.9	-0.0	2.9
Nonfinancial Assets	61.3	204.5	209.3	-0.3	0.2	1.9
Owner-Occupied Real Estate	47.9	160.0	164.1	-0.5	0.6	1.9
Consumer Durable Goods	8.3	27.7	27.8	1.8	1.1	1.5
Nonprofit Assets	5.0	16.8	17.4	-1.6	-4.4	2.1
Financial Assets	128.8	429.9	432.6	1.5	-0.1	3.4
Deposits, Incl. Money Market	19.7	65.6	65.2	2.8	-1.1	3.7
Debt Securities & Loans	12.8	42.6	42.6	2.1	5.2	2.7
Business Equity	71.2	237.6	238.6	1.6	0.2	4.4
Corporate Equities	55.6	185.5	184.9	2.4	1.5	5.5
Noncorporate Business Equity	15.6	52.1	53.7	-1.0	-3.8	1.9

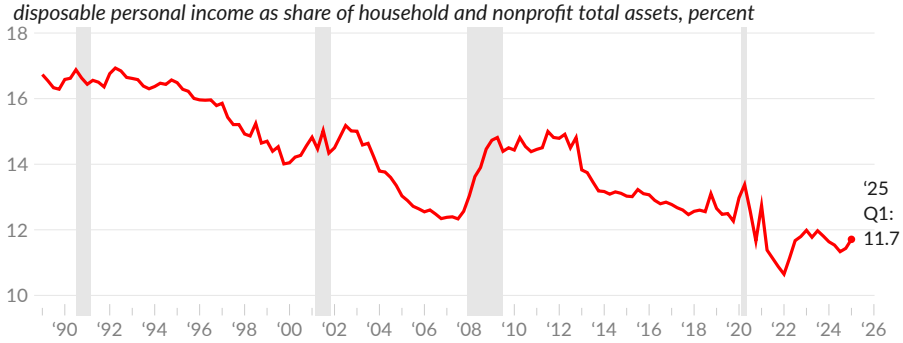
Source: Federal Reserve, Bureau of Economic Analysis

Return on Assets

Asset prices rising faster than income can be viewed as a decrease in the expected rate of return on total household assets. This can be measured by disposable income as a share of household assets. In 2025 Q1, disposable income is equivalent to 11.7 percent of the market value of US assets (see —), compared to an average of 16.0 percent during the 1990s.

Return on Household Assets

disposable personal income as share of household and nonprofit total assets, percent



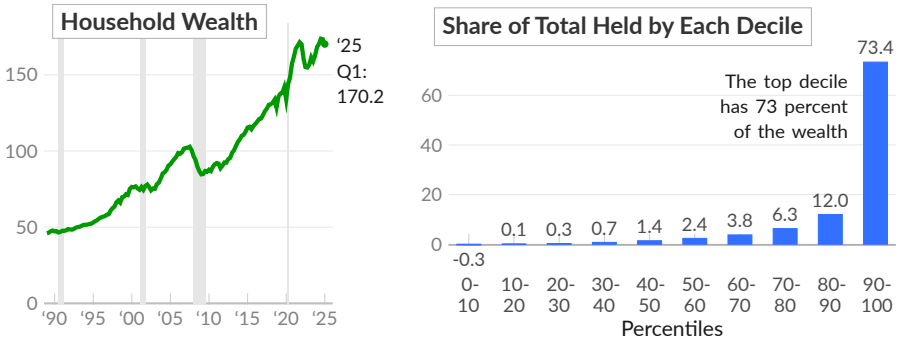
Source: Federal Reserve, Bureau of Economic Analysis

Wealth

In the aggregate, US households are very wealthy. **Household wealth** totals $170.2 trillion in 2025 Q1 (see —), equivalent to $498,200 per capita. The vast majority of this wealth, however, is held by the wealthiest families. In the 2022 Survey of Consumer Finances, 73.4 percent of wealth is held by the wealthiest ten percent of families (see ■).

Household Wealth / Net Worth Summary

trillions of 2025 Q1 US dollars (left), and percent of US wealth held by each decile, 2022 (right)



Source: Federal Reserve, Survey of Consumer Finances

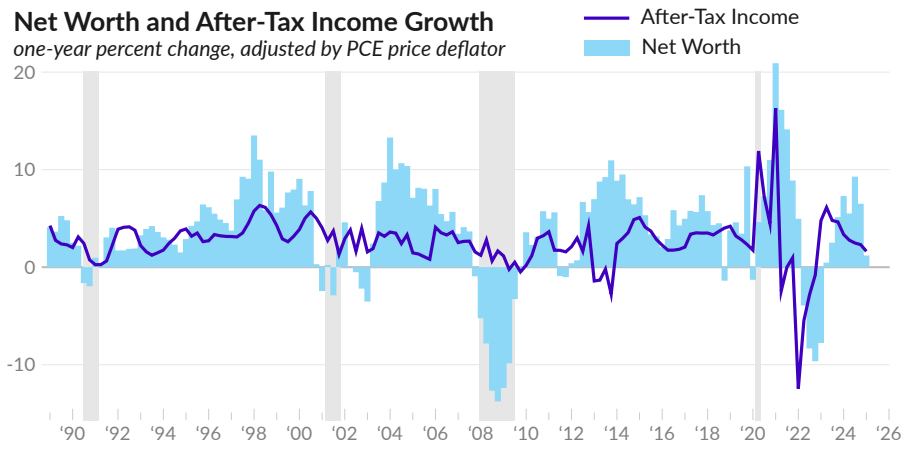
Growth Rate

Over the long run, the market value of household assets has risen much faster than the total level of household debt, resulting in a substantial increase in aggregate net worth. In 2025 Q1, household and nonprofit institution net worth was $169.3 trillion, equivalent to 7.6 years of disposable personal income; the result of total assets of $190.1 trillion and total liabilities of $20.8 trillion.

In 2025 Q1, inflation-adjusted net worth increased by 1.2 percent (see ■), and inflation-adjusted after-tax income increased by 1.6 percent (see —). Over the past five years, real net worth grew at an average rate of 4.5 percent, while real after-tax income grew at an average rate of 2.5 percent.

Net Worth and After-Tax Income Growth

one-year percent change, adjusted by PCE price deflator



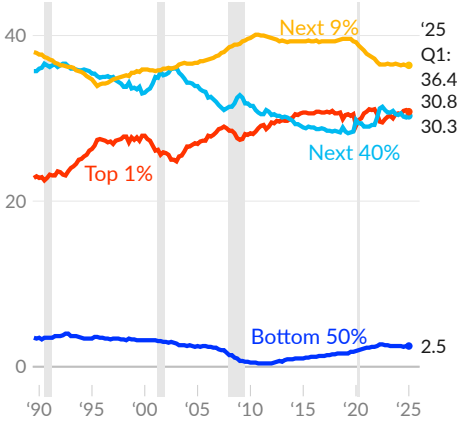
Source: Federal Reserve, Bureau of Economic Analysis

The Federal Reserve report **net worth by percentile**. The top one percent of households by wealth own 30.8 percent of US wealth, as of 2025 Q1 (see —), while the top 10 percent of households own 67.2 percent. The bottom half of households own 2.5 percent of US wealth (see —).

Since 1989, the wealth share of the top one percent increased 7.9 percentage points, while the share held by the bottom 50 percent decreased one percentage point. The wealth share of the 40 percent of households in wealth percentiles 50 through 90 decreased 5.4 percentage points since 1989.

Share of US Wealth

share of total net worth, by percentile, percent



Source: Federal Reserve

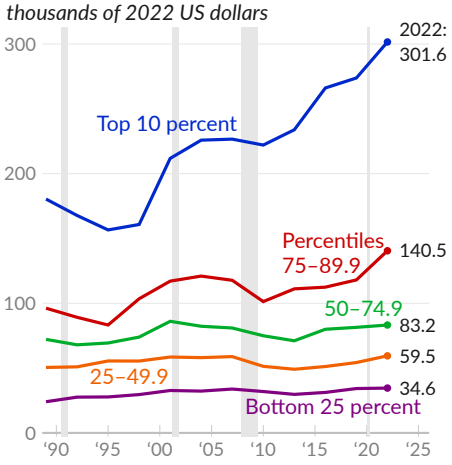
Wealth and Income

While wealth can be a source of income, wealth does not correspond perfectly to income. For example, early-career professionals with student debt may have a negative net worth and a high income. Despite corner cases, data on **family income by wealth percentile** clearly shows that income tends to increase with wealth.

Additionally, the before-tax income of the wealthiest ten percent of families (see —) has increased substantially more than the income of other groups. The top ten percent of families by wealth, percentiles 90 to 100 with a mean wealth of $7.8 million and a median wealth of $3.8 million in 2022, have a typical annual income of $301,600 in 2022 and $180,400 in 1989, after adjusting for inflation. Income for the group increased $121,200, or 20.5 percent per year, over the 33-year period.

Pre-Tax Income by Wealth Percentile

median inflation-adjusted annual family income
thousands of 2022 US dollars



Source: Federal Reserve (SCF)

Families in the third wealth quartile (50th to 74.9th percentiles, mean wealth of $373,800 in 2022), have a typical income of $83,200 in 2022 and $72,200 in 1989 (see —), an increase of $11,100 (5.3 percent per year).

Second quartile (25th to 49.9th percentile, mean wealth of $98,800) family income increased $8,900 (6.1 percent per year) to $59,500 in 2022, from $50,500 in 1989 (see —).

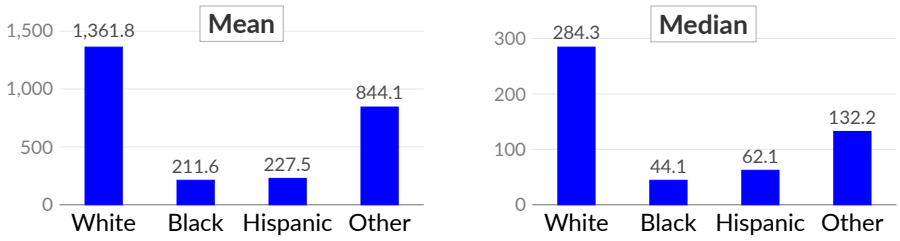
For the bottom quarter of families by wealth (see —), typical income increased $10,500 or 14.1 percent per year to $34,600, over the 33 years ending 2022. The bottom quarter of families have no wealth.

Wealth and Race

In the US, **wealth varies substantially by race and ethnicity**. In 2022, white non-Hispanic families' average net worth was $1,361,800, compared to $211,600 for black non-Hispanic families, and $227,500 for Hispanic families of any race. Additionally, typical (median) family wealth is much lower than average (mean) family wealth, as the result of a concentration of wealth among the wealthiest families.

Racial Wealth Gap

net worth by race/ethnicity, thousands of US dollars, 2022

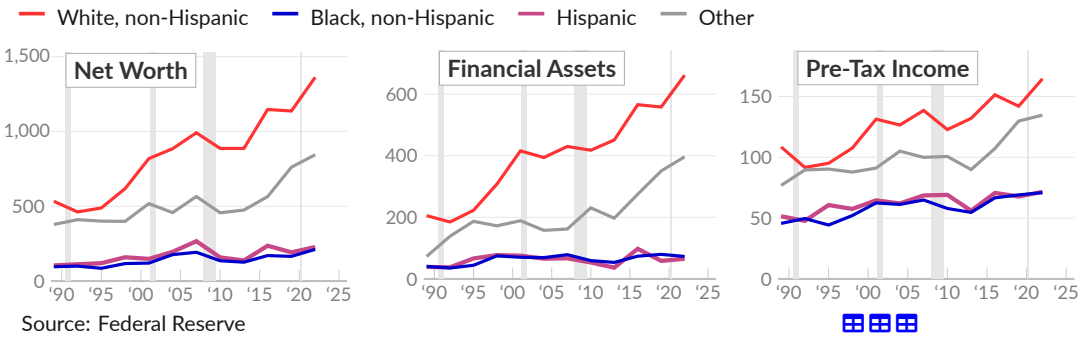


Source: Federal Reserve, Survey of Consumer Finances

White families have substantially more financial assets, including stocks, and are much more likely to receive inheritance and in vivo transfers. Income for black families is also substantially lower–about half of white family income. Persistent structural inequalities are seen in income data, but are also evident from measures of wealth and assets.

Measures of Wealth and Income by Race or Ethnicity

by family, mean, thousands of 2022 USD

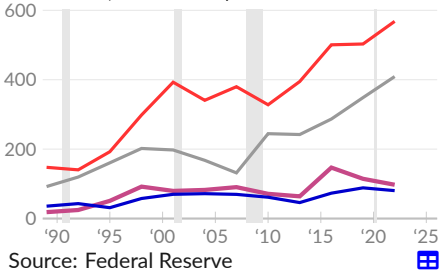


Source: Federal Reserve

In 2022, among the 65.6 percent of white families who own stocks, the average value of stock holdings is $568,136. The return on these assets is a source of income and the assets themselves provide cushion against unexpected expenses. Meanwhile, black families have relatively few financial assets; only 39.2 percent of black families own stocks, with average stock holdings of $80,400.

Stock Holdings

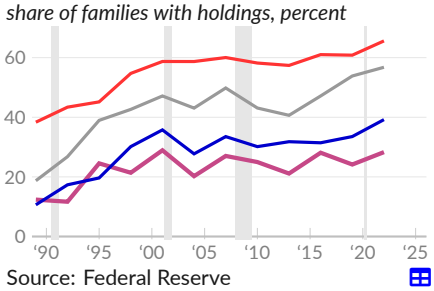
mean value, thousands of 2022 USD



Source: Federal Reserve

Stock Holdings

share of families with holdings, percent



Source: Federal Reserve

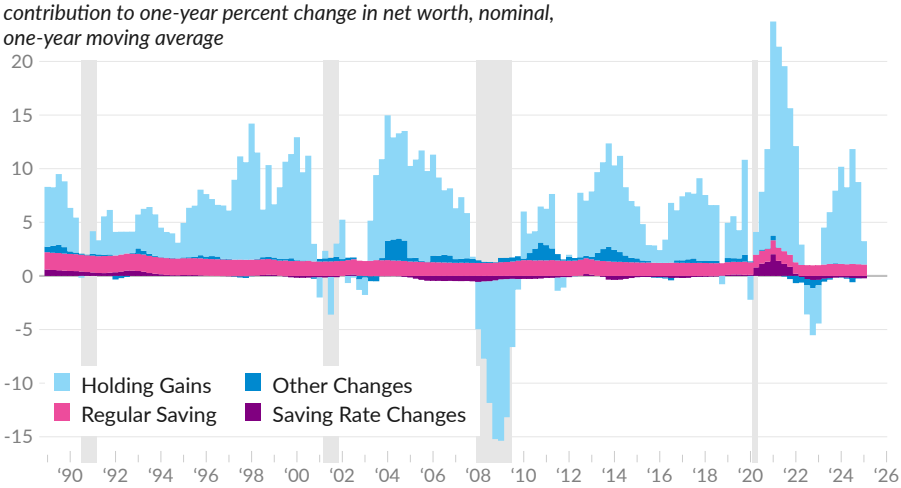
Changes in Wealth

Household wealth growth is largely determined by capital gains (see), but is also the result of new saving. The portion of aggregate household income that isn't consumed by the household sector becomes net investment in the economy and adds to household wealth. Since 1989, household net investment averages about eight percent of after-tax income.

In the following chart, income invested at the historical-average rate (see) is shown separately from investment that is above or below trend (see). The separation distinguishes changes in disposable personal income from changes in decisions about how to use that income. Separately, changes in data sources or from natural disasters are identified as other volume changes (see).

Net Worth Growth

contribution to one-year percent change in net worth, nominal, one-year moving average



Source: Federal Reserve, Bureau of Economic Analysis

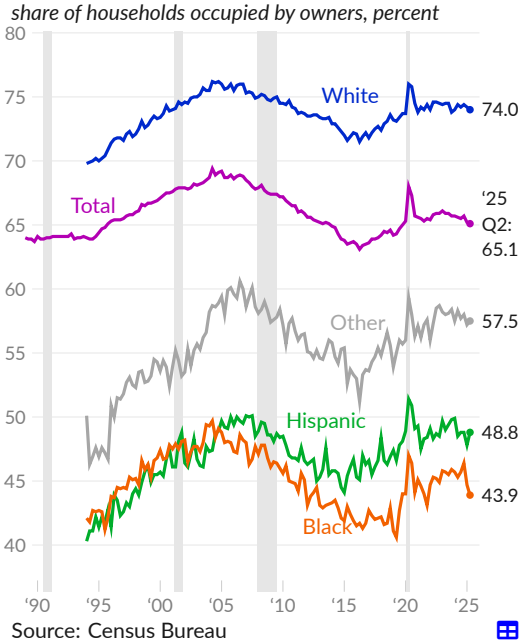
Over the year ending 2025 Q1, holding gains contributed 2.2 percentage points to the 3.8 percent change in household net worth. Income invested at the 1989-onward average rate of 7.9 percent would have contributed 1.1 percentage points, but 0.2 percentage points were subtracted as household net investment was 6.2 percent of disposable personal income over the year ending 2025 Q1. Other volume changes did not contribute.

Over the past six years, net worth grew at an average annual rate of 7.4 percent. Holding gains contributed 5.8 percentage points to this total, on average. Net investment of income contributed 1.3 percentage points and other volume changes subtracted 0.1 percentage point.

Homeownership

The **homeownership rate** measures the percent of occupied housing units that are owner-occupied, as opposed to rented. In 2004, near to the peak of the housing bubble, the overall homeownership rate reached 69.2 percent. As of 2025 Q2, the Census Bureau report a homeownership rate of 65.1 percent (see —). Over the past five years, the overall US homeownership rate decreased by a total of 2.9 percentage points.

Homeownership Rate
share of households occupied by owners, percent



Source: Census Bureau

Census data also show large differences in homeownership rates by race and ethnicity. Around three-quarters (74.0 percent in 2025 Q2) of non-Hispanic white households own their home (see —), compared to fewer than half of black and Hispanic households.

During the housing bubble, the homeownership rate for black households increased by nearly ten percentage points. Black homeownership peaked at 49.7 percent in the second quarter of 2004 but fell to 40.6 percent in 2019 Q2. The 2025 Q2 rate is 43.9 percent (see —).

The 2025 Q2 rate for Hispanic households is 48.8 percent, substantially below the 50.1 percent rate in 2007 Q1 (see —).

Use caution when interpreting homeownership rates during the COVID-19 pandemic. Individuals who are renters or homeowners are captured by the measure, but when an individual moves in with family and stops being a head of household, they are dropped from the measure. Therefore when renters move in with family the homeownership rate increases. The 2020 spike in homeownership rates reflects renters moving in with family.

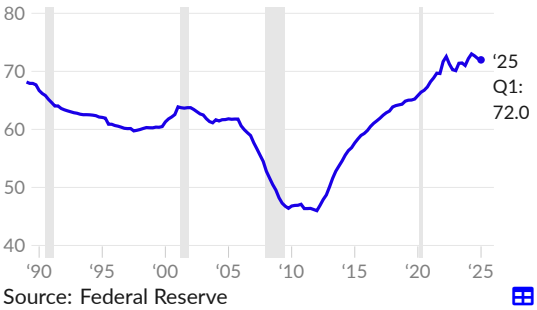
Homeowners' Equity

As seen during the collapse of the housing bubble, it is possible for a homeowner to have no equity in their home, for example if the market price of the home falls below the principal remaining on the mortgage. Owners' equity in their homes has increased substantially since the collapse of the housing bubble.

As of 2025 Q1, the Federal Reserve report **owners' equity** is 72.0 percent of residential real estate (see —). Over the past three years, the owners' equity share increased by a total of 0.3 percentage point.

Over the past year, the share decreased by a total of 0.2 percentage point. The current share is substantially above the 1989 average of 67.9 percent.

Owners' Equity Share of Real Estate
owners' equity as percent of real estate



Source: Federal Reserve

Housing Construction

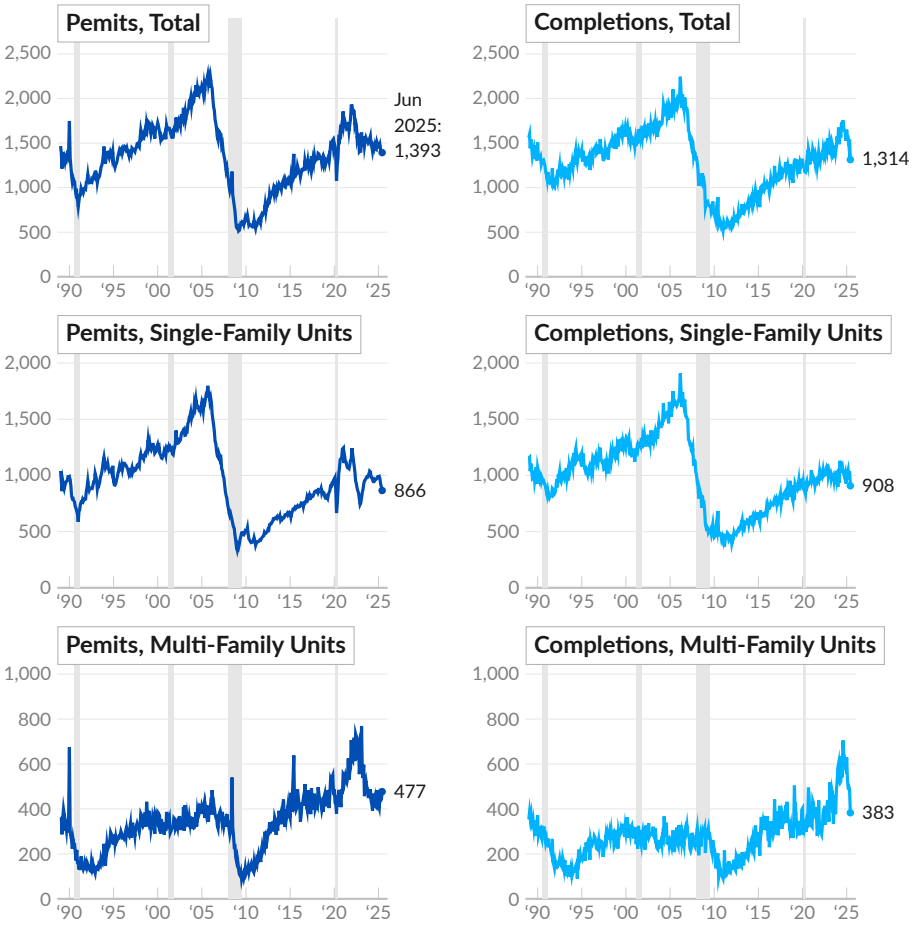
The Census Bureau tracks the issuance of **new residential building permits**, which offer insight into planned residential construction. In June 2025, a seasonally-adjusted annual rate of 1,393,000 new residential housing units were authorized by building permits, the lowest level since June 2020 (see —). Permits issued decreased by 1,000 (-0.1 percent) (annualized) over the previous month, decreased by 68,000 (-4.7 percent) over last June, and increased by 59,000 (4.4 percent) total over the past five years.

In addition to data on permits, the Census Bureau also report how many residential construction projects are started and completed. Not all permitted projects are built and completion can be affected by economic conditions. In June 2025, a seasonally-adjusted annual rate of 1,314,000 new residential units were completed (see —), compared to 1,540,000 in May and 1,475,000 in June 2024.

The Census Bureau distinguish between single-family homes and multi-unit housing. In June 2025, a seasonally-adjusted annual rate of 866,000 new single-family residential units were permitted and 908,000 were completed. In the same month, an annual rate of 477,000 new multi-family residential units were permitted and 383,000 were completed.

Residential Construction Permits and Completions

number of housing units permitted or completed, seasonally-adjusted annual rate, in thousands



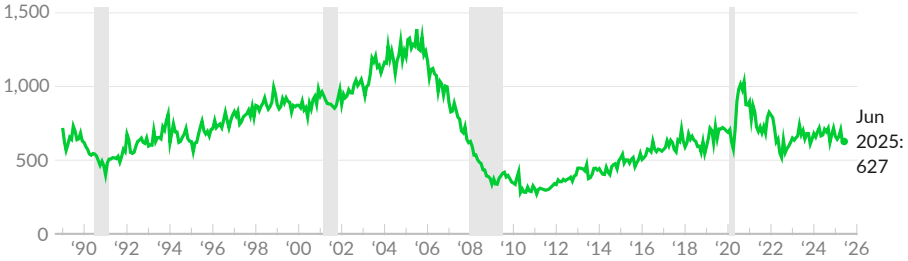
Source: Census Bureau

New Residential Sales

In June 2025, seasonally-adjusted **annualized sales** of new single-family homes total 627,000 (see —), as reported by the Census Bureau. Over the past year, new home sales were unchanged. Pre-COVID, in February 2020, the annualized rate of single family new home sales was 707,000. Since February 2020, new home sales have decreased 11.3 percent.

New Home Sales

new single family homes sold, in thousands, seasonally adjusted annual rate

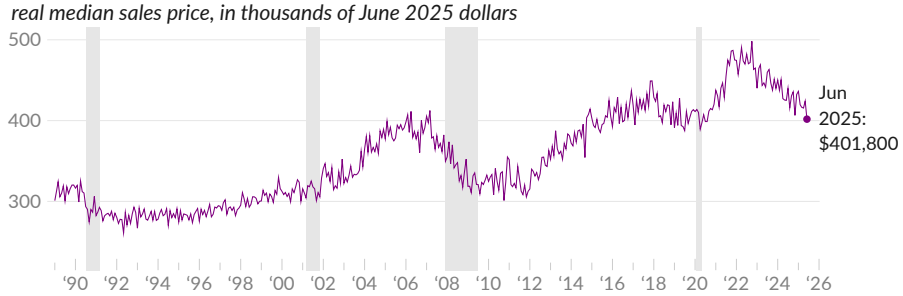


Source: Census Bureau

The Census Bureau also tracks the **sales price** of new single-family homes. In June 2025, the median new home sold for $401,800 (see —), and the average sales price was $501,000. The inflation-adjusted median sales price has decreased 5.5 percent over the past year, and decreased 1.3 percent over the past five years. Since 1989, the inflation-adjusted median new home sales price increased 33.5 percent.

Real New Home Sales Price

real median sales price, in thousands of June 2025 dollars

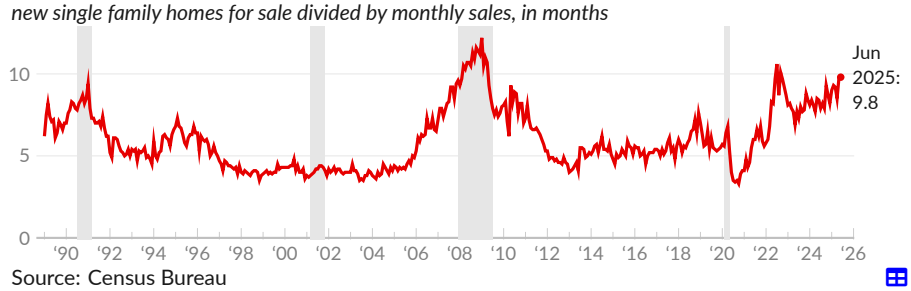


Source: Census Bureau, Bureau of Labor Statistics

The **inventory** of new homes for sale affects housing prices. The Census Bureau report a seasonally-adjusted total of 511,000 new houses for sale in June 2025, an increase of 40,000 since June 2024. At the current pace of new home sales, it would take 9.8 months to exhaust the supply of unsold homes (see —). Current inventory levels are slightly above the year-prior supply of 8.4 months and far above the long-term average supply of 6.0 months.

New Homes, Months of Supply

new single family homes for sale divided by monthly sales, in months



Source: Census Bureau

The monthly payment associated with new single-family home sales typically reflects both the sales price and the current mortgage interest rate. The monthly principal and interest payment for a 30-year fixed-rate mortgage on the median new home sold is $2,362, as of June 2025, compared to an average of $2,425 over the prior three months, and an average of $1,361 in 2019.

New House Affordability

index, new house monthly principal and interest payment relative to 1/3rd median usual full-time earnings,

Source: Author's Calculations

The **affordability of a new house** depends on both the monthly payment and people's ability to make the payment, usually determined by their income. New homes are affordable when the monthly payment is a third of income, or less.

The new house affordability index (see —) compares the monthly payment with one-third of the median full-time wage. The median full-time wage is sufficient to afford the median new home when index values are 100 or greater.

New House Affordability

index components

	Jul '25	Jun '25	May '25	Apr '25	Jun '24	2019
Affordability Index	–	64.6	62.6	65.9	61.7	87.6
Monthly Payment ($)	–	2,362	2,484	2,406	2,458	1,361
Median Home Price ($)	–	401,800	422,700	413,300	414,000	319,267
Mortgage Rate (%)	6.72	6.82	6.82	6.72	6.92	3.93
Median Monthly Earnings ($)	5,123	5,078	5,175	5,283	5,053	3,964

Source: Author's Calculations, Census Bureau, Freddie Mac, CPS
See also the more-comprehensive Home Ownership Affordability Monitor from the Federal Reserve Bank of Atlanta.

Housing Prices

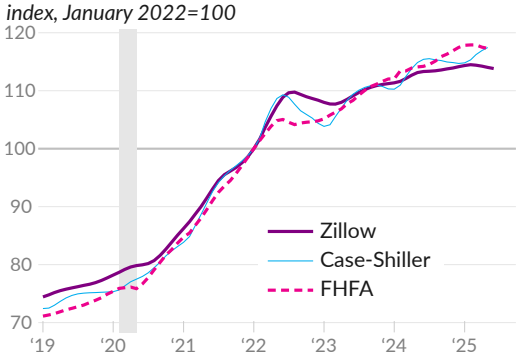
Housing prices are a particularly important topic in the US. To get a sense of recent trends, we can compare the results from different housing price indices. Measures include the Zillow Home Value Index (see —), Case-Shiller Home Price Index (see —), and the Federal Housing Finance Authority House Price Index (see - -).

Despite differences in methods and data sources, the three measures return similar results. All three measures show a sharp increase from mid-2020 to early 2022, with annual growth between 17.3 and 19.3 percent.

Since mid-2022, the indices have increased at an annualized rate of between 1.9 and 3.8 percent, per year. The Zillow measure was virtually unchanged over the year ending June 2025.

Housing Price Indices

index, January 2022=100



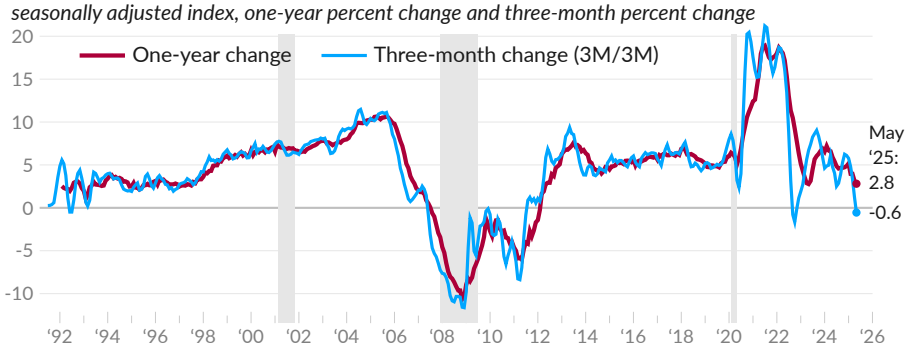
Source: Zillow, S&P CoreLogic, FHFA

The Federal Housing Finance Agency (FHFA) **house price index** measures changes in the price of the same home. The seasonally-adjusted index increased 2.8 percent over the year ending May 2025 (see —). The average of the latest three months compared to the previous three months shows an annualized decrease of 0.6 percent (see —).

In April 2025, the one-year growth rate was 3.2 percent and the three-month growth rate was 1.3 percent. Home prices in the Middle Atlantic region, which includes New Jersey, New York, and Pennsylvania, increased 5.9 percent in May 2025, the highest one-year growth rate.

House Price Index

seasonally adjusted index, one-year percent change and three-month percent change



Source: Federal Housing Finance Agency

House Price Growth by Region

seasonally adjusted, one-year percent change

	May '25	Apr '25	Mar '25	Feb '25	May '24	May '23	May '22	'03–'05 Average	'09–'12 Average
Middle Atlantic	5.9	7.3	6.3	6.6	9.1	4.8	13.3	11.3	-2.3
New England	5.3	5.4	6.8	6.2	9.4	3.8	15.3	10.3	-2.3
East North Central	5.2	5.9	6.0	6.8	7.5	5.4	14.2	4.2	-2.4
East South Central	4.0	4.3	4.5	4.0	5.2	4.8	18.1	5.1	-1.7
West North Central	3.8	3.3	3.9	4.3	5.7	3.9	13.6	5.4	-1.1
United States	2.8	3.2	4.0	4.0	5.9	2.8	17.2	9.1	-2.5
South Atlantic	1.4	1.9	3.5	3.0	6.2	4.1	22.3	11.3	-3.7
Mountain	1.2	1.2	2.6	3.7	5.5	-3.1	21.0	11.0	-4.2
West South Central	0.9	0.7	2.4	2.0	2.9	2.2	18.5	4.3	0.3
Pacific	0.6	0.9	1.7	1.3	3.8	-1.6	14.9	18.3	-3.9

Source: Federal Housing Finance Agency

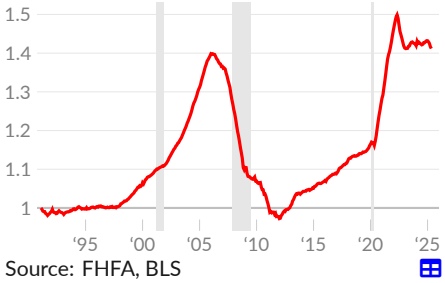
Housing Price to Rent Ratio

The purchase price of housing should move with the rental price. When housing prices exceed the rental equivalent, it may suggest that housing is overvalued.

During the housing bubble that caused the great recession, housing prices reached more than 40 percent above the rental equivalent. As of May 2025, housing prices are 41.2 percent above the rental equivalent (see —).

Housing Price to Rent Ratio

index, 1991=1

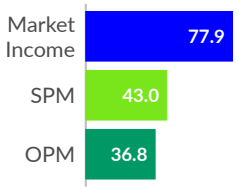


Source: FHFA, BLS

Poverty

In 2023, market income, or total payments from working and investment, is below the poverty line for about one quarter (23.4 percent) of US households. Government programs reduce the poverty rate to 12.9 percent, pulling 34.9 million people out of poverty in 2023. This subsection discusses poverty definitions, who is in poverty, and which programs reduce poverty.

In Poverty, 2023
millions of people



Source: CPS ASEC

Definitions

For purposes of program eligibility and economic statistics, poverty is defined by having income below the poverty threshold. The Official Poverty Measure (OPM) defines poverty as cash income below three times a price-adjusted 1963 minimal food budget. Under this definition, 36.8 million people are in poverty in the US in 2023.

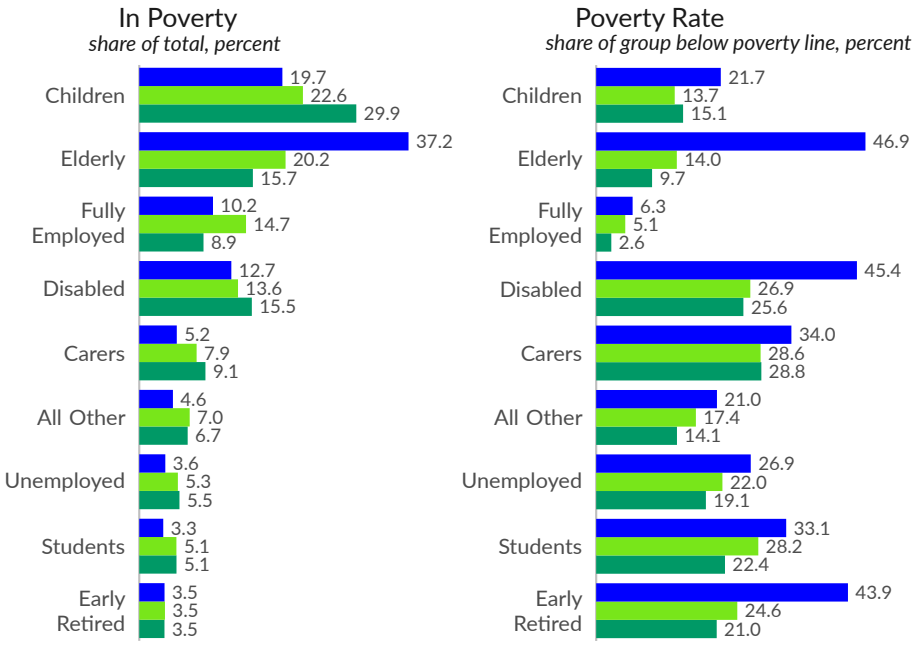
The more-comprehensive Supplemental Poverty Measure (SPM) is based on food, shelter, clothing, and utilities costs and additionally captures program benefits and taxes, along with other adjustments. The SPM poverty level in 2023 is 43.0 million people.

Who is in poverty?

While some fully-employed people are in poverty, **the vast majority of poor people are either children, elderly, disabled, caregivers, or students**. Groups that are work-limited in some way cannot rely on labor markets and must rely on others and government programs to avoid poverty. These groups make up roughly 50 percent of the population but roughly 80 percent of those in poverty before taxes and transfers.

While poverty is far more likely for some groups than others, government programs also reduce market poverty for some groups more than others. These trends are summarized in the following charts, which show the breakdown of poverty by group (left) and the poverty rates for each group (right).

Poverty Measures, 2023 ■ Market Income ■ SPM ■ OPM



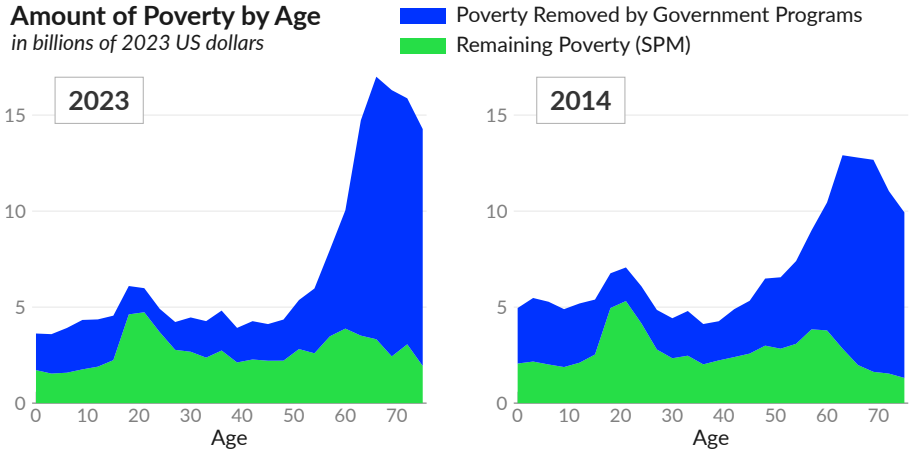
Source: CPS ASEC, Author's Replication of Bruenig, see
OPM = Official Poverty Measure; SPM = Supplemental Poverty Measure. See text for description.

Poverty by Age

The share of a group whose combined labor, capital, and welfare income is below the poverty line is the poverty rate for the group. In 2023, students, caregivers, and the disabled had the highest poverty rates. The poverty rate is low for the fully-employed.

By age, market income (see) leaves older people particularly vulnerable to poverty, as they are not as likely to have labor income. After government social benefits (see), the elderly have lower rates of poverty than other age groups. Young people and those just below social security and medicare age (late 50s and early 60s) remain particularly vulnerable to poverty, relative to other ages.

Amount of Poverty by Age
in billions of 2023 US dollars

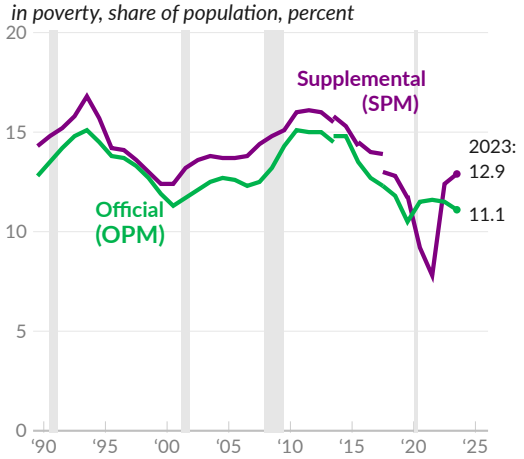


Source: CPS ASEC, 2014 adjusted for inflation with CPI-U-RS

Poverty Rates

Since 1989, the official poverty measure (see —) shows between 10.5 percent and 15.1 percent of people in poverty each year, with an average poverty rate of 12.8 percent during the period. Poverty rates were above-average after the recession of 1991 and after the great recession, and below-average around 2000.

Poverty Rates
in poverty, share of population, percent



Source: Census Bureau

In 2019, both the official US poverty rate and the more-comprehensive supplemental rate (SPM, see —) reached new lows of 10.5 percent and 11.8 percent, respectively.

In 2021, the official rate increased to 11.6 percent, while the SPM fell further, to a new low of 7.8 percent. The official poverty rate does not include stimulus checks, housing assistance, or tax credits, while the supplemental rate does. In 2022, the SPM bounced back to 12.4 percent, as stimulus expired, followed by 12.9 percent in 2023.

Effect of Government Programs

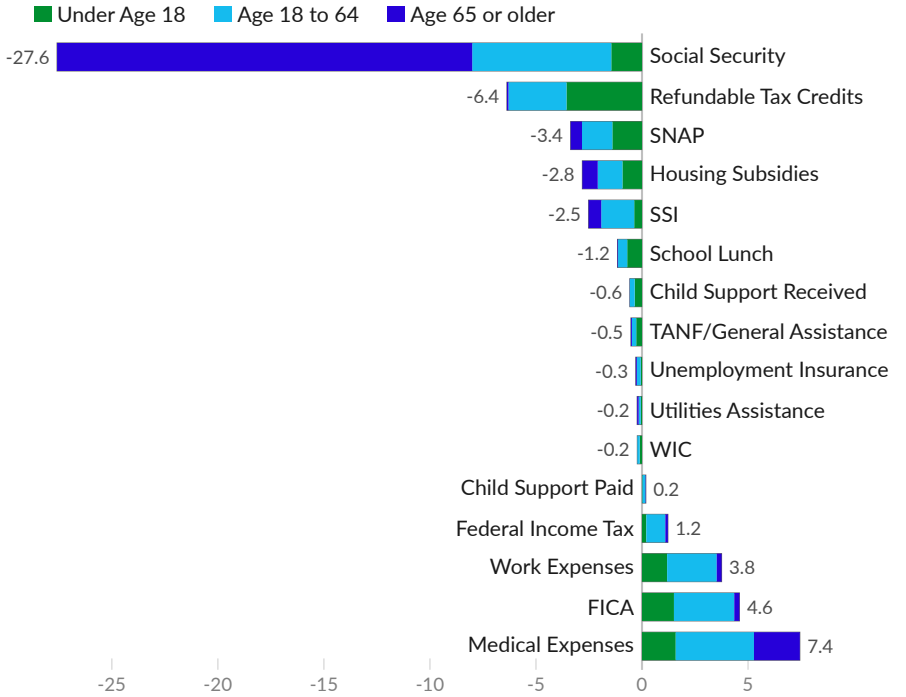
The Census Bureau report **the number of people taken out of poverty by various programs**, along with how many people are put in poverty by various expenses. In 2023, Social Security payments lift income above the poverty line for 27.6 million people, by far the most effective program for reducing poverty.

Refundable tax credits, which include the refundable portion of the child tax credit and the earned income tax credit, remove 6.4 million people from poverty, including 3.6 million children. Supplemental nutrition assistance (SNAP) removes 3.4 million people from poverty, while school lunch programs remove 1.2 million. Public assistance and welfare programs take 522,000 people out of poverty.

Several elements add to the number of people in poverty. Medical expenses are the most significant, and push 7.4 million people into poverty. Federal payroll taxes for Social Security and Medicare put 4.6 million people in poverty. Work expenses additionally put 3.8 million people in poverty.

Effect of Individual Elements on Poverty Headcount

individual element effect on number of people in poverty, in millions of people, 2023



Refundable tax credits include the refundable portion of the child tax credit and the earned income tax credit. SNAP is the Supplemental Nutrition Assistance Program, SSI is Supplemental Security Income, TANF is Temporary Assistance for Needy Families, WIC is special supplemental nutrition assistance for women, infants, and children, and FICA is Federal Insurance Contributions Act payroll taxes.

Source: Author's Replication of Census Bureau Report

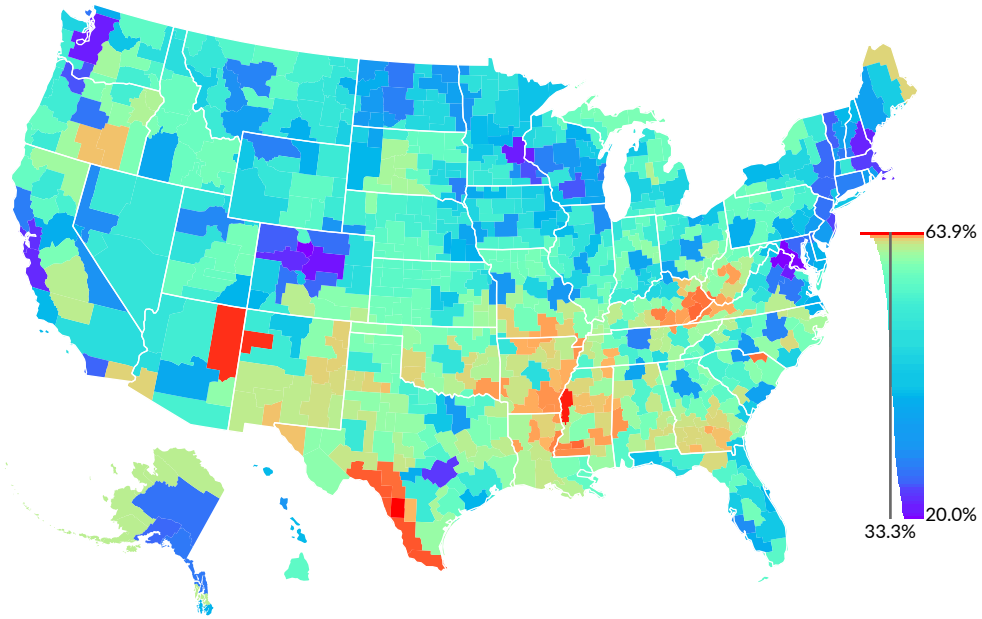
Poverty and Geography

Poverty can be geographically concentrated. In the United States, some regions have particularly high and persistent poverty rates. In 2023, one third of people in the US have income below $24,468. In some regions of the US, more than half of the population has income below this threshold.

Dividing the US into 741 commuter zones, 66 of these zones, covering 3.0 million people, have a majority of the population in bottom third of US income. Among the most extreme examples are Greenville, MS (62.3 percent), Gallup, NM (61.3 percent), Brownsville, TX (59.1 percent), and Laredo, TX (59.1 percent).

Low-Income Share of Commuter Zone, 2023

Share of commuting zone householders with income below $24,468



Source: American Community Survey, Author's Calculations

Businesses

The factories, offices, and equipment that workers use to produce goods and services are all important to the economy. This section looks at the private business sector, with data covering business investment, retail sales, industrial production, corporate profits, and the financial activities of private businesses.

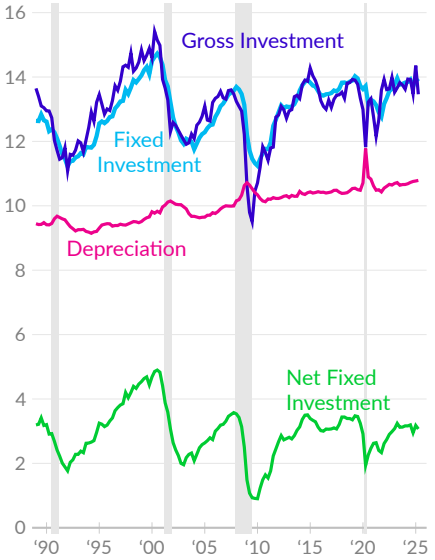
Investment

Private business production relies on capital goods, such as buildings, equipment, and software. These items, with a useful life exceeding one year, are categorized as fixed investment, or investment in fixed assets. From an accounting perspective, these transactions are considered an exchange of assets–cash in exchange for capital goods–rather than expenses.

Over time, capital goods deteriorate, a process known as consumption of fixed capital or depreciation. From an accounting standpoint, depreciation represents the cost associated with the use of capital goods. Businesses must decide whether to replace or add to the existing stock of capital goods, and their new purchases of capital goods and inventory investment are considered gross investment. Net investment, which is gross investment minus depreciation, measures whether the stock of capital goods is expanding.

Net investment is important for many reasons. In the short run, the production and installation of capital goods adds directly to GDP and boosts economic activity. In the long run, **investments in fixed assets make workers more productive**, as they allow businesses to produce more goods and services with the same hours of work.

Investment and Depreciation
share of GDP, percent



Source: Bureau of Economic Analysis

In the second quarter of 2025, gross private business investment totals $4,084 billion on a seasonally-adjusted annualized basis, which is 13.5 percent of GDP (see —). Private business investment in fixed assets totals $4,203 billion, or 13.9 percent of GDP (see —). Private business depreciation totals $3,272 billion in the quarter, or 10.8 percent of GDP (see —). As a result, net fixed investment is $931 billion, or 3.1 percent of GDP (see —).

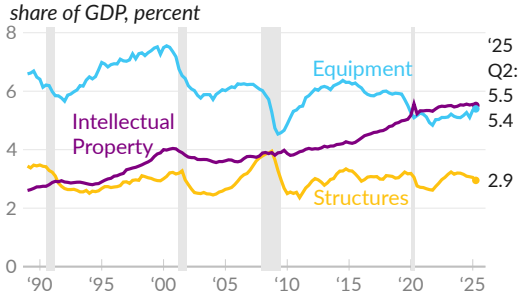
In 2019 Q4, prior to the COVID-19 pandemic, private business gross investment was $2,926 billion. Since 2019 Q4, gross investment increased at an annual rate of 6.2 percent. Net fixed investment was $711 billion in 2019 Q4, and increased at an annual rate of five percent from 2019 Q4 to 2025 Q2, as growth of depreciation costs outpaced the increase in gross investment.

Note that gross investment includes fixed investment and inventory investment, or the change in private inventories. Changes to private inventories capture the difference between sales and production. Reduced production of new inventory explains much of the overall reduction in gross investment during the COVID-19 pandemic.

Business fixed investment encompasses structures, equipment, and intellectual property, such as software and R&D. Annualized investment in structures is $895 billion in 2025 Q2, representing 2.9 percent of GDP (see —). Equipment investment is $1,636 billion or 5.4 percent of GDP (see —), and intellectual property investment is $1,672 billion, which is 5.5 percent of GDP (see —).

Gross Fixed Investment by Type

share of GDP, percent



Source: Bureau of Economic Analysis

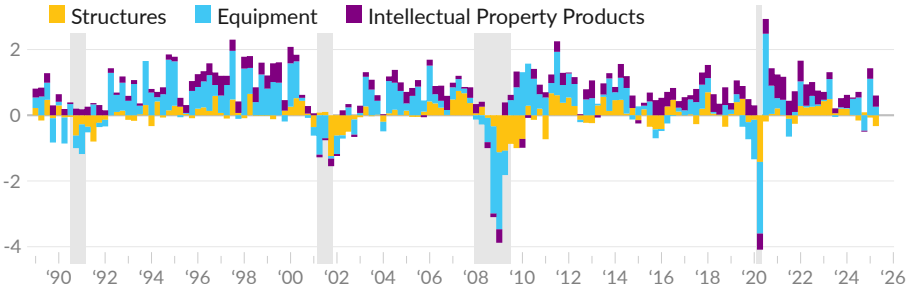
Contribution to Growth

Business fixed investment plays an **outsized role in GDP growth**. From 1992 to 2000, business fixed investment contributed an average of 1.1 percentage points to GDP growth. Over the past three decades, the category contributed 0.6 percentage point, on average. Business investment added an average of 0.5 percentage point since 2019, and contributed 0.4 percentage point over the past year.

Private business gross fixed investment contributed 0.27 percentage point to annualized GDP growth in 2025 Q2. Within the category, investment in structures subtracted 0.33 percentage point from (see ■), investment in equipment contributed 0.26 percentage point (see ■), and investment in intellectual property added 0.34 percentage point (see ■).

Business Gross Fixed Investment

contribution to real GDP growth, percentage points, annualized



Source: Bureau of Economic Analysis

Business Gross Fixed Investment

contribution to real GDP growth, percentage points, annualized — *moving averages*

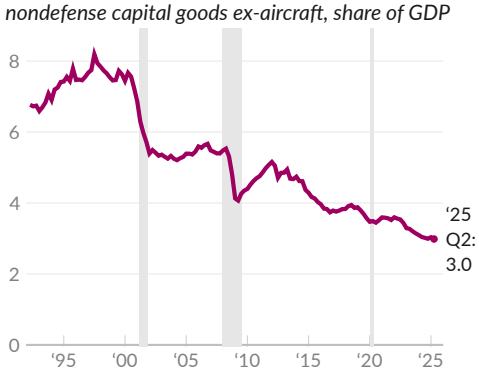
	2025 Q2	'25 Q1	'24 Q4	'24 Q2	'23 Q2	1-year	10-year	30-year
Total	0.27	1.36	-0.41	0.53	1.30	0.44	0.53	0.58
■ Structures	-0.33	-0.07	0.09	0.01	0.49	-0.12	0.02	0.03
■ Equipment	0.26	1.11	-0.47	0.49	0.61	0.36	0.15	0.28
Information Processing	0.11	1.01	-0.13	0.13	-0.07	0.32	0.12	0.19
Computers & Peripherals	0.32	0.54	-0.14	0.11	0.04	0.23	0.06	0.10
Industrial Equipment	0.05	0.05	-0.01	-0.05	0.01	0.04	0.02	0.02
Transportation Equipment	0.14	0.08	-0.23	0.41	0.61	0.06	0.01	0.04
■ Intellectual Property Products	0.34	0.32	-0.03	0.04	0.21	0.20	0.36	0.26
Software	0.41	0.39	0.06	0.05	0.11	0.23	0.22	0.16
Research & Development	-0.04	-0.06	-0.09	-0.01	0.09	-0.02	0.13	0.09

Source: Bureau of Economic Analysis

Productive business investments also show up as **new orders for core capital goods**. The category excludes the more-volatile aircraft orders as well as defense-related orders, and is derived from the Census Bureau survey of shipments, inventories, and orders.

New orders for manufactured core capital goods excluding aircraft total $76 billion in June 2025, equivalent to 3.0 percent of GDP (see —). New orders increased 2.8 percent over the past year, and increased by 20.5 percent since February 2020.

New Orders for Core Capital Goods
nondefense capital goods ex-aircraft, share of GDP



Source: Census Bureau

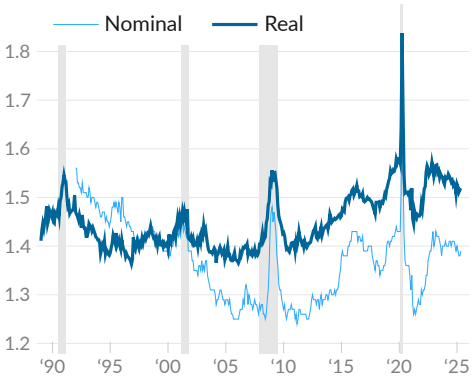
Inventories

In the national accounts, **inventories** are the stock of goods held by firms, encompassing goods for sale, goods used in production and sales, and goods requiring further processing prior to sale. When economic activity is measured using spending on final goods, it must be adjusted for changes in inventories. For example, a rise in inventories indicates goods were produced but not sold, and therefore were not measured by consumer spending or investment.

One tool for measuring changes in inventories is the inventories-to-sales ratio. The Bureau of Economic Analysis report an inflation-adjusted ratio of inventories to sales in manufacturing and trade sectors (see —).

When examining trends in the ratio, note that business sales include services, whereas inventories account only for goods. In the three decades before the COVID-19 pandemic, a shift towards service-based sales led to a naturally lower inventories-to-sales ratio. Post-COVID-19, a rebound in goods sales, in turn, pushed this ratio higher, all else equal, masking some of the inventory shortages of the period.

Inventories to Sales Ratio
total business sector



Source: FRED, BEA

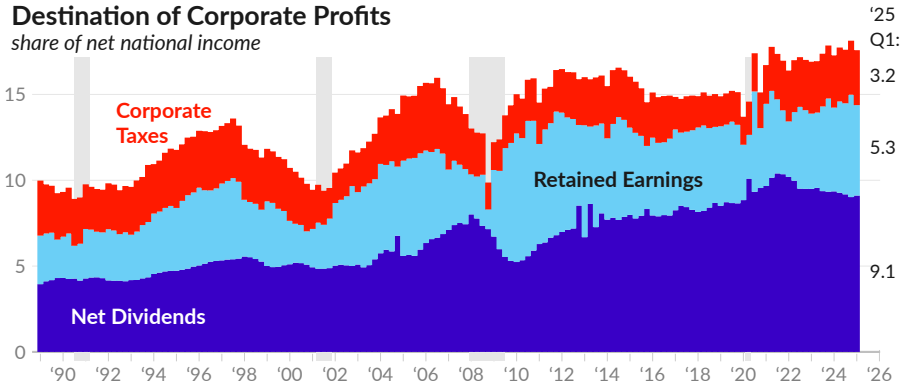
The Census Bureau report the nominal **ratio of inventories to sales** for the total business sector (see —). In May 2025, the ratio of total business inventories to sales was 1.39, compared to 1.38 in April 2025, 1.41 in May 2024, and 1.43 in February 2020.

The inflation-adjusted version from BEA shows inventories at 1.52 times sales in May 2025, following a ratio of 1.52 in April 2025, and 1.54 one year prior, in May 2024. In 2019, real monthly inventories were 1.55 times real monthly sales, on average.

Corporate Profits

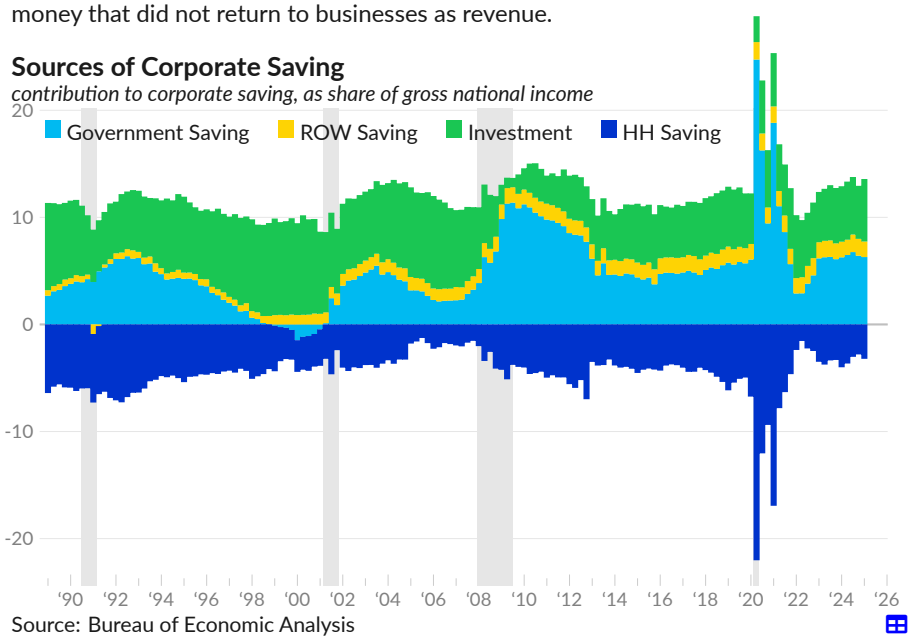
The national accounts include detailed information on **aggregate corporate profits**. In the first quarter of 2025, corporate profits were $3.92 trillion, equivalent to 17.6 percent of the income paid to US nationals after depreciation costs (net national income). Of this, $2.03 trillion, equivalent to 9.1 percent of net national income, were paid out as dividends (see), $1,174 billion were retained (corporate saving, see), and $713 billion, 18.2 percent of corporate profits, went to corporate income tax (see).

In 2019, corporate profits were 15.1 percent of net national income. Dividends were equivalent to 8.6 percent, corporate savings were 4.6 percent, and corporate income taxes were 1.8 percent of net national income and 12 percent of corporate profits.



Source: Bureau of Economic Analysis

Aggregate corporate savings (corporate profits less dividends and corporate profit tax) are the result of net investment and non-business saving. Investment (see) is a source of aggregate profit because it is revenue for one party but not an expense for the other. Non-business saving, which includes household (see), government (see), and rest of world saving (see), necessarily reduces aggregate corporate profits because it is money that did not return to businesses as revenue.



Source: Bureau of Economic Analysis

Business Balance Sheets

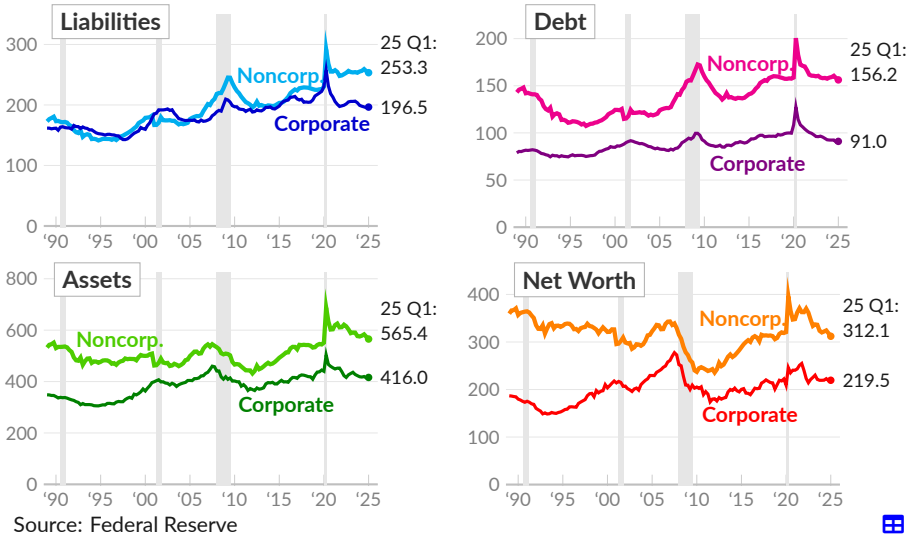
Next, we look at the **balance sheets** of US private businesses. The Financial Accounts report assets, liabilities, and net worth for corporate and noncorporate businesses, each of which is discussed in this subsection.

The following charts cover nonfinancial businesses and show the ratio of balance sheet components to sector production, measured as the gross value added by the sector. The gross value added is essentially the GDP of the sector. For example, the corporate liabilities-to-sector-GDP ratio is 196.5 percent in 2025 Q1 (see —), as corporate liabilities total $30.1 trillion and corporate sector gross value added is $15.3 trillion. Noncorporate business liabilities equal 253.3 percent of the sector GDP (see —).

Corporate assets are equivalent to 416.0 percent of sector GDP in 2025 Q1 (see —), and corporate sector net worth, assets minus liabilities, is equivalent to 219.5 percent of sector GDP (see —). Noncorporate assets are equivalent to 565.4 percent of sector GDP (see —), and noncorporate business net worth is equivalent to 312.1 percent of sector GDP (see —).

Nonfinancial Business Balance Sheets

share of sector gross value added, percent

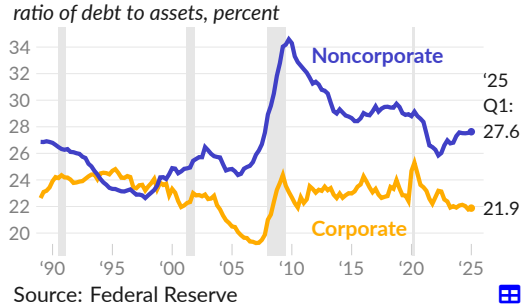


Source: Federal Reserve

Analysis of private business balance sheets can help researchers understand risks in the sector. A high ratio of debt to assets, for example, can suggest businesses are over-leveraged. The following chart shows the **ratio of debt to assets** for nonfinancial businesses, separated by corporate and noncorporate businesses.

Nonfinancial Business Debt-to-Asset Ratio

ratio of debt to assets, percent



Source: Federal Reserve

The ratio of corporate business debt to assets is 21.9 percent in 2025 Q1 (see —). One year prior, in 2024 Q1, the ratio was 22.1 percent, and, in 2019, the ratio averaged 22.9 percent.

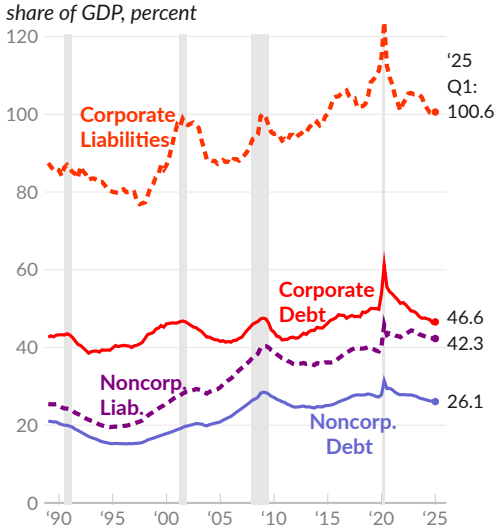
The noncorporate business debt to asset ratio is 27.6 percent in 2025 Q1 (see —), and 27.6 percent, one year prior. In 2019, the ratio was 29.1 percent.

Business Liabilities

This subsection looks at types of **business liabilities**. Corporate nonfinancial businesses issue bonds, and have loans and mortgages, pension liabilities, and accounts payable. Noncorporate businesses primarily have mortgages and other loans. Both sectors have substantial miscellaneous liabilities, calculated as the unidentified residual of other aggregate balance sheet measures.

Nonfinancial Business Liabilities

share of GDP, percent



Source: Federal Reserve

Corporate liabilities total $30.1 trillion in the first quarter of 2025, equivalent to 100.6 percent of GDP (see —). Of this, corporate debt is equivalent to 46.6 percent of GDP (see —). In 2019, corporate liabilities are 109.6 percent of GDP and corporate debt is 50.0 percent.

Noncorporate business sector liabilities are equivalent to 42.3 percent of GDP in 2023 Q2 and 39.4 percent in 2019 (see —). Noncorporate business debt is 26.1 percent of GDP in the latest data and 27.6 percent in 2019 (see —).

The following table provides more details on the size of nonfinancial business liabilities relative to the overall economy.

Nonfinancial Business Liabilities

share of GDP, percent

	2025 Q1	'24 Q4	'24 Q3	'24 Q1	'19 Q4	2010	1989
Corporate Liabilities (—)	100.6	100.3	100.4	102.6	111.2	94.4	86.4
Corporate Debt (—)	46.6	46.3	47.2	47.6	49.8	42.9	42.9
Corporate Bonds	24.3	24.1	24.5	24.5	26.6	22.0	16.5
Bank Loans & Mortgages	8.6	8.7	9.1	9.2	9.6	9.3	15.3
Nonbank Loans	9.1	9.0	9.1	9.1	8.4	7.0	6.9
Trade & Taxes Payable	14.3	14.1	14.0	14.0	14.5	11.5	11.1
Miscellaneous Liabilities	38.6	38.7	38.0	39.9	45.0	37.3	30.7
Noncorporate Liabilities (—)	42.3	42.3	42.4	42.9	39.0	38.0	25.4
Noncorporate Debt (—)	26.1	26.2	26.3	26.6	27.3	26.6	20.9
Mortgages	18.7	18.7	18.8	19.1	19.3	19.0	16.3
Other Loans	7.4	7.4	7.4	7.6	7.9	7.6	4.7
Trade & Taxes Payable	3.8	3.8	3.8	3.8	3.2	3.4	1.7
Miscellaneous Liabilities	12.4	12.4	12.3	12.4	8.5	8.0	2.8

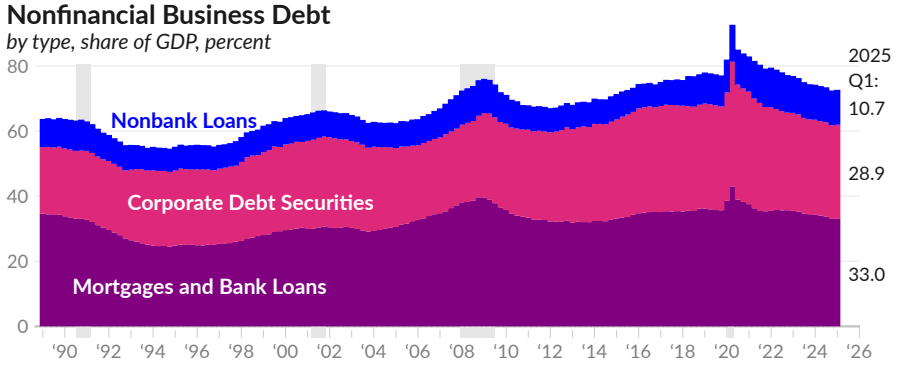
Source: Federal Reserve, Bureau of Economic Analysis

Business Debt

Combining corporate and noncorporate business debt provides the aggregate amount of nonfinancial business debt, which we can compare to the size of the overall economy. The debt to GDP ratio provides an additional measure of business sector leverage.

As of 2025 Q1, **nonfinancial business debt**–the debt security and loan liabilities of nonfinancial private businesses–both corporate and non-corporate–totals $21.8 trillion, with $14.0 trillion (64.1 percent) held by corporate businesses. Over the past five years, nonfinancial business debt has fallen relative to overall economic activity. As a share of GDP, nonfinancial business debt fell by 9.3 percentage points to 72.7 percent in 2025 Q1 from 81.9 percent in 2020 Q1. The vast majority of the increase, 0.7 percentage points, comes from nonbank loans (see ■).

Nonfinancial Business Debt
by type, share of GDP, percent

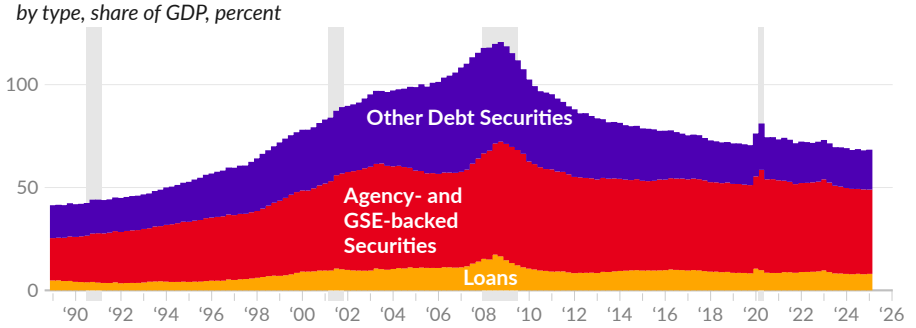


Source: Federal Reserve, Bureau of Economic Analysis

The debt of the domestic private financial sector includes agency and government-sponsored enterprise (GSE) backed securities (see ■), corporate and foreign bonds, loans (see ■), and open market paper. The long-term increase in financial sector debt reflects the emergence and growth of various asset-backed securities. In addition to home mortgage-backed securities, the domestic financial sector issues debt securities based on commercial mortgages, auto loans, credit cards, student debt, and more.

Domestic financial sector debt has fallen as a share of GDP to 68.4 percent in 2025 Q1 from a housing bubble peak of 120.7 percent in 2008 Q4.

Financial Sector Debt
by type, share of GDP, percent



Source: Federal Reserve, Bureau of Economic Analysis

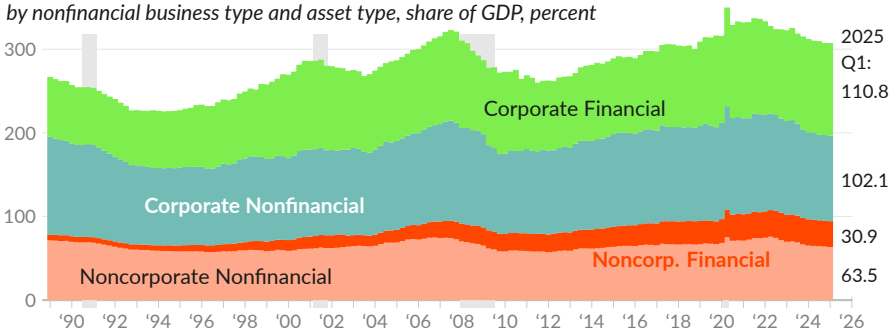
Business Assets

Combined **assets of private nonfinancial businesses** are valued at $92.1 trillion in the first quarter of 2025, which is 307.3 percent of GDP. These include financial and nonfinancial assets. Financial assets include cash and deposits, equity in other businesses, trade receivables, and other financial assets, and total $42.5 trillion. Nonfinancial, or tangible, assets include real estate, equipment, inventories, and intellectual property products, and total $49.6 trillion.

Nonfinancial corporations have assets valued at $63.8 trillion, or 212.9 percent of GDP. These include nonfinancial assets (see ■) valued at 102.1 percent of GDP and financial assets (see ■) valued at 110.8 percent, as of 2025 Q1. Noncorporate business assets are valued at $28.3 trillion, equivalent to 94.4 percent of GDP. Tangible assets (see ■) are equivalent to 63.5 percent of GDP, and include $10.3 trillion in rental housing. Financial assets for the sector (see ■) total 30.9 percent of GDP.

Business Assets

by nonfinancial business type and asset type, share of GDP, percent



share of GDP, percent

	2025 Q1	'24 Q4	'24 Q3	'24 Q1	'19 Q4	2010	1989
Corporate Total	212.9	212.5	214.1	215.5	222.2	191.6	185.8
Nonfinancial Assets (■)	102.1	102.4	102.5	104.1	112.6	97.9	114.8
Real Estate	52.2	53.0	53.0	54.5	63.3	49.5	61.7
Equipment	23.2	23.1	23.2	23.3	24.3	25.1	29.9
IP Products	14.7	14.5	14.4	14.2	12.9	11.4	7.7
Inventories	12.0	11.8	11.9	12.1	12.1	11.9	15.4
Financial Assets (■)	110.8	110.0	111.6	111.4	109.7	93.7	71.0
Noncorporate Total	94.4	95.0	95.4	96.6	94.2	79.9	77.9
Nonfinancial Assets (■)	63.5	64.0	64.3	65.1	66.9	58.9	71.0
Real Estate	57.0	57.5	57.8	58.4	60.2	51.7	62.0
Residential	34.5	34.8	35.1	35.3	34.9	29.7	34.9
Equipment	3.7	3.7	3.8	3.9	4.1	4.5	5.8
IP Products	1.6	1.6	1.6	1.6	1.5	1.3	0.7
Inventories	1.1	1.1	1.1	1.1	1.2	1.5	2.5
Financial Assets (■)	30.9	31.0	31.1	31.5	27.2	20.9	6.9

Source: Federal Reserve, Bureau of Economic Analysis
Notes: Includes only nonfinancial businesses. Tangible assets are market values or current replacement values.

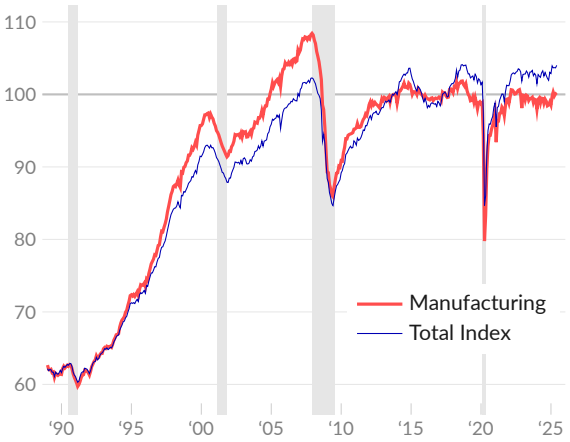
Industrial Production

The Federal Reserve industrial production index measures the real output of the industrial sector, which includes manufacturing, mining, and electric and gas utilities.

Industrial production increased 0.7 percent over the year ending June 2025, following an increase of 0.7 percent in May. The manufacturing-only index increased 0.8 percent over the year ending June, and contributed 0.6 percentage point to the growth of the total index. Mining contributed 0.2 percentage point, and utilities did not contribute.

By market group, finished consumer goods subtracted 0.2 percentage point from one-year industrial production growth in June. Business equipment contributed 0.2 percentage point, nonindustrial supplies contributed 0.1 percentage point, and materials contributed 0.6 percentage point.

Industrial Production
index, 2012=100



Source: Federal Reserve

Industrial Production Growth

one-year growth, seasonally-adjusted	*contribution to total* Jun '25	May '25	Apr '25	Jun '24	*rate, percent* Jun '25	May '25	Apr '25	Jun '24
Total Index	0.7	0.7	1.3	0.9	0.7	0.7	1.3	0.9
Manufacturing	0.6	0.5	0.8	0.2	0.8	0.6	1.0	0.3
Durable Manufacturing	0.5	0.4	0.3	-0.2	1.5	1.0	0.8	-0.6
Motor Vehicles & Parts	-0.1	0.0	-0.2	0.0	-2.2	0.6	-4.3	0.7
Nondurable Manufacturing	0.2	0.2	0.6	0.5	0.4	0.5	1.5	1.3
Mining	0.2	0.4	0.2	-0.1	1.6	2.7	1.5	-0.7
Utilities	-0.1	-0.2	0.3	0.8	-0.8	-1.8	3.0	7.0
Consumer Goods	-0.2	-0.1	-0.1	0.5	-0.7	-0.4	-0.2	1.7
Consumer Durables	-0.2	-0.1	-0.3	-0.0	-3.4	-2.1	-4.7	-0.0
Automotive Products	-0.2	-0.1	-0.2	-0.0	-5.5	-2.2	-6.5	-0.3
Consumer Nondurables	0.0	0.0	0.2	0.5	0.0	0.1	1.1	2.2
Foods & Tobacco	-0.1	-0.1	-0.1	0.0	-0.8	-0.7	-0.6	0.3
Chemical Products	0.2	0.3	0.3	0.2	4.5	5.9	6.4	4.4
Consumer Energy Products	-0.1	-0.2	0.0	0.3	-1.9	-3.1	0.6	5.0
Business Equipment & Supplies	0.4	0.4	0.5	0.1	1.4	1.4	1.9	0.2
Equipment	0.2	0.2	0.2	-0.1	2.3	1.9	1.7	-1.0
Industrial Equipment	0.1	0.0	0.1	-0.1	1.9	0.7	2.9	-3.9
Nonindustrial Supplies	0.1	0.2	0.3	0.2	0.8	1.0	2.0	1.1
Construction Supplies	0.1	0.1	0.2	-0.0	2.4	2.4	3.0	-0.3
Business Supplies	-0.0	0.0	0.2	0.2	-0.1	0.3	1.5	1.8
Materials	0.6	0.4	0.9	0.3	1.3	0.9	1.9	0.7
Consumer Parts	-0.1	-0.1	-0.2	-0.0	-2.5	-3.2	-5.7	-1.0
Equipment Parts	0.3	0.3	0.3	0.0	6.5	5.6	6.3	1.0
Chemical Materials	0.1	0.1	0.3	0.1	1.6	2.3	4.7	1.7
Energy Materials	0.1	0.1	0.4	0.4	0.8	0.4	2.0	2.3

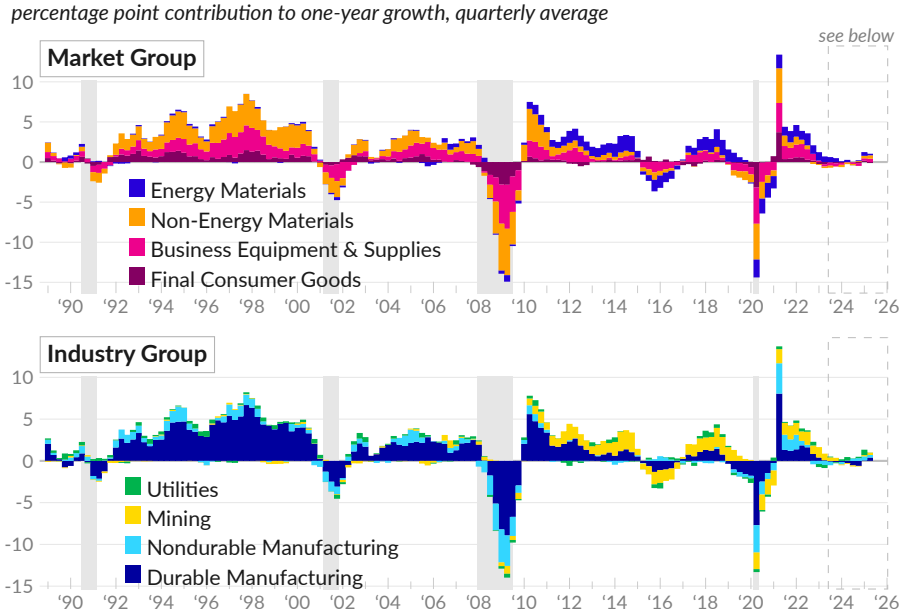
Source: Federal Reserve

Over the past 30 years, economic conditions and shifts in how production is organized have affected industrial growth. Much of the growth over the period is attributed to the production of materials, such as parts, chemicals, and energy, and to the production of business equipment and supplies. In contrast, there has been virtually no growth in domestic production of finished consumer goods, particularly from 2000 to 2020.

While the manufacturing industry dominated industrial growth in the 1990s, mining and utilities have played a relatively larger role since 2010. Manufacturing growth was relatively weak from 2013 to 2020, but increased starting in 2021.

Contributions to Industrial Production Growth

percentage point contribution to one-year growth, quarterly average

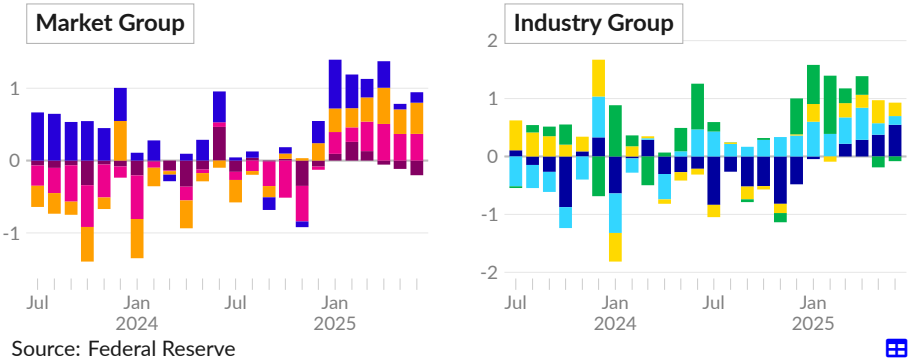


Source: Federal Reserve

Looking more closely at recent industrial production growth, the latest one-year growth rate, covering June 2025, is slightly above the five-year average, and in line with the May growth rate.

By market group, the latest low growth is largely the result of an increase in non-energy materials, and partially offset by a decrease in other categories. By industry group, the latest low growth is also largely the result of an increase in durable manufacturing, and partially offset by a decrease in other categories.

Recent Data in Detail



Source: Federal Reserve

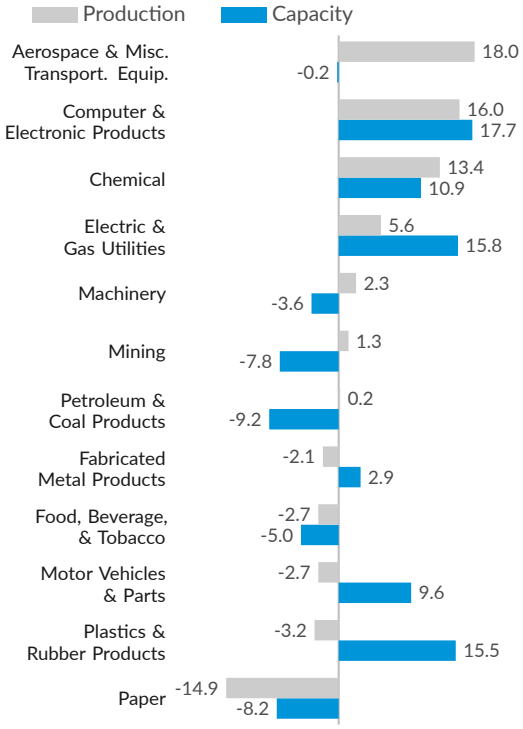
As of June 2025, of a subset of 12 industries that contribute the majority of industrial production, seven increased **production** since February 2020, and five decreased production (see).

Since February 2020, aerospace and miscellaneous transportation equipment production increased by 18.0 percent, production of computer and electronic products increased by 16.0 percent, paper production decreased by 14.9 percent, and chemical production increased by 13.4 percent.

Since February 2020, six of the 12 industries increased **capacity**, six decreased capacity, and none were unchanged (see). Production capacity for computer and electronic products increased by 17.7 percent, electric and gas utilities capacity increased by 15.8 percent, and production capacity for plastics and rubber products increased by 15.5 percent.

Industrial Production and Capacity

As of June 2025, percent change since February 2020



Source: Federal Reserve

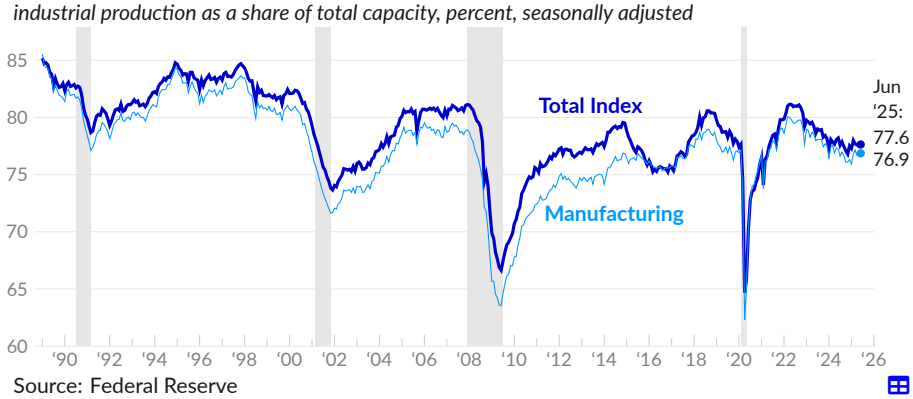
Capacity Utilization

The Federal Reserve also report the US industrial capacity, based on estimates of the maximum sustainable output. Industrial production as a share of total capacity is called **capacity utilization**. From the 1990s to the 2010s, capacity utilization fell substantially, as many domestic industrial facilities reduced output or closed.

In June 2025, the US is utilizing 77.6 percent of total industrial capacity (see —), and 76.9 percent of manufacturing capacity (see —). In 2019, the total capacity utilization rate averaged 78.6 percent, and the manufacturing capacity utilization rate averaged 77.2 percent. Total capacity utilization has decreased by one percentage point since 2019, and decreased by 6.1 percentage points since 1989.

Capacity Utilization

industrial production as a share of total capacity, percent, seasonally adjusted



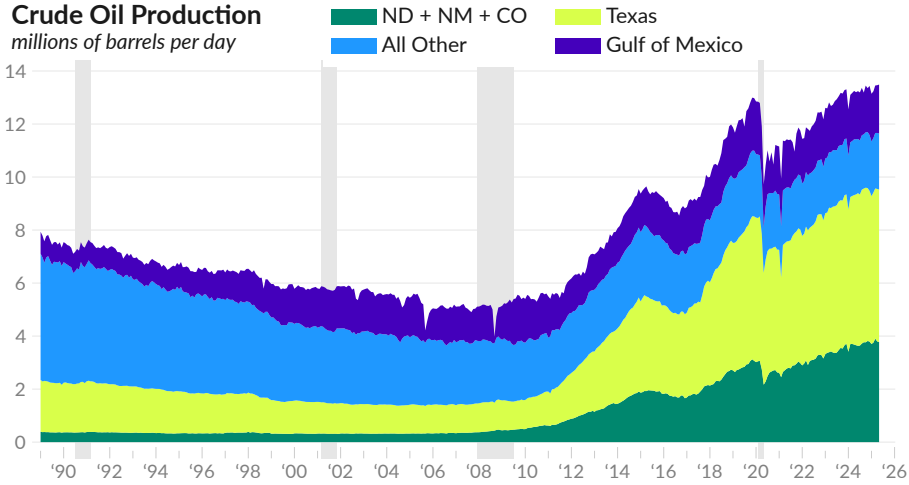
Source: Federal Reserve

Energy Production and Use

This subsection looks at the energy sector, and covers oil production and electricity generation and sales.

Crude Oil Production

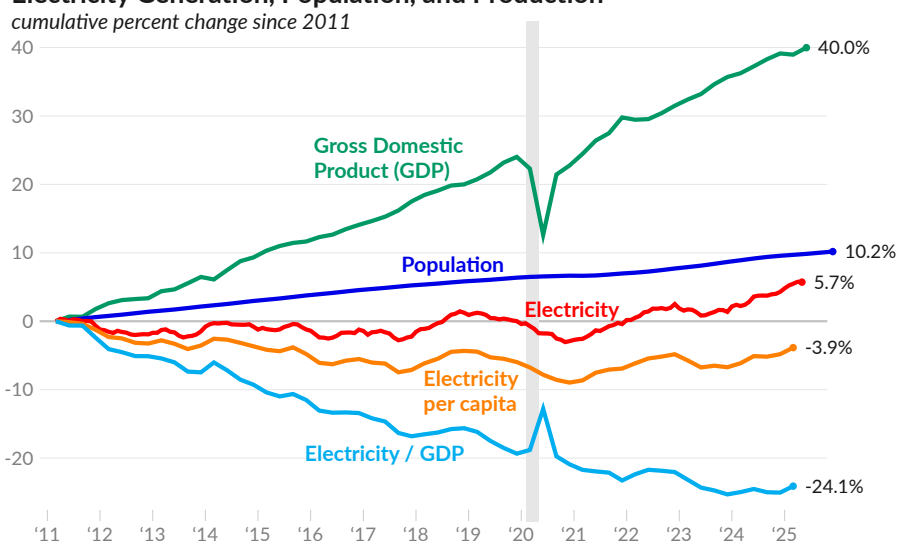
The Energy Information Administration report a large increase in US **crude oil production**, from around five million barrels per day in 2007 to nearly 13 million barrels per day at the end of 2019. Much of the increase comes from Texas, New Mexico, North Dakota, and Colorado. During May 2025, the US produced 13.5 million barrels per day, compared to 13.2 million barrels per day in May 2024.



Source: Energy Information Administration

Electricity Production

Since 2011, annualized total US **electricity generation** has increased 5.7 percent. Over the same period, the US population has increased by 10.2 percent (see —) and real GDP has increased by 40.0 percent (see —). As a result, the electricity required to produce a unit of real GDP decreased by 24.1 percent (see —).

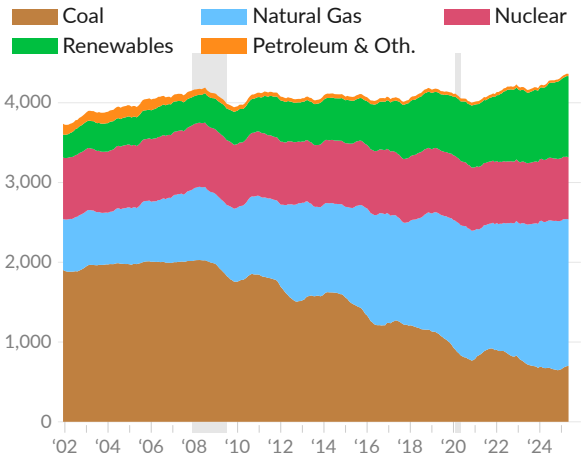


Source: EIA, BEA

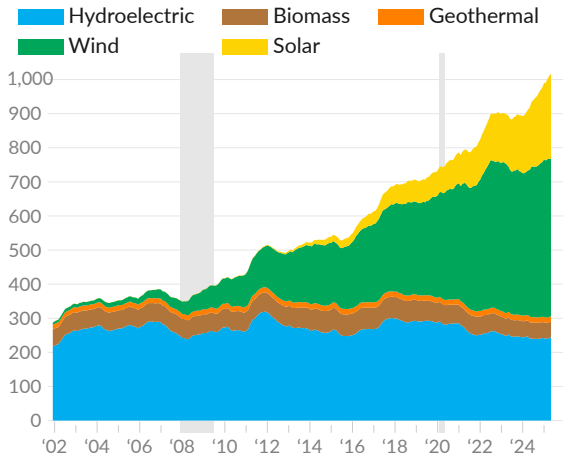
Electricity Production by Source

During the 12 months ending May 2025, the US generated 4,363 billion kilowatt hours of electricity. Of this, 1,837 billion kilowatt hours were generated using natural gas (see), 701 billion kilowatt hours were generated from coal (see), 778 billion from nuclear (see), and 1,017 billion from renewable sources (see).

Electricity Generation by Source
billion kilowatt hours, 12-month moving sum



Renewable Sources



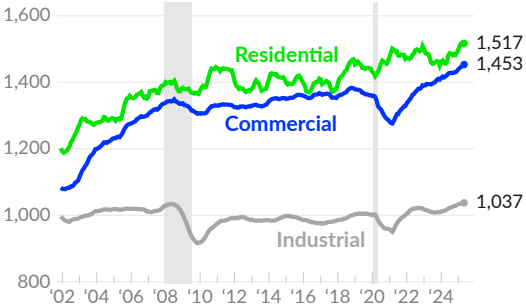
Source: Energy Information Administration

Among renewable energy sources, over the year ending May 2025, 244 billion kilowatt hours of electricity were generated with conventional hydroelectric (see), 46 billion kilowatt hours were generated from biomass (see), 16 billion were generated from geothermal (see), 462 billion from wind (see), and 250 billion from solar (see).

Electricity Sales by Sector

The Energy Information Administration report the **retail sales of electricity** to each major sector. Electricity sales to the commercial and industrial sectors fell during the pandemic, and were partially offset by increased electricity sales to the residential sector.

Electricity Retail Sales by Sector
billion kilowatt hours, 12-month moving sum



Source: Energy Information Administration

Over the year ending May 2025, retail sales of electricity to the residential sector total 1,517 billion kilowatt hours, compared to 1,440 billion during 2019 (see —). Commercial sector electricity sales total 1,453 billion kilowatt hours over the year ending May 2025, and 1,361 billion in 2019 (see —). Industrial sector sales total 1,037 billion kilowatt hours in the latest 12 months of data and 1,002 billion in 2019 (see —).

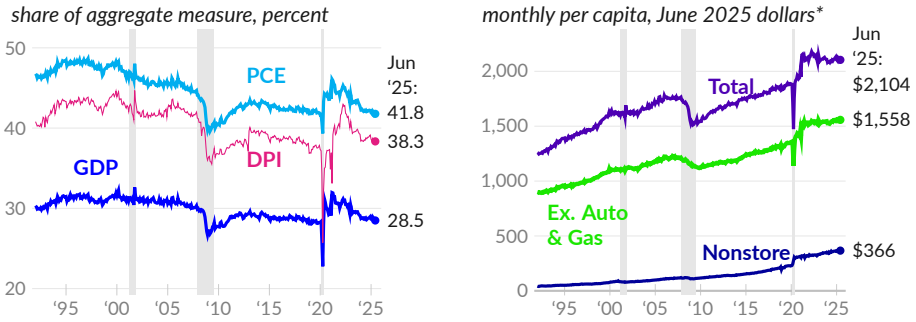
Retail Sales

The Census Bureau report the monthly sales of retail businesses, restaurants, and bars. These retail trade figures can be a useful economic indicator. Retail trade includes brick and mortar stores as well as e-commerce and other nonstore sales to the general public.

In June 2025, **retail and food services sales** total $720.1 billion. On an annualized basis, this is equivalent to 38.3 percent of disposable (after-tax) income (see —), 41.8 percent of consumer spending (see —), and 28.5 percent of GDP (see —). During the first two months of the US COVID-19 pandemic, retail sales were a smaller portion of overall economic activity, as many businesses were closed. Since the initial reopening, retail sales have comprised a larger share of economic activity, in part as other activities, like transportation, have recovered less.

Retail and food service sales, **adjusted for population growth and inflation**, provide additional context on economic developments. Per capita retail and food services sales, adjusted by the personal consumption expenditure (PCE) price index, are $2,104 during June 2025 (see —). Prior to the pandemic, in 2019, real per capita retail and food service sales averaged $1,869 per month. Excluding automotive and gasoline sales, per capita sales were $1,558 in June 2025 and $1,336 per month in 2019, after adjusting for inflation (see —).

Retail and Food Services Sales

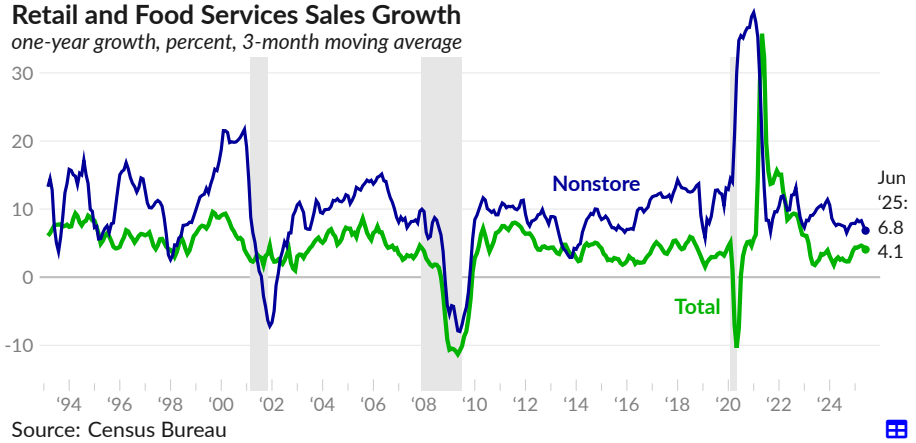


Source: Census Bureau, Bureau of Economic Analysis

*Adjusted by PCE price index

Changes in retail and food services sales can indicate shifts in consumer behavior. One-year retail and food services **sales growth** is 3.9 percent in June 2025, and averages 4.1 percent over past three months (see —). Nonstore sales, for example from online retailers, have increased at a faster rate than other sales, since 1992. Over the past three months, one-year nonstore sales growth averages 6.8 percent (see —).

Retail and Food Services Sales Growth



Source: Census Bureau

Since 1992, the share of after-tax income spent at different **kinds of businesses** has diverged wildly. In large part, this is due to the growth of e-commerce, with online sales replacing brick and mortar sales. However, there have also been shifts in other consumer preferences and relative prices.

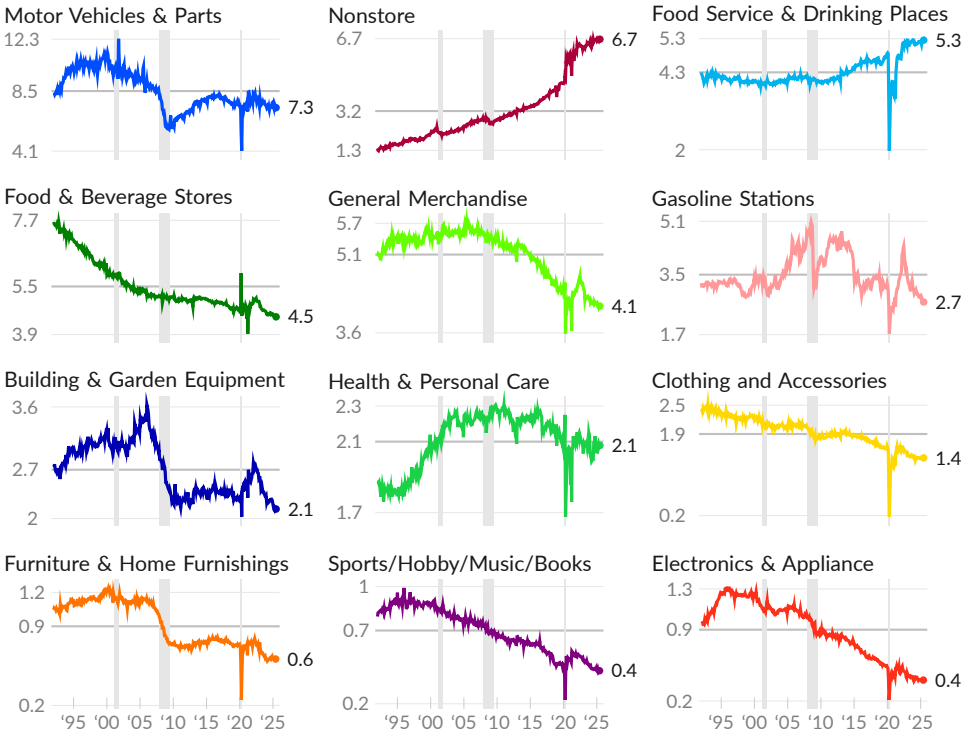
Nonstore sales were 1.4 percent of after-tax income in January 1992 and 6.7 percent in June 2025, a shift that is equivalent to $1,191 billion per year. Since 1992, sales as a share of after-tax income has decreased in food and beverage stores (-3.2 percentage points), motor vehicles and parts stores (-1.1 percentage points), and clothing and accessories stores (-1.0 percentage point).

Some sales categories were boosted by the housing bubble during the 2000s and its associated wealth effects, then fell sharply following the collapse of the bubble. Building and garden equipment, furniture and home furnishings stores, and motor vehicle sales all claimed a larger share of income during the 1990s and 2000s than during the 2010s. Meanwhile, food service and drinking places and health and personal care stores received a relatively stable share of income from 2000 until the COVID-19 pandemic, which hit restaurants and bars particularly hard.

Lastly, some categories are more affected by changes in relative prices. Sales at gasoline stations, for example, move with gasoline prices. Likewise, an increase in building material prices during the pandemic partially boosted the share of income spent at building and garden equipment stores.

Retail Sales by Kind of Business

share of disposable personal income, percent, January 1992 to June 2025



Source: Census Bureau, Bureau of Economic Analysis

Government

Public institutions are collectively referred to as the *public-sector* or the *government*. In the United States, the government has the authority to spend, tax, and create money, as well as to regulate economic and financial activity. The government also enforces and determines the ownership of property. These activities are all extremely important to production and distribution in the economy.

This chartbook section covers government contributions to current economic activity, receipts and expenditures, assets and liabilities, and government jobs.

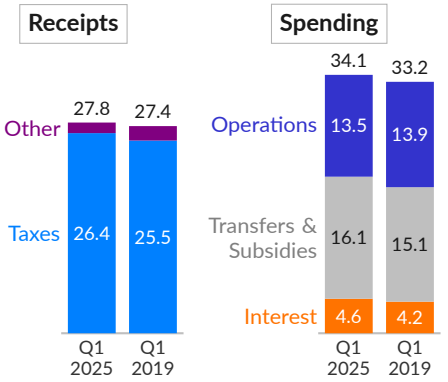
Current Economic Activity

There are multiple ways to interpret the government's direct contribution to current economic activity. Methods include: 1) government current receipts and expenditures; 2) the gross output of the sector minus intermediate inputs used in production (value added); 3) government income payments to people and taxes and social insurance contributions; or 4) the sum of government current expenditures on final goods and services, and investment.

As an overview of the consolidated government's effect on GDP, government receipts are equivalent to 27.8 percent of GDP in 2025 Q1, compared to 27.4 percent in 2019 Q1. The vast majority of these receipts are taxes, including social insurance contributions.

Government spending is equivalent to 34.1 percent of GDP in the latest data and 33.2 percent in 2019. This includes consumption expenditures, which are the government's operating costs, transfers and subsidies, and interest payments. These are covered in more detail in the following subsections.

Government Receipts and Spending
consolidated government, share of GDP, percent

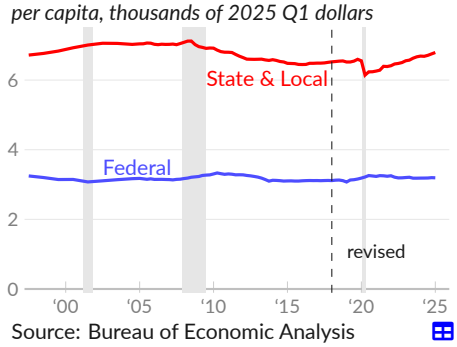


Source: Bureau of Economic Analysis

Value Added

The value added in production by the government sector is composed primarily of the compensation of government employees. These employees provide all types of services: education, health care, transportation, utilities, sanitation, etc. Government value added also includes, as a residual, the government's gross operating surplus, much of which goes toward replacing and maintaining government fixed assets.

Value Added in Domestic Production
per capita, thousands of 2025 Q1 dollars



Source: Bureau of Economic Analysis

In the first quarter of 2025, the federal government value added in domestic production is $1,091 billion, equivalent to $3,193 per capita (see —). In 2019 Q4, federal government added $3,158 in value to domestic production, per capita, after adjusting for inflation.

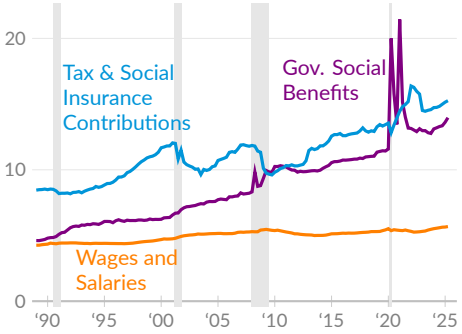
State and local governments added $2,320 billion in production value in 2025 Q1 and $1,851 billion in 2019 Q4, equivalent after inflation to $6,792 and $6,596 per capita, respectively (see —).

Income Approach

Payments from the government to people include both the wages and salaries of government workers and transfer payments, also referred to as government social benefits or welfare.

Over the past thirty years, total spending on government social benefits has mostly kept pace with consumer spending, while tax collection lagged behind income growth. Increased social benefits payments on a per capita basis reflect expanded access to health insurance, as well as a larger share of the population receiving social security benefits. During the COVID-19 pandemic, the federal government expanded social benefits, reducing poverty rates to all-time lows in 2021.

Personal Income and Outlays
per capita, thousands of 2025 Q2 dollars



Source: Bureau of Economic Analysis

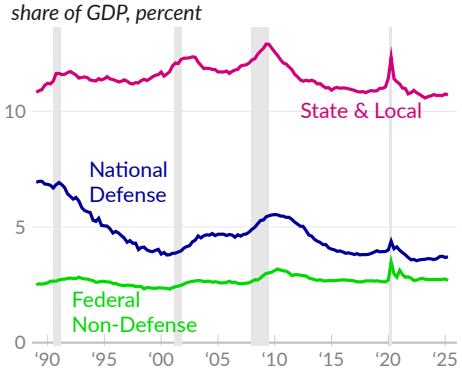
In 2025 Q2, government worker wages and salaries were equivalent to $5,681 per capita, following a price-adjusted $5,428 in 2019 Q4 (see —). Net government benefits were equivalent to $13,966 per capita in 2025 Q2, compared to $11,432 per capita in 2019 Q4 (see —). In 1989 Q1, net benefits were equivalent to $4,615 per person.

Personal current taxes and social insurance contributions total $15,260 per capita in 2025 Q2, $13,438 in 2019 Q4, and $8,453 in 1989 (see —).

Consumption and Investment

Another approach to calculating the government sector effect on current economic activity is to add up spending on final goods and services. Government consumption and investment tends to be more stable than consumer spending or private investment, and thus tends to rise as a share of economic activity during recessions. This category does not include government transfer payments, which mostly become consumer spending.

Consumption and Investment
share of GDP, percent



Source: Bureau of Economic Analysis

In 2025 Q2, federal non-defense spending and investment was $813.8 billion, equivalent to 2.7 percent of GDP (see —), compared to 2.6 percent of GDP in 2019 Q4. Federal spending on national defense was equivalent to 3.7 percent of GDP in the latest quarter and 3.9 percent in 2019 Q4 (see —). National defense spending was 6.9 percent of GDP in 1989 Q1.

In 2025 Q2, state and local government spending and investment was equivalent to 10.7 percent of GDP, compared to 11.1 percent in 2019 Q4 (see —).

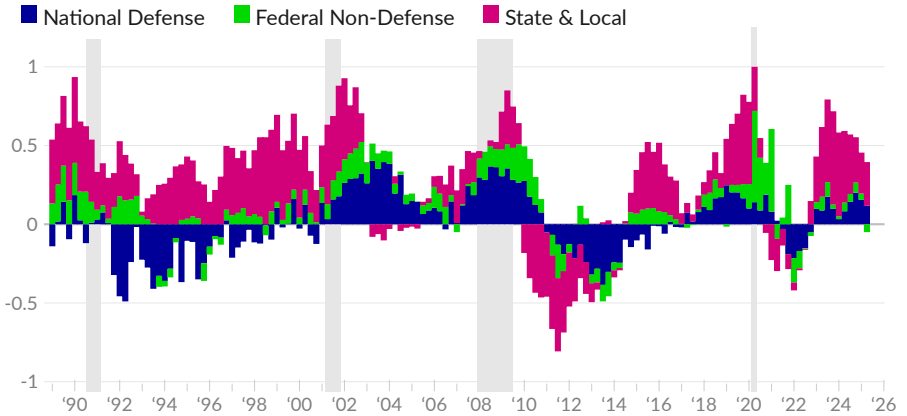
Contribution to Growth

Government consumption and investment directly affect economic growth in the short-term. In the second quarter of 2025, government consumption spending and investment contributed 0.08 percentage point to the real GDP growth rate of 3.0 percent. Over the last four quarters, government consumption and investment contributed 0.34 percentage point to economic growth, on average. Since 1989, the average contribution has been 0.26 percentage points.

Over the four quarters ending 2025 Q2, by level of government, national defense contributed 0.12 percentage point (see ■), federal non-defense subtracted 0.05 percentage point (see ■), and state and local government contributed 0.28 percentage point (see ■).

Government Consumption and Investment

percentage point contribution to real GDP growth, one-year moving average



Source: Bureau of Economic Analysis

Government Consumption and Investment

percentage point contribution to real GDP growth

	2025 Q2	'25 Q1	'24 Q4	'24 Q2	'23 Q2	*moving averages* 1-year	10-year	30-year
Consolidated Government Total	0.08	-0.10	0.52	0.52	0.48	0.34	0.34	0.27
Federal Total	-0.24	-0.31	0.25	0.27	-0.08	0.06	0.13	0.11
■ National Defense	0.08	-0.27	0.18	0.23	0.03	0.12	0.06	0.05
Consumption Expenditures	0.03	-0.30	0.15	0.10	-0.04	0.05	0.03	0.03
Gross Investment	0.06	0.03	0.03	0.13	0.07	0.07	0.03	0.02
■ Federal Non-Defense	-0.32	-0.03	0.08	0.04	-0.11	-0.05	0.07	0.06
Consumption Expenditures	-0.34	-0.06	0.06	0.03	-0.14	-0.07	0.03	0.04
Gross Investment	0.02	0.03	0.02	0.01	0.03	0.02	0.04	0.02
■ State & Local Total	0.32	0.21	0.27	0.25	0.56	0.28	0.21	0.15
Consumption Expenditures	0.20	0.16	0.18	0.16	0.28	0.19	0.16	0.12
Gross Investment	0.12	0.05	0.09	0.09	0.29	0.09	0.05	0.03

Source: Bureau of Economic Analysis

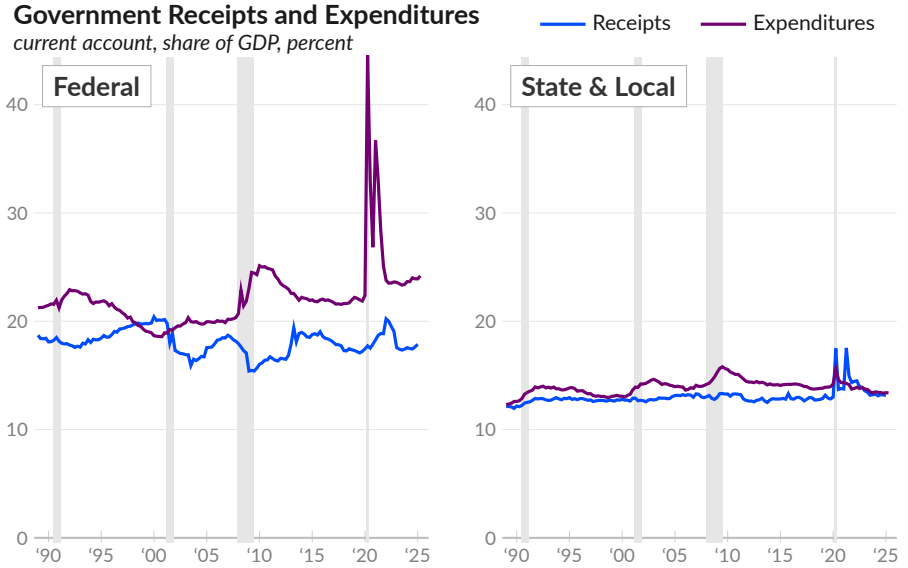
Government Receipts and Expenditures

Government current expenditures include consumption and investment as well as transfers such as government social benefits to persons. Government spending provides services and income to people. Government current receipts come primarily from taxes. When government expenditures exceed receipts, it is referred to as a *government deficit*, and corresponds to a private sector surplus. A large government deficit, relative to GDP, means the government is increasing current household income and corporate profits.

Federal government expenditures total $7.3 trillion, or 24.2 percent of GDP, in 2025 Q2. BEA has not yet released receipts data for 2025 Q2, however, in 2025 Q1, federal government receipts total $5.4 trillion, or 17.9 percent of GDP. In 2025 Q1, the federal government deficit was $1,811 billion or 6.0 percent of GDP.

Combined state and local government expenditures total $4.1 trillion, or 13.4 percent of GDP, in 2025 Q2. BEA has not yet released receipts data for 2025 Q2, however, in 2025 Q1, combined state and local government receipts total $3.9 trillion, or 13.2 percent of GDP. In 2025 Q1, the combined state and local government deficit was $77 billion or 0.3 percent of GDP.

Government Receipts and Expenditures
current account, share of GDP, percent



Source: Bureau of Economic Analysis

Government Receipts and Expenditures
percent of GDP

	'25 Q2	'25 Q1	'24 Q4	'24 Q2	'23 Q2	'19 Q2	4-year *moving average*	10-year *moving average*	30-year *moving average*
Federal Government									
Receipts	–	17.9	17.6	17.5	17.4	17.2	18.3	18.0	18.0
Expenditures	24.2	23.9	23.9	23.7	23.5	22.1	24.1	24.4	22.2
Surplus (+) / Deficit (-)	–	-6.0	-6.3	-6.2	-6.0	-4.9	-5.8	-6.4	-4.2
State & Local Government									
Receipts	–	13.2	13.2	13.1	13.5	13.2	13.7	13.5	13.1
Expenditures	13.4	13.4	13.4	13.4	13.7	13.9	13.6	13.9	14.0
Surplus (+) / Deficit (-)	–	-0.3	-0.2	-0.3	-0.3	-0.7	0.1	-0.4	-0.9

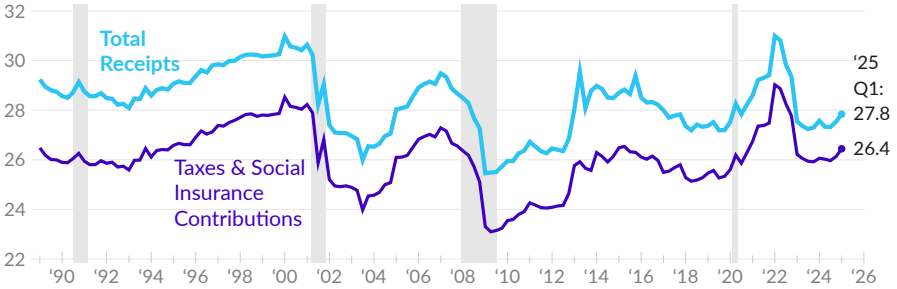
Source: Bureau of Economic Analysis

Government Receipts

The combined revenue of the federal, state, and local governments in the US is reported as government current receipts in the national accounts. This subsection describes government current receipts by level of government and by type.

At an aggregate level, the vast majority of government receipts are tax receipts and contributions for social insurance programs. Government receipts total $8.3 trillion in 2025 Q1, representing 27.8 percent of GDP (see —). Taxes and social insurance contributions comprise 95.0 percent of receipts and are equivalent to 26.4 percent of GDP in 2025 Q1 (see —).

Government Current Receipts
consolidated government, share of GDP, percent

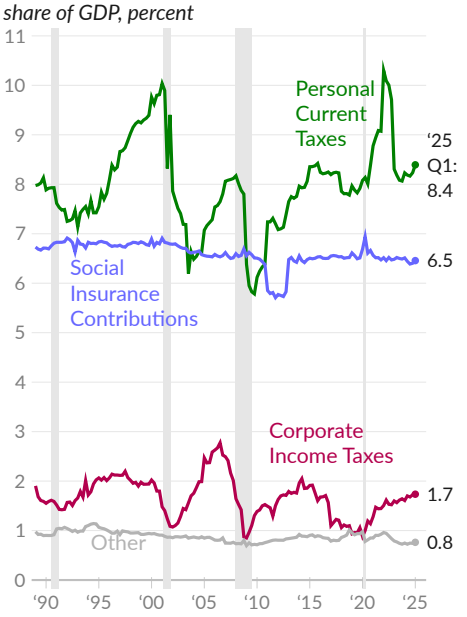


Source: Bureau of Economic Analysis

Federal Government Receipts

Taxes and social insurance contributions are the main federal government receipts, and total $2.0 trillion in 2025 Q2, equivalent to 17.3 percent of GDP. These receipts include personal current taxes, primarily individual income taxes, taxes on corporate income, and other taxes such as the federal excise tax on gasoline. Tax receipts are grouped with social insurance contributions, such as payroll taxes for Social Security and Medicare.

Federal Gov. Current Tax Receipts
share of GDP, percent



Source: Bureau of Economic Analysis

As of 2025 Q2, federal personal current tax receipts are equivalent to 8.4 percent of GDP (see —). Some volatility in these receipts comes from swings in yearly capital gains. Since 1989, these tax receipts average eight percent of GDP.

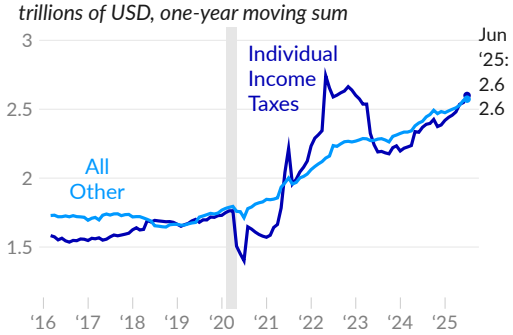
Social insurance contributions are relatively stable over time and comprise 6.5 percent of GDP in 2025 Q2 (see —), compared to an average of 6.6 percent since 1989.

Corporate income tax receipts are typically two percent of GDP during economic expansions, but were cut to one percent in 2019. In 2025 Q2, these receipts are equivalent to 1.7 percent of GDP (see —).

Other tax receipts, including excise taxes and customs duties total 0.8 percent of GDP in the latest data (see —).

The United States Treasury report federal government current receipts and outlays, by type, in the Monthly Treasury Statement. To smooth seasonal patterns in tax payments, the receipts from the previous 12 months are combined, in each month, below.

Federal Government Receipts
trillions of USD, one-year moving sum



Source: Treasury

Over the 12 months ending June 2025, **federal government receipts** total $5.2 trillion, compared to $4.8 trillion one year prior, in June 2024.

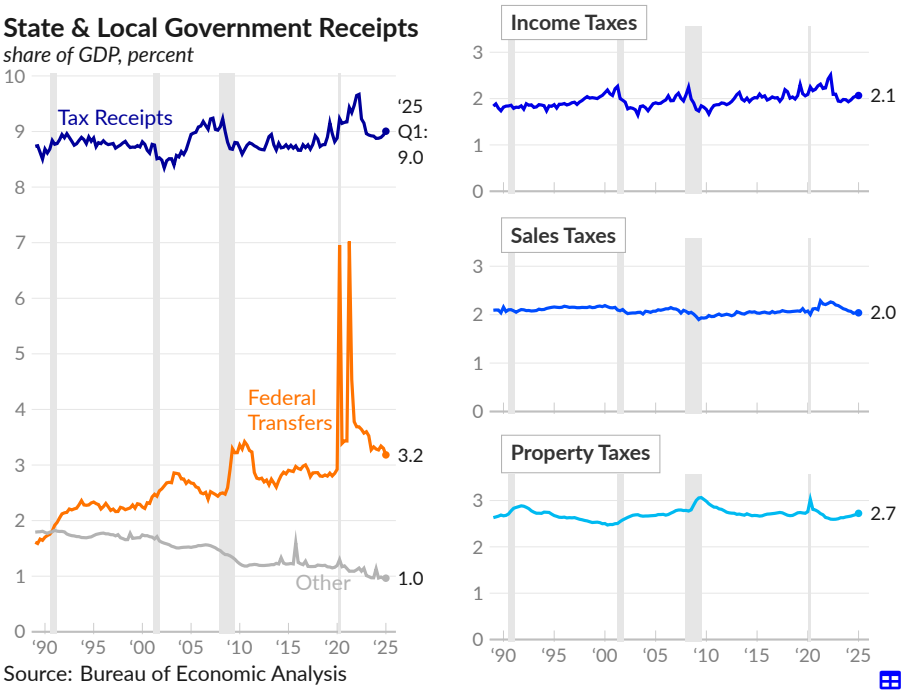
Over the past 12 months, 50 percent of receipts, totalling $2.6 trillion, are from individual income taxes (see —). The remaining receipts (see —) are largely social insurance contributions ($1.8 trillion) and corporate income taxes ($0.5 trillion).

State and Local Government Receipts

State and local government current receipts are a combination of taxes, transfers from the federal government, and other receipts, such as fines and fees. In 2025 Q1, combined state and local government tax receipts total nine percent of GDP (see —), following 8.9 percent of GDP one year prior. Since 2019, these tax receipts are unchanged as a share of GDP. State and local government income tax receipts fell by 0.1 percent of GDP over the same period.

Federal government transfers to state and local governments total 3.2 percent of GDP in 2025 Q1 (see —), and 3.3 percent one year prior. These transfers peaked during COVID-19 relief efforts, but have been climbing over time, from 1.6 percent of GDP in 1989. Other receipts are equivalent to one percent of GDP in 2025 Q1 (see —).

State & Local Government Receipts
share of GDP, percent



Source: Bureau of Economic Analysis

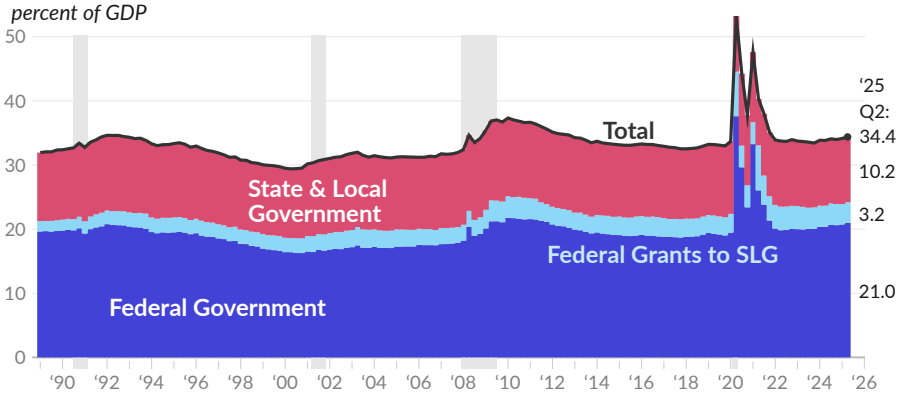
Government Expenditures

Consolidated government current expenditures combine federal, state, and local levels of government, and include consumption expenditures, government social benefits, interest payments, subsidies, and other transfers. Federal government grants to state and local governments are separated to avoid double counting.

As of 2025 Q2, government current expenditures total $10.4 trillion, which is 34.4 percent of GDP (see —). One year prior, in 2024 Q2, government current expenditures total 33.8 percent of GDP. Government spending peaked during the COVID-19 pandemic, averaging 41.2 percent of GDP from 2020 to 2021. Since 1989, government spending averages 33.4 percent of GDP.

Government Current Expenditures

percent of GDP



Source: Bureau of Economic Analysis

By level of government, federal current expenditures are equivalent to 21 percent of GDP in 2025 Q2, and 20.4 percent in 2024 Q2 (see ■). Federal government transfers to state and local governments comprise 3.2 percent of GDP in the latest data (see ■). State and local government current expenditures, excluding transfers from the federal government, are equivalent to 10.2 percent of GDP in 2025 Q2 (see ■).

By category, consumption expenditures represent 13.4 percent of GDP in 2025 Q2, and 13.4 percent of GDP one year prior. Over the past 30 years, consumption expenditures average 14.7 percent of GDP. Current transfer payments, which are largely government social benefits, total 16.1 percent of GDP in 2025 Q2, compared to 15.4 percent one year prior, and a long-term average of 13.8 percent.

Consolidated government interest payments are 4.6 percent of GDP in the latest data, compared to 4.7 percent one year prior. Interest payments comprise 4.3 percent over the past 30 years, on average. Government subsidies to businesses total 0.4 percent of GDP in 2025 Q2 and 0.3 percent in 2024 Q2.

Government Current Expenditures

share of GDP, percent

	2025 Q2	'25 Q1	'24 Q4	'24 Q2	'23 Q2	*moving averages* 1-year	10-year	30-year
Current Expenditures (—)	34.4	34.1	34.0	33.8	33.7	34.1	34.9	33.4
Consumption Expenditures	13.4	13.5	13.4	13.4	13.4	13.4	13.9	14.7
Current Transfer Payments	16.1	15.8	15.6	15.4	15.6	15.8	16.1	13.8
Interest Payments	4.6	4.6	4.6	4.7	4.3	4.6	4.0	4.3
Subsidies	0.4	0.3	0.3	0.3	0.4	0.3	0.9	0.6

Source: Bureau of Economic Analysis

Composition of Federal Government Spending

Over the long-term, there have been important shifts in the **composition of federal spending**. The ways federal spending varies from these long-term trends, in the short-term, are also important.

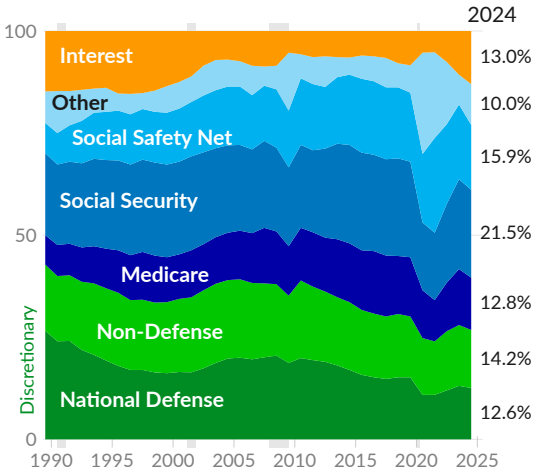
Over the long-term, Office of Management and Budget (OMB) data show national defense spending fell to 15.2 percent of outlays in 2019 from 26.6 percent in 1989 (see ■). Discretionary non-defense spending maintained a relative stable share of spending over the period (see ■). Net interest expense, the cost of federal borrowing, fell along with long-term interest rates, to 8.4 percent of outlays in 2019 from 14.8 percent in 1989 (see ■).

Offsetting the reduction in spending on interest and national defense, Medicare and Social Security now make up a larger share of federal spending, as a larger share of people are retirement age. Likewise, spending on the social safety net (means-tested benefits and Medicaid) increased as employment-to-population ratios fell and Medicaid was expanded. Medicare (see ■), Social Security (see ■), and the social safety net (see ■) combine to comprise 54.8 percent of federal spending in 2019, compared to 34.7 percent in 1989.

Composition of Federal Government Outlays

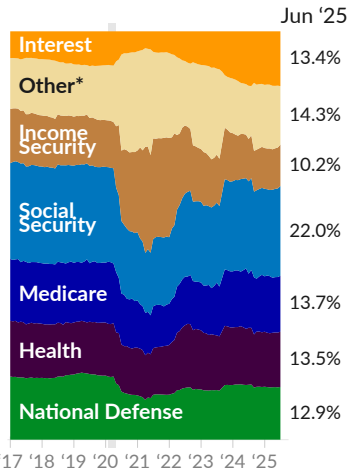
share of total, percent

Since 1990, by Budget Enforcement Act Type



Source: Office of Management and Budget

Recent Monthly, by Type*



Source: Treasury

* The two charts use different data sources with different categories and therefore do not match.

The Treasury Bureau of Fiscal Service report federal outlays by type on a monthly basis (see right chart above). The categories used in the Treasury monthly report are not the same as those used in the OMB data, so the two charts above should not be compared. The higher-frequency Treasury data, however, are helpful for showing short-term changes, and **recent changes in the composition of federal spending**.

Income security, which includes economic impact payments, the child tax credit, unemployment compensation, food and nutrition assistance, federal employee retirement and disability, and housing assistance, was 10.2 percent of federal spending over the 12 months ending June 2025 (see ■). At its peak, over the 12 months ending March 2021, income security comprised 26.0 percent of federal spending. Pre-pandemic, in 2019, the category comprised 11.5 percent.

The category labeled “other” in the above-right chart includes several subcategories worth examining. The category increased to 14.3 percent of federal spending during the 12 months ending June 2025, from 24.2 percent during the 12 months ending March 2021 (see). Prior to the pandemic, in 2019, the category was 12.8 percent of spending.

Within the “other” category, the biggest changes during the pandemic came from business and housing subsidies (commerce and housing credit) and transfers to state and local governments (general government). The category is described in the following table.

Composition of Federal Government Outlays
share of total, percent

	Jun 2025	May 2025	Apr 2025	Mar 2021	2019	2017
Income Security	10.2	10.0	9.9	26.0	11.8	12.8
Health	13.5	13.4	13.4	10.9	12.8	13.4
Medicare	13.7	13.6	13.5	10.4	14.7	15.0
Social Security	22.0	21.7	21.6	14.7	23.6	23.8
National Defense	12.9	12.8	12.9	9.7	16.0	15.2
Net Interest	13.4	13.3	13.4	4.1	8.3	6.6
Other:	14.3	15.1	15.3	24.2	12.8	13.1
Administration of Justice	1.2	1.2	1.2	1.0	1.5	1.5
Agriculture	0.6	0.6	0.6	0.7	0.8	0.5
Commerce & Housing Credit	-0.2	-0.2	-0.5	9.8	-0.5	-0.8
Community & Regional Development	1.1	1.1	1.5	1.3	0.7	0.7
Educ., Training, Employment, & Social Serv.	2.9	4.0	4.0	3.2	2.7	3.2
Energy	0.3	0.3	0.3	0.1	0.1	0.1
General Government	0.5	0.5	0.5	2.4	0.4	0.5
General Science, Space, & Technology	0.6	0.6	0.6	0.5	0.7	0.8
International Affairs	1.0	0.9	0.9	0.9	1.2	1.2
Natural Resources & Environment	1.2	1.2	1.2	0.5	0.8	0.9
Transportation	2.0	2.0	2.0	2.2	2.2	2.4
Undistributed Offsetting Receipts	-2.1	-2.1	-2.1	-1.5	-2.3	-2.3
Veterans Benefits & Services	5.2	5.1	5.0	3.0	4.5	4.4

Source: Treasury Bureau of Fiscal Service

Major Federal Programs

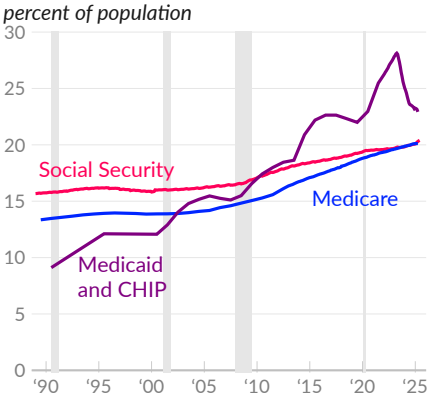
The three main federal government social benefits in the US are Social Security, Medicare, and Medicaid. Social Security provides income in old age and to disabled people. Medicare provides health insurance in old age, and Medicaid provides health insurance to many low income people.

As discussed in the household section, Social Security is by far the main anti-poverty program in the US, removing 27.6 million people from poverty in 2023. The number of Social Security beneficiaries has increased from 53.4 million in 2010, or 17.2 percent of the population, to 69.8 million in June 2025, equivalent to 20.4 percent of the population.

Medicare enrollment has grown from 15.3 percent of the population in 2010 to 20.1 percent. Total Medicare enrollment is 68.8 million in April 2025. Medicaid, which was expanded in 2014, and the Children's Health Insurance Program (CHIP), increased enrollment from 17.4 percent of the population in 2010 to 22.9 percent in April 2025. The total enrollment for Medicaid and CHIP is 78.4 million people.

Enrollment / Beneficiaries

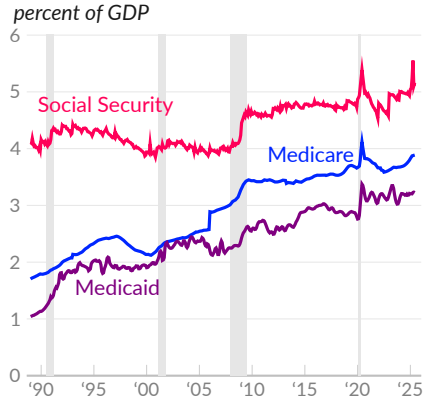
percent of population



Source: CMS, SSA, Census

Expenditures

percent of GDP



Source: BEA

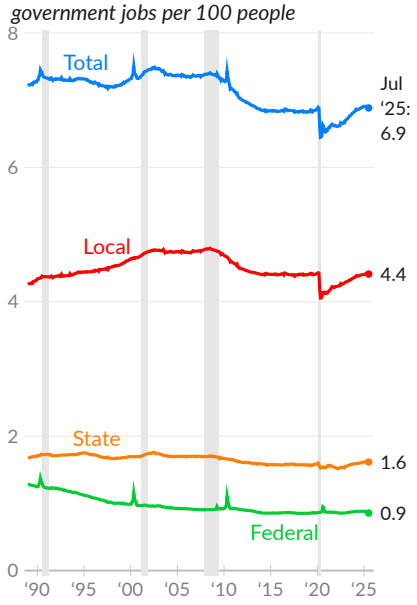
The overall increase in the cost of these programs since 2010 has been modest, despite the aging of the population and the major expansion of Medicaid. Payments to Social Security beneficiaries, combined with government spending on Medicare and Medicaid, comprise 10.7 percent of GDP in 2010. In the latest data, covering June 2025, these programs combined are equivalent to 12.3 percent of GDP. Social Security benefits are 5.2 percent of GDP, and government spending on Medicare and Medicaid are 3.9 percent and 3.2 percent of GDP, respectively.

Government Jobs

Government workers provide public services to the population. As examples, federal government jobs include mail carriers and park rangers; state government jobs include teachers and social workers; and local governments employ firefighters, police, and utilities workers. Additionally, government employment is traditionally a relatively-stable source of aggregate household income. Government jobs are also disproportionately likely to provide health insurance and retirement benefits.

Government Employment

government jobs per 100 people



Source: Bureau of Labor Statistics

In July 2025, there were 23.6 million government jobs, equivalent to 6.9 for every 100 people (see —). The previous year, in July 2024, there were 23.4 million government jobs, equivalent to 6.9 per 100 people. During the 1990s, there were 7.3 government jobs per 100 people. If the rate was the same today, there would be 1.4 million additional government jobs.

By level of government, there were 15.1 million local government jobs in July 2025, equivalent to 4.4 per 100 people (see —). In the same period, there were 5.5 million state government jobs (1.6 per 100 people, see —), and 2.9 million federal government jobs (0.9 per 100 people, see —).

Since 2019, the US has gained 843,000 total government jobs. During the same period, local governments added 470,000 jobs, state governments added 279,000 jobs, while the federal government added 94,000 jobs.

Government Employment

in thousands of employees

	Jul '25	Jun '25	Jul '24	Jul '23	2019	2005
Government Total	23,569	23,579	23,392	22,820	22,612	21,804
Federal	2,931	2,943	3,002	2,928	2,831	2,732
Federal Hospitals	–	372	385	374	355	248
Department of Defense	–	552	557	552	544	487
US Postal Service	596	594	607	602	607	775
State Government	5,530	5,525	5,444	5,303	5,202	5,032
State Education	2,628	2,629	2,593	2,566	2,511	2,260
State Hospitals	–	486	460	429	387	350
General Admin.	–	1,926	1,906	1,837	1,824	1,862
Local Government	15,108	15,111	14,946	14,589	14,580	14,041
Local Education	8,194	8,204	8,145	7,986	8,003	7,856
Utilities	–	262	257	251	247	238
Transportation	–	305	300	291	290	252
Local Hospitals	–	729	706	686	682	654
General Admin.	–	4,480	4,425	4,293	4,255	4,013

Source: Bureau of Labor Statistics

Government Balance Sheets

The scope of the public sector and how the government funds and organizes itself are reflected in **government balance sheets**. This subsection describes selected components of government balance sheets, at the federal level, and for combined state and local governments. First, the combined balance sheet of federal, state, and local governments is summarized. Next, public wealth is discussed, followed by liabilities, interest expense, and debt sustainability. The subsection also covers assets and net investment.

Assets other than public lands, liabilities, and net worth (public wealth), are the main components of government balance sheets, and are summarized below for the combined federal, state, and local governments. Since 1989, government assets have remained stable as a share of GDP, while liabilities have increased, driving down public wealth.

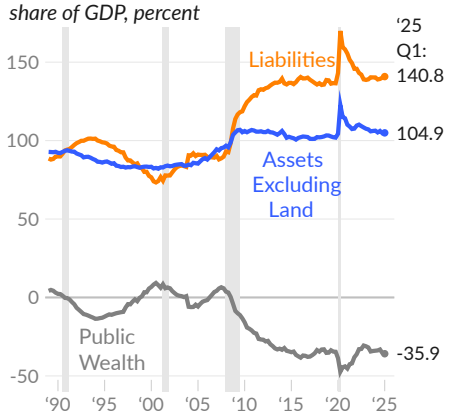
Combined government liabilities total $42.2 trillion in 2025 Q1, equivalent to 140.8 percent of GDP (see —). Liabilities are 140.3 percent of GDP one year prior, in 2024 Q1, and 137.0 percent in 2019.

Government assets, excluding public land, are valued at $31.4 trillion in 2025 Q1, or 104.9 percent of GDP (see —). Assets are 106.3 percent of GDP one year prior, and 102.5 percent in 2019.

Public wealth is government assets minus liabilities, and is equivalent to negative negative 35.9 percent of GDP in the latest data (see —). Each balance sheet component is discussed in the following subsections.

Government Balance Sheet

combined federal, state, and local governments
share of GDP, percent



Source: Federal Reserve

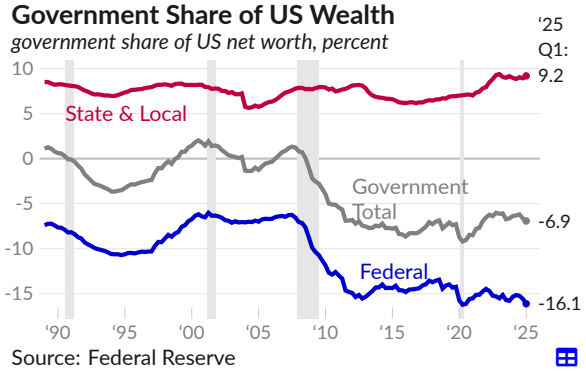
Public Wealth

Government balance sheets can be summarized and put into broader context by examining the **government share of US wealth**, calculated from the Federal Reserve financial accounts. Wealth, or net worth, is calculated as assets minus liabilities, and summarizes an overall financial position. The wealth of an individual group is then divided by total US wealth to determine the group's share of the total.

Excluding public land, the federal government's sizable debt exceeds the market value of its assets, therefore its financial position is negative. At an aggregate level, state and local governments own a small portion of US wealth, as the value of assets is greater than the amount of debt.

Government Share of US Wealth

government share of US net worth, percent



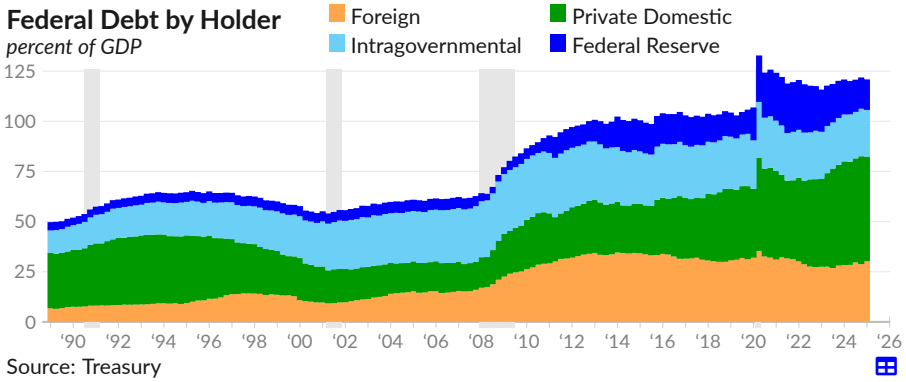
Source: Federal Reserve

The combined US government has a net worth of negative $25.0 trillion, as of 2025 Q1, equivalent to -6.9 percent of national wealth (see —). Federal government net worth (excluding land) is equal to -16.1 percent of national wealth (see —), while state and local government net worth is equivalent to 9.2 percent of US wealth (see —).

Liabilities

Federal government public debt totals $36.2 trillion in 2025 Q1, equivalent to 120.9 percent of GDP. This debt is **held by a mixture of investors**, including private domestic investors, overseas investors, the Federal Reserve, and government agencies and trusts (referred to as intragovernmental holdings).

Breaking down federal debt by holder, $15.6 trillion, or 43.2 percent of the total, is held by private domestic investors (see ■). An additional $9.0 trillion, or 25.0 percent of the total, is held by foreign investors (see ■). The remainder is held by the Federal Reserve (see ■) and various government agencies and trusts (see ■), such as the Social Security Trust Fund.



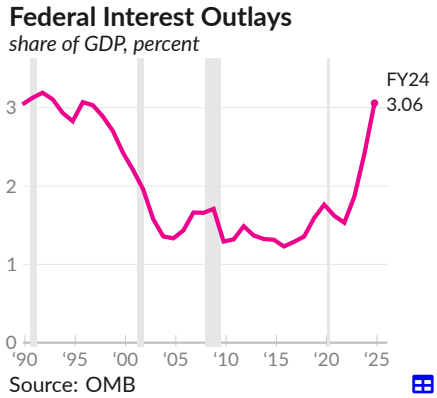
Source: Treasury

Interest Expense

The ratio of public debt to GDP increased during the COVID-19 response, while the typical interest income from holding public debt initially fell because of lower interest rates. Treasuries and other government debt securities provide a safe asset for the balance sheets domestic households and businesses, and for foreign investors. The Federal Reserve also initially absorbed some of the newly issued treasuries. More recently, the Federal Reserve has raised interest rates and reduced the size of its balance sheet, which has increased interest income in the economy.

The Office of Management and Budget report **federal interest outlays** of $882 billion in fiscal year 2024 (the year beginning October 1, 2023), compared to $659 billion in fiscal year 2023.

Put into the context of the size of the economy, federal interest outlays in fiscal year 2024 were equivalent to 3.06 percent of GDP (see —), following 2.41 percent of GDP in FY2023 and 1.86 percent in FY2022, and compared to an average of 2.9 percent in the 1990s, when interest rates were substantially higher.



Source: OMB

Debt Sustainability

Changes in the ratio of federal government debt to GDP can be decomposed to understand how various economic forces affect the trajectory of the debt relative to our ability to service it. Specifically, **debt sustainability** is affected not only by borrowing but also by changes in real interest rates and economic growth.

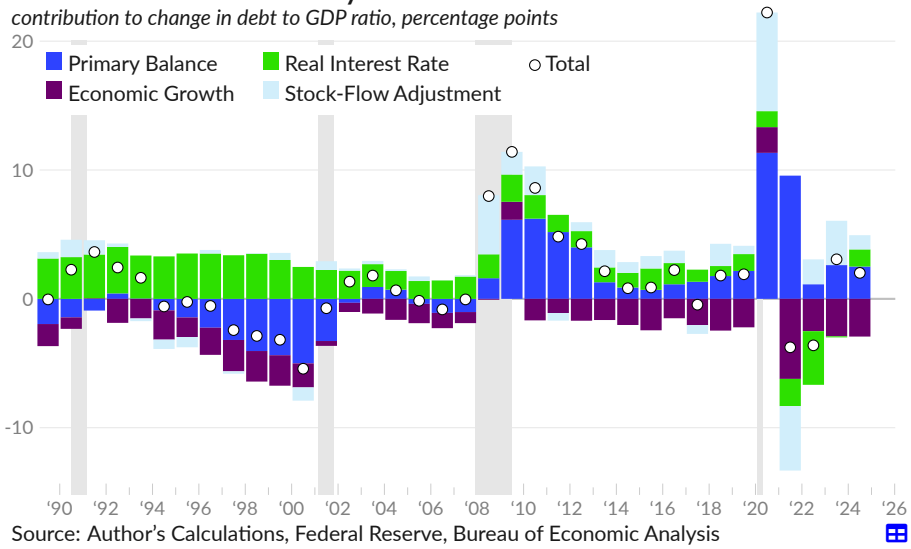
In a mechanical way, government debt is the result of the accumulation of past deficits. When the government spends more than it takes in through taxes, it borrows the difference, which adds to the debt. Importantly, some government spending is interest payments on the debt. The *primary balance* measures the gap between spending, excluding interest payments, and revenue. Interest payments are a product of the interest rate and the existing debt. Higher real interest rates mean larger interest payments which increase deficits and, in turn, increase debt.

Federal debt is often divided by GDP as a way to capture the ability to repay the debt. The basic idea is that **a growing economy gradually erodes the burden of its debt**. As the economy grows, it is better able to produce the resources needed to repay its debt. Finally, there are often discrepancies between when borrowing occurs and when spending occurs, and the account balances at the Treasury vary over time. For example, the Treasury Secretary made more cash available to cover any potential short-term needs during the peak of the COVID-19 pandemic. Stock-flow adjustments correct for the difference between the change in liabilities (the stock) and the current federal deficit or surplus (the flow).

In 2024, the debt to GDP ratio increased by two percentage points (see ○). The primary balance added 2.5 percentage points to the debt to GDP ratio (see ■), economic growth subtracted 2.9 percentage points (see ■), and real interest rates added 1.3 percentage points (see ■). These combined factors were less than the actual change in liabilities; the adjustment to reconcile stocks and flows added 1.1 percentage points (see ■).

Federal Government Debt Dynamics

contribution to change in debt to GDP ratio, percentage points



Source: Author's Calculations, Federal Reserve, Bureau of Economic Analysis

Assets

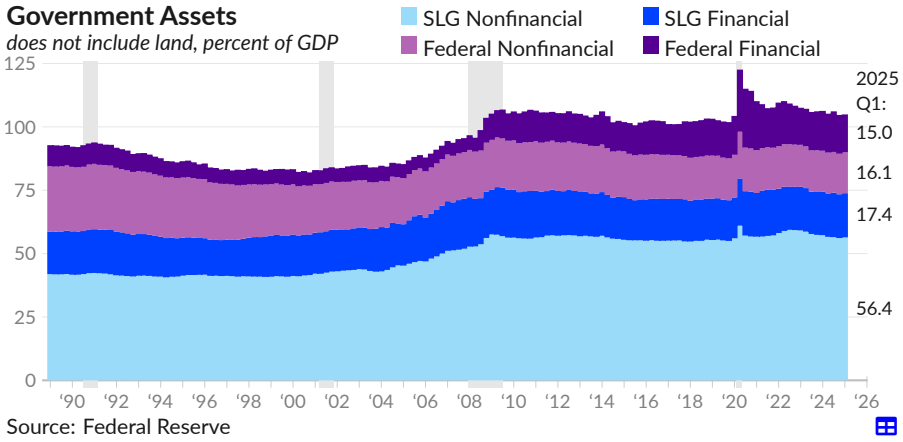
US government assets include financial assets but are mostly comprised of the non-financial assets of state and local governments (SLG), such as buildings and equipment. Land is not included in US measures of government assets.

In the first quarter of 2025, the market value of government assets, excluding land, is $31.4 trillion, equivalent to 104.9 percent of GDP. Of this, state and local government nonfinancial assets, such as buildings and equipment, are equivalent to 56.4 percent of GDP (see), and state and local government financial assets, such as insurance trust funds, are equivalent to 17.4 percent of GDP (see).

The market value of federal government nonfinancial assets is equivalent to 16.1 percent of GDP in 2025 Q1 (see). Federal government financial assets are valued at 15.0 percent of GDP (see).

Government Assets

does not include land, percent of GDP



Source: Federal Reserve

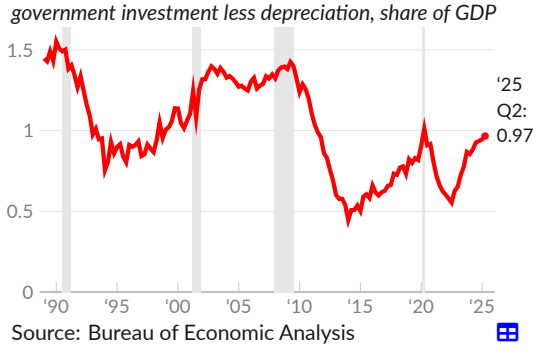
Government Net Investment

Government gross investment, less depreciation, is the government's net investment in the tangible assets that make the economy more productive. Government investment includes infrastructure, buildings, equipment, intellectual property, and other capital goods.

In the latest data, covering 2025 Q2, annualized government net investment is $293.1 billion, the result of gross investment of $1,135.0 billion and $841.9 billion in depreciation. Government net investment is equivalent to 0.97 percent of GDP in 2025 Q2 (see –), compared to 0.89 percent in 2024 Q2, and 0.72 percent in 2023 Q2.

Government Net Investment

government investment less depreciation, share of GDP



Source: Bureau of Economic Analysis

International Transactions

Transactions between US residents and the rest of the world are recorded in two main categories: the current account, which tracks nonfinancial transactions with economic value, and the financial account, which records financial transactions like lending and borrowing. This section delves into both accounts, with a focus on the balance of payments, the difference between payments from residents and payments to residents. The section also covers international trade and discusses trends in exchanges rates.

Balance of Payments

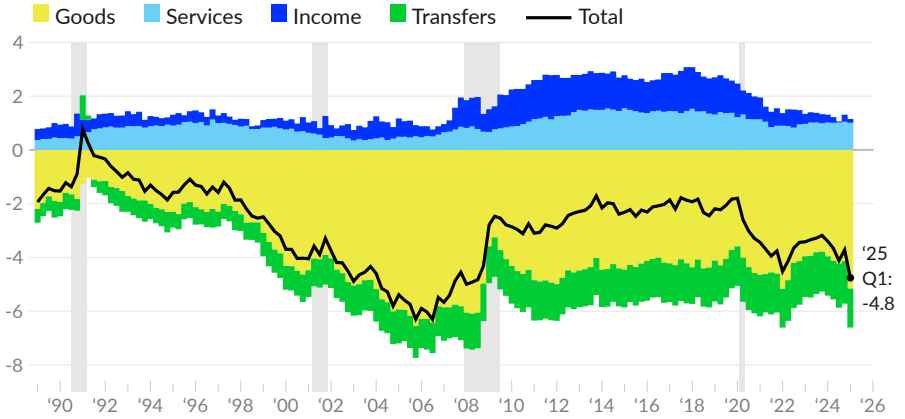
The **current account balance** reflects international transactions for goods and services, transfers such as remittances, and ownership income from foreign assets. It comprises current receipts–payments to US residents primarily for exports of goods and returns on foreign assets–and current payments–payments from US residents to the rest of the world for imports, returns on foreign investment in the US, and transfers such as remittances.

This balance is further broken down into four components: the trade balance for goods (see), the trade balance for services (see), the primary income balance (covering wages and asset income, see), and the secondary income balance (including remittances and taxes, see).

As of 2025 Q1, the US runs a current account deficit of 4.8 percent of GDP, primarily as the result of a trade deficit on goods of 5.2 percent of GDP. The initial GDP report for 2025 Q2 does not include the data needed to calculate the current account balance, however, the goods trade deficit for 2025 Q2 is equivalent to 3.9 percent of GDP.

Current Account Balance

balance on individual current account component, as percent of GDP



Source: Bureau of Economic Analysis

US current payments exceed current receipts and the US runs a persistent current account deficit. Economic theory suggests that capital flows towards countries with lower labor costs and less capital per worker, as they have higher marginal productivity from additional capital. However, in the case of the US, the opposite is happening. Capital is flowing from less-developed countries with lower wages into the US, largely to finance additional US consumer spending on imported goods.

Components of Current Account

share of GDP, percent

	2025 Q2	'25 Q1	'24 Q4	'24 Q3	'24 Q2	'24 Q1	3-year moving averages	10-year moving averages
Current Account Balance	–	-4.76	-3.72	-4.12	-3.66	-3.40	–	–
Current Receipts	–	16.37	16.63	16.56	16.75	16.85	–	–
Exports	10.69	10.90	10.84	10.96	10.87	10.92	10.97	11.40
Goods	6.88	7.08	6.92	7.11	7.08	7.12	7.18	7.51
Durable	3.91	3.99	3.83	4.00	3.93	3.90	3.97	4.38
Non-Durable	2.97	3.08	3.09	3.11	3.14	3.21	3.21	3.12
Services	3.81	3.82	3.91	3.85	3.79	3.80	3.78	3.89
Income Receipts	–	4.75	5.10	4.91	5.18	5.22	–	–
Transfer Receipts	0.68	0.71	0.69	0.69	0.69	0.72	0.72	0.76
Current payments	–	21.13	20.35	20.68	20.40	20.25	–	–
Imports	13.56	15.06	13.93	14.18	14.00	13.86	14.07	14.44
Goods	10.78	12.24	11.07	11.34	11.21	11.07	11.29	11.75
Durable	7.07	7.67	7.15	7.40	7.26	7.19	7.28	7.62
Non-Durable	3.71	4.57	3.91	3.94	3.95	3.89	4.01	4.13
Services	2.79	2.82	2.86	2.83	2.79	2.78	2.77	2.69
Income Payments	–	4.62	4.84	4.86	4.98	4.93	–	–
Transfer Payments	1.42	1.45	1.58	1.64	1.43	1.46	1.52	1.49

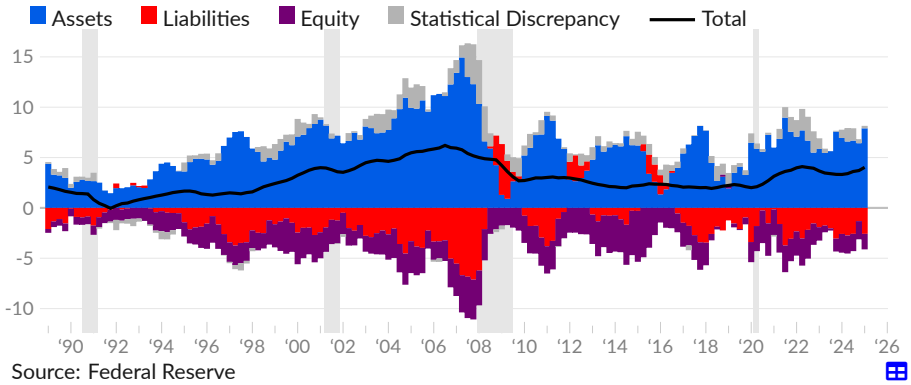
Source: Bureau of Economic Analysis

The financial account measures transactions between the US and the rest of the world that result in changes in the ownership of assets. The **financial account balance** captures the difference between capital inflows and capital outflows, and offsets the current account balance. Each quarter, the US acquires foreign goods and services, and the rest of the world acquires US assets, on a net basis.

In the first quarter of 2025, the rest of the world acquired $3.77 trillion in US assets, equivalent to 7.9 percent of GDP (see ■). The rest of the world incurred the equivalent of negative 2.6 percent of US GDP in liabilities (see ■) and issued negative 1.5 percent of US GDP of equity in foreign businesses (see ■).

Financial Account Balance

percent of GDP, one-year moving average



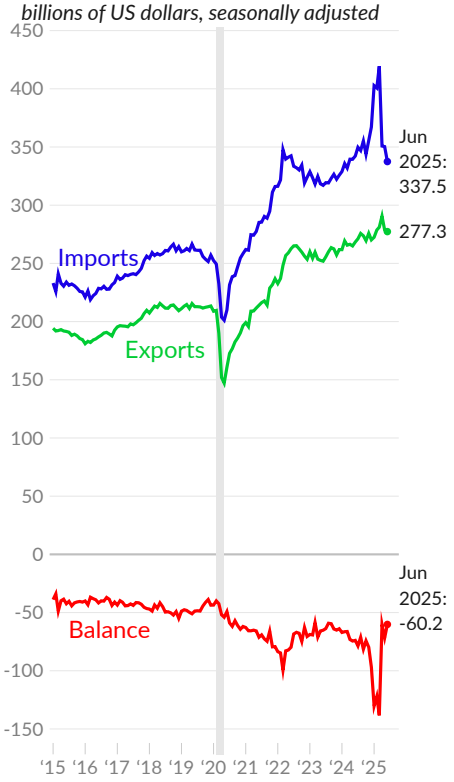
Source: Federal Reserve

International Trade

Each month, the Census Bureau report **goods and services trade** between the US and the rest of the world. US purchases of foreign goods and services are classified as imports and foreign purchases of US goods and services are exports. The trade of goods includes consumer goods, industrial equipment, and agricultural products. Services trade includes travel and tourism, business services, and charges for the use of intellectual property, among other services.

US Imports and Exports

billions of US dollars, seasonally adjusted



Source: Census Bureau

US goods and services imports total $337.5 billion in June 2025, following $350.3 billion in May (see —). Imports average $346.2 billion over the latest three months of data, and $340.4 billion during the same months, one year prior. In 2019, monthly US imports average $259.4 billion. For additional context, imports are equivalent to $986 per capita, in the latest month.

The US exported $277.3 billion of goods and services in June 2025, following $278.6 billion in May (see —). The three-month average was $282.2 billion in June, and $266.6 billion one year prior. Exports were $212.8 billion per month, on average, in 2019. In the latest month, exports are equivalent to $810 per capita or $1,697 per worker.

Spending on imports exceeds payments received for exports, resulting in a trade deficit. In June, the trade deficit was $60.2 billion, following $71.7 billion in May (see —). Over the past three months, the average trade deficit is $64.0 billion, compared to $73.8 billion one year prior. In 2019, the average monthly trade deficit is $46.6 billion.

International Trade

billions of US dollars, seasonally adjusted

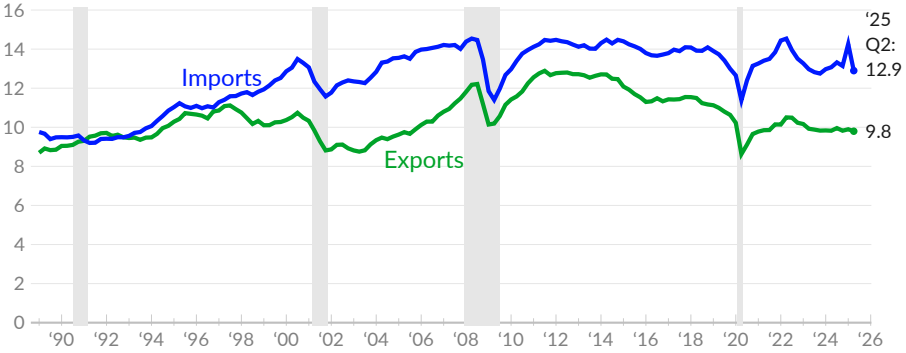
	Jun 2025	May 2025	Apr 2025	Jun 2024	Jun 2023	2025 Q2	2025 Q1	2024 Q4
						quarterly average		
Total Balance (—)	-60.2	-71.7	-60.3	-73.9	-65.2	-64.0	-130.2	-83.6
Goods Balance	-85.9	-97.3	-86.3	-99.6	-88.9	-89.8	-155.3	-109.6
Services Balance	25.7	25.6	26.0	25.7	23.7	25.8	25.1	26.0
Total Exports (—)	277.3	278.6	290.6	268.4	251.9	282.2	277.4	271.8
Goods Exports	179.1	180.3	191.6	173.3	164.8	183.7	179.7	172.6
Services Exports	98.2	98.3	99.0	95.0	87.1	98.5	97.7	99.2
Total Imports (—)	337.5	350.3	350.8	342.2	317.0	346.2	407.6	355.5
Goods Imports	265.0	277.6	277.9	272.9	253.6	273.5	335.0	282.3
Services Imports	72.5	72.7	72.9	69.4	63.4	72.7	72.6	73.2

Source: Census Bureau

Nonpetroleum goods and services imports (see —) were equivalent to 12.9 percent of GDP in the second quarter of 2025, while exports of nonpetroleum goods and services (see —) were equivalent to 9.8 percent of GDP. In 2019 Q4, nonpetroleum imports were 13 percent of GDP, and exports were 10.6 percent.

Imports and Exports, Nonpetroleum

includes goods and services, but excludes petroleum products, share of GDP



Source: Bureau of Economic Analysis

Contribution to Overall Growth

The **trade balance** (exports of goods and services minus imports of goods and services) acts as an adjustment to consumption and investment when calculating domestic production using the expenditure approach. A country with a positive trade balance, or trade surplus, produces more exports than its residents purchase in imports, therefore its trade balance is added to domestic purchases to calculate domestic production. The US runs a persistent trade deficit, which is instead subtracted from spending data to calculate domestic production.

Goods exports subtracted 0.35 percentage point from GDP growth in the second quarter of 2025 while services exports contributed 0.17 percentage point. Good imports contributed 5.02 percentage points to GDP growth and services imports contributed 0.16 percentage point.

International Trade

percentage point contribution to real GDP growth

Source: Bureau of Economic Analysis

Trade by Type

Numerous factors can influence the trade balance, including shifts in domestic and international preferences and incomes, fluctuations in exchange rates, and changes in trade policy. The table below presents key trade categories as a percentage of GDP at selected intervals over the past three decades.

Exports and Imports by Type

share of GDP, percent — *period averages*

	'25 Q2	'25 Q1	'24 Q2	2016	2012–13	2005–06	1998–99	1989–93
Exports of Goods & Services	10.69	10.90	10.87	11.89	13.60	10.31	10.41	9.42
Exports of Goods	6.88	7.08	7.08	7.70	9.34	7.30	7.52	6.84
Foods, Feeds, & Beverages	0.54	0.54	0.54	0.69	0.81	0.46	0.50	0.60
Industrial Supplies & Materials	2.28	2.43	2.45	2.06	2.94	1.92	1.55	1.65
Petroleum & Products	0.89	1.00	1.05	0.53	0.89	0.28	0.11	0.12
Capital Goods, Except Automotive	2.34	2.33	2.20	2.77	3.21	2.84	3.27	2.61
Automotive Vehicles, & Parts	0.50	0.57	0.61	0.80	0.90	0.77	0.79	0.67
Consumer Goods, Ex. Food & Auto	0.86	0.86	0.93	1.03	1.11	0.91	0.86	0.74
Durable Goods	0.36	0.39	0.39	0.55	0.61	0.49	0.44	0.39
Nondurable Goods	0.49	0.48	0.54	0.47	0.50	0.41	0.42	0.35
Exports of Services	3.81	3.82	3.79	4.19	4.26	3.01	2.90	2.58
Transport	0.37	0.37	0.37	0.43	0.54	0.46	0.49	0.59
Travel	0.73	0.73	0.73	1.03	0.98	0.71	0.93	0.90
Intellectual Property Charges	0.52	0.52	0.49	0.60	0.67	0.50	0.40	0.29
Other Business Services	2.10	2.09	2.11	2.00	1.92	1.19	0.92	0.60
Imports of Goods & Services	13.56	15.06	14.00	14.56	16.71	15.99	12.65	10.38
Imports of Goods	10.78	12.24	11.21	11.80	13.85	13.48	10.59	8.45
Foods, Feeds, & Beverages	0.73	0.79	0.73	0.70	0.69	0.54	0.46	0.43
Industrial Supplies & Materials	1.96	2.25	2.29	2.32	4.24	4.24	2.22	2.16
Petroleum & Products	0.67	0.80	0.92	0.85	2.49	2.15	0.65	0.87
Capital Goods, Except Automotive	3.60	3.62	3.29	3.16	3.35	3.00	3.03	2.04
Automotive Vehicles, & Parts	1.40	1.57	1.68	1.87	1.84	1.84	1.74	1.46
Consumer Goods, Ex. Food & Auto	2.55	3.49	2.70	3.11	3.17	3.20	2.47	1.83
Durable Goods	1.03	1.36	1.23	1.63	1.70	1.75	1.29	0.97
Nondurable Goods	1.51	2.13	1.46	1.48	1.47	1.46	1.18	0.86
Imports of Services	2.79	2.82	2.79	2.77	2.86	2.51	2.06	1.93
Transport	0.52	0.56	0.54	0.49	0.59	0.60	0.54	0.55
Travel	0.60	0.61	0.60	0.58	0.55	0.57	0.63	0.61
Intellectual Property Charges	0.17	0.17	0.19	0.22	0.21	0.18	0.13	0.06
Other Business Services	1.39	1.37	1.36	1.32	1.32	0.91	0.57	0.38

Source: Bureau of Economic Analysis

Import Penetration

Goods can be produced domestically, imported, or some combination of the two. The import share of the total US demand for goods, measured as US produced goods and imported goods less exported goods, is also referred to as **import penetration**. This measure has risen considerably over the past thirty years. The majority of the long-term increase has been concentrated in consumer goods, while the decrease since 2011 has come primarily from petroleum and related products.

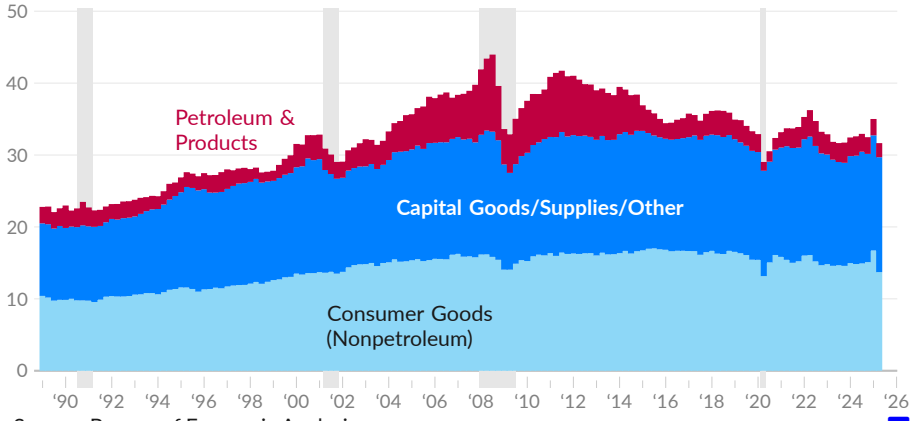
From 1989 to 2011, imports of consumer goods excluding petroleum increased by the equivalent of six percent of domestic consumption of goods, petroleum-related imports increased by the equivalent of 6.1 percent, and all other goods imports increased by the equivalent of 6.1 percent.

Since 2011, imports of consumer goods decreased by the equivalent of 2.6 percent of domestic goods demand, imports of petroleum products decreased by the equivalent of 6.4 percent, and other imports decreased by the equivalent of 0.2 percent.

In 2025 Q2, the US imported nonpetroleum consumer goods equivalent to 13.7 percent of domestic consumption of goods (see). Petroleum-related imports claim 2.0 percent (see), and imports of all other goods, primarily capital goods, industrial supplies, and materials, are equivalent to 16.0 percent (see).

Import Share of Goods

import share of domestic-produced and imported goods less exports, by category



Source: Bureau of Economic Analysis

Trade by Partner

The US Census Bureau report monthly data on international **trade in goods by partner country**. In June 2025, trade with the top 25 trading partners (see table) comprises 99.5 percent of total US trade in goods. The top three US trading partners are Mexico, Canada, and China. These three countries account for 35.8 percent of US goods trade in June 2025.

US Trade in Goods June 2025 June 2024
census basis, millions of USD, not seasonally adjusted

	Imports	Exports	Total	Imports	Exports	Total
Total, All Countries	$265,533	179,864	445,397	266,056	173,980	440,036
Mexico	44,872	28,102	72,975	42,213	27,667	69,880
Canada	29,687	28,375	58,062	34,411	29,787	64,199
China	18,948	9,443	28,392	34,169	11,376	45,545
Taiwan	16,921	4,292	21,213	9,863	3,915	13,778
Vietnam	17,715	1,197	18,912	11,475	962	12,437
Japan	11,956	6,792	18,748	11,700	7,433	19,133
Germany	11,083	7,323	18,406	12,960	6,447	19,408
South Korea	11,391	5,574	16,965	11,347	5,757	17,105
India	9,153	3,805	12,959	7,124	4,052	11,177
United Kingdom	5,209	7,410	12,620	5,702	6,807	12,509
Netherlands	2,442	8,648	11,091	2,881	7,608	10,489
Italy	6,128	4,267	10,395	6,391	3,004	9,396
Thailand	7,606	1,408	9,014	5,106	1,492	6,598
France	4,819	3,858	8,678	4,650	3,363	8,014
Brazil	3,589	4,906	8,496	3,383	4,264	7,647
Switzerland	4,061	4,114	8,176	4,457	1,782	6,240
Ireland	6,662	1,385	8,048	7,475	1,438	8,913
Malaysia	5,269	2,197	7,466	4,069	2,328	6,398
Singapore	2,977	3,121	6,099	4,294	4,074	8,368
Belgium	2,626	2,785	5,411	2,325	3,200	5,526
Spain	1,989	2,672	4,661	1,884	1,900	3,784
Australia	1,379	3,075	4,454	1,154	3,148	4,302
Indonesia	3,131	1,072	4,203	1,996	874	2,870
Chile	1,646	1,494	3,141	1,146	1,607	2,753
United Arab Emirates	551	2,500	3,052	669	2,167	2,836

Source: Census Bureau

Over the year ending June 2025, nominal total trade increased among 17 of the top 25 trading partners. The largest one-year increase in total trade was with Taiwan. Monthly trade with Taiwan grew by 7.4 billion, or 54.0 percent. The largest one-year decrease is with China, with monthly trade falling by 17.2 billion, which is a drop of 37.7 percent. Total trade with all countries grew 1.2 percent over the year.

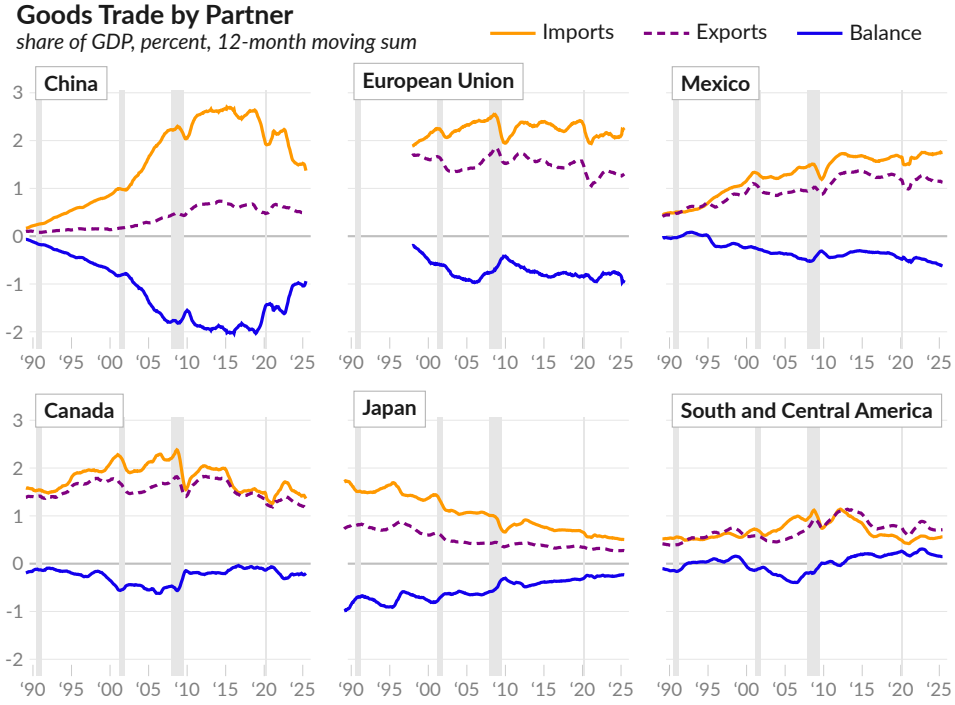
Trade data have large seasonal differences, and can swing from one month to the next. The following subsection uses 12-month moving sums to smooth the data and highlight longer-term trends.

Imports of goods have increased from 8.4 percent of GDP in 1989 to 11.7 percent of GDP in the year ending June 2025. Goods imports from China increased by 2.5 percent of GDP from 1989 to 2015, and have since fallen by 1.3 percentage points to 1.4 percent of GDP. Goods imports from Mexico have increased by 1.3 percent of GDP since 1989. Goods imports from Japan have fallen by 1.2 percent of GDP.

Exports of goods have increased by 0.6 percent of GDP since 1989. The largest buyers of US-made goods are Canada, Mexico, and China. Exports to these three countries make up 38.3 percent of exports and are equivalent to 2.7 percent of GDP over the year ending June 2025. Exports to the European Union currently total 1.3 percent of GDP.

Goods Trade by Partner

share of GDP, percent, 12-month moving sum

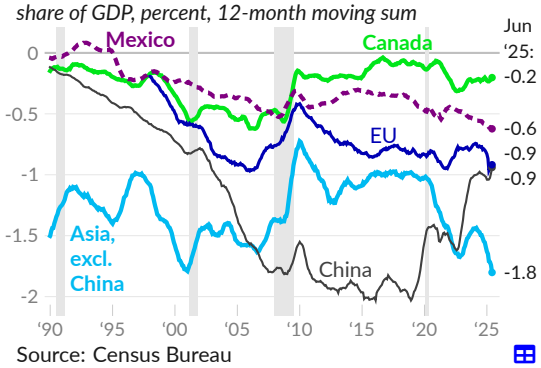


Source: Census Bureau

The trade balance, exports minus imports, has particular economic significance, and the breakdown by trading partner is no less interesting. Since 1989, the US goods trade deficit has increased by 2.6 percent of GDP, to 4.5 percent of GDP. In 2018, the deficit with China was two percent of GDP, but it has fallen to 0.9 percent of GDP.

Trade Balance on Goods by Partner

share of GDP, percent, 12-month moving sum



Source: Census Bureau

The US also runs a trade deficit with the European Union. In 1997, trade between the EU and US was relatively balanced. In the latest data, the goods trade deficit with the EU is 0.9 percent of GDP.

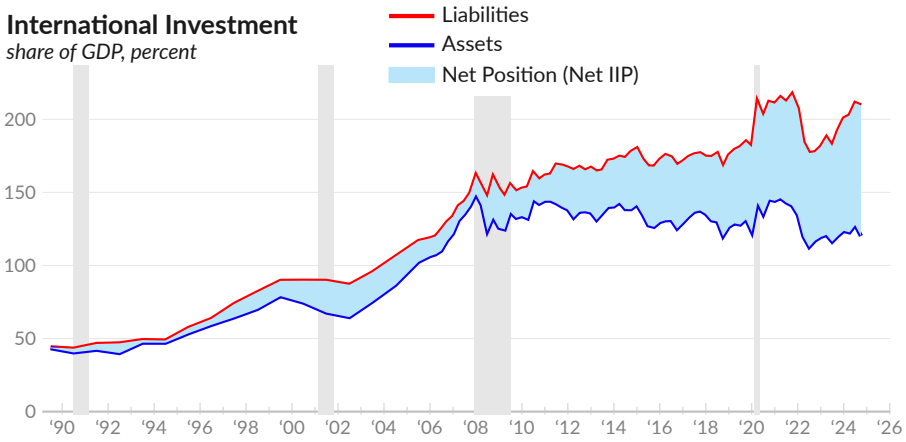
The US trade deficit with Mexico is currently 0.6 percent of GDP. In the early 1990s, the US had a trade surplus with Mexico. The US has a surplus with south and central American countries, equivalent to 0.1 percent of GDP.

International Investment Position

The US **net international investment position** (IIP) measures the difference between residents' foreign assets and liabilities. The Bureau of Economic Analysis report US IIP data on a quarterly basis beginning in 2006, while prior data are annual.

In 2024 Q4, domestic holdings of foreign assets total $35.7 trillion, which is 120.2 percent of GDP (see —). These assets translate to 127.7 percent of GDP in 2024 Q3, and 128.7 percent in 2019. Domestic liabilities to the foreign sector total $62.3 trillion, or 209.5 percent of GDP, in 2024 Q4, following 211.1 percent in 2024 Q3, and 180.0 percent in 2019 (see —).

The overall result of these financial positions, net IIP, or holdings of foreign assets minus liabilities, identifies the US as a net debtor to the rest of the world, to the equivalent of 89.3 percent of GDP in 2024 Q4, following 83.4 percent in 2024 Q3, and 51.4 percent in 2019 (see).



Source: Bureau of Economic Analysis

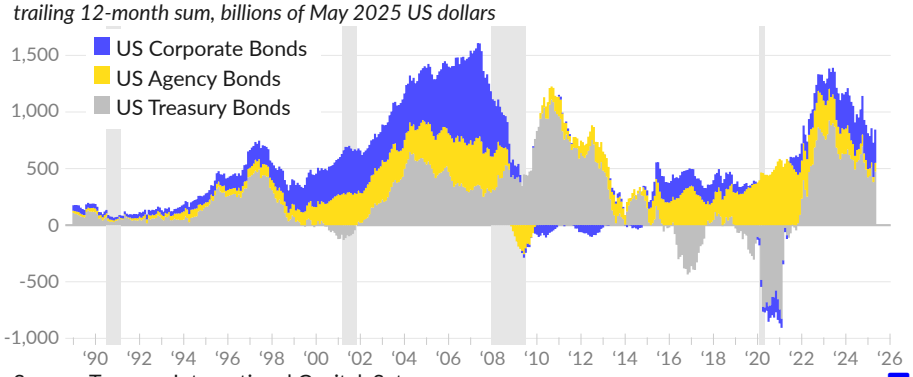
Capital Flows

The purchases and sales of US bonds by the rest of the world give insight into overall **capital flows** and appetite for different types of debt. During the 2000s, other countries were accumulating US corporate and government bonds, as the US was borrowing from the rest of the world and running a very wide trade deficit. In 2020, the rest of the world was a net purchaser of US government agency bonds but a net seller of treasuries.

Over the year ending May 2025, the rest of the world was a net buyer of $469 billion of US treasury bonds, equivalent to 1.5 percent of US GDP (see). Over the same period, the rest of the world was a net buyer of $78 billion of US agency bonds, (see), and a net buyer of $291 billion of US corporate bonds, (see).

Long-Term Bond Flows

purchases by foreigners minus sales by foreigners
trailing 12-month sum, billions of May 2025 US dollars



Source: Treasury International Capital, Setser

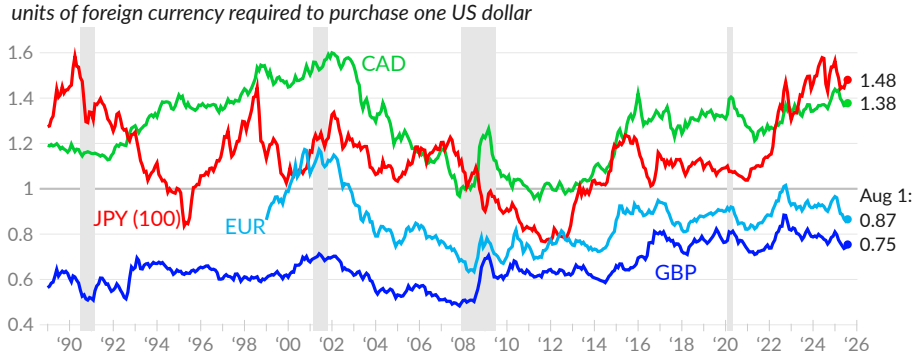
Exchange Rates

Changes in the strength or weakness of the US dollar (USD) can affect trade and financial flows. The dollar is said to be relatively strong when more units of foreign currency, for example Japanese yen (JPY), British pounds (GBP), euros (EUR), or Canadian dollars (CAD), are required to buy one USD.

As of August 1, 2025, one US dollar buys approximately: 1.38 Canadian dollars (see —), 148 Japanese yen (see —), 0.87 euros (see —), and 0.75 British pounds (see —). Over the past three years, the nominal exchange rate between the US dollar and the Canadian dollar decreased 0.2 percent, the USD-JPY rate decreased 1.5 percent, the USD-EUR rate decreased 6.3 percent, and the USD-GBP rate decreased 3.2 percent.

Selected Exchange Rates

units of foreign currency required to purchase one US dollar

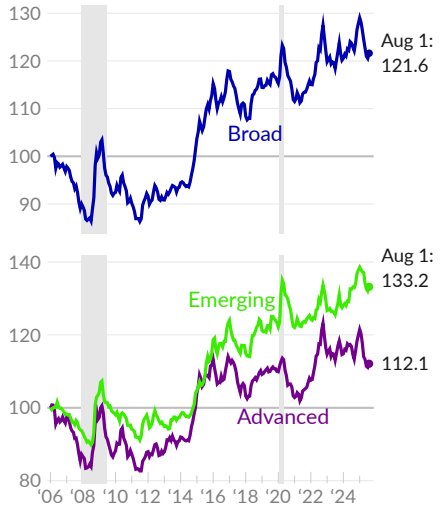


Source: Federal Reserve

The Federal Reserve **trade-weighted dollar** indices track weighted-average foreign exchange rates based on 26 currencies that are important to US trade. The weight of each currency in the index is based on the bilateral trade share of total trade in goods and services. These US dollar indices can simplify analysis of the overall role of foreign exchange rates on US trade.

Dollar Indices

trade-weighted foreign exchange rate, index, January 2006=100



Source: Federal Reserve

The **broad dollar index** (see —) summarizes foreign exchange rates between the US and trading partners by weighting foreign currencies in the index by the total amount of goods and services trade with the relevant countries.

As of August 1, 2025, the broad dollar index is 21.6 percent above its value at inception in 2006. Over the past three years, the index value has averaged 122.7, compared to an average of 115.9 over the previous three-years.

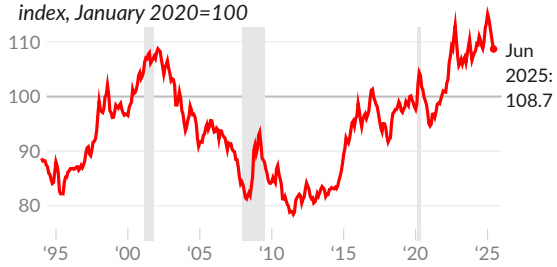
The Fed separately calculates the trade-weighted exchange rate with **advanced economies**, and with **emerging markets**. Since 2006, the dollar has increased 33.2 percent against emerging market currencies (see —), and increased 12.1 percent against advanced economy currencies (see —).

Shifts in relative consumer prices between the US and trading partners complicate analysis of exchange rates. For example, the US dollar-Japanese yen exchange rate is relatively stable from 2000 to 2020, but Japan has less inflation in consumer prices over the period. At the end of the period, 100 yen buys more consumer goods in Japan than one dollar will buy in the US.

Real effective exchange rates incorporate the inflation rate in the US and in trading partners, and are again weighted by the amount of trade with each partner. The real effective exchange rate captures the basket of goods that can be purchased by a unit of currency, as opposed to capturing the basket of other currencies that can be purchased.

USD Real Effective Exchange Rate

trade-weighted foreign exchange rate, index, January 2020=100



Source: BIS

The Bank for International Settlements (BIS) calculates **real effective exchange rates** for many countries, on a monthly basis. As of June 2025, the US dollar real effective exchange rate has increased 8.7 percent since 2020. In 2019, the index average was 98.6. Over the past three months, the index average value was 110.0.

Selected Exchange Rates

units of foreign currency required to buy one US dollar

	Aug 1, 2025	1-month moving average	1-year moving average	2019 average	1-month percent change	1-year percent change	5-year percent change
EUR	0.865	0.858	0.914	0.893	1.9	-5.8	-5.6
GBP	0.754	0.743	0.770	0.784	3.5	-2.3	-6.3
JPY	148.1	147.4	148.9	109.0	3.1	-6.6	38.6
CAD	1.378	1.370	1.394	1.327	0.9	0.7	-2.2
MXN	18.88	18.69	19.71	19.25	0.7	6.9	-22.6
CNY	7.21	7.18	7.21	6.91	0.7	-0.8	2.1
CHF	0.807	0.800	0.860	0.994	1.8	-9.9	-16.4
HKD	7.85	7.85	7.79	7.84	0.0	0.5	1.2
INR	87.54	86.26	85.24	70.38	2.3	4.7	15.7
AUD	1.546	1.531	1.546	1.439	1.6	4.0	-0.9
NZD	1.691	1.671	1.694	1.518	3.0	2.2	2.0
BRL	5.54	5.54	5.72	3.94	1.5	1.6	-0.5
KRW	1388.3	1380.7	1399.9	1165.8	2.2	0.2	13.0
MYR	4.28	4.24	4.37	4.14	1.9	-8.5	-0.9
DKK	6.46	6.40	6.82	6.67	1.9	-5.8	-5.6
NOK	10.26	10.17	10.73	8.80	1.7	-5.3	-0.9
SEK	9.67	9.61	10.31	9.46	1.8	-8.9	-2.1
ZAR	18.04	17.79	18.13	14.45	2.3	-0.3	-3.6
SGD	1.290	1.282	1.320	1.364	1.3	-4.1	-9.0
TWD	29.83	29.37	31.83	30.90	2.0	-8.4	0.0

Source: Federal Reserve

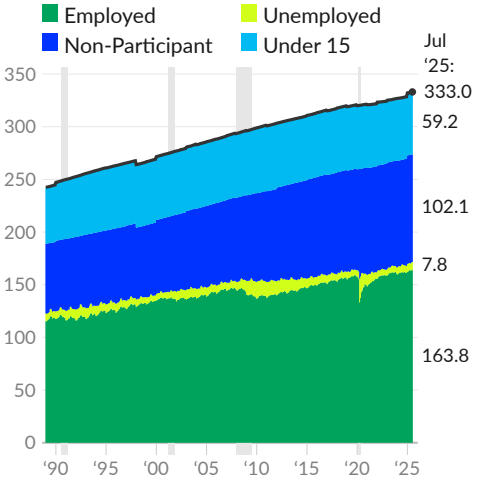
Labor Markets

Labor is the primary source of income for US households and is essential to the production of goods and services. The portion of labor that is provided by a household member to others outside of the household or to other households is considered *employment*. As of July 2025, 163.8 million people are employed (including self-employment).

The number of people who are employed divided by the total population is the employment rate or employment-to-population ratio, which is 49.2 percent as of July 2025. Note that these values are not seasonally adjusted and include children, while BLS published values refer to those 16 or older.

Labor Force Status of Population

millions of people, not seasonally adjusted



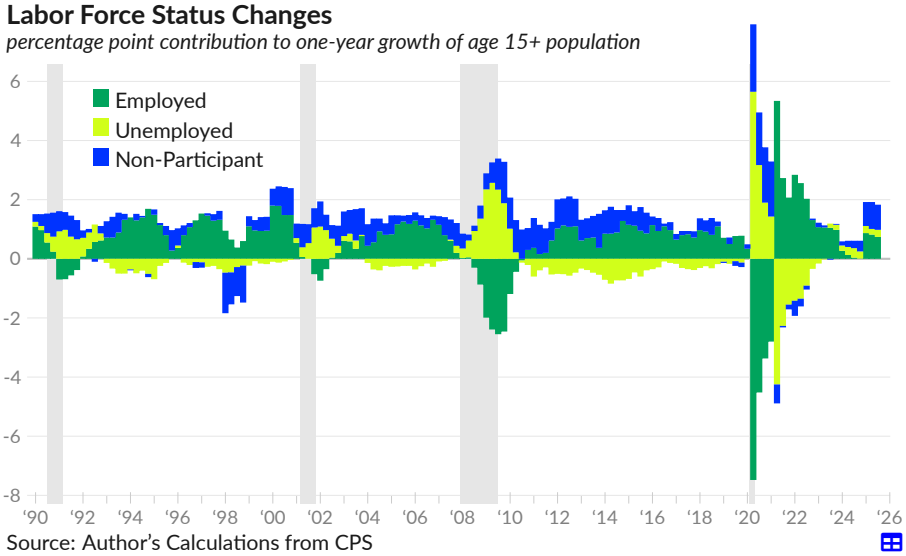
Source: Author's Calculations from CPS

When a member of a household is not employed but looked for a job during the past four weeks or is on temporary layoff, they are considered **unemployed**. As of July 2025, there are 7.8 million unemployed people. The combined group of employed and unemployed people is the labor force. The unemployment rate, unemployed people as a share of the labor force, is currently 4.6 percent. The labor force as a share of the population is the labor force participation rate, currently 51.5 percent.

People who are neither employed nor unemployed are considered *outside of the labor force*. Nonparticipants usually comprise about half of the population, and total 161.4 million in July 2025. The category includes children (59.2 million), students (15.3 million), unpaid caregivers (12.1 million), those unable to work due to disability or illness (13.6 million), those who want a job but have given up looking (6.7 million), and retirees and the elderly (54.1 million).

Labor Force Status Changes

percentage point contribution to one-year growth of age 15+ population



Source: Author's Calculations from CPS

The labor force status of the US population varies by age, sex, and over time. Employment is the main source of income in the economy and is particularly important to overall levels of economic activity.

Labor Force Status

July 2025, thousands of people, not seasonally adjusted

	Total, 16+	Men, 16–29	Men, 30–59	Men, 60+	Women, 16–29	Women, 30–59	Women, 60+
Population	273,785	31,059	63,951	38,537	30,733	64,999	44,508
Employed	163,799	19,936	54,698	12,683	18,356	47,456	10,670
Multiple Jobs	8,244	747	2,778	555	1,030	2,653	480
Full-Time	142,622	16,705	53,215	10,240	13,411	41,506	7,545
Part-Time	29,024	5,095	3,218	2,861	6,511	7,829	3,510
Economic Reasons	4,856	1,019	1,347	265	865	1,153	208
Unemployed	7,847	1,864	1,735	418	1,566	1,879	385
Not in Labor Force	102,140	9,258	7,518	25,436	10,811	15,664	33,453
Discouraged	6,506	1,343	1,010	635	1,247	1,462	808
Disabled/Ill	13,763	959	3,571	2,385	698	3,564	2,585
Family/Care	12,214	387	754	72	2,326	7,873	802
School	12,198	5,711	337	11	5,666	448	24
Retirement	54,660	121	1,336	22,169	214	1,760	29,059

Source: Author's Calculations from CPS

Changes in labor force status can highlight both secular and cyclical trends in the economy. The following table presents the net six-year change in labor force status, in number of people, from July 2019 to July 2025.

Labor Force Changes

Change from July 2019 to July 2025, thousands of people

	Total, 16+	Men, 16–29	Men, 30–59	Men, 60+	Women, 16–29	Women, 30–59	Women, 60+
Population	14,560	609	2,653	4,907	501	1,325	4,566
Employed	5,414	-533	2,436	615	-367	2,457	805
Multiple Jobs	-68	-169	162	6	-164	118	-21
Full-Time	5,223	-641	2,226	471	-380	2,760	787
Part-Time	1,481	454	560	239	189	-33	73
Economic Reasons	753	165	421	77	-36	75	52
Unemployed	1,291	346	349	95	176	270	55
Not in Labor Force	7,856	796	-133	4,197	692	-1,401	3,706
Discouraged	1,204	276	186	51	282	234	175
Disabled/Ill	-701	157	-352	104	184	-523	-270
Family/Care	-1,387	-15	-41	-17	-274	-844	-196
School	584	296	-24	-18	282	44	5
Retirement	7,744	27	23	4,001	38	-313	3,967

Source: Author's Calculations from CPS

The next table provides the net one-year change in labor force status, in number of people. The table summarizes more-recent changes in labor force status.

Labor Force Changes

Change from July 2024 to July 2025, thousands of people

	Total, 16+	Men, 16–29	Men, 30–59	Men, 60+	Women, 16–29	Women, 30–59	Women, 60+
Population	5,141	743	816	1,012	659	807	1,104
Employed	1,761	126	694	129	233	498	81
Multiple Jobs	-159	-146	117	46	-98	-88	10
Full-Time	1,413	105	624	-37	157	466	99
Part-Time	510	150	71	165	14	148	-39
Economic Reasons	131	-36	221	30	-82	-2	0
Unemployed	162	128	1	-0	-62	116	-21
Not in Labor Force	3,218	489	121	884	488	193	1,044
Discouraged	546	118	55	76	128	60	111
Disabled/Ill	440	55	97	148	-89	230	-1
Family/Care	-298	-49	-20	-65	-96	109	-177
School	679	266	31	-6	424	-38	2
Retirement	1,519	30	-42	681	81	-295	1,064

Source: Author's Calculations from CPS

Finally, long-term changes in labor force status can be summarized by comparing the tight labor market of 2000 with the most recent data. The following table presents the net change in labor force status, in number of people, from July 2000 to July 2025.

Labor Force Changes

Change from July 2000 to July 2025, thousands of people

	Total, 16+	Men, 16–29	Men, 30–59	Men, 60+	Women, 16–29	Women, 30–59	Women, 60+
Population	61,109	4,729	7,441	19,367	4,250	5,926	19,397
Employed	26,030	104	5,175	7,618	1,008	5,380	6,745
Multiple Jobs	654	-253	-34	327	-57	325	347
Full-Time	21,487	-1,067	4,400	6,489	156	6,247	5,262
Part-Time	6,361	1,434	1,301	1,408	939	-477	1,757
Economic Reasons	1,549	281	608	180	109	225	146
Unemployed	1,819	263	526	279	87	389	274
Not in Labor Force	33,260	4,362	1,740	11,470	3,154	156	12,378
Discouraged	2,060	376	400	274	274	233	503
Disabled/Ill	3,642	461	462	1,311	264	297	848
Family/Care	-747	199	416	48	-635	-646	-128
School	6,645	3,283	99	7	3,065	167	24
Retirement	21,184	86	169	9,706	151	1	11,071

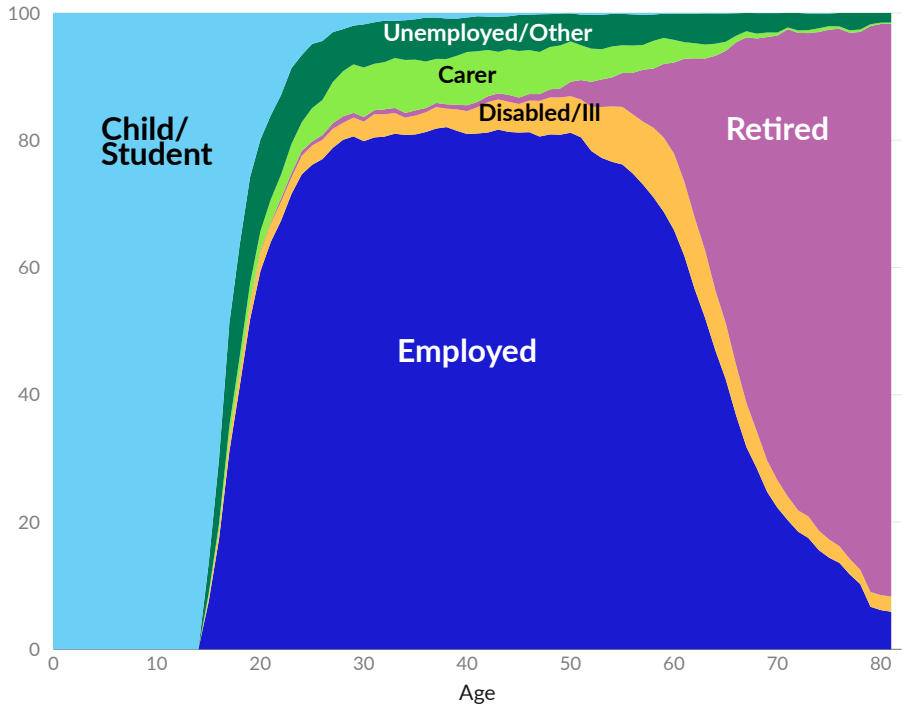
Source: Author's Calculations from CPS

Labor Force Status and Age

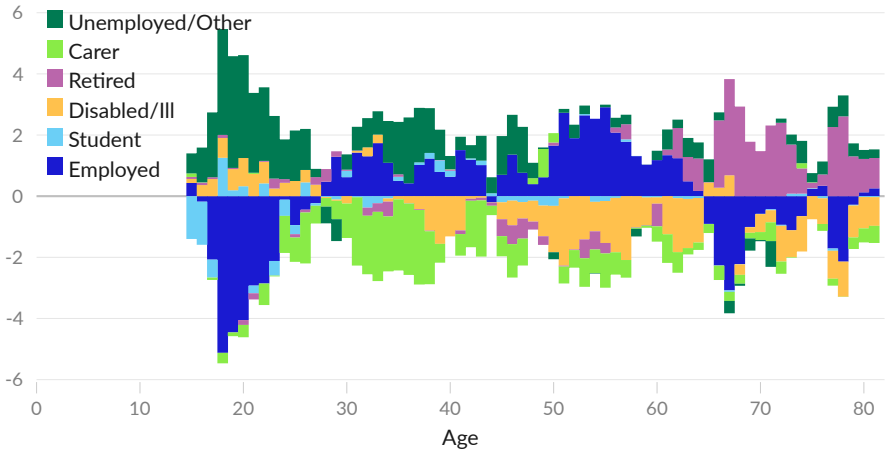
There is a clear relationship between age and employment. Children are not permitted to work and many young people attend school full time. During ages 25 to 54, around 80 percent of the population is employed. The remaining 20 percent include caregivers and those unable to work due to disability or illness. Retirement becomes more likely as workers reach their 60s and 70s; less than 10 percent of people continue to work into their 80s.

Labor Force Status, by Age

share of same-age population, percent, July 2025



change since July 2019 in share of age group, percentage points



Source: Author's Calculations from CPS, Bruenig

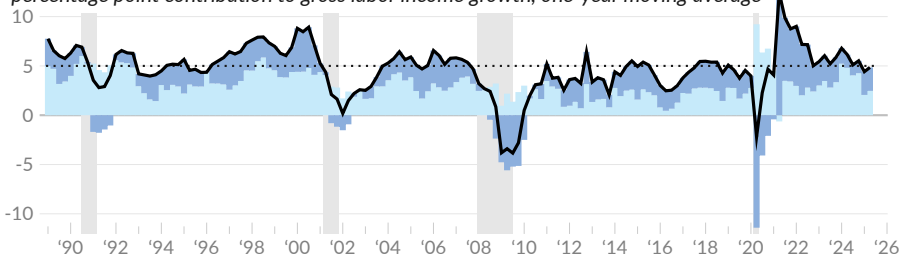
Gross Labor Income

Businesses do not usually cut wages in response to an economic downturn, and will instead typically employ fewer workers and/or cut hours. As a result, wage data give only a partial picture of the labor income received by households.

Gross labor income (compensation of employees in the national accounts), which captures both the amount of employment and the rate of compensation, increased at an average annualized rate of 4.8 percent over the year ending 2025 Q2. Changes in wages contributed 2.5 percentage points, and changes in total hours worked contributed 2.4 percentage points.

Gross Labor Income Growth Average Wage Hours of Work Total

percentage point contribution to gross labor income growth, one-year moving average



Source: BLS, BEA, Author's Calculations

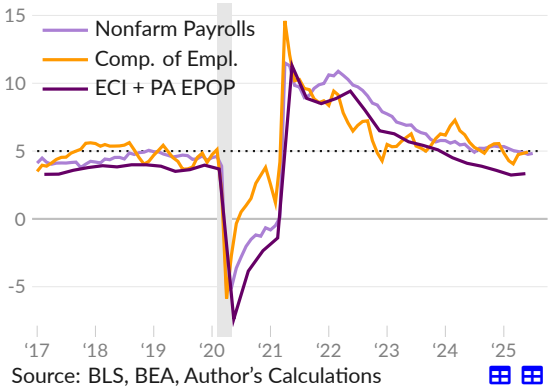
Historically, the US economy can sustain gross labor income of at least five percent. For example, assuming a stable labor share of income, this could be inflation of two percent and real output growth of three percent. Gross labor income growth of under five percent may indicate weak aggregate demand.

Among measures of overall economic activity, gross labor income has the added benefit that it can be calculated using multiple independent data sources. The measure can be calculated from timely measures such as nonfarm payrolls and average earnings, from compensation of employees data from BEA, or from more-comprehensive measures that reduce effects of composition, such as the employment cost index combined with the prime-age employment rate.

Using the nonfarm payrolls approach (see —), the one-year growth rate of gross labor income is 4.8 percent in July 2025, following 4.9 percent one-year prior, in July 2024.

Gross Labor Income Growth

one-year growth, percent



Source: BLS, BEA, Author's Calculations

The monthly data on compensation of employees from BEA (see —) shows one-year gross labor income growth of 4.9 percent in June 2025, and 5.6 percent in June 2024, one-year prior.

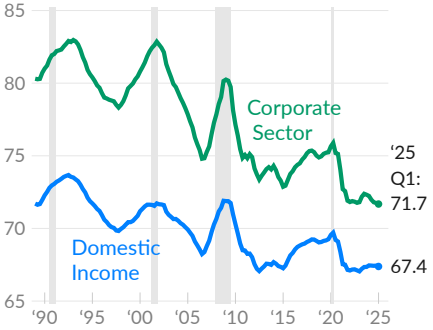
Calculating gross labor income from the employment cost index for private industries and the prime age employment rate (see —), one-year growth is 3.3 percent in 2025 Q2, following 4.1 percent one year prior.

Labor Share of Income

The **labor share** measures the portion of available income that is paid to workers. Labor income is measured in the national accounts as employee compensation, and net income is measured as employee compensation plus the net operating surplus. Net income, or income after depreciation, is used instead of gross income because depreciation expenses are not available to labor or capital.

Labor Share of Net Income

percent, one-year moving average



Source: Bureau of Economic Analysis

Over the year ending 2025 Q1, labor receives 67.4 percent of net domestic income (see —). Labor's share decreased 0.1 percentage point over the past year. For context, one percent of net domestic income translates to $230 billion per year, which is $1,440 per worker.

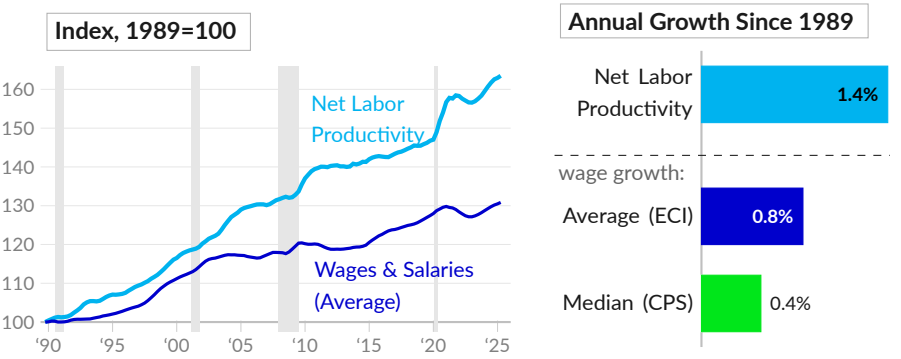
Labor's share in the corporate sector is 71.7 percent in 2025 Q1 (see —). The corporate sector has well-defined accounting, which is useful for this analysis. The corporate labor share is currently 11.3 percentage points below its 30-year high of 83.0 percent in 1993 Q1.

Productivity-Pay Gap

When analyzing the fall in labor share of income, it's useful to consider the **gap between labor productivity and pay**. Behind long-term output growth is productivity growth and population growth. Since 1989, annualized net output growth is 2.3 percent, net productivity growth is 1.4 percent, and population growth is 0.9 percent.

While the US has modest labor productivity growth over the past few decades, wages have not kept pace. The average wage has grown by 0.8 percent per year since 1989, and the median wage has increased by 0.4 percent per year.

Productivity-Pay Gap



Source: BEA, BLS, Author

Data notes: Net labor productivity is real net domestic product divided by total hours worked from the CPS. Average wages and salaries is from the ECI, and covers all civilian workers. Median usual weekly earnings from the CPS cover full-time civilian wage and salary workers. Average wages are deflated using the PCE price index and median wages are deflated with the CPI.

More-complete analysis finds that the productivity-pay gap emerged around 1979; between World War II and 1979, employee compensation kept pace with productivity growth. Researchers argue that the post-1979 gap is tied to policies that weaken unions and reduce bargaining power for the typical worker.

Employment

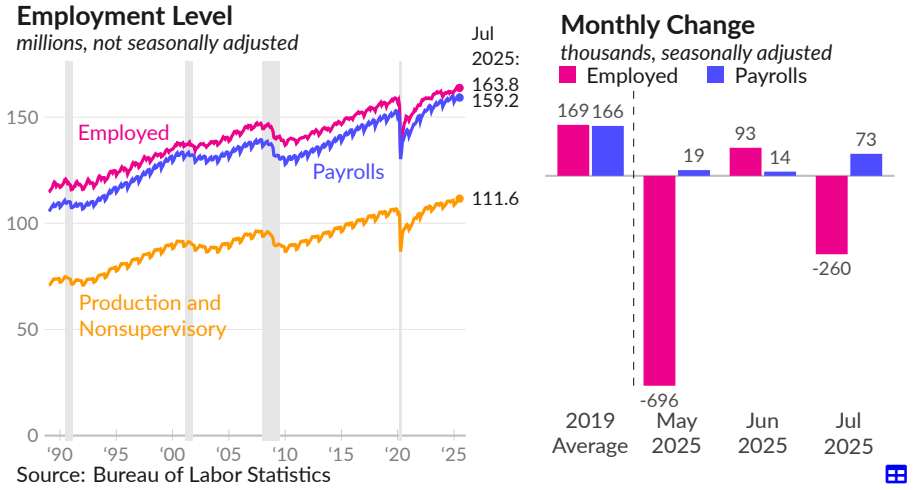
Employment is critical to production and as a source of income. This subsection covers payrolls and employment rates for different groups and places. Related topics, such as work arrangements, hours worked, and wages, are covered in later subsections.

Overview

Two primary sources of employment data are households and employers. Households report activities, including employment and self-employment, while employers report payrolls.

In July 2025, establishments report 159.2 million **nonfarm payroll employees** (see —). The pre-COVID peak was 153.1 million in November 2019. Households report 163.8 million employed people, including the self-employed but not including armed forces, in the latest month, compared to a pre-COVID peak of 159.1 million (see —).

Private production and nonsupervisory workers are engaged in production, including working supervisors, or in other activities but not above the working supervisor level. In July 2025, this group totals 111.6 million, compared to a pre-COVID peak of 106.9 million (see —). Production and nonsupervisory workers comprise 81.6 percent of private nonfarm payrolls in July 2025.



Source: Bureau of Labor Statistics

In July 2025, seasonally-adjusted civilian employment decreased by 260,000 (see ■), far below the 2019 average increase of 169,000 jobs per month. The US added a net total of 73,000 nonfarm payroll jobs in July 2025 (see ■), compared to a monthly average of 165,500 in 2019. The average of both surveys over the past three months shows a decrease of 126,200 employees per month.

Employment Level

millions	*seasonally adjusted*		*not seasonally adjusted*				
	Jul 2025	Jun 2025	Jul 2025	Jun 2025	2019 Avg.	2017 Avg.	2000 Avg.
Employed	163.1	163.4	163.8	163.9	157.5	153.3	136.9
Nonfarm Payrolls	159.5	159.5	159.2	160.3	150.9	146.6	132.0
Private Nonfarm Payrolls	136.0	135.9	136.9	136.8	128.3	124.3	111.2
Production & Nonsuperv.	110.8	110.7	111.6	111.6	105.6	102.4	90.5

Source: Bureau of Labor Statistics

Payroll Employment

The Current Employment Statistics Program surveys around 130,000 businesses and government agencies each month. Payroll data from this survey provide insight into the overall health of the economy by indicating the pace of job growth. The payroll data also reliably identify changes in employment in individual industries.

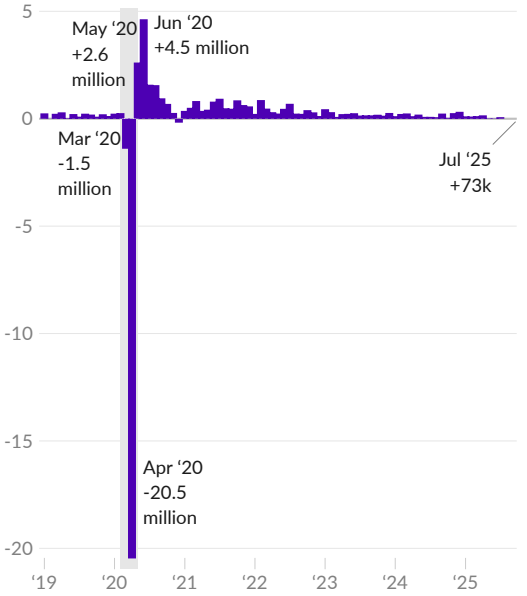
Nonfarm payrolls increased by 73,000 in July 2025, following 14,000 jobs added in June, and 19,000 added in May (see ■). Average payroll growth was 35,300 over these three months, slightly below the average of 126,700 during the previous three months.

During March and April 2020, the US lost a combined 22 million jobs. Since May 2020, a total of 29.1 million jobs have been added, equivalent to 133.1 percent of those lost.

To maintain a steady payroll employment rate with population growth, the US needed to add 251,000 jobs in July 2025. Pre-pandemic, in 2019, the US was adding an average of 165,500 jobs per month.

Nonfarm Payroll Growth

one-month change, in millions, seasonally adjusted



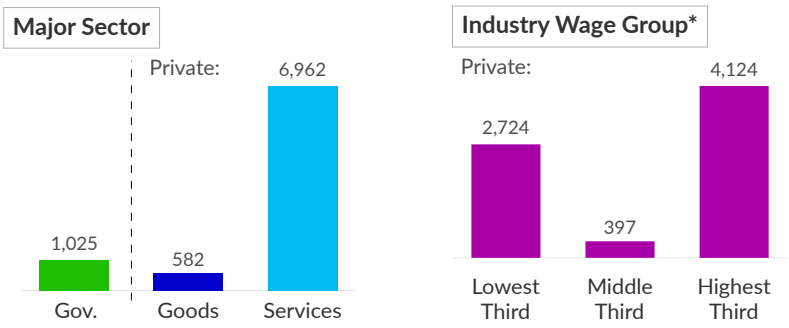
Source: Bureau of Labor Statistics

Over the six years ending July 2025, nonfarm payrolls increased by a total of 8,569,000. By sector, combined government payrolls grew by 1,025,000 (see ■), and private payrolls increased by a total of 7,544,000 over the six-year period. Private goods-producing industries added 582,000 jobs (see ■), and private service-providing industries added seven million jobs (see ■).

Dividing the private industries into three wage groups, the lowest-wage industries added 2,724,000 jobs since July 2019, the middle-wage industries gained 397,000 jobs, and the highest-wage industries added 4.12 million jobs (see ■).

Six-Year Change in Payrolls (July 2019 to July 2025)

not seasonally adjusted, thousands of jobs



*Wage groups are derived from 2019 average hourly earnings by 3-digit NAICS industry. Private industries without wage information added 305,600 jobs over the period.

Source: Bureau of Labor Statistics

The establishment survey provides reliable industry-level estimates of payroll employment. Household surveys have a higher potential to misclassify industries and are considered less-reliable for industry-level estimates of payroll employment.

Over the six years ending July 2025, the industry groups with the largest increase in payrolls were health care (+1,901,600), professional and technical services (+1,324,500), social assistance (+1,074,300), and transportation and warehousing (+1,013,900). The private industry groups with the least least job growth were administrative and support (-357,000), accommodation (-144,600), and mining and logging (-114,000).

Nonfarm Payrolls by Industry Group

in thousands	*seasonally adjusted*				*not seas. adjusted*	
	July 2025	1-month change	May '25–Jul '25 average	Feb '25–Apr '25 average	July 2025	6-year change
Total nonfarm	159,539	73	35	127	159,227	8,569
Total Private	135,970	83	52	118	136,877	7,544
Goods-Producing	21,654	-13	-13	10	21,929	582
Mining & Logging	617	-4	-3	2	623	-114
Construction	8,310	2	2	6	8,518	764
Manufacturing	12,727	-11	-12	3	12,788	-68
Private Service-Providing	114,316	96	65	108	114,948	6,962
Wholesale Trade	6,164	-8	-5	1	6,195	277
Retail Trade	15,577	16	-4	6	15,596	47
Transportation & Warehousing	6,738	4	1	-3	6,612	1,014
Information	2,939	-2	0	0	2,961	73
Financial Activities	9,263	15	7	8	9,339	495
Real Estate & Rental & Leasing	2,505	1	1	5	2,545	176
Professional & Technical Services	10,852	3	-4	0	10,907	1,324
Management	2,638	2	3	4	2,659	122
Administrative & Support	8,550	-20	-16	6	8,576	-357
Educational Services	4,000	6	-1	4	3,700	260
Health Care	18,199	55	50	20	18,196	1,902
Social Assistance	5,210	18	18	48	5,189	1,074
Arts, Entertainment, & Recreation	2,713	1	6	4	3,054	268
Accommodation	1,951	5	1	1	2,094	-145
Food Services & Drinking Places	12,367	0	5	4	12,631	355
Other Services	6,036	2	2	5	6,110	134
Utilities & Waste Management	1,121	1	1	0	1,130	116
Government	23,569	-10	-16	9	22,350	1,025

Source: Bureau of Labor Statistics

Summarizing employment changes by grouping industries can have the adverse effect of hiding changes within these industry groups. Additionally, industry groups can be vague or overly broad. The government and business chartbook sections contain more information on industry-level employment trends.

Employment Rates

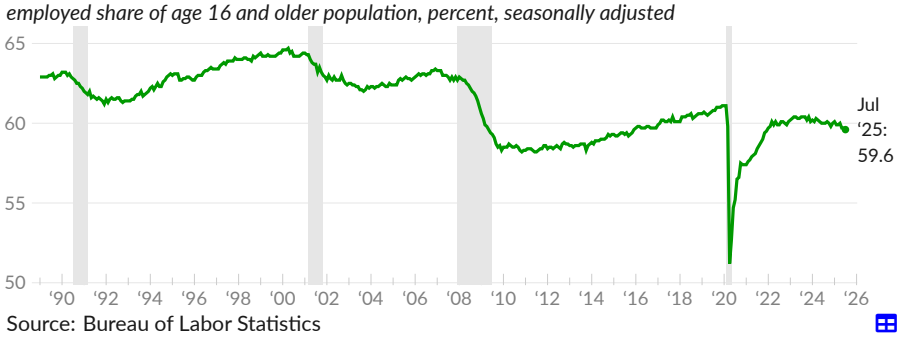
The **employment rate**, or the employment-population ratio, is the share of a group that is employed. Employment rates can provide useful insight into macroeconomic conditions. A high employment rate means available labor are being utilized in the productive process. All else equal, higher employment results in both increased supply, as the result of more labor being used for production, and increased demand, as the result of higher levels of income.

Economists are interested in both the overall employment rate and in the employment rates for individual groups of people. The overall employment rate provides insight into the overall utilization of labor of a society and is affected by demographic and macroeconomic factors. Employment rates for individual groups can tell us about macroeconomic conditions and even tell us about differences in local economic conditions.

As of July 2025, the Bureau of Labor Statistics report an overall (age 16 and older) employment rate of 59.6 percent (see —), a one-year decrease of 0.4 percentage point, and a 1.2 percentage point decrease since 2019.

Employment Rate, Age 16 and Older

employed share of age 16 and older population, percent, seasonally adjusted



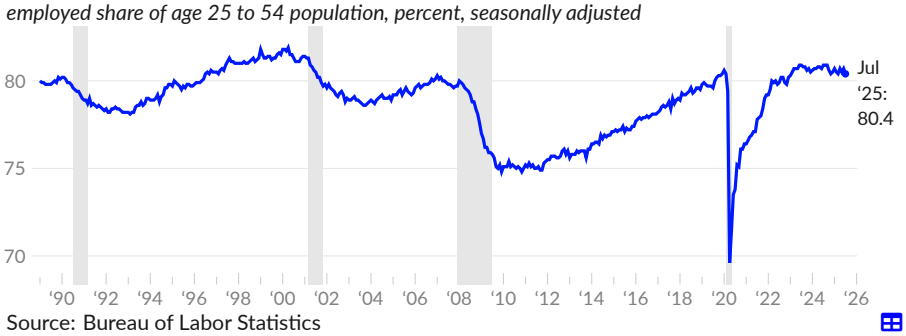
Source: Bureau of Labor Statistics

Importantly, a larger share of the US population is of retirement age, reducing the overall US employment rate. To examine macroeconomic conditions separate from demographic developments, BLS report the employment rate for a more-narrow age group, specifically, those age 25 to 54. This group has the highest employment rate and are sometimes considered the "prime" age for labor market purposes.

The **age 25 to 54 employment rate** is an important measure of labor market utilization. In a tight labor market, the age group is employed at a very high rate. In July 2025, 80.4 percent of 25 to 54 years olds were employed (see —), compared to 80.7 percent in June 2025. Over the past year, the age 25 to 54 employment rate decreased 0.5 percentage point. The July 2025 rate is one percentage point (equivalent to 1.4 million workers) below the average rate of 81.4 during the tight labor market of 1999–2000.

Employment Rate, Age 25 to 54

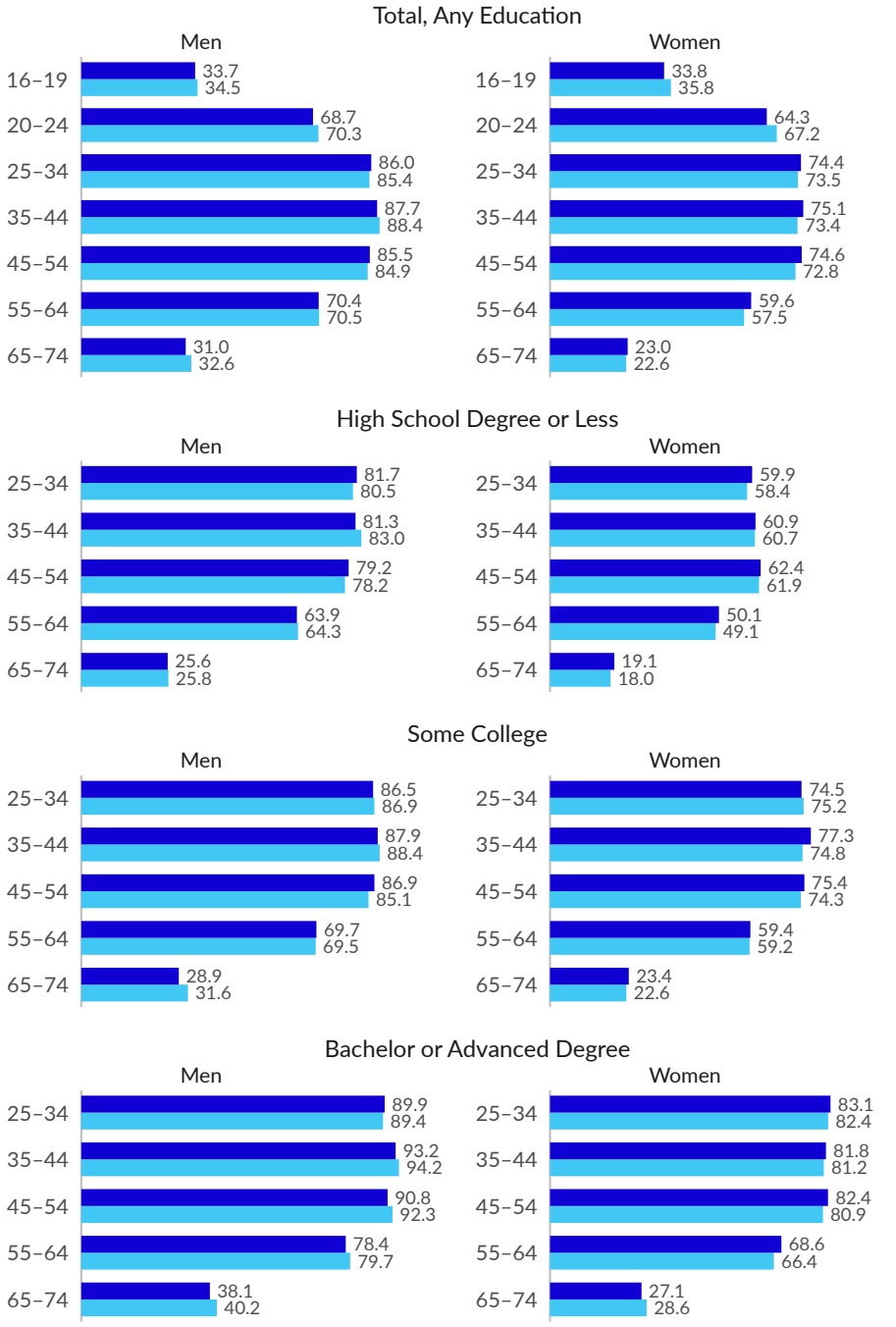
employed share of age 25 to 54 population, percent, seasonally adjusted



Source: Bureau of Labor Statistics

Employment rates vary over time, but also by age, gender, and education, among other factors. Over the three months ending July 2025, the employment rate for most sub-groups is about the same as it was before the pandemic. At a given point in time, employment rates tend to increase with education and tend to peak during ages 25 to 54. Within most age groups, employment rates are higher for men, though the gap has narrowed over the long-run.

Employment Rates ■ July 2025 ■ July 2019
employed share of age group, percent, three-month average



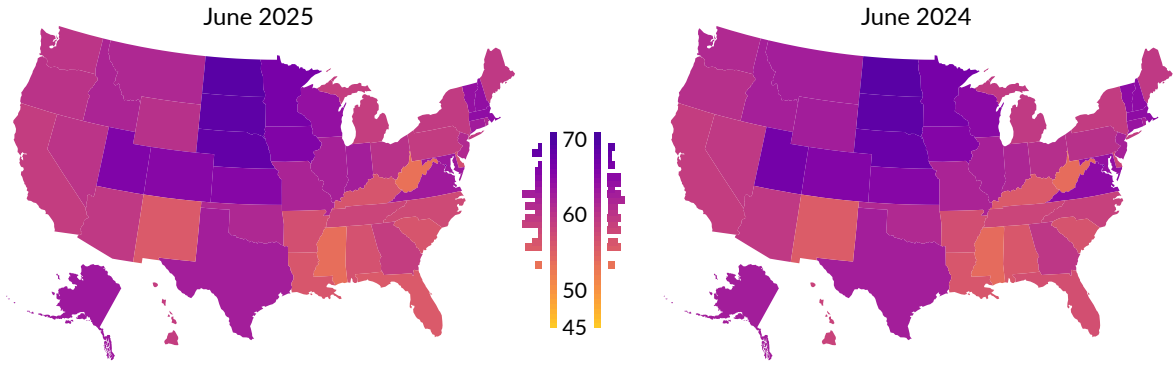
Source: Author's Calculations from CPS

Next, we examine how employment rates vary across states. In June 2025, the age 16 and older employment rate is below 60 percent in 24 states. One year prior, in June 2024, the employment rate was below 60 percent in 20 states. The rate is above 65 percent in seven states, in the latest month, and in eight states in June 2024.

The states with the highest employment rates in June 2025 are North Dakota (68.7%), South Dakota (68.3%), and the District of Columbia (68.1%). The states with the lowest employment rates are West Virginia (52.9%), Mississippi (53.3%), and New Mexico (55.5%).

Employment Rate by State

employed share of age 16+ population, percent, not seasonally adjusted



Source: Bureau of Labor Statistics

Employment Rate and One-Year Change

age 16 and older employment rate, percent, not seasonally-adjusted, as of June 2025 and one-year change, percentage points

North Dakota	68.7 unch	Indiana	62.2 (+0.9)	Pennsylvania	58.8 (-1.2)
South Dakota	68.3 (-0.1)	Texas	62.2 unch	Hawaii	58.6 (+0.6)
Distr. of Columbia	68.1 (-0.4)	Illinois	61.9 (-0.1)	California	58.6 unch
Nebraska	67.9 (+0.5)	Missouri	61.6 unch	Georgia	58.6 (-0.8)
Minnesota	66.2 (-0.1)	Idaho	61.4 (-0.7)	Michigan	58.5 (-0.5)
Utah	65.5 (-1.1)	Rhode Island	61.2 (-0.9)	Tennessee	57.8 (0.1)
Iowa	65.4 (+0.3)	Montana	61.1 (-1.1)	North Carolina	57.2 (-1.0)
Kansas	65.0 unch	Oklahoma	61.0 (+0.1)	Delaware	56.6 (-1.0)
Colorado	64.9 (-0.4)	New Jersey	60.8 (-1.2)	Arkansas	56.6 (-0.1)
Massachusetts	64.1 (-0.2)	Wyoming	60.0 (-2.3)	Alabama	56.3 (+0.6)
New Hampshire	64.0 (-0.4)	Ohio	59.9 (-0.4)	South Carolina	55.9 (-0.2)
Wisconsin	63.7 (-0.9)	Oregon	59.8 (-0.4)	Kentucky	55.9 (+0.4)
Vermont	63.7 (-0.7)	Nevada	59.7 (+0.6)	Louisiana	55.8 unch
Maryland	62.9 (-0.8)	Washington	59.5 (-1.4)	Florida	55.5 (-1.1)
Alaska	62.8 (+0.4)	Maine	59.1 (-0.1)	New Mexico	55.5 (+0.3)
Virginia	62.6 (-1.8)	Arizona	59.1 unch	Mississippi	53.3 (-0.2)
Connecticut	62.5 (-0.8)	New York	58.9 (+0.2)	West Virginia	52.9 (-0.5)

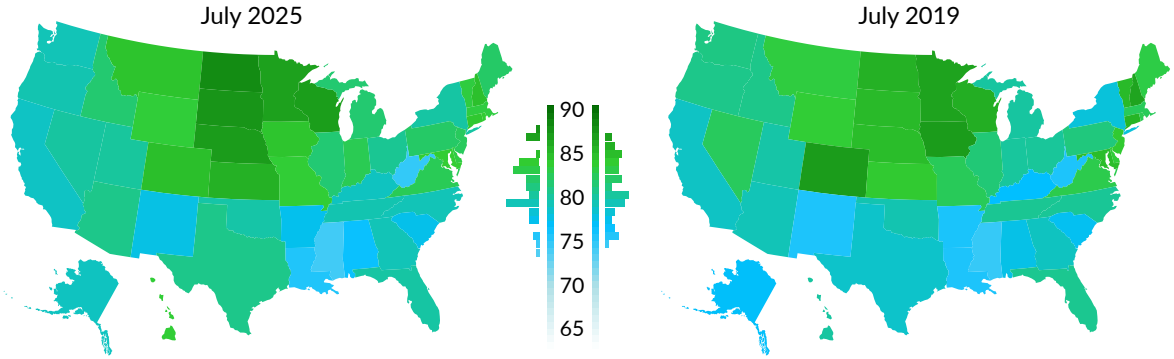
Source: Bureau of Economic Analysis

A tight local labor market will employ those ages 25 to 54 at a very high rate, barring any local labor supply constraints, for example availability or cost of child care or high rates of disability. In July 2025, the states with the highest employment rates for 25 to 54 year olds are North Dakota (87.8 percent), South Dakota (87.1 percent), and Nebraska (86.7 percent).

The age 25 to 54 employment rate is higher in July 2025 than it was in July 2019 in 29 states, and lower in 22 states. Comparing the latest three months to the previous three months, the seasonally-adjusted age 25 to 54 employment rate increased in 25 states, decreased in 25 states, and was unchanged in one state.

Age 25 to 54 Employment Rate by State

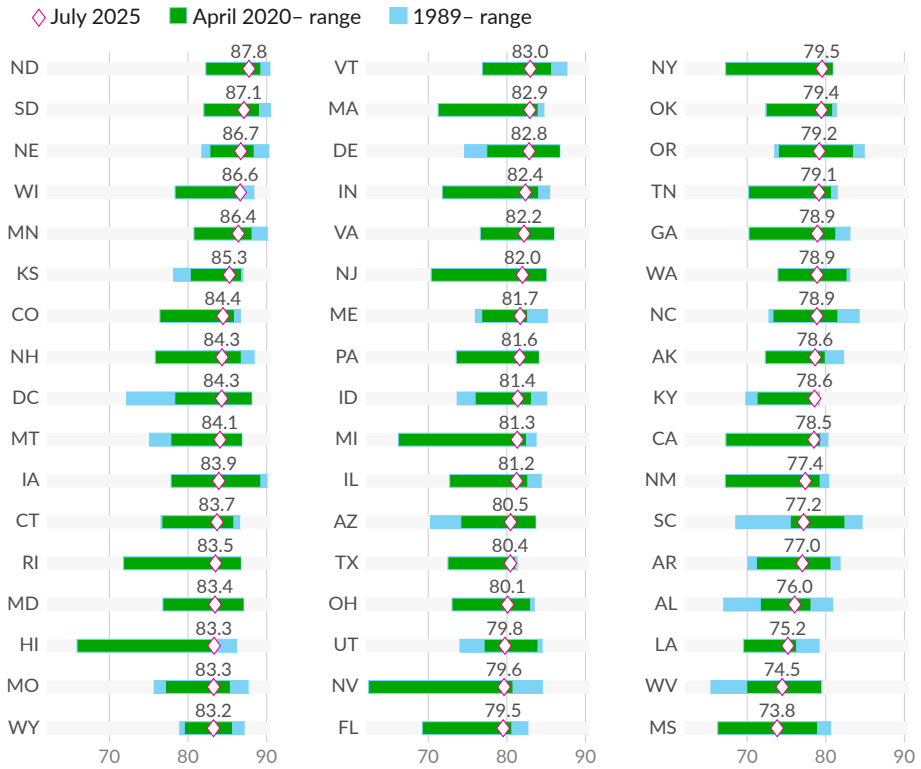
employed share of age 25 to 54 population, percent, seasonally adjusted, three-month moving average



Source: Author's Calculations from CPS

Employment Rate by State

employed share of age 25 to 54 population, percent, seasonally adjusted, three-month moving average



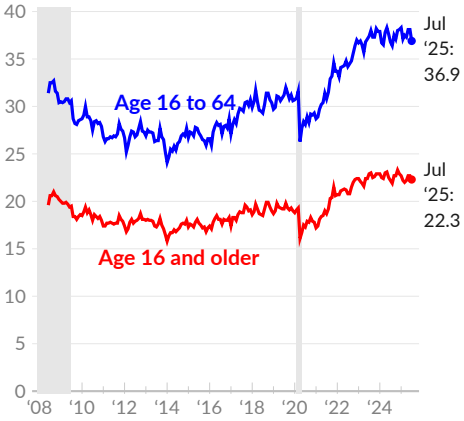
Source: Author's Calculations from CPS

The Bureau of Labor Statistics (BLS) also report the **employment rate for people with disabilities**. People with disabilities may be limited in their ability to participate in labor markets and can also face discrimination during hiring. Labor market prospects for the group are also affected by economic conditions. A tight labor market pushes businesses to accommodate disabilities and to discriminate less in hiring.

Beginning in June 2008, the Current Population Survey (CPS) asks respondents age 16 and older whether they have difficulty with any of the following: hearing, seeing (even while wearing glasses), walking or climbing stairs, concentrating, remembering, making decisions, dressing or bathing, or running errands alone. In July 2025, 35.9 million people age 16 and older report at least one such disability, of which 17.6 million are under age 65.

Employment Rate, with Disability

employed share of age group, with disability, percent, not seasonally adjusted



Source: BLS; Author

As of July 2025, BLS reports a 22.3 percent employment rate for individuals aged 16 and over with at least one disability (see —). This marks a 0.1 percentage point increase over the past year, and a jump of 3.6 percentage points since July 2021.

For those age 16 to 64 with disabilities, the employment rate is 36.9 percent in July 2025 (see —), a one-year increase of 0.1 percentage point, and a 6.1 percentage point increase since 2021.

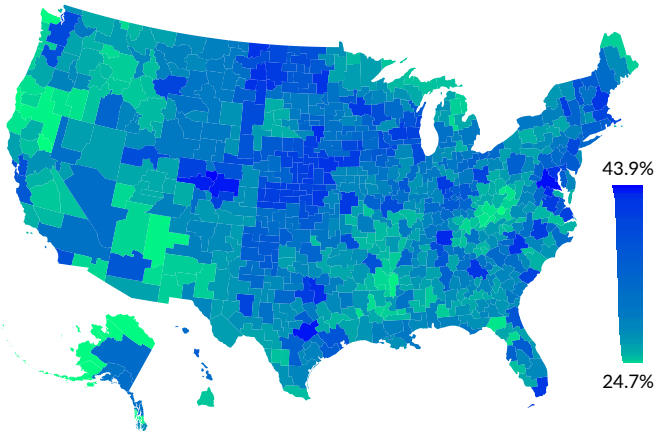
In 2013, during the sluggish recovery from the great recession, the employment rate for those age 16 to 64 with a disability averaged 26.8 percent.

The monthly jobs report describes employment at a given point in time, by asking about activities during a specific week of the previous month. To instead examine activities over a *period of time*, annual data on weeks worked per year and hours worked per week can be combined to identify the **fully-employed**, or full-time, full-year workers, who usually work 35 hours per week or more for 50 weeks per year or more. The Census Bureau report 121.4 million fully-employed people in 2023, equivalent to 36.5 percent of the US population, compared to 121.4 million (36.7 percent) in 2022.

Employment rates vary dramatically by location. In 2023, 57.1 percent of commuter zones have at least a third of their population working full-time and full-year. A total of 2 commuter zones (out of 741), covering 0.1 million people, have a quarter of the population or less fully employed. The top ten and bottom ten commuter zones by fully-employed rate are listed below.

Commuter Zone Fully-Employed Rate

full-time, full-year worker share of population, 2023



Top 10:
42.8% Washington, DC
42.3% Austin, TX
42.0% Denver, CO
41.5% Glenwood Springs, CO
41.1% Fredericksburg, VA
40.8% Nashville-Davidson, TN
40.7% Sioux Falls, SD
40.6% Dallas, TX
40.3% Charlotte, NC
40.1% Omaha, NE

Bottom 10:
25.2% Port Angeles, WA
25.6% Gallup, NM
25.6% Altamont, OR
25.9% Greenville, MS
26.6% Lake City, FL
26.8% Eureka, CA
26.8% Pikeville, KY
27.2% Roseburg, OR
27.4% Ocala, FL
27.6% St. George, UT

Source: American Community Survey, Dorn, Author's Calculations

Employment Rates of Largest Commuter Zones, 2023

	all ages		*age 25 to 54*	
	full-time & full-year	employed	full-time & full-year	employed
Los Angeles, CA	35.3	59.5	60.8	89.5
New York, NY	36.1	60.1	62.9	90.2
Chicago, IL	38.2	62.5	66.6	92.0
Houston, TX	37.6	59.5	64.9	90.1
Newark, NJ	38.6	62.2	66.6	91.5
Philadelphia, PA	37.1	62.3	65.8	91.8
Washington, DC	42.8	64.5	73.1	94.0
Atlanta, GA	39.9	62.6	67.7	91.8
Boston, MA	38.7	65.5	67.4	93.3
Dallas, TX	40.6	62.0	68.4	91.2
Detroit, MI	34.8	60.1	62.9	90.8
San Francisco, CA	38.0	63.0	65.3	91.8
Phoenix, AZ	37.3	60.3	66.1	90.8
Seattle, WA	38.5	64.2	64.8	92.7
Miami, FL	39.7	60.7	66.5	90.1

Source: American Community Survey, Dorn, Author's Calculations

Unemployment

The headline unemployment rate, also known as the U3 unemployment rate, measures people who do not have a job but are looking for one or are on temporary layoff, as a share of the labor force (the employed and unemployed). BLS reports 7.2 million unemployed people in July 2025, and an unemployment rate of 4.2 percent (see —), in line with the June 2025 rate of 4.1 percent.

BLS also report a broader measure of unemployment, known as U6 or labor under-utilization. Labor under-utilization includes U3 unemployment, as well as people who have given up looking for work and people who work part-time but want to work full-time. In July 2025, the labor under-utilization rate is 7.9 percent (see —).

Unemployment Measures

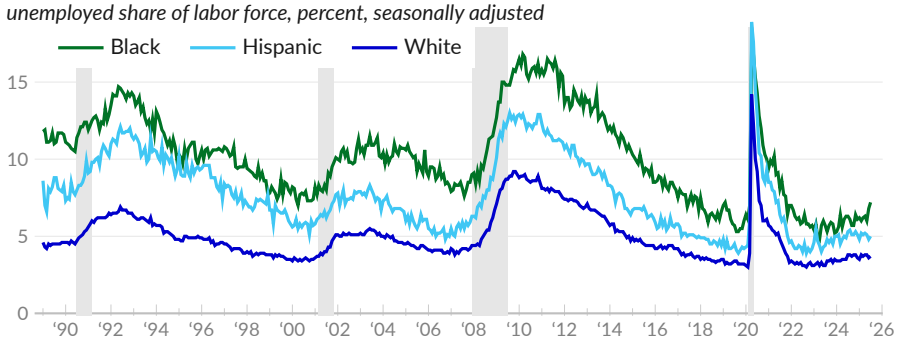
percent of labor force, seasonally adjusted

Source: BLS

Periods of unemployment are more common for disadvantaged groups. The black or African American unemployment rate is typically double the white unemployment rate. Employment opportunities for disadvantaged groups are more-dependent on current labor market conditions. A very tight labor market reduces racial discrimination in hiring, while disadvantaged groups are more likely to lose jobs in a downturn. The black unemployment rate is currently 7.2 percent, 1.1 percentage points above the February 2020 rate (see —).

Unemployment Rate

unemployed share of labor force, percent, seasonally adjusted



Source: Bureau of Labor Statistics

Unemployment Measures

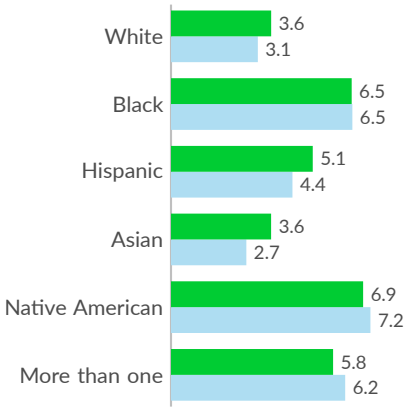
seasonally adjusted, percent

	Jul '25	Jun '25	May '25	Apr '25	Jul '24	Jul '23	GFC peak	Date of peak
Under-utilization Rate (U6)	7.9	7.7	7.8	7.8	7.8	6.7	17.2	Dec '09
Unemployment Rate (U3)	4.2	4.1	4.2	4.2	4.2	3.5	10.0	Oct '09
by race/ethnicity:								
White	3.7	3.6	3.8	3.8	3.8	3.1	9.2	Oct '09
Black	7.2	6.8	6.0	6.3	6.3	5.7	16.8	Mar '10
Hispanic	5.0	4.8	5.1	5.2	5.3	4.4	13.0	Aug '09
Asian	3.9	3.5	3.6	3.0	3.7	2.3	8.4	Dec '09

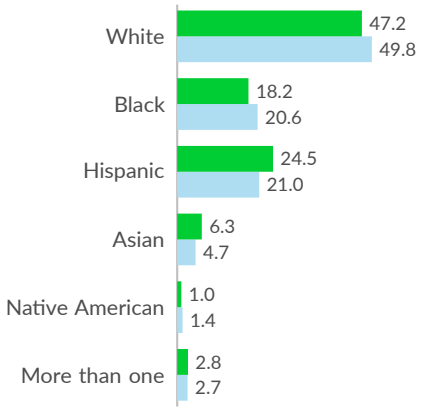
Source: Bureau of Labor Statistics

Current Population Survey microdata are used to calculate unemployment by race and ethnicity over the latest six months, on average, and for the same six months before the COVID-19 pandemic. The groups used to produce these estimates separate those with a non-Hispanic ethnicity by race: white alone, black alone, Asian or Hawaiian/Pacific Islander alone, Native American/American Indian or Alaskan Native alone, or more than one race, from those with a Hispanic ethnicity and any race.

Unemployment Rate
unemployed share of labor force
age 18 to 64
not seasonally adjusted



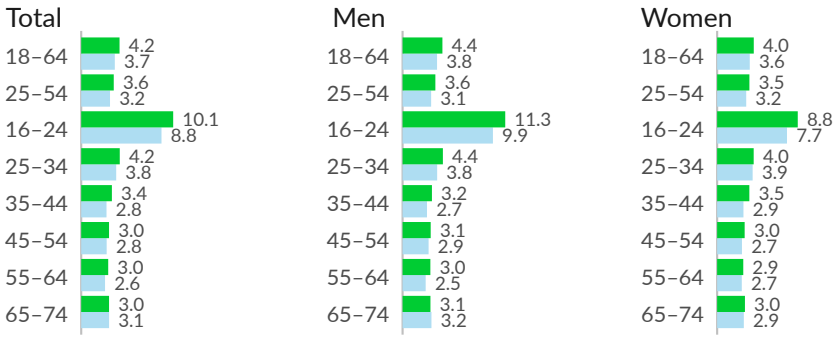
Share of Unemployed
group share of unemployed
age 18 to 64
not seasonally adjusted



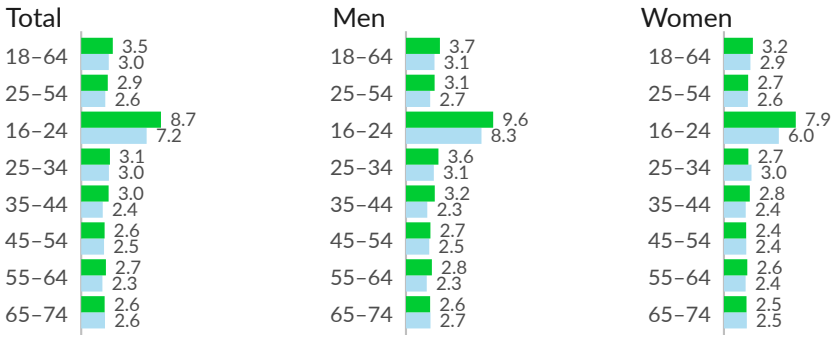
Source: Author's calculations from CPS

Unemployment Rate

Total, any race or ethnicity

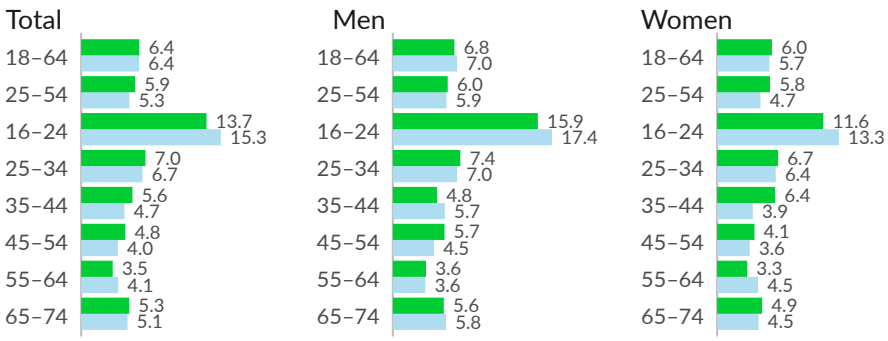


White, non-Hispanic, alone

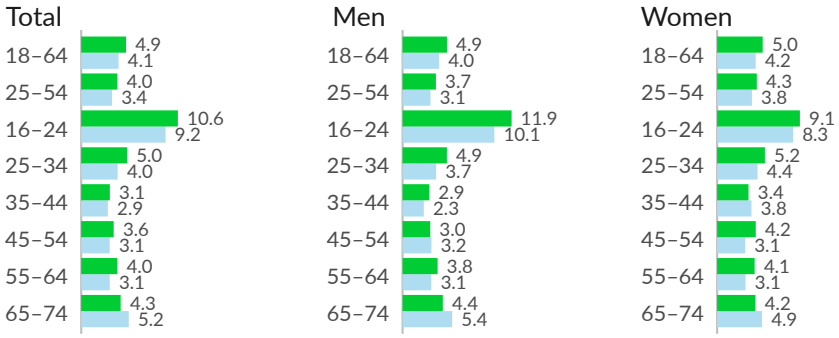


Unemployment Rate, Continued

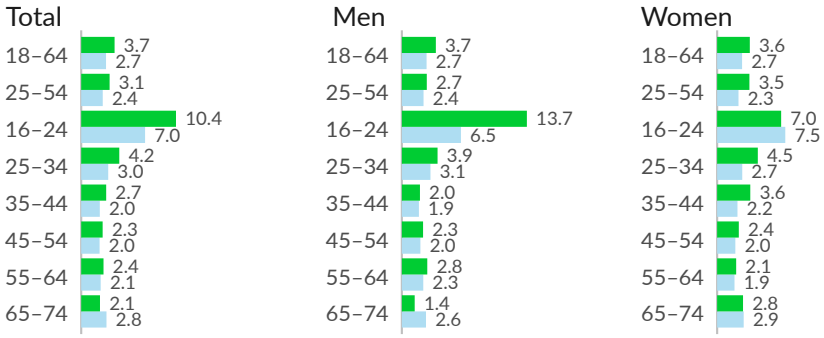
Black, non-Hispanic, alone



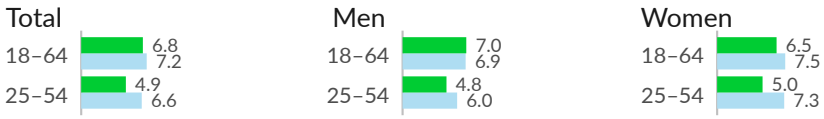
Hispanic, any race



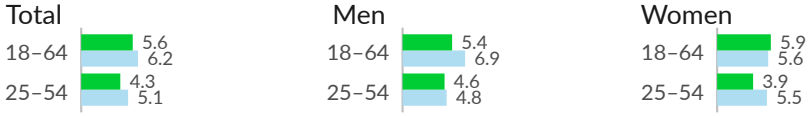
Asian or Hawaiian/Pacific Islander, non-Hispanic, alone



Native American/American Indian or Alaskan Native, non-Hispanic, alone



More than one race, non-Hispanic



Source: Author's Calculations from CPS

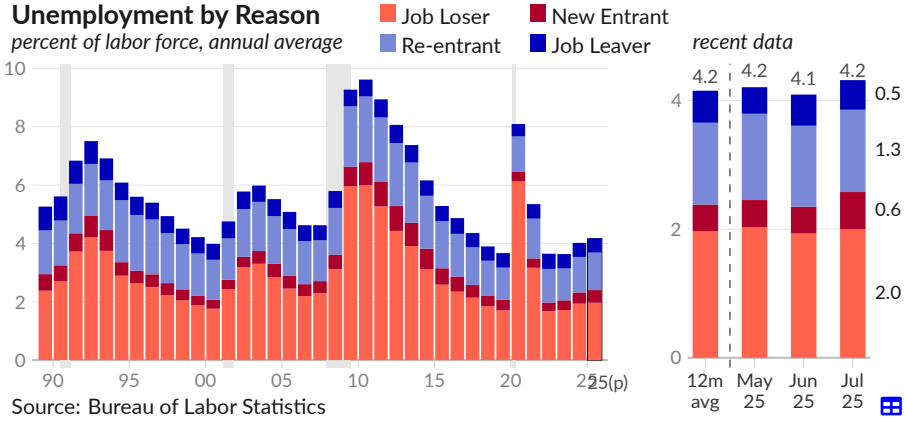
Reasons for Unemployment

There are several **reasons for unemployment**. In July 2025, 3.4 million people, or 2.0 percent of the labor force, were unemployed from losing their job (see ■). An additional 0.5 percent voluntarily left a job (see ■). Re-entrants, people who left the labor force but are looking for a new job, comprised 1.3 percent (see ■). Lastly, 0.6 percent of the labor force were new entrants to the labor market, looking for their first job (see ■).

The mixture of reasons for unemployment may reflect the existing economic conditions. In a downturn, workers who lose jobs are a larger share of the unemployed. A downturn also makes it harder for young people to find their first job, increasing their share of the total. In contrast, an economic boom reduces job losses and improves job-finding.

Other reasons for unemployment claim a larger share of the total during a boom. An economic boom can entice people to re-enter the job market, and encourage workers to quit and look for a new job. The overall prevalence of these categories, however, is also *reduced* during a boom, by an improved job-finding rate.

Unemployment by Reason
percent of labor force, annual average



Source: Bureau of Labor Statistics

Many job losses are temporary, particularly during the COVID-19 recession. Other job separations are permanent. In July 2025, temporary layoffs were 0.6 percent of the labor force. Permanent job losses were 1.1 percent of labor force.

Unemployment by Reason
share of labor force, percent

	Jul 2025	Jun 2025	May 2025	12m Avg.	Apr 2020	2020	2019	2009 –'11
Unemployed, Any Reason	4.2	4.1	4.2	4.2	14.8	8.1	3.7	9.3
■ Job Loser	2.0	1.9	2.0	2.0	13.2	6.1	1.7	5.7
Temporary Layoff	0.6	0.5	0.5	0.5	11.6	4.0	0.5	0.9
Permanent Separation	1.1	1.1	1.1	1.1	1.3	1.7	0.8	3.9
■ Re-entrant	1.3	1.3	1.3	1.3	0.9	1.2	1.1	2.2
■ New entrant	0.6	0.4	0.4	0.4	0.2	0.3	0.4	0.8
■ Job Leaver	0.5	0.5	0.4	0.5	0.4	0.4	0.5	0.6
See also:								
Employed, Not at Work*	5.7	4.4	2.8	3.4	7.4	4.2	3.2	3.3

Source: Bureau of Labor Statistics, Author
* During the COVID-19 shutdowns some unemployed were incorrectly counted as employed but not at work.

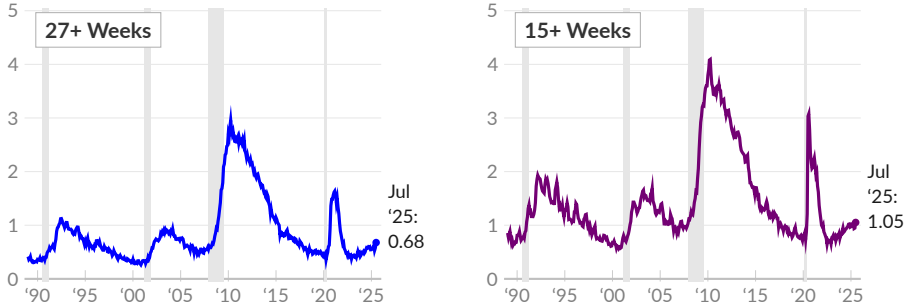
Duration of Unemployment

US unemployment benefits are available for a relatively short duration, compared with other advanced countries. Therefore, the long-term unemployed risk running out of unemployment benefits, causing a sharp reduction in income. Additionally, long periods of unemployment can make re-entering the workforce more challenging.

As of July 2025, BLS reports that 0.68 percent of the age 16 and older population have been unemployed for 27 weeks or longer, compared to 0.58 percent in July 2024 (see —). This measure of **long-term unemployment** peaked at 2.96 percent of the population in April 2010, but had fallen to 0.42 percent in December 2019.

In July 2025, 1.05 percent of those age 16 and older have been unemployed for at least 15 weeks (see —), following 1.05 percent in June and 0.95 percent in May. One-year prior, in July 2024, 0.93 percent are unemployed for 15 weeks or more.

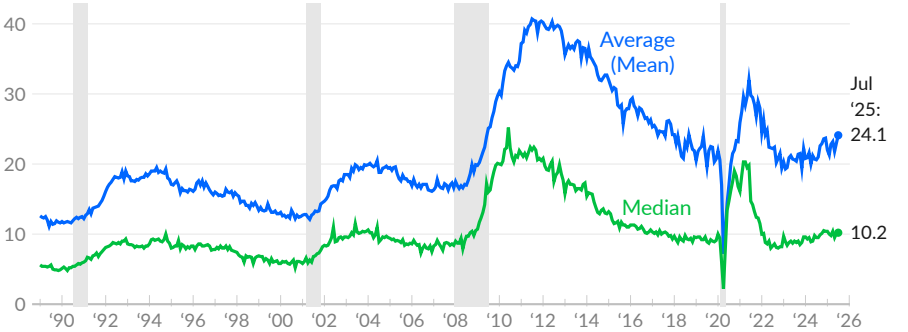
Long-Term Unemployed
share of population, percent



Source: Bureau of Labor Statistics

Among those who are unemployed in July 2025, the average (mean) **duration of unemployment** is 24.1 weeks (see —), and the typical (median) duration of unemployment is 10.2 weeks (see —). Over the year prior to COVID-19, ending February 2020, the average duration of unemployment was 21.7 weeks and the typical duration was 9.2 weeks.

Duration of Unemployment
in weeks



Source: Bureau of Labor Statistics

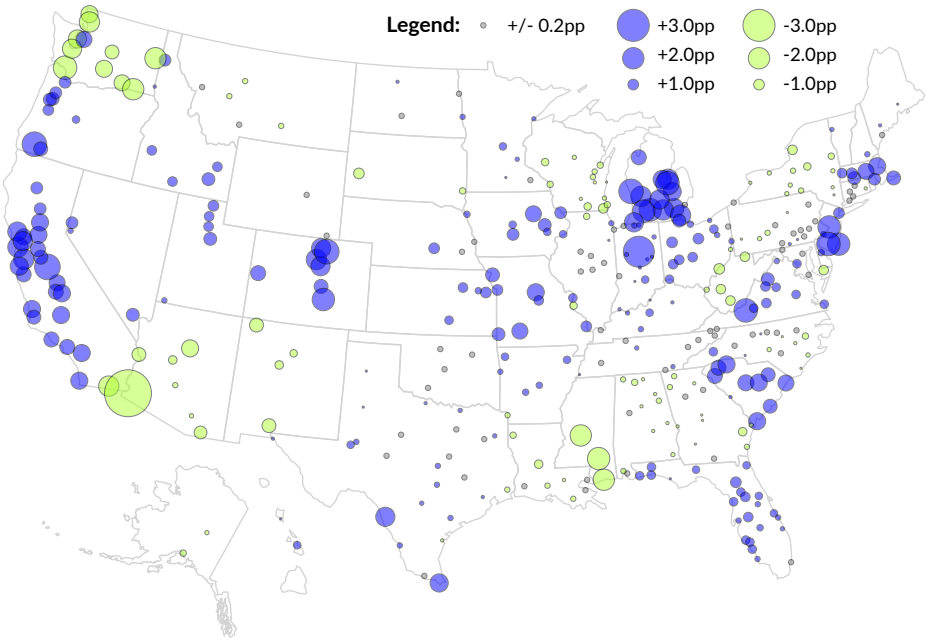
Unemployment by Metro Area

The Bureau of Labor Statistics produce local area estimates of unemployment, including the **unemployment rate for metro areas**. The following map shows changes since 2019 in metro area unemployment rates. An increase in the unemployment rate is shown by a blue circle and a decrease is shown by a light green circle; circle size is the magnitude of the change.

From June 2019 to June 2025, unemployment rates fell by 0.2 percentage point or more in 105 metro areas, and increased by 0.2 percentage point or more in 212 metro areas. Recent local unemployment rates were within 0.3 percentage points of their pre-pandemic level in 69 metro areas.

Change in Unemployment Rate by Metro Area

from June 2019 to June 2025, percentage points



Largest MSAs:

	Core City	Jun 25	Jun 19	Labor Force	Pct Ch*
+1.0	New York, NY	4.5	3.5	10,270,100	3.5
+1.4	Los Angeles, CA	5.6	4.2	6,681,200	-0.9
+0.5	Chicago, IL	4.7	4.2	5,051,100	4.3
unch.	Dallas, TX	3.8	3.6	4,542,100	17.9
+0.3	Houston, TX	4.3	4.0	3,898,200	13.4
+0.8	Washington, DC	4.0	3.2	3,564,900	2.2
unch.	Atlanta, GA	3.6	3.8	3,313,100	7.0
unch.	Miami, FL	3.2	3.3	3,307,200	6.2
+0.5	Philadelphia, PA	4.5	4.0	3,293,500	3.5
+1.6	Boston, MA	4.5	2.9	2,886,300	4.0
-0.5	Phoenix, AZ	4.0	4.5	2,766,800	14.7

Source: Bureau of Labor Statistics; Full Table:
*Pct Ch is percent change in labor force from June 2019 to June 2025

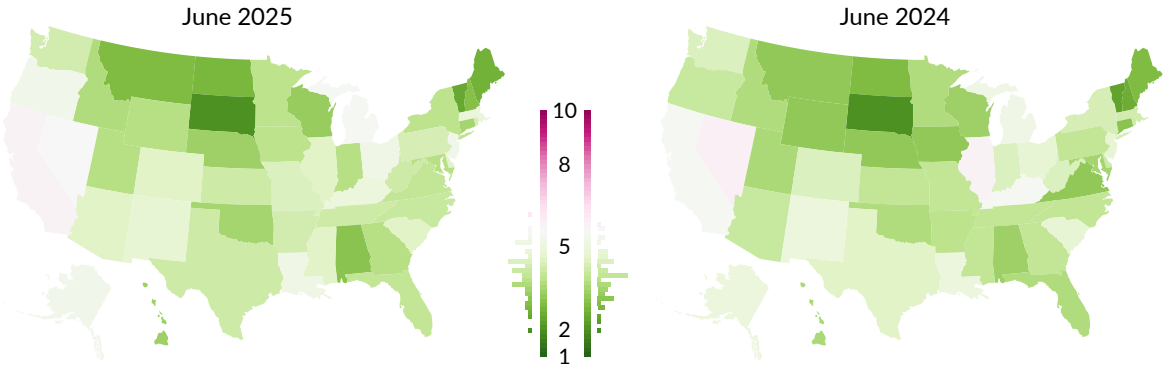
Unemployment by State

The Bureau of Labor Statistics report the **state unemployment rate**–unemployed people as a share of the state labor force–each month, around three weeks after reporting the national unemployment rate. In June 2025, all 50 states and DC had unemployment rates below eight percent, and the unemployment rate was above five percent in nine states. Three months prior, in March 2025, no states unemployment rate was above eight percent, and eight states were above five percent. In the peak of the COVID-19 pandemic shutdowns, in April 2020, the unemployment rate was above eight percent in 48 states, and above five percent in every state.

The states with the highest unemployment rates in June 2025 are the District of Columbia (6.2%), California (5.7%), and Nevada (5.5%). The states with the lowest unemployment rates are South Dakota (1.9%), Vermont (2.4%), and Maine (2.6%).

Unemployment Rate by State

unemployed share of labor force, percent, not seasonally adjusted



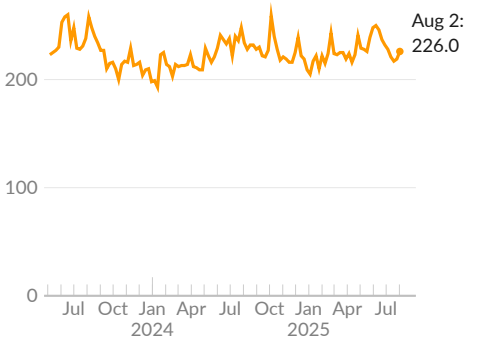
Source: Bureau of Labor Statistics

Jobless Claims

Each week, the Department of Labor present the unemployment insurance (UI) claims reported by state unemployment offices. An initial claim for UI is filed by an unemployed person, after a separation from an employer, to determine eligibility for benefits.

New Jobless Claims

initial claims per week, thousands, seasonally adjusted



Source: Department of Labor

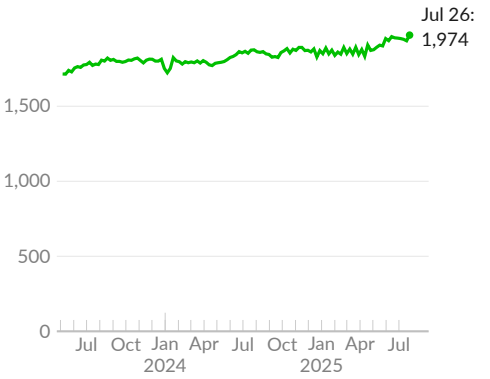
In the week ending August 2, 2025, seasonally-adjusted initial claims for UI total 226,000 (see —), virtually no change from the previous week. Initial claims average 220,800 per week over the past four weeks, 226,400 per week over the past year, and 217,700 per week during 2019.

Initial claims are considered a leading indicator of labor market conditions. An increase in jobless claims suggests a deterioration in economic conditions.

The Labor Department additionally report continued claims for UI, also referred to as insured unemployment. Insured unemployment is the number of people receiving UI benefits during a given week.

Insured Unemployed

continuing claims, thousands, seasonally adjusted



Source: Department of Labor

During the week ending July 26, 2025, seasonally-adjusted insured unemployment totals 1,974,000 (see —), an increase of 38,000 from the previous week. These continued claims average 1,951,800 over the past four weeks, 1,880,900 over the past year, and 1,682,300 during 2019.

UI only covers some workers. In July 2025, the Bureau of Labor Statistics classify 7.2 million people as unemployed, and identify another 6.5 million who want a job but do not count as unemployed.

Jobless Claims

thousands per week

	Aug 2, 2025	Jul 26, 2025	Jul 19, 2025	*period averages* Jul 2025	Jun 2025	Aug 2024	Aug 2023
Initial Claims (SA)	226	219	217	221	241	231	245
Initial Claims (NSA)	195	194	216	228	235	196	209
Continued Claims (SA)	–	1,974	1,936	1,952	1,953	1,856	1,809
Continued Claims (NSA)	–	2,005	2,006	2,007	1,868	1,818	1,789

Source: Department of Labor

Labor Force Participation

Individuals who are employed, actively seeking employment, or on temporary layoff constitute participants in the labor force. The share of the US population that participates in the labor force at a given point in time, or the **labor force participation rate**, is affected by many factors, including demographic shifts and economic conditions.

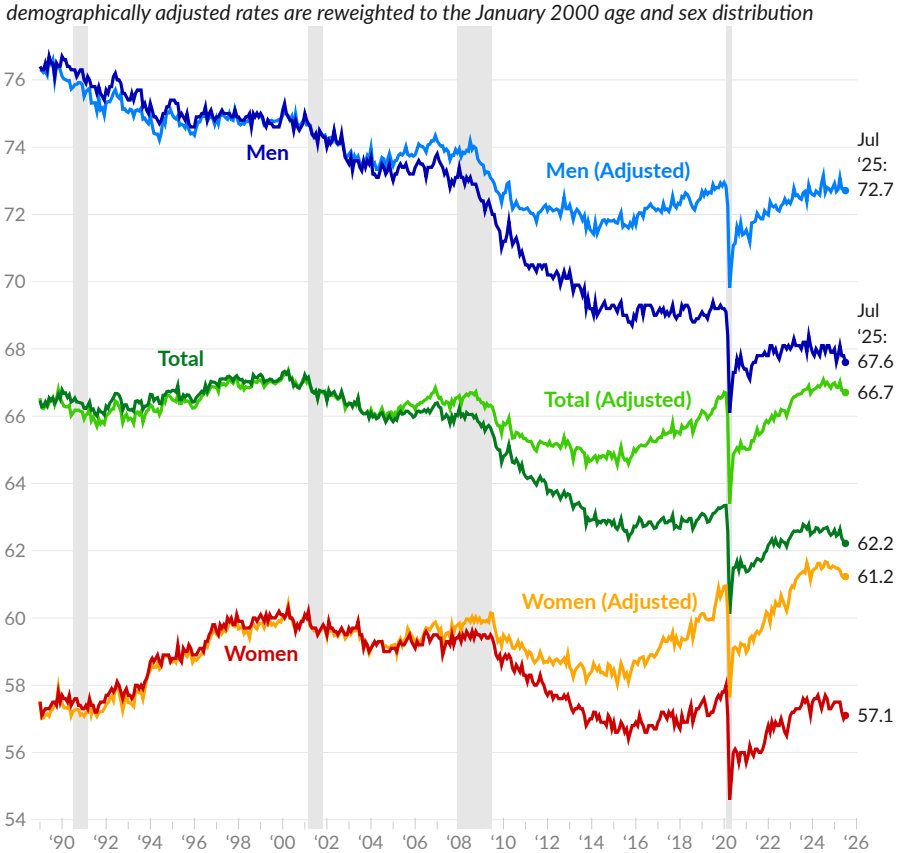
Over the past two decades, the age composition of the population has lowered labor force participation rates, all else equal. Reweighting the population to match the age composition in 2000 suggests the aging of the US population since 2000 has reduced total labor force participation by 4.4 percentage points.

As of July 2025, 62.2 percent of those aged 16 and over are part of the labor force (see —), following 62.3 percent in June and 62.4 percent in May. Pre-pandemic, in February 2020, the rate stood at 63.3 percent.

In July 2025, 67.6 percent of men age 16 and older are in the labor force (see —), compared to 57.1 percent of women (see —). Since February 2020, labor force participation has decreased 1.6 percentage points among men, and decreased 0.7 percentage point among women.

Labor Force Participation Rate

labor force as share of age 16 and older population, percent, seasonally adjusted
demographically adjusted rates are reweighted to the January 2000 age and sex distribution



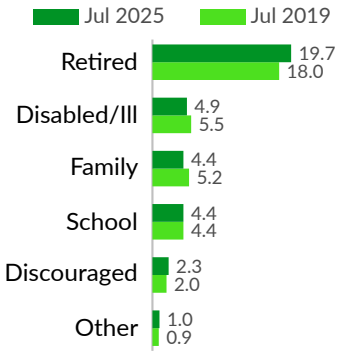
Sources: BLS (Latest: July 2025); CPS (Latest: July 2025)

Reasons for Labor Force Non-Participation

The Current Population Survey (CPS) asks those who are not employed or looking for work about their major activities and **reasons for not participating in the labor market**. Answers vary by age in intuitive ways, and are influenced by labor market conditions.

Nonparticipants

share of age 16+ population, percent



Source: Author's CPS calculations

Nonparticipants age 16 and older total 100.8 million in July 2025, and make up 36.8 percent of the age 16 or older population, compared to 36.0 percent in July 2019. About half of nonparticipants, and 19.7 percent of the population, are retirees in July 2025 (see ■), compared to 18.0 percent in July 2019 (see ■).

Disability or illness keeps an additional 4.9 percent out of the labor force in July 2025, compared to 5.5 percent in July 2019. Students who are out of the labor force make up 4.4 percent in July 2025 and 4.4 percent in July 2019, while unpaid caregivers are 4.4 percent in July 2025 and 5.2 percent in July 2019.

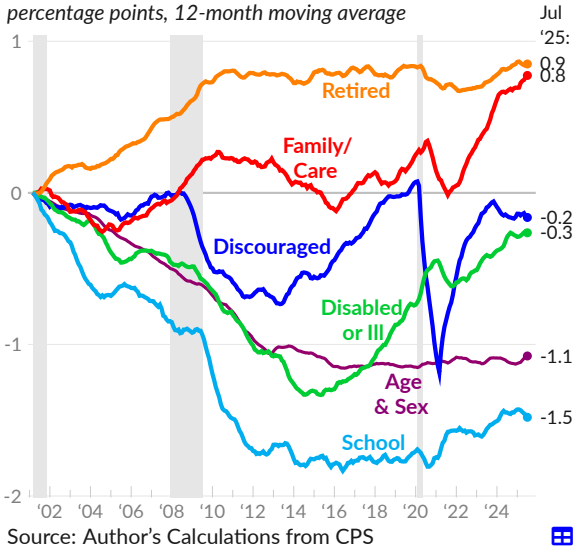
While the recession of 2001 appears mild in measures of expenditure, it was followed by a substantial reduction in the share of the population receiving labor income. The economy was losing jobs at an alarming rate long after the 2001 recession had officially ended, though labor market weakness was partially masked by a major housing bubble. Seven years after the recession of 2001, the housing bubble collapsed, causing the great recession, which pushed many more people out of the labor force.

From March 2001 to July 2025, a cumulative total of 1.6 percent of the age 18 to 64 population left the labor force. Demographic shifts partially account for this change. Notably, the sizable post-World War II birth cohort has been entering retirement age during this timeframe. Changes in the age and sex distribution within the age group explain 1.1 percentage points of the cumulative decrease in participation since March 2001 (see —).

Additionally, young people are staying in school longer, on average, reducing the age 18 to 64 labor force by 1.5 percent (see —). Disability and illness reduce the labor force by another 0.3 percent (see —). Less retirement among those age 18 to 64 increases participation by 0.9 percent, over the period (see —).

Contribution to Labor Force Participation

Age 18 to 64, cumulative contribution since March 2001, percentage points, 12-month moving average



Source: Author's Calculations from CPS

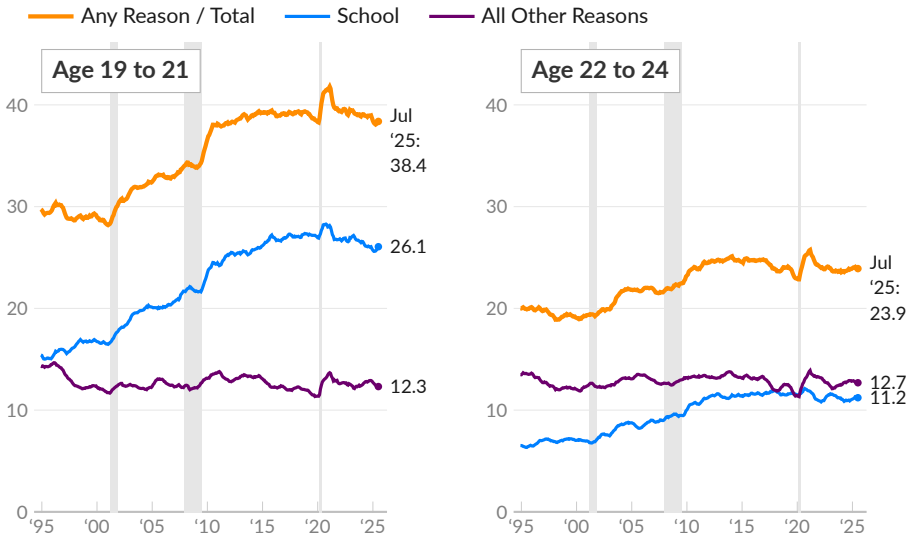
Series in the chart are adjusted so that the distribution of the age 18 to 64 population by age and sex is constant and equal to its March 2001 value. The total effect of this adjustment on labor force participation is included separately in the chart, as **Age/Sex**.

Young people's participation in the labor market, by working or looking for work, is affected by trends in educational attainment and by economic conditions. From 1994 to 2000, labor force participation among young people increased slightly. Following the recession of 2001, and carrying through the great recession, participation rates dropped sharply. From 2000 to 2014, labor force non-participation increased from 28.2 percent to 39.3 percent for 19 to 21 year olds and from 19.3 percent to 24.6 percent for 22 to 24 year olds (see —). The overall increase is nearly entirely accounted for by increased college enrollment (see —).

By February 2020, the labor market had improved and the annual non-participation rate was 38.3 percent for 19 to 21 year olds and 22.9 percent for 22 to 24 year olds. In the latest data, covering the 12 months ending July 2025, the rate of non-participation is 38.4 percent for 19 to 21 year olds and 23.9 percent for 22 to 24 year olds.

Reason for Labor Force Non-Participation, by Age

share of age group population, percent, 12-month moving average



Source: Author's Calculations from CPS

Non-Participation Due to School

share of age group population, percent, 12-month moving average

	Jul 2025	Jun 2025	May 2025	Jul 2024	2019	2015	2010	1994
Total, 19 to 21	26.1	25.9	25.7	26.1	27.1	27.0	24.5	15.4
Men	25.6	25.4	25.2	26.2	26.6	27.0	24.2	15.8
Women	26.5	26.5	26.3	26.0	27.5	27.0	24.7	15.1
Total, 22 to 24	11.2	11.2	11.3	10.9	11.5	11.7	10.6	6.5
Men	10.9	11.1	11.2	11.4	11.7	12.0	10.8	6.7
Women	11.5	11.4	11.3	10.5	11.4	11.3	10.4	6.4
Total, 25 to 27	4.7	4.6	4.6	4.7	4.6	5.2	4.6	2.9
Men	4.4	4.4	4.3	4.3	4.7	5.0	4.4	2.5
Women	4.9	4.8	4.8	5.2	4.4	5.4	4.7	3.2

Source: Author's Calculations from CPS

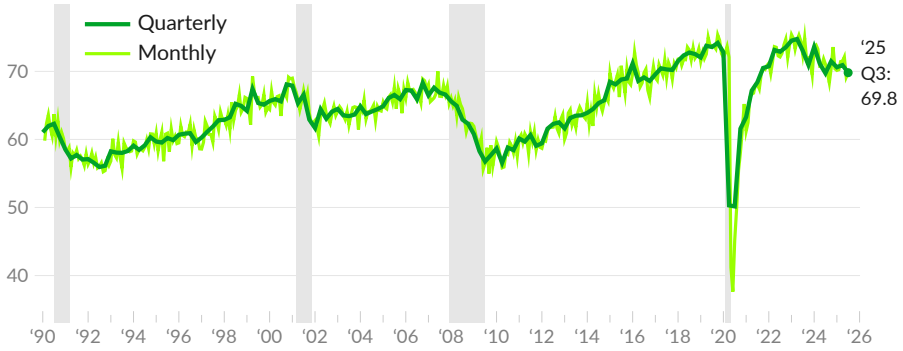
Labor Force Flows

The current population survey interviews households up to eight times over 16 months, allowing insight into the labor force status of the same individual over time, and in particular, into **flows between employment, unemployment, and other categories**. The Bureau of Labor Statistics publish many monthly indicators based on labor force flows, and others can be calculated directly from the public use data.

Among newly-employed workers, some were considered unemployed the month prior, while others were not in the labor force. In July 2025, 6.2 million people were newly employed (on a gross basis). Of these, 69.8 percent were not looking for work in the prior month (see —). Over the past three months, an average of 69.8 percent of the newly employed were not looking for work the month prior (see —).

When unemployment is low, the newly employed are more likely to come from outside of the labor force. Six years ago, in July 2019, 73.7 percent of the newly employed had not looked for work the previous month.

Newly Employed, Not Previously Looking For Work
share of newly employed that were not looking for work in the prior month



Source: Bureau of Labor Statistics

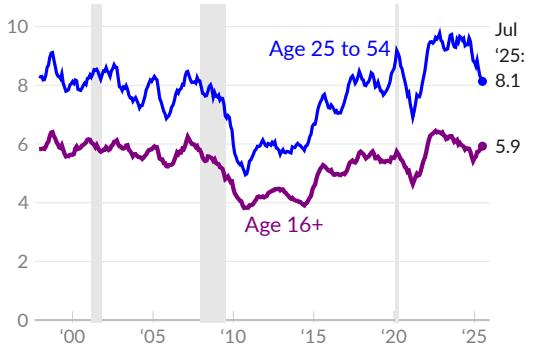
The great recession worsened job-finding prospects for those not in the labor force (NILF) due to disability or illness. As a result, the flow into employment for people age 25 to 54 who are out of the labor force due to a disability or illness slowed considerably. These prospects first recovered to pre-recession levels around 2017.

Over the year ending July 2025, 8.1 percent of 25 to 54 year olds who were out of the labor force due to disability or illness one year prior became employed (see —).

Pre-pandemic, in 2019, 8.0 percent of those in the category found a job. The one-year rate of job-finding has increased substantially from its 2010–2013 average of 5.8 percent.

For those age 16 and older, the rate is 5.9 percent for the year ending July 2025 (see —), and 5.5 percent in 2019.

Flow, Disability to Work
one-year moving average, percent



Employed share of individuals who were out of the labor force due to disability or illness one year prior
Source: Author's Calculations from CPS

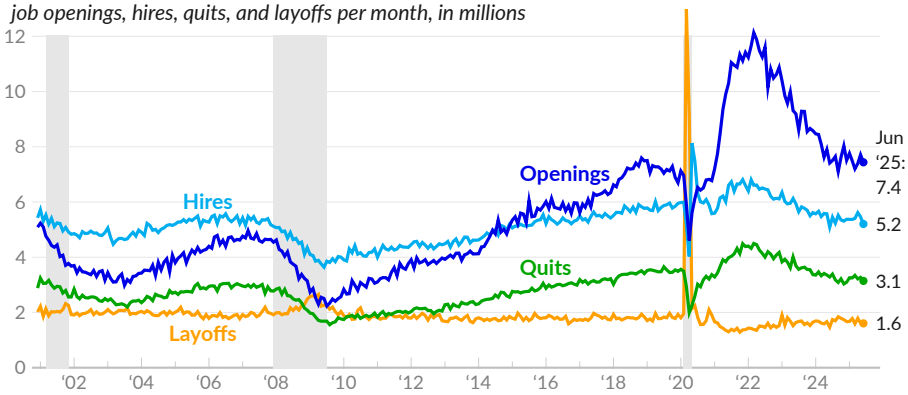
Job Openings and Labor Turnover Survey

Healthy labor market **turnover** indicates that workers can readily find new employment if they are dissatisfied with their current jobs. Moreover, the availability of job opportunities outside a company can enhance the negotiating power of its employees. The Bureau of Labor Statistics releases monthly data on job openings, hires, and separations across various industry groups. *Separations* include layoffs, voluntarily leaving a job (*quits*), and other separations such as retirements, transfers to other locations, or separations due to death or disability.

In June 2025, there were 7.4 million total nonfarm job openings (see —) and 5.2 million hires completed (see —). In the same month, there were 5.1 million nonfarm separations, including 1.6 million layoffs (see —), 3.1 million quits (see —), and 314,000 other separations. In 2019, there were an average of 5.8 million hires completed and 5.7 million total separations, per month.

Job Turnover

job openings, hires, quits, and layoffs per month, in millions

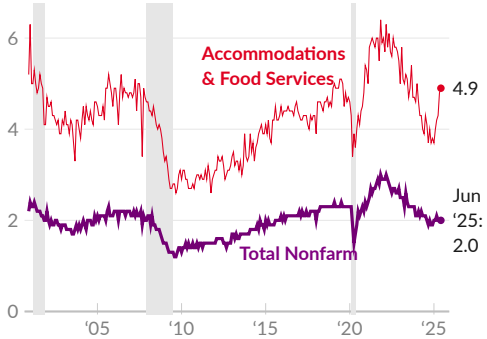


Source: Bureau of Labor Statistics

The **quits rate** measures the share of workers who voluntarily separate from a job in a given month. The rate typically increases when workers are confident enough to leave one job for another one, and a high quits rate, particularly in low-paying industries, can be a sign of a tight labor market.

Quits Rate

voluntary separations as share of workforce



Source: Bureau of Labor Statistics

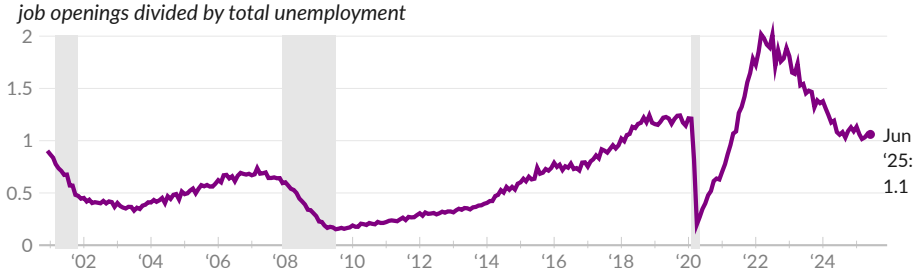
The quits rate is cyclical within the accommodations and food services industries (which includes restaurants), and tends to rise when a tight labor market pulls people out of restaurant jobs and into higher paying jobs in other industries.

In June 2025, the total quits rate in all industries was 2.0 percent (see —). The accommodations and food services quits rate was 4.9 percent (see —); the series high for the industry group was 6.4 percent in November 2021.

A high ratio of job openings to unemployed indicates a tight labor market, for example from low levels of unemployment, or if completing a new hire is taking more time. In June 2025, there were 7.0 million unemployed people and 7.4 million job openings, therefore the ratio of job openings per unemployed person was 1.1 (see —). In May 2025 the ratio was 1.1, and during 2019 the average ratio was 1.2.

Job Openings Per Unemployed Person

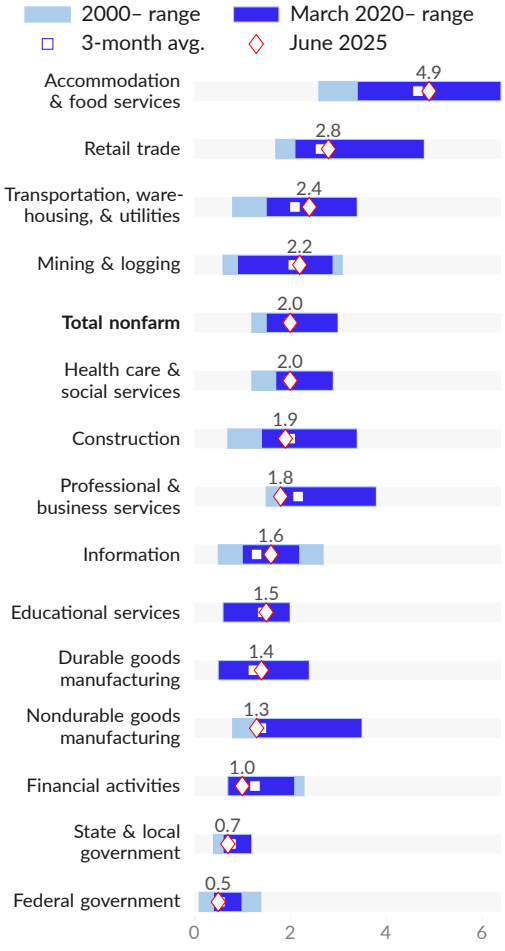
job openings divided by total unemployment



Source: Bureau of Labor Statistics

Monthly Quits Rate by Industry

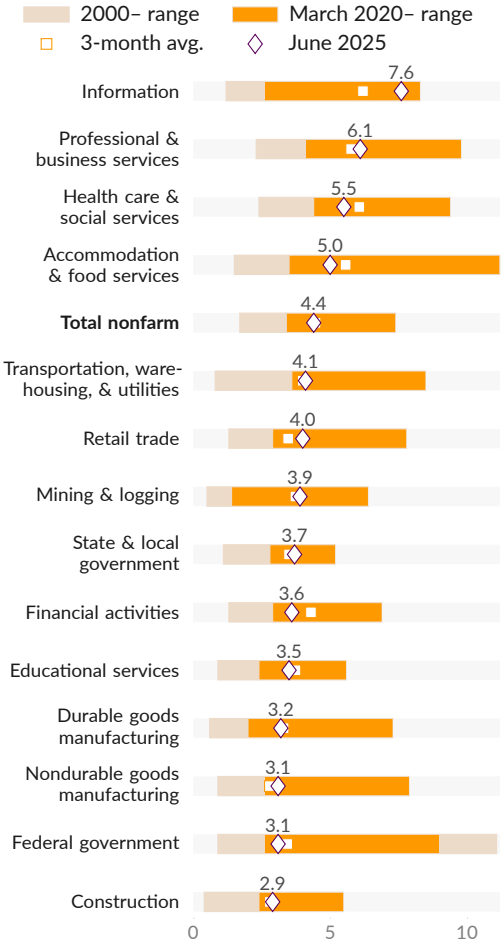
share of employment, percent



Source: Bureau of Labor Statistics

Monthly Job Openings Rate by Industry

share of employment, percent



Source: Bureau of Labor Statistics

Job Switching

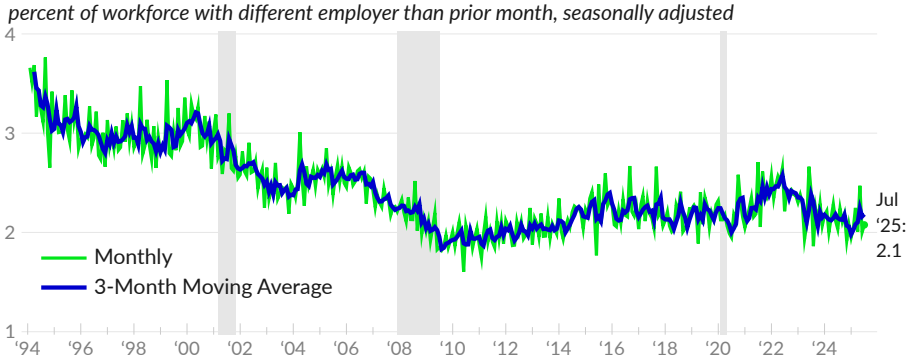
Job switching is important for getting people into the jobs where they are most productive. Individuals boost labor productivity by switching to a more productive industry or moving from a less-productive firm to a more-productive firm.

The current population survey asks whether individuals have the same employer as they did the previous month. The rate at which people say they have **changed employers** had fallen to below two percent after the great recession, from an average of around three percent during the late 1990s.

More recent data show a slight increase in job switching rates. In July 2025, 2.1 percent of the workforce had a different employer than the previous month, after seasonal adjustment (see —). Smoothed data show an average of 2.2 percent of the workforce with a new employer during the three months ending July 2025 (see —). Prior to COVID-19, in 2019 Q4, a monthly average of 2.2 percent of the workforce switched jobs.

New Employer

percent of workforce with different employer than prior month, seasonally adjusted



Source: Author's Calculations from CPS

Expectations

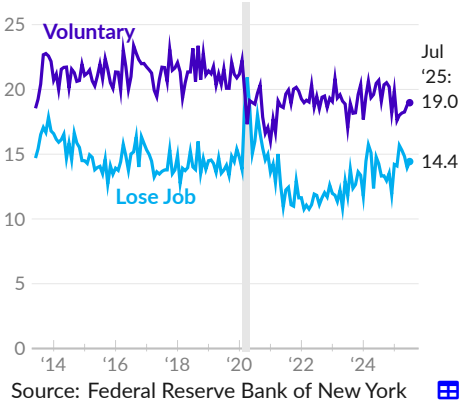
The monthly Survey of Consumer Expectations from the Federal Reserve Bank of New York asks people how likely they are to either lose or leave a job. **Expected separations** are specifically the average perceived probability, or likelihood, of separating from a job in the next 12 months.

In July 2025, the perceived likelihood of leaving one's job voluntarily in the next 12 months averages 19.0 percent, compared to 21.0 percent in 2019 (see —). In the latest month, the perceived probability losing one's job is 14.4 percent, compared to 14.3 percent in 2019 (see —).

During the pandemic, in April 2020, job loss expectations exceeded job leaving expectations. In July 2025, job leaving expectations exceed job loss expectations by 4.5 percentage points, compared to 6.8 percentage points in 2019.

Expected Separations

mean probability of separation, percent



Source: Federal Reserve Bank of New York

Hours Worked

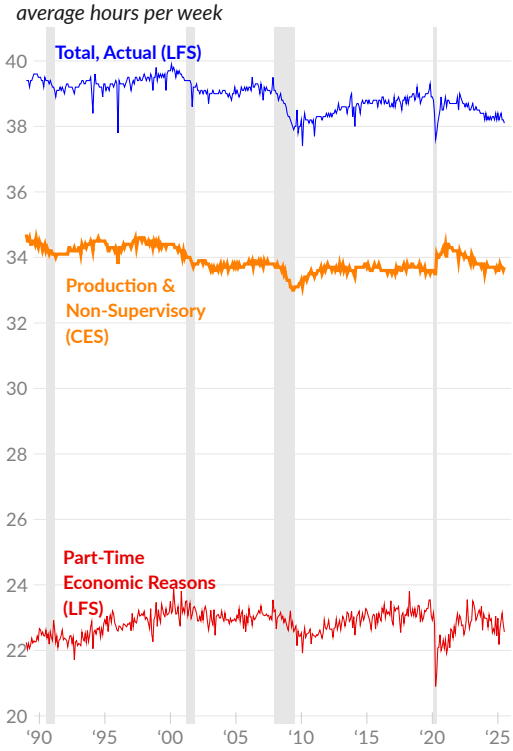
The Bureau of Labor Statistics (BLS) report **average hours worked per week** in both Current Employment Statistics (CES) and Labor Force Statistics (LFS), the two surveys used to produce the monthly jobs report.

Actual hours worked by people at work in all industries during the survey reference week average 38.1 in July 2025 (see —), slightly below the 38.8 average actual hours worked in February 2020. Average actual hours for this group average 39.6 from 1998 through 2000, and fell to a great recession low of 37.4 in February 2010.

Those in service occupations work fewer hours on average, with 34.3 average weekly hours in July 2025, substantially below the 35.2 average in February 2020. Those part-time for economic reasons (see —) work an average of 22.6 hours per week in July 2025.

In July 2025, production and non-supervisory workers (see —), about four of every five employees, worked 33.7 hours per week on average, in line with the 33.6 average weekly hours in February 2020 and substantially below the 1998–2000 average of 34.4 hours.

Hours Worked
average hours per week



Source: BLS

Hours Worked, Various Measures
average hours per week, seasonally adjusted

	Jul 2025	Jun 2025	May 2025	Jul 2024	2019	2015	2010
Total Actual, CES	34.3	34.2	34.3	34.2	34.4	34.5	34.1
Production & Non-Supervisory, CES (—)	33.7	33.6	33.7	33.7	33.6	33.7	33.4
Total Actual, LFS (—)	38.1	38.2	38.2	38.2	39.0	38.8	38.1
Part-Time for Economic Reasons, LFS (—)	22.6	22.8	23.1	23.0	23.2	23.0	22.4
Services Occupations, LFS	34.3	34.4	34.4	34.7	35.2	34.7	34.2

Source: Bureau of Labor Statistics, Author

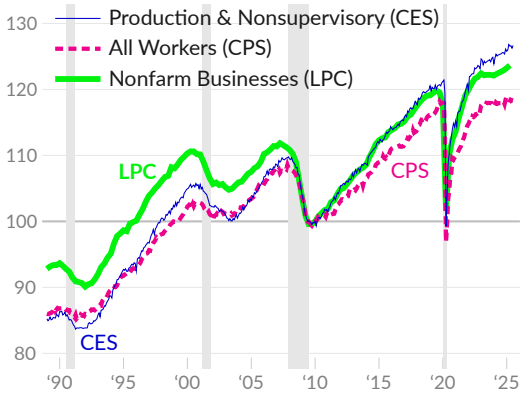
Aggregate Hours Worked

In addition to tracking the average hours that people work, economists are interested in **aggregate hours worked**, which combine the average workweek with the number of workers. The aggregate hours worked represent the total labor input of a sector. This subsection examines three measures of total hours worked per week.

First, the Bureau of Labor Statistics (BLS) publish a quarterly index of aggregate hours worked in nonfarm businesses (see —). The official productivity figures in the Productivity and Costs (LPC) report use this measure, which shows an annualized 0.8 percent increase in aggregate hours since 1989.

Next, The establishment survey (CES) can be used to calculate aggregate hours worked as average hours worked multiplied by the total number of workers. Aggregate hours for private production and nonsupervisory workers calculated using this method have increased 1.2 percent per year since 1989 (see —).

Aggregate Hours Worked Per Week
indexes, 2010=100



Source: Bureau of Labor Statistics, Author

Finally, the Current Population Survey (CPS) shows hours of all workers, including the public sector, increased 0.9 percent per year since 1989 (see - - -).

Trends emerge when comparing between the aggregate hours measures. Production and nonsupervisory workers have most overall growth. In contrast, public sector hours have not kept up since the great recession, driving a wedge between hours for all workers and hours for private workers. This trend continued after the COVID-19 recession.

Lastly, let's look at quarterly changes in aggregate hours worked (see ■). Total hours worked in nonfarm businesses increased at an annual rate of 1.3 percent in 2025 Q2, following increases of 1.2 percent in Q1 and 0.8 percent in 2024 Q4. From 2017 through 2019, total hours worked increased at an annual rate of 1.4 percent. Since 2019, hours worked have increased by 0.6 percent per year.

Aggregate Hours Worked Growth
nonfarm businesses, quarterly growth at seasonally adjusted annual rate, percent

Source: Bureau of Labor Statistics

Nonstandard Work Arrangements

Many workers do not have standard work arrangements, either by choice or as the result of not being able to find standard work arrangements. Many workers are employed part-time, part-year, or both. Some workers have more than one job. Additionally, a portion of the workforce is considered self-employed.

Part-Time Work

Around 27 million people work part-time, defined as fewer than 35 hours per week, and the reasons for doing so vary. The Bureau of Labor Statistics classify part-time workers who would prefer full-time work as involuntary or **part time for economic reasons**. This group is comprised of people who don't have enough hours because of slack business conditions or who are unable to find full-time work.

Voluntary part-time workers, or those **part-time for non-economic reasons**, do not necessarily want more hours of work. The category includes those who work fewer hours for health, childcare, personal or family reasons, those who are retired or have a limit on earnings, and those with jobs where full-time is less than 35 hours per week.

Part Time, by Reason
percent of labor force

Source: Bureau of Labor Statistics

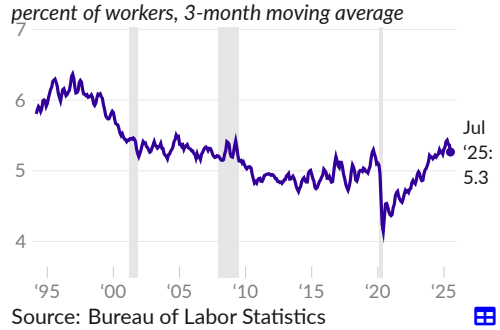
In July 2025, 4.7 million people worked part-time for economic reasons, equivalent to 2.7 percent of the labor force (see —). In 2019, an average of 2.7 percent of the labor force worked part-time for economic reasons. In 2010, following the great recession, the rate was 5.8 percent.

Voluntary part-time workers total 22.8 million in July 2025, or 13.4 percent of the labor force (see —). The category is 13.1 percent of the labor force in 2019, on average.

More Than One Job

Over a given period of time, some people work more than one job. The household survey identifying people with more than one job asks about employment during a specific reference week. Respondents who work more than one job during the reference week are considered multiple jobholders; those who work multiple jobs over a month or year, but work one job in the survey reference week, are not.

Multiple Jobholders
percent of workers, 3-month moving average



Source: Bureau of Labor Statistics

In July 2025, a seasonally-adjusted total of 8.3 million people **worked more than one job** during the survey reference week, equivalent to 5.1 percent of workers. Over the three months ending July 2025, an average of 5.3 percent of workers were multiple jobholders (see —). In 2019, an average of 5.1 percent of workers had more than one job during the survey reference week.

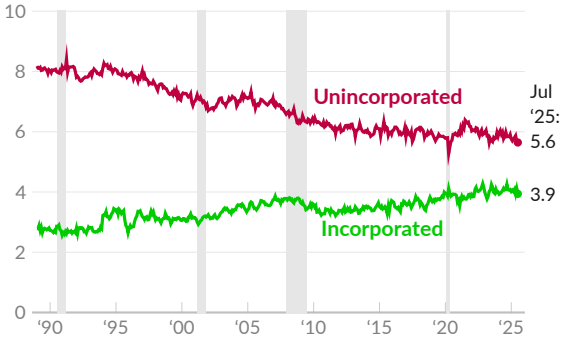
Self-Employment

Workers are considered **self-employed** if they work for profit or fees in their own business, profession, trade, or farm. Some self-employed have incorporated their business, and are similar to wage and salary workers in that they are paid by their business. Self-employment can offer more flexibility than traditional jobs, in some cases, but can also be less stable. The category includes people who work for profit but do not make any profits, for example.

As of July 2025, there are 9.6 million **unincorporated self-employed**, equivalent to 5.6 percent of the labor force (see —). Over the past year, the unincorporated self-employed made up an average of 5.8 percent of the labor force, compared to an average of 5.8 percent in 2019. From 1989 to 1994, the category made up an average of 8.0 percent of the labor force.

Self-Employed

percent of labor force



Source: Bureau of Labor Statistics, Author

The **incorporated self-employed** total 6.8 million in July 2025, equivalent to 3.9 percent of the labor force (see —). In 2019, the category made up 3.8 percent of the labor force.

Incorporated self-employed are not reported by BLS prior to 2000, but can be calculated from the CPS, and make up a average of 2.8 percent of the labor force from 1989 to 1994.

Wages

Economists view wages as an important economic indicator. Wages are the majority of personal income and the main expense of businesses. Wage growth is particularly closely monitored as it affects quality of life and can affect inflation rates.

The US measures wages in several ways. As two examples, average hourly earnings comes from the monthly establishment survey, and usual weekly earnings are derived from three combined months of household surveys. This subsection first provides an overview of wage measures and recent results, and then discusses individual measures.

Overview

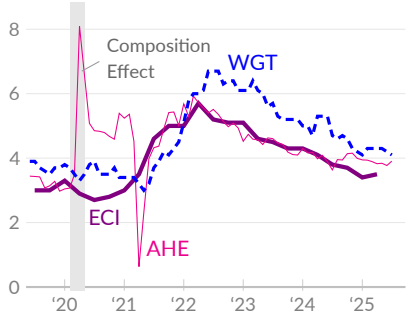
The various US wage measures each have advantages; average hourly earnings from the payroll survey are timely and cover detailed industry groups, while median earnings from the household survey are unaffected by outliers and cover demographic groups.

Likewise, wage measures come with caveats. For example, both average and median wages are subject to *composition effects* during and after a recession. Low-wage workers are more likely to lose a job during a recession, and therefore move out of (and later into) the sample of a wage survey. This drives up the central tendency of wages during a recession and drives down the central tendency after a recession.

Illustrating the composition effect, several measures show nominal one-year wage growth of three to four percent during 2018 and 2019. During the COVID-19 recession in 2020, average hourly earnings (AHE) growth (see —) jumps to eight percent, while wage growth is stable when tracked (WGT) at the level of individuals (see - -), or calculated from the industry- and occupation-adjusted employment cost index (ECI, see —).

In the latest data, key measures show one-year nominal wage growth that is falling but still above the pre-pandemic rate.

Wage Growth Measures
nominal one-year percent change



Source: BEA, BLS, Atlanta Fed

The following tables consolidate recent wage growth rates from different measures. In addition to measures discussed above, the table includes average wages and salaries per worker, calculated as national accounts aggregate wages and salaries divided by the number of employees on nonfarm payrolls.

Wage Growth Measures
nominal one-year percent change

	Jul '25	Jun '25	May '25	Apr '25	Mar '25	Feb '25	Jul '24	Jul '23
Average Hourly Earnings (AHE), Private	3.9	3.8	3.8	3.8	3.9	3.9	3.6	4.6
Production & Nonsupervisory	3.9	4.0	3.9	4.0	3.9	4.2	4.0	4.9
Goods-Producing Industries	4.0	4.4	4.5	4.5	4.5	4.4	5.1	5.8
Service-Providing Industries	3.9	3.9	3.8	3.9	3.8	4.1	3.7	4.7
Usual Weekly Earnings, Median	3.1	0.5	7.0	6.6	4.6	5.9	4.7	3.9
Usual Weekly Earnings, Median (3M Avg)	3.5	4.7	6.0	5.7	5.5	5.5	4.4	5.0
Wage Growth Tracker, Median (3M Avg)	4.1	4.2	4.3	4.3	4.3	4.3	4.7	5.7
Wages & Salaries, Average (NIPA)	–	3.8	3.6	3.4	2.7	2.9	3.8	3.1
Wages & Salaries, Average (3M Avg)	–	3.6	3.2	3.0	3.0	3.5	4.2	3.4

Source: BLS, BEA, Federal Reserve Bank of Atlanta, Author

The second wage growth summary table captures quarterly measures, such as the ECI discussed above, which is particularly high-quality. Lastly, unit labor costs measure the cost a business pays to produce one unit of output.

Wage Growth Measures
nominal one-year percent change

	'25 Q2	'25 Q1	'24 Q4	'24 Q3	'24 Q2	'23 Q2	'22 Q2	'21 Q2
Wages & Salaries (ECI)	3.6	3.5	3.8	3.9	4.2	4.7	5.2	3.2
Usual Weekly Earnings, Median	4.8	5.0	4.0	4.2	3.9	5.7	5.2	-1.2
Unit Labor Cost	2.6	2.0	2.3	1.7	2.3	2.8	5.4	1.2

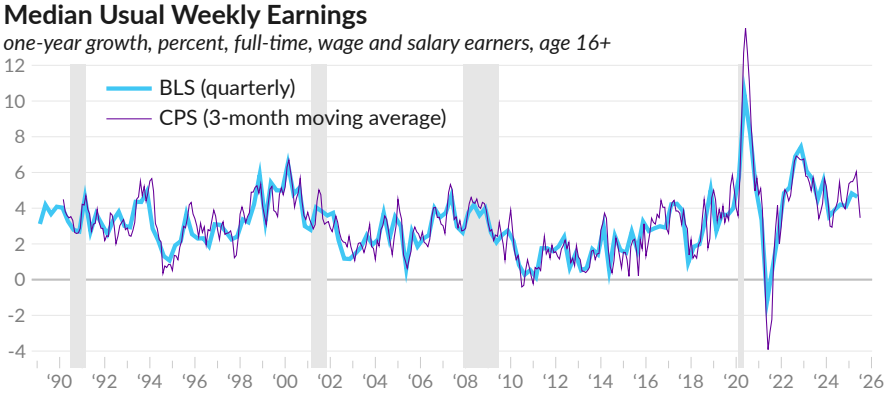
Source: BLS

Usual Weekly Earnings

The Bureau of Labor Statistics (BLS) report the **usual wages of full-time workers** at various points in the income distribution, including by decile and by quartile. The most commonly used of these measures is the median usual weekly earnings, which represents the middle wage; half of wages are above and half are below.

In the second quarter of 2025, median usual earnings of full-time wage and salary workers are $1,196 per week, compared to $1,143 per week in 2024 Q2, a nominal one-year increase of 4.6 percent (see —). In 2025 Q1, the median full-time worker receives $1,194 per week, a one-year increase of 4.8 percent.

Median Usual Weekly Earnings
one-year growth, percent, full-time, wage and salary earners, age 16+



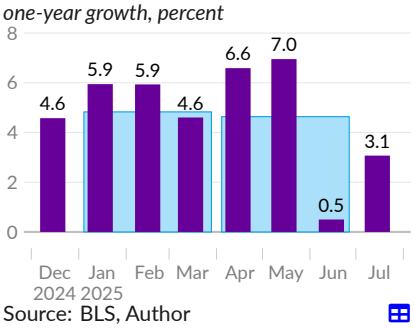
Source: Bureau of Labor Statistics, Author's Calculations

The primary source for BLS quarterly estimates of usual weekly earnings is the Current Population Survey (CPS). Using the CPS, more-volatile monthly estimates can be calculated before the next BLS quarterly estimate (■) is available.

In July 2025, the median full-time worker receives $1,182 per week, following $1,172 per week in June and $1,194 per week in May. The average over these three months is $1,183 per week, a 3.5 percent increase over the same three months, one year prior (see —).

Median usual weekly earnings increased 3.1 percent over the year ending July 2025 (see ■), following increases of 0.5 percent in June and seven percent in May.

Median Usual Weekly Earnings
one-year growth, percent



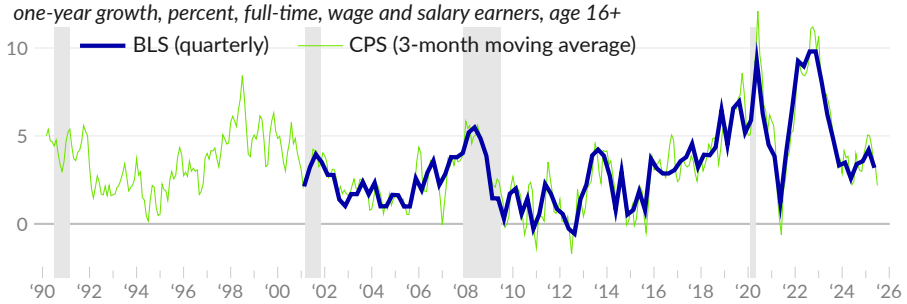
Source: BLS, Author

The income distribution also tells us the earnings of low-wage workers, represented here by the first decile. Only ten percent of workers earn less than the first decile wage. BLS report first decile usual earnings for full-time workers of $615 per week in 2025 Q2 and $596 per week in 2024 Q2, a nominal one-year increase of 3.2 percent (see —). Over the year ending 2025 Q1, first decile usual weekly earnings increased 4.2 percent.

The more-volatile CPS-based monthly measure shows first decile usual earnings of $610 per week in July 2025, $612 per week in June 2025, and $615 per week in May 2025. The three-month average is $612 per week; first decile earnings increased 2.2 percent over the same months, one year prior (see —). By month, over the year ending July 2025, first decile earnings increased 0.1 percent, following increases of 1.7 percent in June and 4.8 percent in May.

First Decile Usual Weekly Earnings

one-year growth, percent, full-time, wage and salary earners, age 16+



Source: Bureau of Labor Statistics, Author's Calculations

The following tables present the BLS published estimates for usual weekly earnings of full-time wage and salary earnings. The first table presents the earnings in levels, and the second table shows the one-year percent change.

Usual Weekly Earnings

full-time, wage and salary earners, age 16+, nominal USD

	2025 Q2	2025 Q1	2024 Q4	2024 Q3	2024 Q2	2023 Q2	2022 Q2	2021 Q2	2020 Q2
First Decile	$615	619	611	607	596	581	547	502	496
First Quartile	806	814	805	790	776	741	710	665	670
Median	1,196	1,194	1,192	1,165	1,143	1,100	1,041	990	1,002
Third Quartile	1,887	1,895	1,876	1,858	1,836	1,735	1,655	1,557	1,551
Ninth Decile	2,901	2,905	2,884	2,892	2,810	2,705	2,561	2,405	2,383

Source: Bureau of Labor Statistics

Weekly Earnings Growth

full-time, wage and salary earners, age 16+, one-year growth, percent

	2025 Q2	2025 Q1	2024 Q4	2024 Q3	2024 Q2	2023 Q2	2022 Q2	2021 Q2	2020 Q2
First Decile	3.2	4.2	3.6	3.4	2.6	6.2	9.0	1.2	9.3
First Quartile	3.9	5.4	3.7	4.8	4.7	4.4	6.8	-0.7	9.7
Median	4.6	4.8	4.1	4.2	3.9	5.7	5.2	-1.2	10.4
Third Quartile	2.8	4.6	6.3	5.1	5.8	4.8	6.3	0.4	8.3
Ninth Decile	3.2	3.0	5.2	4.0	3.9	5.6	6.5	0.9	5.0

Source: Bureau of Labor Statistics

Wages and Education

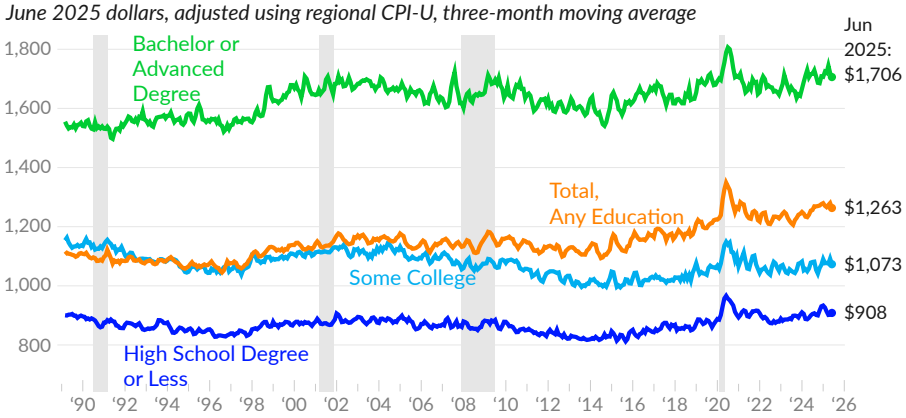
The US has increasingly invested in education, boosting productivity and earnings. This subsection discusses the relationship between **wages and education**, over the long-term and in recent data.

Over the three months ending June 2025, the median usual earnings of full-time wage and salary workers age 25 to 54 average $1,263 per week. After adjusting for inflation, median earnings have increased by 14.2 percent, in total, since 1989. Over this same period, which features a sharp increase in education in the US, labor productivity increased by 103.4 percent.

Not only is the long-term increase in median wages low, but some of the increase is explained by the median person having more education. Wage growth within education groups is lower than overall wage growth. Real median wages increased 9.7 percent over the same period for workers with a bachelor's degree or more, decreased seven percent for workers with some college or an associate degree, and increased 0.9 percent for those with a high school degree or less.

Real Earnings by Level of Education

median usual weekly earnings, full-time wage and salary workers age 25 to 54
June 2025 dollars, adjusted using regional CPI-U, three-month moving average



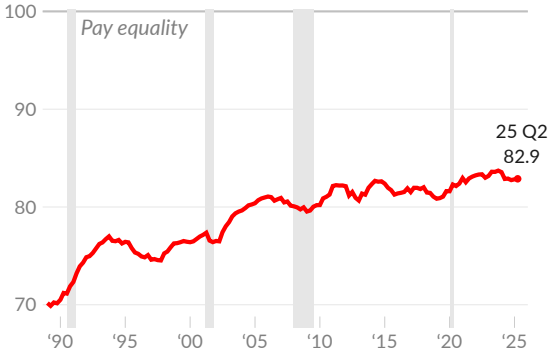
Source: Author's Calculations from CPS

Gender Wage Gap

Men are paid significantly more than women, both in general, and for a given job. The US **gender wage gap** has narrowed but is large and persistent. The US is not expected to achieve gender pay equality until 2053.

Gender Wage Gap

women's median wage as a share of men's



Source: Bureau of Labor Statistics

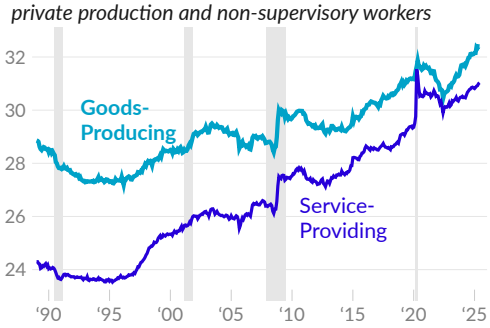
In 1989, the gender wage gap was 30 percent; women were paid 70 cents for each dollar men were paid. From 1989 to 2006, the gap closed at a rate of 0.74 percentage point per year. From 2006 to 2019 Q4, the gap closed at a rate of only 0.04 percentage point per year.

Over the year ending 2025 Q2, the gender wage gap is 17.1 percent; women are paid 82.9 cents on the dollar. Pre-pandemic, in 2019 Q4, the gap was 18.4 percent.

Average Hourly Earnings

Each month, the Bureau of Labor Statistics report wages of employees on private nonfarm payrolls. The earnings data are also available for industries and for major sectors. Industry- and sector-level earnings are reported for production and non-supervisory workers, who make up about four in every five workers.

Real Wages by Major Sector
average hourly earnings, June 2025 dollars
private production and non-supervisory workers



Source: Bureau of Labor Statistics

Hourly wages for production and non-supervisory workers in private goods-producing sectors average $32.40 in June 2025 (see —). In June 2019, the average hourly wage for the sector is $31.12, after adjusting for inflation.

Private service-providing industry wages average $31.03 for production and non-supervisory workers in June 2025. The inflation-adjusted equivalent is $29.25 in June 2019 (see —).

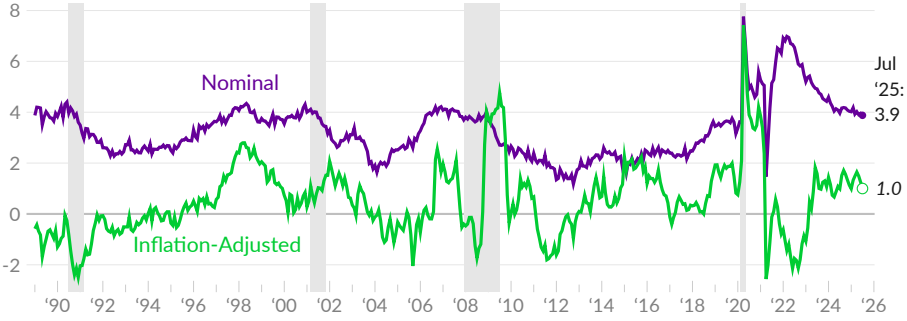
Growth Rate

As with other measures of wages, economists are interested in the rate of wage growth. The following chart presents the one-year change in seasonally-adjusted average hourly earnings for private production and nonsupervisory employees on nonfarm payrolls. The chart includes both nominal, or unadjusted, wage growth and real, or inflation-adjusted wage growth, which is adjusted using the CPI-U.

Over the year ending July 2025, nominal average hourly earnings increased 3.9 percent for production and non-supervisory workers (see —), following increases of four percent in June and 3.9 percent in May. Comparing the latest three months to the previous three months, nominal earnings increased at an annual rate of 3.5 percent.

The July CPI is not yet published, but the one-year real wage growth estimate based on the CPI nowcast is one percent (see ○). The real rate for June is 1.3 percent (see —). Using the nowcast, the annualized real growth rate for the latest three months compared to the previous three months is 1.7 percent.

Average Hourly Earnings Growth
private production and non-supervisory workers, one-year growth, percent



Source: Bureau of Labor Statistics

While one-year wage growth rates are relatively less-volatile, the latest month of data only represents one-twelfth of the data that determines the rate. To help identify trends during recent months, the one-month growth rate is presented next.

Turning to **one-month growth**, in July 2025, nominal average hourly earnings for all private sector employees increased by 0.3 percent, following increases of 0.2 percent in June and 0.4 percent in May (see ■).

Adjusting for inflation shows one-month growth of -0.0 percent in June, following an increase of 0.3 percent in May, and virtually no change in April (see ◊).

Average Hourly Earnings One-Month Growth

all private employees, percent change from previous month

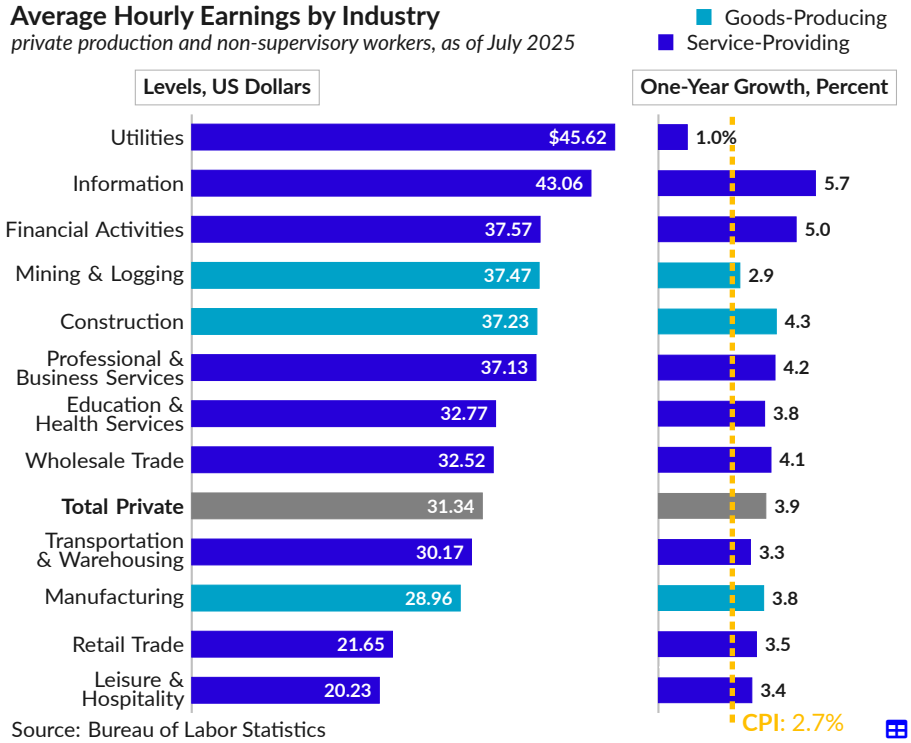
Source: Bureau of Labor Statistics

The average wage varies between **industry groups**. For production and nonsupervisory workers, the highest average hourly earnings in July 2025 are in the utilities industry ($45.62), followed by the information industry ($43.06), and the financial activities industry ($37.57). The lowest wage industries in the latest data, by average hourly earnings, are leisure and hospitality ($20.23) and retail trade ($21.65).

Over the past year, 11 of the 12 industry groups have wage growth above the increase in prices indicated by the consumer price index (see —). The information industry had the fastest nominal growth rate, at 5.7 percent, followed by 5.0 percent in financial activities and 4.3 percent in construction.

Average Hourly Earnings by Industry

private production and non-supervisory workers, as of July 2025



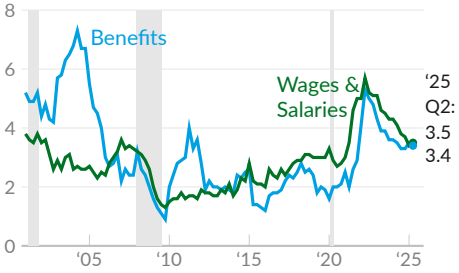
Source: Bureau of Labor Statistics

Employment Cost Index

The Bureau of Labor Statistics report the overall hourly labor costs faced by employers, using an index that is not influenced by short-term changes in the industry and occupation composition of the US workforce. This **Employment Cost Index** (ECI) covers total compensation, wages and salaries, and benefits.

Benefits include health insurance, retirement, vacation, sick leave, and transportation benefits. Benefits access and participation vary, even within the same firm. The benefits costs in the index are averages computed across all workers, including the workers who do not have benefits.

Employment Cost Index
private industry wage and salary workers
nominal one-year growth, percent



Source: Bureau of Labor Statistics

Over the year ending 2025 Q2, private industry wage and salary costs increased 3.5 percent (see —), following increases of 3.4 percent in Q1 and 3.7 percent in 2024 Q4. In 2019, private wages and salaries increased by three percent.

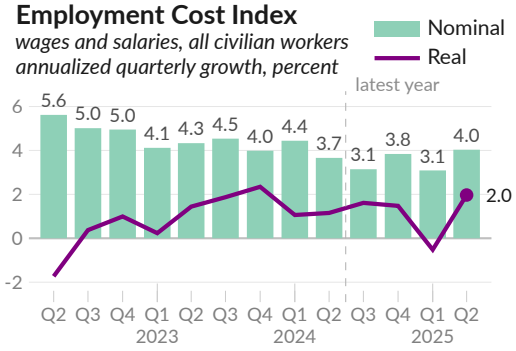
The cost of private sector benefits increased 3.4 percent (see —) over the year ending 2025 Q2, following an increase of 3.5 percent in 2025 Q1. In 2019, private-sector benefits costs increased by two percent.

Quarterly ECI growth can highlight recent developments. Next, we examine seasonally-adjusted annualized quarterly wage and salary growth for all civilian workers.

In 2025 Q2, wages increased four percent, following increases of 3.1 percent in Q1 and 3.8 percent in 2024 Q4 (see ■). Growth is currently below the 2021 highs and above the pre-COVID average.

Adjusted for inflation using the PCE deflator, growth is two percent in 2025 Q2, following a decrease of 0.5 percent in Q1, and an increase of 1.5 percent in 2024 Q4 (see —). Real wage growth is above the long-term average.

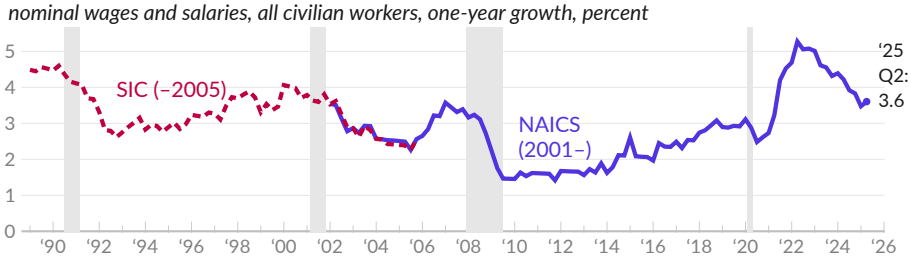
Employment Cost Index
wages and salaries, all civilian workers
annualized quarterly growth, percent



Source: Bureau of Labor Statistics

Lastly, longer-term trends in ECI wage growth can add context to recent developments. Prior to 2001, ECI growth is calculated using a different industry classification (SIC). Combining the two sets, one-year growth since 1989 is presented below.

Employment Cost Index
nominal wages and salaries, all civilian workers, one-year growth, percent



Source: Bureau of Labor Statistics

Wage Growth Tracker

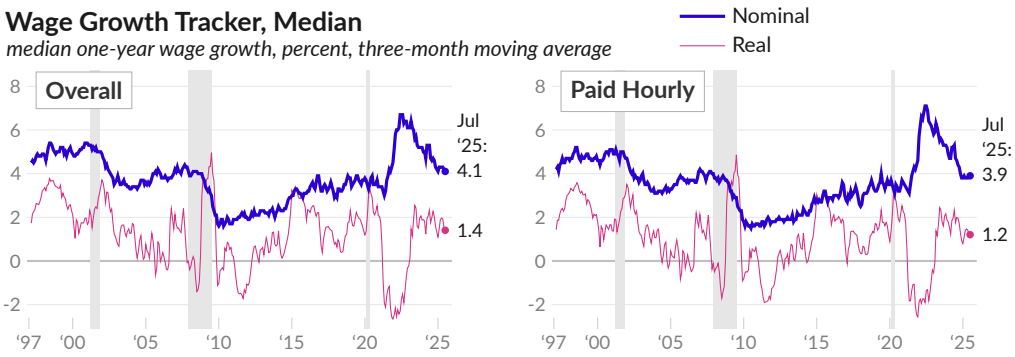
The Federal Reserve Bank of Atlanta publish a **wage growth tracker** that captures the distribution of one-year changes in the wages of the same people. This approach avoids some of the compositional changes that affect aggregate wage growth measures, though the sample used to calculate the data is affected by changes to respondents' employment status, and by survey response rates.

The wage growth tracker shows matched-observation nominal median wage growth of 4.1 percent over the three months ending July 2025, and 3.9 percent for workers paid hourly (see —). One year prior, in July 2024, three-month moving average nominal median wage growth was 4.7 percent, overall, and also 4.7 percent for hourly workers.

The inflation-adjusted one-year median wage growth (see —) can also be calculated using the wage growth tracker approach. Real wages are deflated using the CPI-U. In July 2025, inflation-adjusted median wage growth is 1.4 percent overall, and 1.2 percent for hourly workers.

Wage Growth Tracker, Median

median one-year wage growth, percent, three-month moving average



Source: FRB Atlanta, Census, BLS

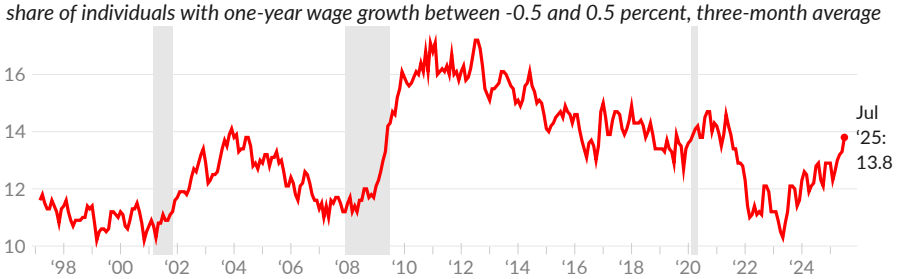
Zero Wage Change

By observing the same person's wage at two points in time, one year apart, we see how many people do not receive a wage increase. The Atlanta Fed measures this as the share of individuals who have one-year hourly wage growth of between -0.5 and 0.5 percent. The Atlanta Fed approach is replicated using CPS data, and smoothed with a three-month moving average.

In July 2025, 13.8 percent of individuals had no hourly wage growth, compared to 13.3 in June 2025 (see —). One year prior, in July 2024, 12.8 percent of individuals had no wage growth.

Zero Wage Change

share of individuals with one-year wage growth between -0.5 and 0.5 percent, three-month average



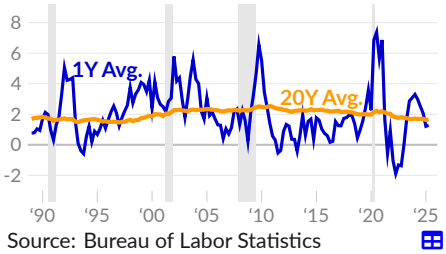
Source: Federal Reserve Bank of Atlanta

Labor Productivity

Labor productivity is reported by the Bureau of Labor Statistics and measured as **real output per hour of work**. The measure captures the rate at which people, with all of the resources and equipment and infrastructure available to them, are able to work together to produce goods and services. Labor productivity growth means real wages can increase without putting upward pressure on inflation. Alternatively, an increase in productivity means a society can meet its material needs with less work.

Over the longer-term, US labor productivity growth averages two percent per year. The trailing 20-year average growth rate is 1.7 percent in 2025 Q2 (see —). During the 1990s and early 2000s, labor productivity growth was above its long-term average. In contrast, from 2010 to 2017, productivity growth was below average. Over the year ending 2025 Q2, growth averages 1.3 percent (see —).

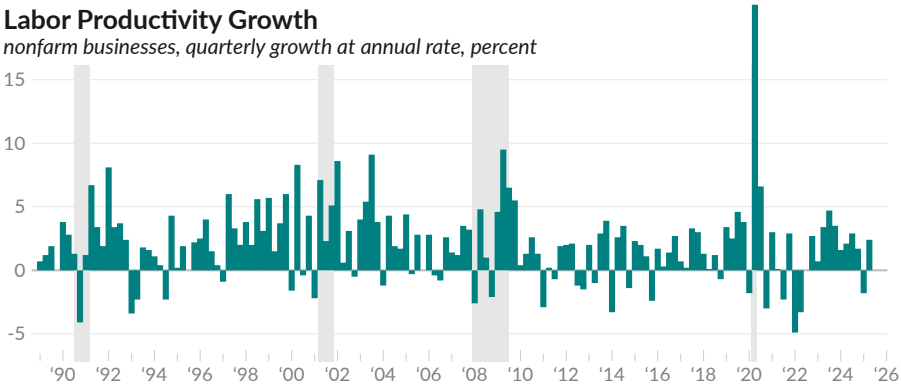
Labor Productivity Growth
quarterly growth at annual rate, percent



Source: Bureau of Labor Statistics

In 2025 Q2, nonfarm business labor productivity increased at an annual rate of 2.4 percent (see ■), as the result of an increase of 3.7 percent in real output and an increase of 1.3 percent in hours worked. In the prior quarter, 2025 Q1, labor productivity decreased at an annual rate of 1.8 percent, as real output decreased 0.6 percent and hours of work increased 1.2 percent. Productivity has increased at an annual rate of 0.8 percent over the past five years, substantially below the 1989-onward rate of two percent.

Labor Productivity Growth
nonfarm businesses, quarterly growth at annual rate, percent



Source: Bureau of Labor Statistics

In the short-term, productivity growth is affected by changes in the composition of the workforce, and by volatility in both the number of hours worked and in production. In the longer-term, the level of business net investment in equipment and other capital goods, particularly relative to the size of the workforce, affects productivity growth. Such investment allows more goods and services to be produced by the same hours of work. Yet efforts to stimulate business investment directly through reducing corporate income taxes do not seem to have worked.

One theory of what drives long-term trends, sometimes called the *Kaldor-Verdoorn Law*, states that demand, and the capacity to meet that demand, determine productivity growth. An economy facing real resource constraints, where demand for goods and services exceeds the capacity to provide these services, is more likely to find ways to produce goods and services more efficiently. As one example, businesses invest more in labor-saving technologies when faced with a tight labor market.

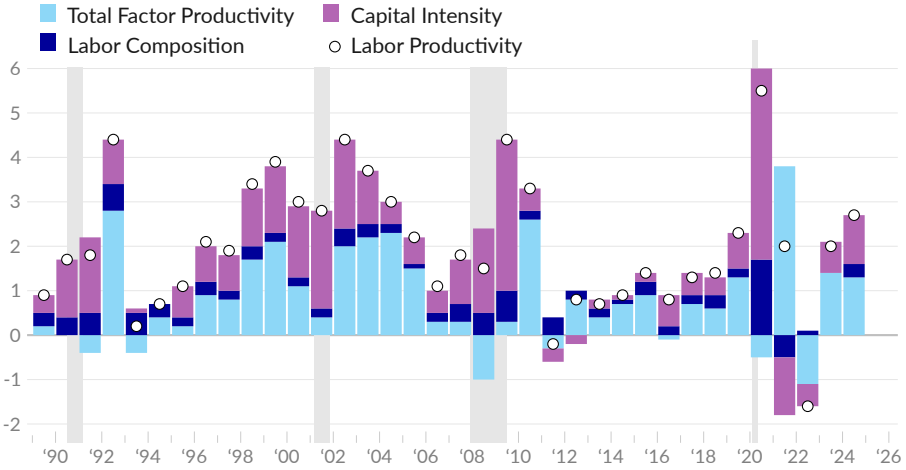
Productivity Growth Decomposition

The Bureau of Labor Statistics report **contributions to nonfarm business labor productivity growth**. Some portion of productivity growth can be explained by businesses adding capital such as equipment and IT improvements. Additionally, the age, education, and gender composition of the labor force changes over time, which affects the average output per hour of work.

In 2024, labor productivity increased by 2.7 percent (see ○). Capital intensity contributed 1.1 percentage points (see ■), and labor composition contributed 0.3 percentage point (see ■). The remainder, called total factor productivity, added 1.3 percentage points (see ■).

Decomposition of Labor Productivity Growth

contribution to labor productivity, percentage points



Source: Bureau of Labor Statistics

Union Membership

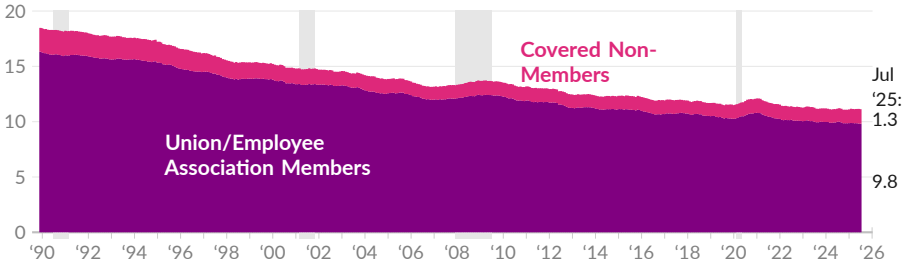
Membership in **unions and employee associations** has diminished in the United States over the past fifty years. Unionized jobs typically offer higher wages and better benefits and union membership tends to increase wages and benefits even in nonunion jobs. Research shows that lower union membership increases income inequality.

Over the 12 months ending July 2025, the union membership rate averaged 9.8 percent (see ■). The coverage rate, which includes nonmembers that are covered under a union contract, was 11.1 percent. During the 12-month period, an average of 131.5 million workers were not represented by a union, 14.3 million workers were union members, and an additional 1.9 million workers, or 1.3 percent of the workforce, reported no union affiliation but were covered by a union contract (see ■).

One year prior, over the 12 months ending July 2024, the union membership rate was 10.0 percent, and the coverage rate was 11.2 percent. From July 2024 to July 2025, the 12-month average number of nonunion workers increased by 1.3 million, while the number of workers represented by unions increased by 60,000.

Union Membership and Coverage

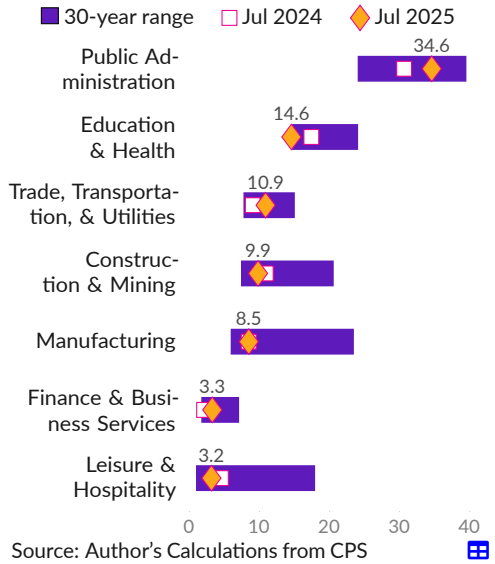
union or employee association share of jobs, percent, one-year moving average



Source: Author's Calculations from Current Population Survey

Union Membership Rate by Industry

union or employee association member, percent



Source: Author's Calculations from CPS

Union membership rates vary substantially by industry. Public administration has the highest union membership rate, at 34.6 percent as of July 2025, followed by education and health with 14.6 percent, and trade, transportation, and utilities with 10.9 percent.

The manufacturing industry experienced the largest overall percentage point decrease in union membership rates over the past 30 years, and is currently 15.0 percentage points below its February 1989 rate of 23.5 percent.

The lowest union membership rate is in leisure and hospitality (3.2 percent). The union membership rate of the industry was 18.0 percent at its 30-year peak in January 1989.

Financial Markets

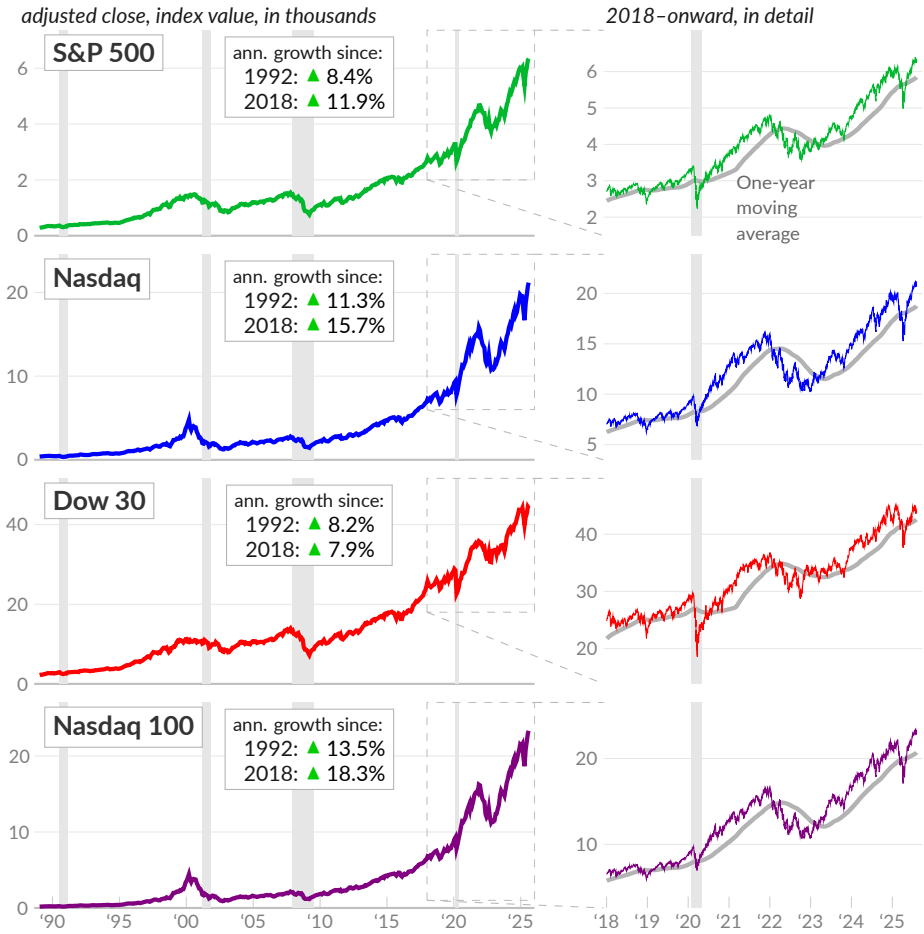
The US financial markets provide funding for borrowers' activities and offer potential income to lenders. The US equity and bond markets are the largest in the world, with daily trading volumes of several hundred billion dollars. This section discusses equity markets, interest rates and bond markets, and money and monetary policy.

Equity Markets

Equity markets, or **stock markets**, provide a method for businesses to raise capital by selling shares, which represent ownership claims on the business. Equity markets also provide a place for people to buy and sell existing shares. Investors purchase shares in hopes that the price will go up, allowing them to sell the shares at a higher price and receive capital gains, or to gain access to a stream of dividends, which are payments from businesses to shareholders.

In the US, several stock market indices track the share price of a basket of companies. These measures are weighted by the market capitalization of the companies in the basket, which is the share price multiplied by the number of shares. Market capitalization is the market value of a company. The following charts and tables capture the *adjusted* close price, which is adjusted to include splits, dividends, and capital gains distributions.

Stock Market Indices



Source: STOOQ; Latest: August 6, 2025

The S&P 500 (see —) is a market-cap-weighted stock market index based on 500 large companies listed on US exchanges. As of August 6, 2025, the S&P 500 has increased at an annual rate of 8.4 percent since 1992, and 11.9 percent since 2018. The Nasdaq composite index (see —) includes nearly all companies listed on the Nasdaq stock exchange. The Nasdaq index increased at an annual rate of 11.3 percent since 1992, and 15.7 percent since 2018.

The Dow 30 industrial average (see —) is an index based on 30 large and prominent companies listed on US exchanges. The measure is used as a proxy for the performance of the largest companies, and increased at an annual rate of 8.2 percent since 1992 and 7.9 percent since 2018. Lastly, the Nasdaq 100 (see —) captures only the largest 100 companies listed on the Nasdaq stock exchange as a proxy for large, disproportionately tech, companies. Since 1992, the Nasdaq 100 has increased at an annual rate of 13.5 percent. Since 2018, the measure increased at an annual rate of 18.3 percent.

Stock Market Indices

adjusted close — *annual index returns, including dividends*

	Aug 6, 2025	1-year moving average	2025 YTD	2024	2023	2022	2021	2020
— S&P 500	6,345	5,845	7.9	23.3	24.2	-19.4	26.9	16.3
— Nasdaq	21,169	18,755	9.6	28.6	43.4	-33.1	21.4	43.6
— Dow 30	44,193	42,564	3.9	12.9	13.7	-8.8	18.7	7.2
— Nasdaq 100	23,315	20,709	11.0	24.9	53.8	-33.0	26.6	47.6

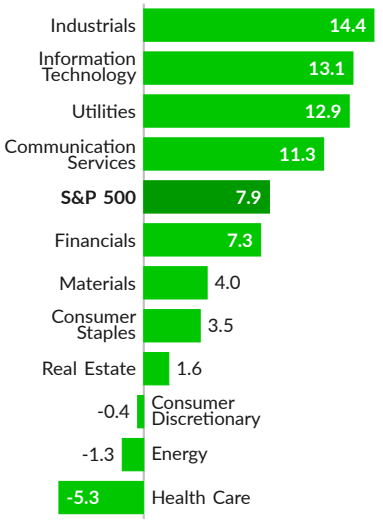
Source: STOOQ

Sector Returns

The S&P 500 companies are broadly categorized into 11 industrial sectors, which are tracked independently. The largest sector is information technology, which makes up 34.0 percent of the index, by market cap, as of July 31, 2025. The financials sector makes up 13.8 percent, the consumer discretionary sector makes up 10.4 percent, and the communication services sector makes up 9.9 percent.

S&P 500 Sector Returns

year to date, percent, as of Aug 6, 2025



Source: STOOQ

In the latest full year of data, 2024, the S&P 500 adjusted gain was 23.3 percent. The communication services sector returned 33.2 percent, the financials sector returned 28.4 percent, and the consumer discretionary sector gained 25.5 percent. The largest loss in 2024 was in the materials sector, with a total decrease of 1.6 percent.

As of August 6, 2025, the **year-to-date total return** for the S&P 500 is 7.9 percent. The industrials sector returned 14.4 percent, the information technology sector returned 13.1 percent, and the utilities sector gained 12.9 percent. The largest loss is in the health care sector, with a total decrease of 5.3 percent.

Over the past month, the S&P 500 has returned 4.2 percent. The information technology sector returned 6.3 percent, the utilities sector gained 4.9 percent, and the industrials sector returned 3.9 percent.

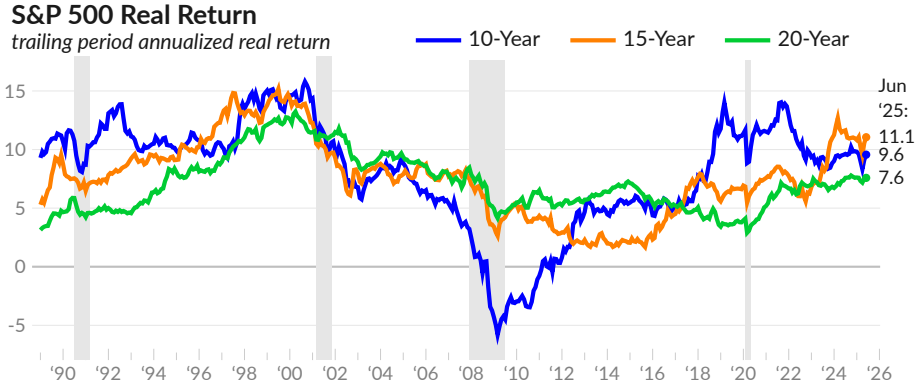
Real Return

Next, for the typical investor saving for retirement, long-term and inflation-adjusted returns are particularly important. Over the long-term, US equities markets have traditionally returned around seven percent per year, after adjusting for inflation.

According to historical stock market data from Robert Shiller, the **inflation-adjusted trailing twenty-year annual rate of return** of the S&P 500 is 7.6 percent as of June 2025 (see —). Ultra-long-term real returns are currently low relative to the average trailing twenty-year real annual return of 10.1 percent during 1995–2005. The trailing ten-year real return was 9.6 percent, as of June 2025, and 10.7 percent during 1995–2005 (see —).

S&P 500 Real Return

trailing period annualized real return



Source: Shiller, Baker, Author's Calculations

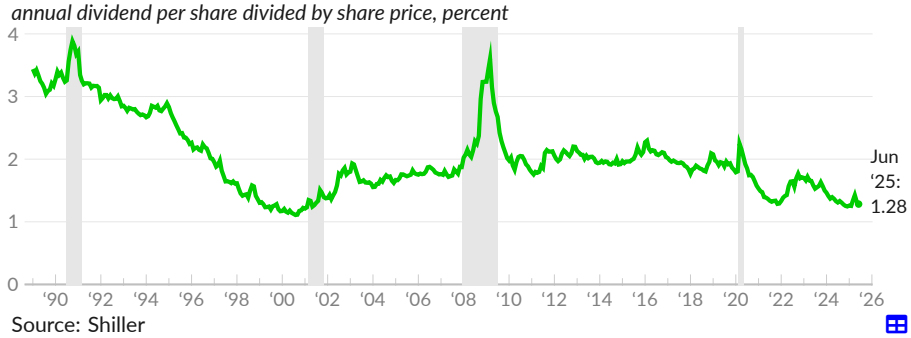
Dividends

One component of total returns is **dividend payments to shareholders**. The dividend payments per share over the previous four quarters divided by the share price is the dividend yield. The S&P 500 dividend yield has averaged around two percent, over the past few decades.

In June 2025, the dividend yield for the S&P 500 is 1.28 percent (see —), compared to 1.32 percent in May 2025, and 1.33 percent in June 2024. From 1990 to 2015, the dividend yield averaged 2.09 percent.

S&P 500 Dividend Yield

annual dividend per share divided by share price, percent



Source: Shiller

Corporate Equity Payout

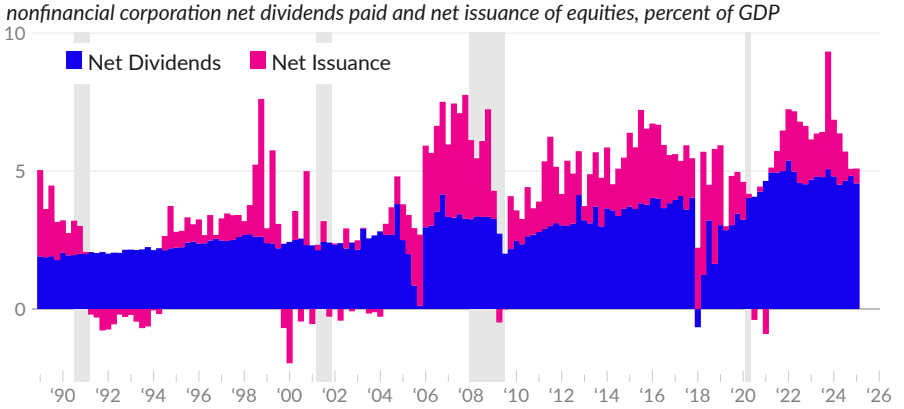
As seen above, investors achieve returns through price appreciation and dividends. Corporations, likewise, can return money to shareholders with dividends, or by repurchasing shares of their own stock. These share buybacks increase the share price, allowing investors to sell their shares at the higher price.

Investors like that share buybacks allow flexibility on the timing of tax payments. Dividends generate tax liabilities when the dividend is issued; share buybacks generate tax liabilities when the shares are sold. Additionally, corporations may prefer share buybacks over higher dividends because cutting dividends in the future would be viewed negatively.

The financial accounts track the **total payout from corporate equities**, which includes dividends and share buybacks. In the first quarter of 2025, nonfinancial corporation net dividends are equivalent to 4.6 percent of GDP (see ■) and net equities issuance is equivalent to 0.5 percent of GDP (see ■). In 2019, net dividends were 3.1 percent of GDP and net issuance was 1.6 percent. From 1990 to 2015, net dividends averaged 2.6 percent of GDP and net issuance averaged 1.1 percent.

Corporate Equity Payout

nonfinancial corporation net dividends paid and net issuance of equities, percent of GDP



Source: Federal Reserve, Bureau of Economic Analysis

Valuation

The cyclically-adjusted price to earnings (CAPE) ratio compares the current price of the S&P 500 to the previous ten-years of total S&P 500 returns, including dividends and buybacks (treated as dividends). Valuations often use recent or forecasted earnings. Robert Shiller's CAPE ratio covers ten years (a normal business cycle) so that valuations are less-affected by the idiosyncrasies of current economic conditions.

In August 2025, the Shiller total return CAPE ratio was 40.6, compared to 40.6 in July 2025 and 37.6 in August 2024 (see —). In 2019, the Shiller CAPE ratio was 32.1, on average. In 2000, during the stock market bubble, the ratio averaged 45.1.

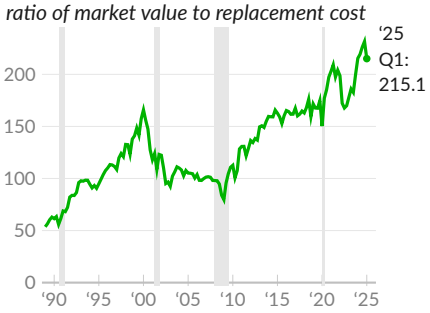
Price to Earnings Ratio

ratio of market value to trailing 10-year returns

Source: Shiller

Tobin's Q

ratio of market value to replacement cost



Source: Federal Reserve

A second measure, Tobin's Q, is the ratio of market value to replacement value. A ratio below 100 means the market value is below the replacement value and stocks may be undervalued. A ratio above 100 means the market value is above the replacement cost and stocks may be overvalued. As of 2025 Q1, the ratio is 215.1 (see —), following 231.6 in 2024 Q4, and compared to an average of 170.4 in 2019.

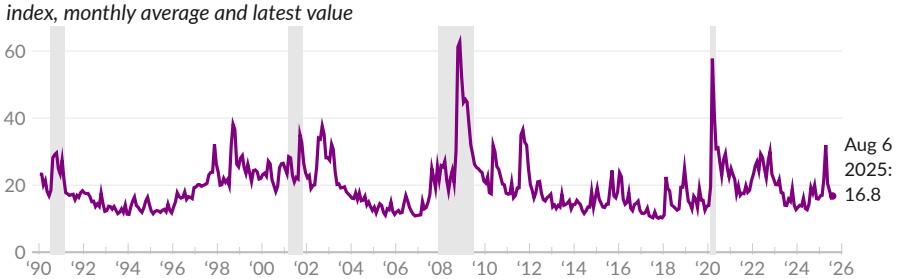
Volatility

The Chicago Board Options Exchange uses S&P 500 options data to identify expectations of future volatility. When investors are uncertain about the future, they will pay a premium for the insurance-like qualities of options. The CBOE volatility index, popularly known as the VIX, captures overall changes in options prices to identify the market-implied volatility in the S&P 500 index over the following 30 days.

The latest value for the VIX is 16.8 on August 6, 2025 (see —), in line with the average index value of 18.2 over the past three years, and in line with the typical index value of 17.6 since 1990. The VIX increased by 1.3 points over the past week.

CBOE Volatility Index

index, monthly average and latest value



Source: Chicago Board Options Exchange

Interest Rates

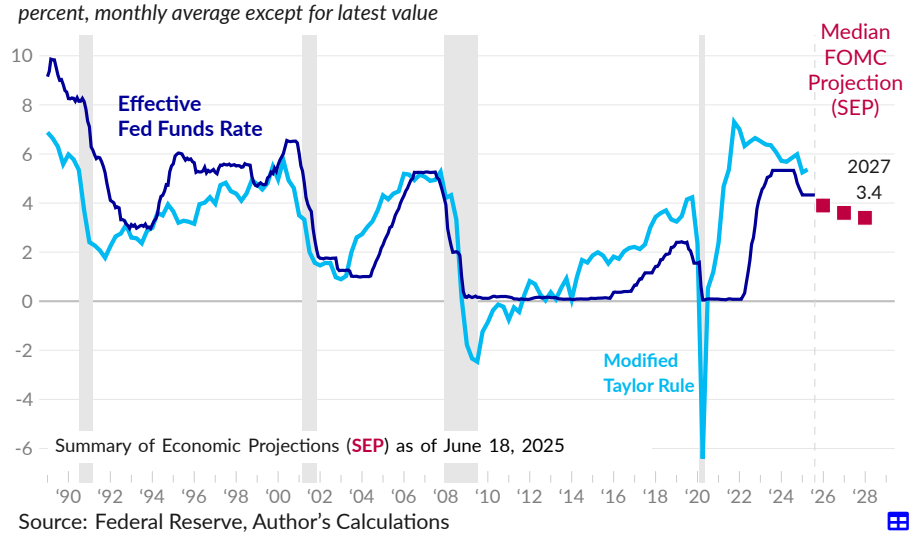
The US Federal Reserve System (Fed) has a congressional mandate to promote price stability and maximum employment. In practice, a Fed committee (the FOMC) determines the **federal funds rate**, which aims to influence interest rates in the broader economy. There are several channels through which interest rates affect broader economic activity, for example, lower interest rates stimulate investment in capital goods and the production of these capital goods employs people, who in turn spend their wages on other goods and services. Through its influence on interest rates, the Fed's monetary policy can aim to be neutral or to stimulate or slow the economy.

The FOMC cut interest rates three times in 2019, for a total reduction of 75 basis points. Responding to the economic shock of the coronavirus, the FOMC cut rates twice in March 2020, by 150 basis points, bringing the lower bound of the federal funds rate range to zero. With at near zero, the Fed adopted several additional measures to increase liquidity in the global financial system.

In March 2022, the FOMC raised the base interest rate by 25 basis points, followed by another 25 basis points in May. In June, July, September and November 2022, the FOMC raised rates by 75 basis points, in each meeting, followed by a 50 basis point increase in December, and 25 basis point increases in February, March, May, and July 2023, bringing the upper limit of the rate to 5.5 percent. Rates were cut by 50 basis points in September 2024, and by 25 basis points in November and December. The effective Fed funds rate is 4.33 percent, as of August 6, 2025 (see —).

Federal Funds Rate

percent, monthly average except for latest value



Source: Federal Reserve, Author's Calculations

Economist John Taylor described a rule for setting the federal funds rate based on inflation and output. Versions of this **Taylor rule** track the actual federal funds rate fairly closely during the 1990s and 2000s. Former Fed Chair Ben Bernanke described a modified Taylor rule based on core PCE inflation and a stronger response to the output gap (see —). As of the second quarter of 2025, the modified Taylor rule suggests a federal funds rate of 5.4 percent, 1.04 percentage point above the current rate.

FOMC meeting participants provide projections which can be used to summarize policymaker views on the future path of the federal funds rate, as seen by the people who set it. As of June 18, 2025, the median projected federal funds rate rate is 3.9 percent for 2025, 3.6 percent for 2026, and 3.4 percent for 2027 (see ■).

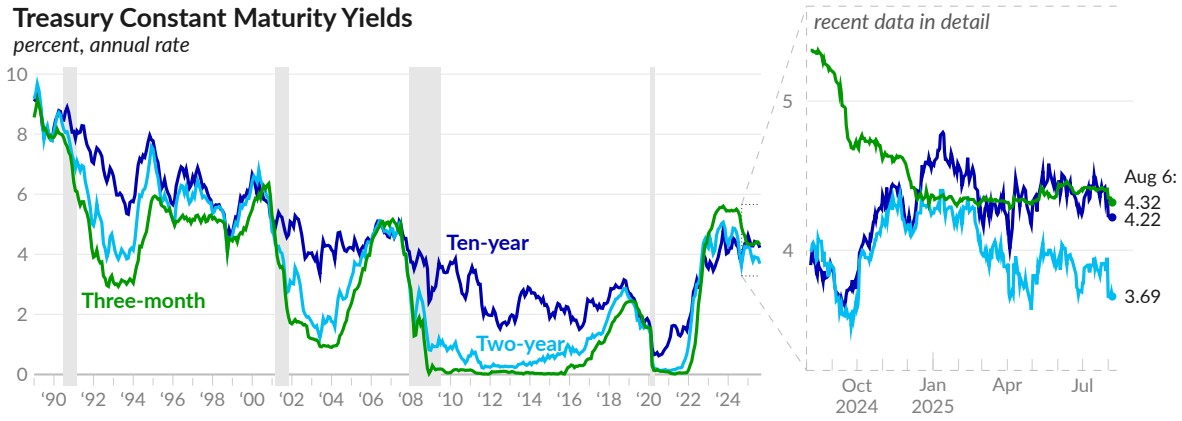
Treasuries

United States Treasury securities, or **treasuries**, are the asset created by federal government borrowing. The treasuries market is traditionally considered both very low-risk and highly liquid. As of July 2025, the public holds $29.0 trillion in marketable treasuries.

From the 1980s to 2021, treasury yields fell considerably. The annual yield on ten-year treasuries (see —) fell from 8.49 percent in 1989 to 0.62 percent in July 2020. As of August 6, 2025, ten-year treasury bonds yield 4.22 percent, an increase of 0.23 percentage point from the year prior.

Short-term treasury yields more-closely track the base interest rate set by the Federal Reserve. Three-month treasury bills (see —) return an annual rate of 8.39 percent in 1989 but pay virtually no interest from 2009 to 2016. As of August 6, 2025, three-month treasuries yield 4.32 percent, a decrease of 1.05 percentage points from the year prior.

Treasury Constant Maturity Yields
percent, annual rate



Source: Federal Reserve

Selected US Treasury Rates

constant maturity yield, percent — *period averages*

	Aug 6, 2025	Aug 5, 2025	Jul 31, 2025	Jul 2025	Aug 2024	2019	2010 –'13	1998 –'00	1989
One-month	4.48	4.49	4.49	4.37	5.50	2.12	0.07	–	–
Three-month	4.32	4.34	4.41	4.41	5.30	2.11	0.08	5.23	8.39
Six-month	4.15	4.16	4.31	4.31	4.96	2.11	0.13	5.38	8.48
One-year	3.90	3.92	4.10	4.08	4.43	2.05	0.20	5.42	8.53
Two-year	3.69	3.72	3.94	3.88	3.97	1.97	0.43	5.61	8.57
Three-year	3.63	3.63	3.89	3.84	3.79	1.94	0.70	5.62	8.55
Five-year	3.77	3.77	3.96	3.95	3.71	1.95	1.35	5.62	8.50
Seven-year	3.97	3.97	4.14	4.15	3.77	2.05	1.93	5.76	8.52
Ten-year	4.22	4.22	4.37	4.39	3.87	2.14	2.54	5.65	8.49
Twenty-year	4.80	4.77	4.89	4.92	4.25	2.40	3.33	6.05	–
Thirty-year	4.81	4.78	4.89	4.92	4.15	2.58	3.63	5.80	8.45

Source: Federal Reserve

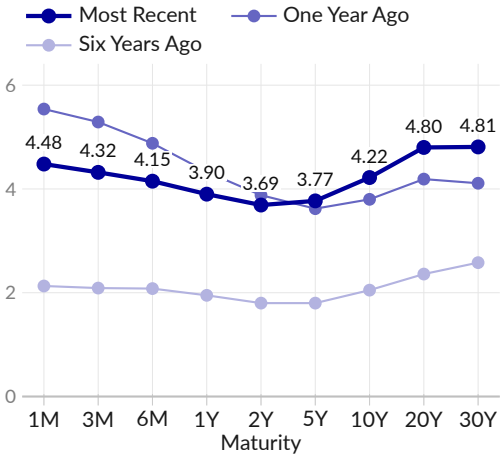
Yield Curve

The **yield curve** arranges the interest rates of US Treasury bills and bonds along a line, from shortest duration to longest duration. This yield curve summarizes the term structure of interest rates, how much it costs to borrow for different periods of time, and is considered an indicator of how markets view short-term economic conditions relative to longer-term conditions.

The yield curve is normally upward sloping as investors expect to be compensated for lending for a longer period of time. The shape of the yield curve changes over time and is affected by several factors, including the term premium, Federal Reserve policy, and expectations about future inflation. The curve can become steeper, for example, if interest rates or inflation is expected to be higher in the future.

Treasury Yield Curve

constant maturity yield, percent, ***August 6, 2025***



Source: Federal Reserve

The yield curve can also become *inverted* when yields on shorter-term debt are higher than yields on longer-term debt. An inverted yield curve can signal worsening economic conditions. For example, short term rates may exceed longer-term rates if the Federal Reserve is expected to lower interest rates in the future, or if inflation is expected to fall due to weakened economic conditions.

Since 1989, the US has entered into four recessions and the 10-year to 2-year segment of the yield curve has newly inverted six times. The most recent such inversion started on April 1, 2022.

Yield Spread

Another summary measure of the term structure of interest rates is the difference, or *spread*, between interest rates of treasuries with different maturities. **Yield spreads** can be used to track changes in the term structure of Treasuries, over time.

As of August 6, 2025, the spread between a 10-year treasury bond and a three-month treasury bill is negative 0.10 percentage point (see —), compared to negative 1.49 percentage points one year prior. The spread between 10-year and 2-year treasuries (see —) is 0.53 percentage point on August 6, 2025, and negative 0.08 percentage point one year prior.

Treasury Yield Spreads

percentage points

Source: Federal Reserve

Changes in Treasury Yields

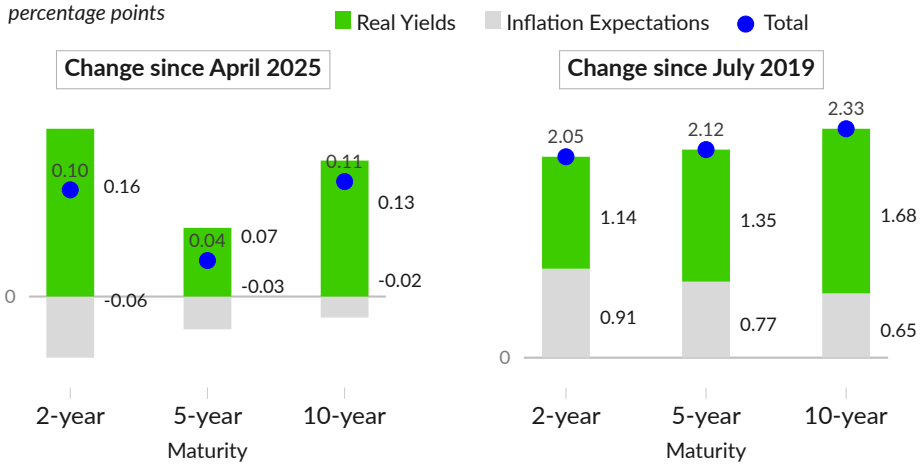
Changes in nominal treasury yields can be **decomposed into changes in expected inflation and changes in real yields**. Changes in real yields reflect changes in expected path of the federal funds rate and the economic outlook. Federal Reserve Bank of Cleveland models identify inflation expectations across the term structure, which can be used to identify changes in real yields.

Over the three months ending July 2025, nominal two-year treasury yields increased 0.10 percentage point, real yields increased 0.16 percentage point, and inflation expectations decreased 0.06 percentage point. Ten-year treasury nominal yields increased 0.11 percentage point, real yields increased 0.13 percentage point, and inflation expectations decreased 0.02 percentage point.

Over the five years ending July 2025, the nominal yield on two-year treasuries increased 2.05 percentage points, the real yield increased 1.14 percentage points, and inflation expectations increased 0.91 percentage point. For ten-year treasuries, the nominal yield increased 2.33 percentage points, the real yield increased 0.13 percentage point, and expected inflation increased 0.65 percentage point.

Decomposition of Recent Changes in Treasury Yields

percentage points



Latest data from model as of: July 2025
Source: Federal Reserve, Federal Reserve Bank of Cleveland

Real Interest Rates

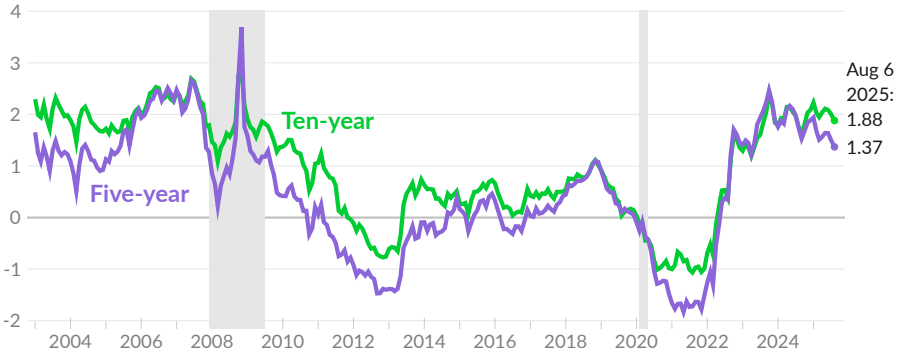
Real interest rates, which are adjusted for expected inflation, can offer insight into economic and financial conditions. Low real interest rates encourage borrowing and consumption and increased economic activity while high real interest rates discourage borrowing and encourage saving.

One measure of real interest rates comes from Treasury inflation-indexed securities. The yield on these securities can be a proxy for the interest rate investors would charge for treasuries, without inflation.

As of August 6, 2025, the real yield on ten-year treasuries is 1.88 percent (see —), compared to 2.06 percent three months prior, on May 2. Five-year treasuries yield 1.37 percent in the latest data, and 1.61 percent three months prior, after adjusting for expected inflation (see —).

Real Treasury Yields

derived from inflation-indexed treasuries, percent



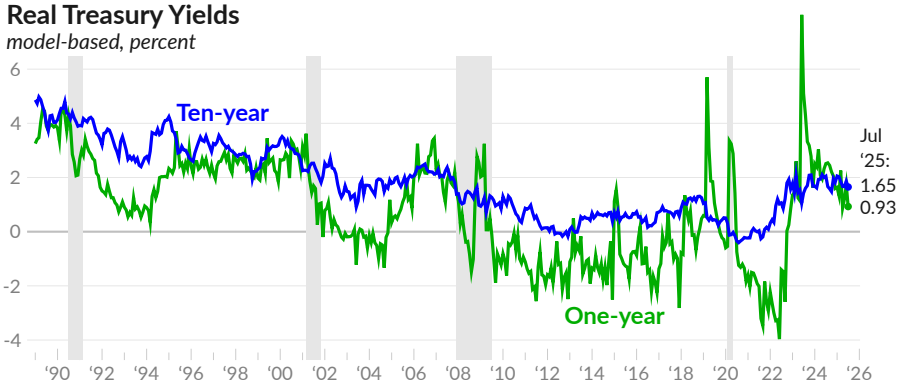
Source: Federal Reserve

The previous approach has limitations, as the market for treasury inflation-indexed securities is relatively small and can be influenced by monetary policy. The Cleveland Fed model estimates real yields across the term structure, using a model based on treasury yields, inflation, and financial-market- and survey-based information, and avoids some limitations of the previous approach.

The model-based real yield on ten-year treasuries is 1.65 percent, as of July 2025 (see —). Ten-year treasury real yields averaged 3.30 percent during the 1990s. The model-based real yield for one-year treasuries is 0.93 percent in July 2025, compared to an average of 2.21 percent during the 1990s (see —).

Real Treasury Yields

model-based, percent



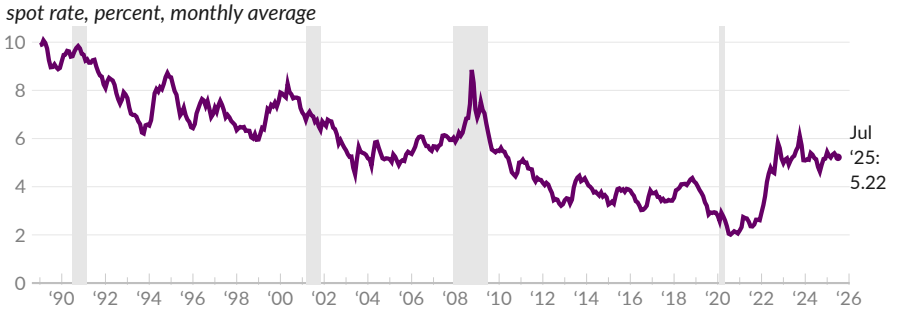
Source: Federal Reserve of Bank of Cleveland

Corporate Bonds

The US Treasury publish a yield curve for **corporate bonds** based on the market-weighted average of bonds rated AAA, AA, and A. The yield on high-quality corporate bonds with a maturity of 10 years is 5.22 percent in July 2025, following 5.28 percent in June 2025 (see —). One year prior, in July 2024, this spot rate was 5.14 percent, and five years prior, in July 2020, it was 2.05 percent.

High Quality Corporate Bonds, 10-Year

spot rate, percent, monthly average



Source: Treasury, FRED

Corporate bonds rated below investment grade (a rating below BBB) are tracked by the ICE BofA high yield index. As of August 6, 2025, the effective yield for **high-yield corporate bonds** in the index is 6.8 percent (see —). In June 2025, the average effective yield was 7.1 percent. Prior to the COVID-19 pandemic, in 2019, the average effective yield was 6.1 percent.

ICE BofA High Yield Index Effective Yield

percent

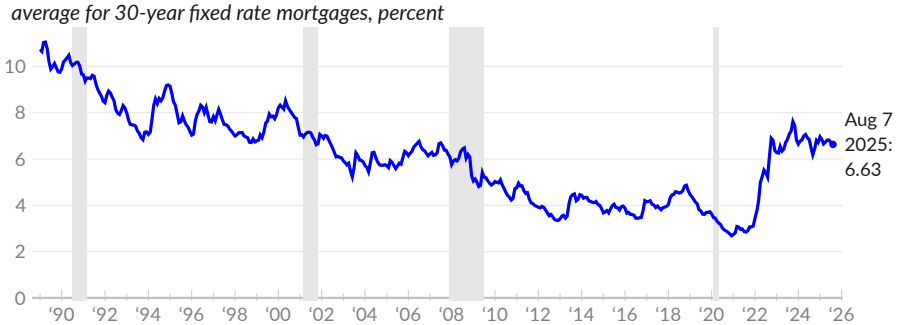
Source: Ice Data Indices, FRED

Mortgage Rates

The **mortgage rate** available to homebuyers can affect housing markets, which in turn can affect demand for construction materials and for consumer goods. As of August 7, 2025, the average 30-year mortgage rate is 6.63 percent, compared to 6.72 percent in April 2025, and 6.85 percent in July 2024 (see —). In 2019, the average rate was 3.93 percent.

Mortgage Rate

average for 30-year fixed rate mortgages, percent



Source: Freddie Mac

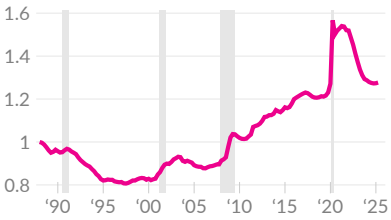
Money and Monetary Policy

The Federal Reserve publish data on the **money supply**. A broad measure of the amount of money, called M2, includes cash and deposits such as savings accounts and checking accounts, as well as time deposits smaller than $100,000, and retail accounts in money market funds.

In June 2025, the M2 money stock totals $22.0 trillion. Put into the context of overall economic activity, M2 is equivalent to 72.6 percent of GDP.

During the 1990s, the ratio of money to economic activity was falling (see —). Following the great recession, the money supply has expanded relative to activity. Since 1989, the ratio has increased by a total of 27.7 percent.

M2 to GDP Ratio
index, 1989=1

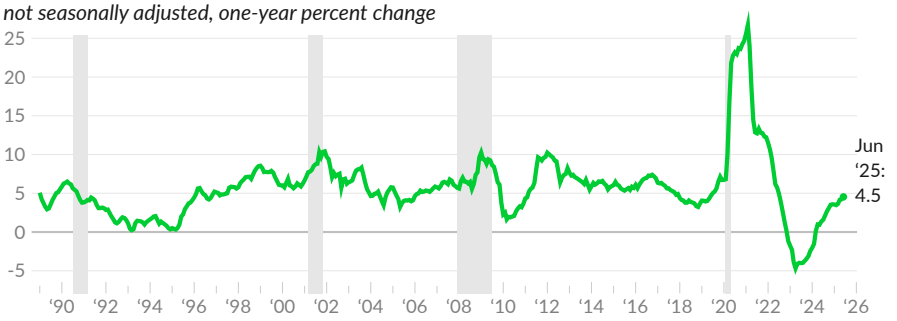


Source: Federal Reserve

A large increase in the amount of money held by individuals and institutions can be the result of a higher rate of saving, a larger government sector financial deficit, an increase in the money supply, a change in preferences for liquidity, or something else.

The M2 money stock increased 0.6 percent in June 2025, over the previous month, following increases of 0.4 percent in May and 0.7 percent in April. Over the past 12 months, the money stock increased 4.5 percent (see —). The M2 money stock has increased 49.1 percent, in total, over the past six years.

M2 Money Stock Growth
not seasonally adjusted, one-year percent change



Source: Federal Reserve

Selected Money Stock Components
share of GDP, percent, not seasonally adjusted

	Jun 2025	Jun 2024	Jun 2023	Jun 2022	2019	2010	2000	1989
M2	72.4	72.4	75.5	83.6	69.1	57.7	47.0	54.4
Monetary Base	19.0	19.8	20.4	21.3	15.4	13.4	5.7	5.1
Currency	7.9	8.1	8.5	8.8	8.1	6.3	5.6	4.4
Reserve Balances	11.1	11.6	11.9	12.5	7.6	7.4	0.4	1.1
Demand Deposits	18.6	17.9	18.0	19.3	7.1	3.1	3.2	5.0

Source: Federal Reserve

Fed Asset Purchases

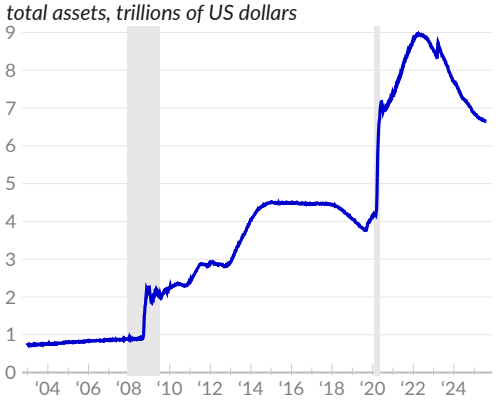
During periods where the Fed funds rate is at or near zero the Fed has engaged in **large scale asset purchases** in an effort to further improve financial market conditions. These asset purchases show up on the Fed balance sheet, which is reported weekly.

In response to the collapse of the housing bubble, the Fed purchased US Treasury bonds and mortgage-backed securities. Total assets held by the Federal Reserve (see —) increased from $0.9 trillion in August 2008 to $2.2 trillion in November 2008. Additional rounds of asset purchases, referred to as quantitative easing, increased the balance sheet to $4.5 trillion by January 2014. The Fed replaced maturing bonds until balance sheet normalization began in October 2017. By August 2019, total assets fell below $3.8 trillion.

Balance sheet normalization ended in September 2019 when the Fed increased operations in overnight and term repurchase agreement (repo) markets, following a sharp increase in rates in these markets. The Fed balance sheet increased to $4.1 trillion by December 2019.

Federal Reserve Balance Sheet

total assets, trillions of US dollars



Source: Federal Reserve

During the COVID-19 pandemic, the Fed offered lending to businesses and currency swaps to major US trading partners, began to purchase commercial bonds, and expanded purchases of treasuries and mortgage-backed securities.

The Fed balance sheet increased from $4.2 trillion in February 2020 to $9.0 trillion in April 2022. As of the latest data, covering August 6, 2025, the Fed balance sheet is $6.6 trillion, or 21.7 percent of GDP. The Fed currently holds $4.2 trillion in Treasuries and $2.1 trillion in mortgage-backed securities.

Federal Reserve Assets

billions of US dollars

	Aug 6, 2025	Jul 30, 2025	Jul 9, 2025	Aug 7, 2024	Aug 9, 2023
Total (see —)	$6,640.8	6,642.6	6,661.9	7,175.3	8,208.2
US Treasury Securities	4,204.5	4,206.9	4,208.5	4,413.6	5,048.4
Mortgage-Backed Securities	2,120.7	2,120.7	2,138.5	2,318.2	2,517.6
Central Bank Liquidity Swaps	0.1	0.1	0.1	0.1	0.2
Repurchase Agreements	0.0	0.0	0.0	0.0	0.0
Loans	6.3	7.0	7.6	105.8	260.4
Payroll Protection Program	1.4	1.4	1.4	2.6	6.1
Net Unamortized Premium	210.7	211.1	212.7	236.7	265.2
Other	97.2	95.4	93.1	98.2	110.3

Source: Federal Reserve

Prices

The price of goods and services determine how much can be purchased by a fixed income. Researchers are interested in the prices of specific goods, as well as changes in purchasing power, more generally.

To summarize changes in purchasing power, researchers create a representative "basket" of relevant goods and services, and then track changes in the basket, and changes in the price of the basket, over time. The end result is a price index, which can be used to calculate the rate of inflation.

Inflation is typically calculated as the 12-month percent change in the price index. This annual inflation rate measures how prices in a given month compare to prices during the same month, one year prior. The 12-month inflation rate, based on various price indices, is presented in the following table.

Price Growth, Various Measures

one-year growth, percent

	Jun '25	May '25	Apr '25	Mar '25	Jun '24	Jun '23	'17–19 Avg.	'00–Avg.
CPI, All Items	2.7	2.4	2.3	2.4	3.0	3.0	2.1	2.6
CPI, ex. Food & Energy	2.9	2.8	2.8	2.8	3.3	4.8	2.1	2.4
PPI, Final Demand	2.3	2.7	2.5	3.2	2.9	0.3	2.3	2.6
Imports Price Index	-0.2	-0.2	0.1	0.8	1.6	-6.1	1.6	1.8
Exports Price Index	2.8	1.9	1.9	2.5	1.0	-11.8	1.6	1.8
PCE, All Items	2.6	2.4	2.2	2.3	2.4	3.3	1.7	2.2
PCE, ex. Food & Energy	2.8	2.8	2.6	2.7	2.6	4.4	1.7	2.1
PCE, Trimmed Mean	2.7	2.6	2.6	2.6	2.8	4.4	1.9	2.2

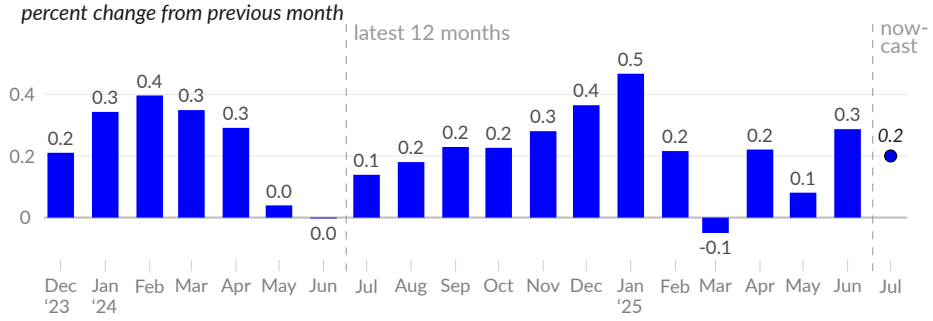
Source: BLS, BEA, Federal Reserve Bank of Dallas

In effect, the 12-month percent change in prices is smoothed, relative to the one-month change, by including information on price changes that happened over the past year. While the chartbook uses less-volatile 12-month inflation rates in most cases, the **one-month rate** can be more useful for examining short-term trends, for example by eliminating the base effects from changes in prices a year ago.

In June 2025, the one-month change in the consumer price index (CPI) was 0.3 percent (see ■), following 0.1 percent in May 2025. The Cleveland Fed nowcasts current inflation by combining recent inflation data with current oil and gasoline prices. As of August 7, the July 2025 nowcast is 0.2 percent (see ●).

CPI One-Month Change

percent change from previous month



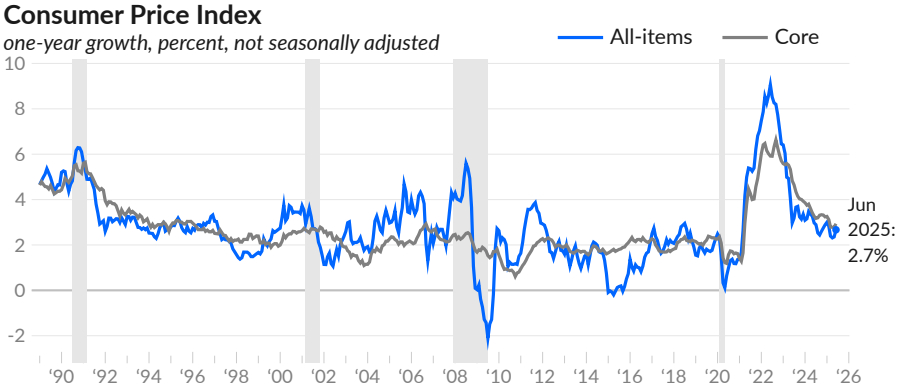
Source: Bureau of Labor Statistics, Federal Reserve Bank of Cleveland

Consumer Price Index

Consumer prices increased 2.7 percent over the year ending June 2025 (see —), according to the Consumer Price Index for all urban consumers (CPI-U). The core CPI, which does not include the more-volatile food and energy prices, increased 2.9 percent over the same one-year period (see —).

Consumer Price Index

one-year growth, percent, not seasonally adjusted



Source: Bureau of Labor Statistics

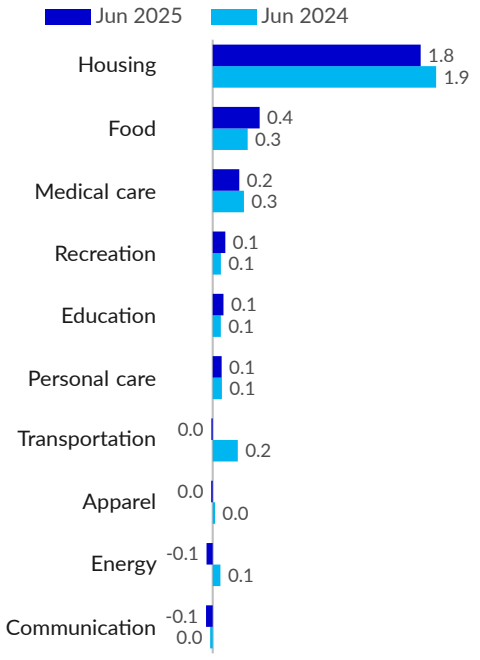
Recent changes in prices can be broad-based, that is derived from many prices changing at roughly the same rate, or narrow-based and driven by large changes in a subset of prices. Identifying each major spending category's **contribution to overall inflation** gives insight into whether inflation is broad-based and also into which groups of people face higher or lower rates of inflation.

In June 2025, housing prices contributed 1.8 percentage points to the CPI one-year inflation rate of 2.7 percent, slightly below the category's June 2024 contribution of 1.9 percentage points. Food prices added 0.4 percentage point to June 2025 inflation, slightly above the year-prior contribution of 0.3 percentage point. Medical care prices increased the inflation rate by 0.2 percentage point in the latest data, compared to 0.3 percentage point in June 2024.

Recreation prices increased the inflation rate by 0.1 percentage point in June 2025, in line with the year-prior virtually no contribution. Transportation prices make up 16.6 percent of the CPI basket and did not contribute to overall inflation in the latest data, slightly below a contribution of 0.2 percentage point one year prior.

Contribution of Major Categories

contribution to one-year CPI inflation rate
percentage points, not seasonally adjusted



Source: Bureau of Labor Statistics

The prices of some items are more volatile than others. Food and energy prices, for example, are sometimes separated from the rest of the CPI basket, which is referred to as the *core*, because swings in food and energy prices are larger and more frequent.

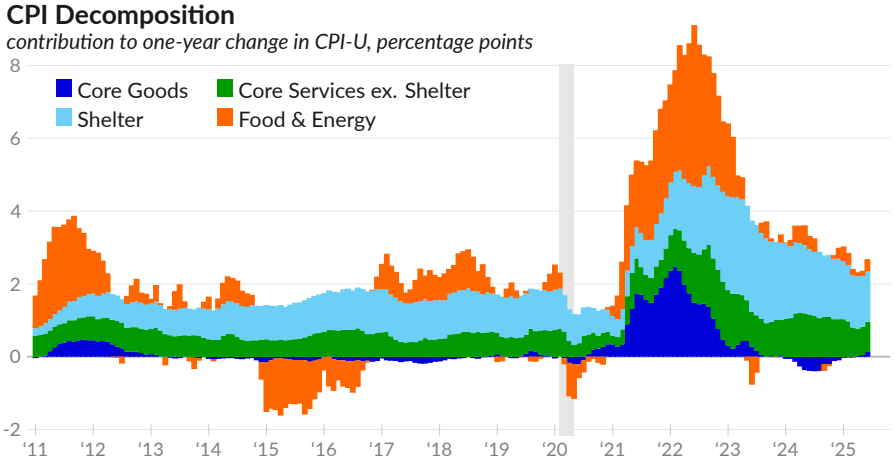
Core inflation includes core goods, core services other than shelter, and shelter. Core goods inflation was barely existent from 2013 through the start of the pandemic. Core goods prices are disproportionately affected by import prices and by changes in the quality of goods, for example from technological improvement. In contrast, domestic wage growth affects the prices for core services more than the other categories. Shelter prices are affected by housing supply and construction.

In June 2025, core goods contributed 0.1 percentage point to the one-year non-seasonally-adjusted CPI inflation rate of 2.7 percent (see ■), while core services excluding shelter contributed 0.8 percentage point (see ■). Shelter added 1.4 percentage points (see ■), and food & energy added 0.3 percentage point (see ■).

One year prior, in June 2024, the corresponding CPI inflation rate was 3.0 percent; core goods subtracted 0.4 percentage point, core services excluding shelter contributed 1.2 percentage points, shelter contributed 1.8 percentage points, and food and energy added 0.4 percentage point.

CPI Decomposition

contribution to one-year change in CPI-U, percentage points



Source: Bureau of Labor Statistics, Federal Reserve Bank of San Francisco

Relative Prices

Some prices increase faster or slower than others. Additionally, the basket of goods used to calculate the CPI is based on average spending patterns across individuals. At a given point, individuals may dedicate a large share of spending to a certain categories or have no expenses at all in a category. For example, day care costs are paid generally only for a few years of a child's life and only some households contain day-care-age children. But within those households, day care is a large share of overall spending.

One-year inflation rates for different categories of goods and services, including some smaller categories, are captured in the following section and table. The table also shows cumulative price changes since February 2020, the last month of data before the COVID-19 pandemic shutdown in the US. Additionally, the weight that a category has in the overall index–the category's share of the basket of goods and services used to calculate the CPI–is included as the last column in the table. This weight comes from each category's share of overall consumer spending during the most recent reference period, and is updated by changes in prices since the reference period.

Housing prices increased four percent over the year ending June 2025, substantially above the pre-COVID rate of 2.9 percent (the average monthly rate during 2019). Medical care prices increased 2.8 percent, these prices grew at an average rate of 2.8 percent during 2019. In contrast, prices of food consumed at home (groceries) increased 2.4 percent in the year ending June 2025 compared to 0.9 percent during 2019.

Transportation prices decreased 0.1 percent over the year ending June 2025, in line with the pre-COVID 0.3 percent decrease. Energy prices decreased 0.8 percent over the year, compared to an average 2.1 percent decrease on average in 2019. Energy prices are historically more volatile than other categories.

Selected CPI Categories

one-year growth, percent

	Jun '25	May '25	Apr '25	Jun '24	2019	Since Feb '20	Weight, Jun '25
All Items	2.7	2.4	2.3	3.0	1.8	24.7	100.0
All Items Less Food & Energy	2.9	2.8	2.8	3.3	2.2	22.9	79.914
Housing	4.0	4.0	4.0	4.4	2.9	28.6	44.359
Owners' Equivalent Rent	4.2	4.2	4.3	5.4	3.3	28.7	26.168
Rent of Primary Residence	3.8	3.8	4.0	5.1	3.7	28.3	7.448
Lodging Away from Home	-2.5	-0.9	-1.4	-2.3	3.0	18.3	1.386
Household Furnishings & Ops.	3.3	2.7	2.3	-0.8	1.8	22.3	4.452
Household Energy	7.1	6.2	5.5	4.2	-0.4	42.9	3.404
Transportation	-0.1	-1.3	-1.5	1.3	-0.3	31.6	16.564
New Vehicles	0.2	0.4	0.3	-0.9	0.4	20.7	4.320
Used Cars & Trucks	2.8	1.8	1.5	-10.1	1.0	35.8	2.422
Gasoline (All Types)	-8.3	-12.0	-11.8	-2.5	-3.5	29.6	2.968
Public Transportation	-2.7	-5.4	-5.6	-3.8	0.3	0.1	1.407
Medical Care	2.8	2.5	2.7	3.3	2.8	13.0	8.262
Professional Services	2.8	2.4	2.7	2.1	1.1	13.9	3.666
Hospital & Related Services	4.2	3.9	3.8	7.1	2.1	24.9	2.288
Health Insurance	3.4	2.9	3.3	-4.2	14.5	-15.0	0.797
Food	3.0	2.9	2.8	2.2	1.9	29.6	13.634
Food at Home	2.4	2.2	2.0	1.1	0.9	28.3	7.988
Food Away from Home	3.8	3.8	3.9	4.1	3.1	32.1	5.646
Full-Service	4.0	4.2	4.3	3.9	3.2	31.1	2.442
Limited-Service	3.5	3.5	3.4	4.3	3.1	35.4	2.832
Recreation	2.1	1.8	1.6	1.3	1.3	15.5	5.276
Communication	-1.9	-2.1	-2.3	-0.7	-0.9	-0.8	3.094
Wireless Telephone Services	-0.8	-0.5	-0.3	-0.7	-2.5	0.8	1.245
Internet Services	-2.3	-3.1	-2.9	4.3	1.5	8.4	0.919
Education	3.6	3.6	3.8	2.8	2.7	14.4	2.549
College Tuition & Fees	2.2	2.3	2.3	1.5	2.9	8.7	1.294
Day Care & Preschool	5.5	5.6	5.4	4.9	2.8	23.8	0.722
Apparel	-0.5	-0.9	-0.7	0.8	-1.3	5.1	2.493
Personal Care	3.1	3.3	2.8	3.2	1.3	22.6	2.455

Source: Bureau of Labor Statistics

Turning to one-month growth, the core CPI, which excludes food and energy, increased 0.2 percent in June 2025, or 2.8 percent annualized, slightly below the one-year core CPI inflation rate of 2.9 percent. The core CPI increased 0.1 percent in May 2025, and increased 0.2 percent in April 2025.

In June, housing prices increased 0.3 percent, (3.8 percent annualized). Over the past three months, housing prices increased at an average annualized rate of 4.3 percent, substantially above the 12-month rate of 2.9 percent. Food prices increased 0.3 percent in June, or four percent, annualized, compared to a three-month average of 2.2 percent.

Transportation prices increased at an annualized rate of 0.9 percent in June, and decreased at an average annualized rate of 2.5 percent over the past three months. Energy prices increased at an annualized rate of 12.0 percent in June, and increased at an average annualized rate of 3.1 percent over the past three months.

Selected CPI Categories, Monthly Rate

one-month growth, seasonally adjusted, percent

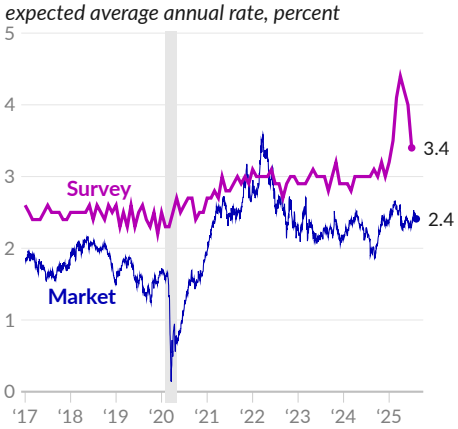
	Jun '25	May '25	Apr '25	Mar '25	Feb '25	Jan '25	Jul '24	Jun '24
All Items	0.3	0.1	0.2	-0.1	0.2	0.5	0.1	-0.0
All Items Less Food & Energy	0.2	0.1	0.2	0.1	0.2	0.4	0.2	0.1
Housing	0.3	0.3	0.5	0.3	0.4	0.3	0.3	0.2
Owners' Equivalent Rent	0.3	0.3	0.4	0.4	0.3	0.3	0.4	0.3
Rent of Primary Residence	0.2	0.2	0.3	0.3	0.3	0.3	0.5	0.3
Lodging Away from Home	-2.9	-0.1	-0.1	-3.5	0.2	1.4	0.0	-1.3
Household Furnishings & Ops.	1.0	0.3	1.0	-0.0	0.4	-0.2	0.2	0.5
Household Energy	0.9	0.5	1.4	1.4	1.3	0.5	0.1	-0.0
Transportation	0.1	-0.7	-0.0	-1.8	-0.4	1.2	-0.2	-1.1
New Vehicles	-0.3	-0.3	-0.0	0.1	-0.1	0.0	-0.1	-0.2
Used Cars & Trucks	-0.7	-0.5	-0.5	-0.7	0.9	2.2	-1.4	-1.6
Gasoline (All Types)	1.0	-2.6	-0.1	-6.3	-1.0	1.8	-0.9	-3.0
Public Transportation	0.4	-2.5	-1.8	-4.2	-3.4	0.7	-0.5	-2.5
Medical Care	0.5	0.3	0.5	0.2	0.3	0.2	-0.1	0.2
Professional Services	0.5	0.0	0.4	0.2	0.3	-0.2	0.2	0.1
Hospital & Related Services	0.4	0.4	0.5	1.3	0.2	0.9	-1.0	0.1
Health Insurance*	0.6	0.2	0.4	0.4	0.3	0.7	-0.4	0.1
Food	0.3	0.3	-0.1	0.4	0.2	0.4	0.1	0.2
Food at Home	0.3	0.3	-0.4	0.5	0.0	0.5	0.1	0.1
Food Away from Home	0.4	0.3	0.4	0.4	0.4	0.2	0.2	0.4
Full-Service	0.5	0.3	0.6	0.6	0.4	0.1	0.1	0.6
Limited-Service*	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.2
Recreation	0.4	0.1	-0.0	-0.1	0.3	1.0	0.1	0.2
Communication	0.0	-0.1	-0.4	0.1	0.3	0.4	-0.0	-0.3
Wireless Telephone Services*	-0.4	-0.2	0.1	-0.1	-0.1	-0.0	-0.1	-0.0
Internet Services	0.5	-0.1	-1.5	0.3	1.1	1.1	0.1	-0.4
Education	0.2	0.3	0.1	0.4	0.2	0.2	0.3	0.2
College Tuition & Fees	0.2	0.1	0.2	0.2	0.2	-0.1	0.2	0.2
Day Care & Preschool	-0.0	0.6	0.0	0.1	0.5	0.8	0.3	0.1
Apparel	0.4	-0.4	-0.2	0.4	0.6	-1.4	-0.3	-0.0
Personal Care	0.3	0.5	0.1	1.0	0.6	-0.5	0.2	0.5

Source: Bureau of Labor Statistics; *not seasonally adjusted

Inflation Expectations

Researchers gain insight on expected changes in prices through regular **surveys of consumers** and through **market data**. One market-based measure is known as the inflation breakeven and is calculated as the difference between the yield on a nominal treasury bond and the yield on a treasury inflation-protected bond of the same maturity. This difference represents the amount of inflation markets have priced in, on average, for the maturity of the bond.

Five-Year Expected Average Inflation
expected average annual rate, percent



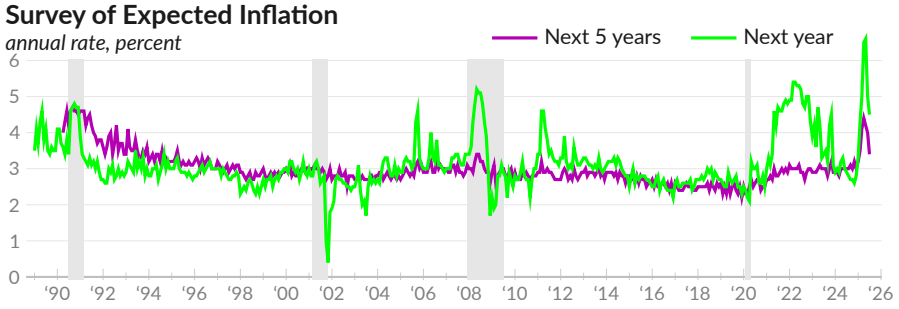
Source: FRED, U. of Michigan

As of July 2025, surveyed consumers expect inflation to average 3.4 percent over the next five years (see —), compared to an expected rate of 3.0 percent in July 2024. Consumers had expected inflation to average 2.6 percent over the past five years, while actual inflation over the period was 4.3 percent.

As of August 7, 2025, markets expect an average inflation rate of 2.4 percent over the next five years (see —), compared to an expected rate of 1.9 percent on August 5, 2024. Markets had expected inflation to average 1.4 percent per year over the past five years, five years ago.

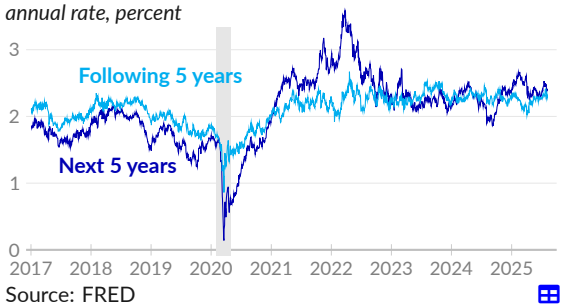
Both survey- and market-based estimates of expected inflation distinguish between near-term inflation and expected medium-term inflation. The survey-based measure asks about inflation over the next year. Respondents expect consumer prices to increase 4.5 percent over the year starting July 2025 (see —).

Survey of Expected Inflation
annual rate, percent



Source: University of Michigan

Market Expected Inflation
annual rate, percent



Source: FRED

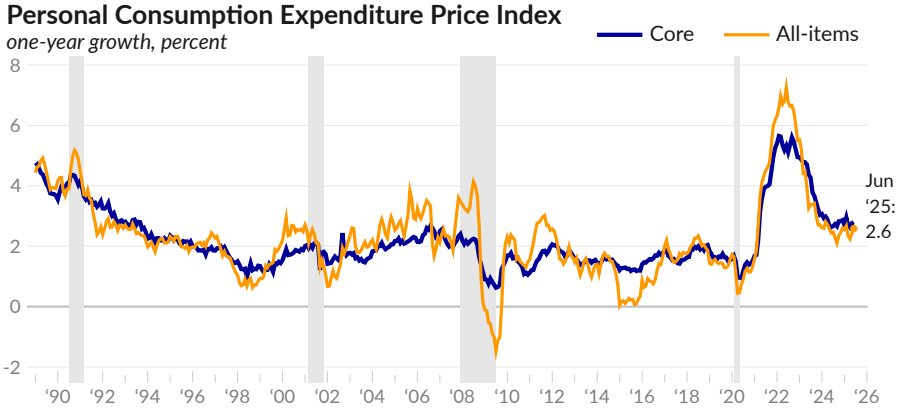
The market-based measure can also be used to calculate expected inflation over the five years starting five years from now. Over this five-year period, markets suggest 2.3 percent inflation per year, as of August 7, 2025. Inflation rates in the near-term are therefore expected to exceed inflation rates in the longer-term.

PCE Price Index

The Personal Consumption Expenditure (PCE) price index from the Bureau of Economic Analysis captures not only changes in the prices of goods and services but also monthly shifts in consumer behavior. Additionally, the index is regularly updated to incorporate the latest methodologies.

As of June 2025, **PCE inflation**, measured as the one-year percent change in the overall index, is 2.6 percent (see —), compared to 2.4 percent in May, and 2.4 percent in June 2024. Core PCE inflation, which excludes food and energy, was 2.8 percent in June 2025 (see —), 2.8 percent in May, and 2.6 percent in June 2024.

Personal Consumption Expenditure Price Index
one-year growth, percent

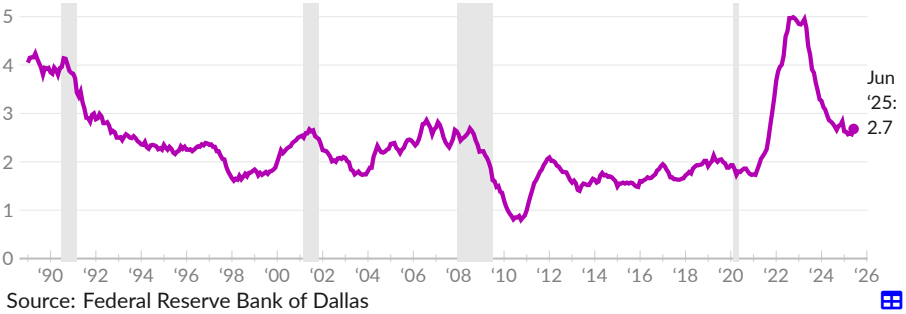


Source: Bureau of Economic Analysis

The Federal Reserve Bank of Dallas publish a variation of the PCE price index called the trimmed-mean index. The most-volatile categories in the current month's index are removed, or *trimmed*, to smooth the data. As a result, the most extreme categories, which vary from month-to-month, do not affect inflation rates calculated using the trimmed-mean index.

The trimmed-mean PCE price index increased 2.7 percent over the year ending June 2025 (see —). By excluding top and bottom categories, the trimmed-mean rate was 0.1 percentage point above the all-items PCE rate. In May 2025, the **trimmed-mean inflation rate** was 2.6 percent, 0.2 percentage point above the all-items rate. From 2017–2019, the average trimmed-mean rate was 1.9 percent, 0.1 percentage point above the all-items rate.

Personal Consumption Expenditure Price Index, Trimmed Mean
highest and lowest categories excluded, one-year growth, percent



Source: Federal Reserve Bank of Dallas

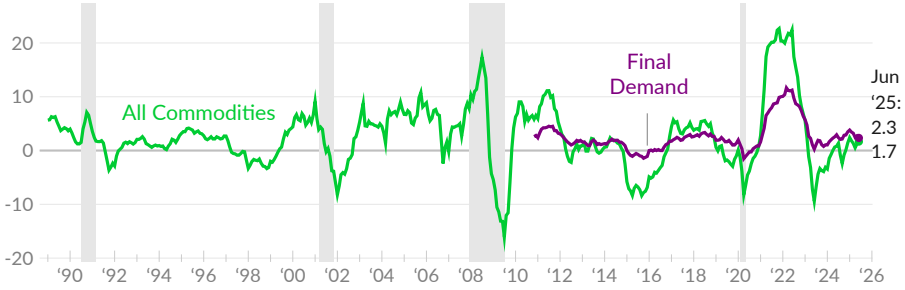
Producer Prices

The Bureau of Labor Statistics report **prices producers receive**. The goods-only producer price index (PPI) for all commodities (see —) increased 1.7 percent over the year ending June 2025, in line with the 12-month growth rate of 0.8 percent in June 2024. The index for final demand goods, services, and construction increased 2.3 percent over the year ending June 2025 (see —).

Note that the all commodities index includes goods at various stages of production and can count inflation multiple times in the production of the same goods. As a result, this measure can send an exaggerated inflation signal.

Producer Price Index

one-year growth, percent, not seasonally adjusted

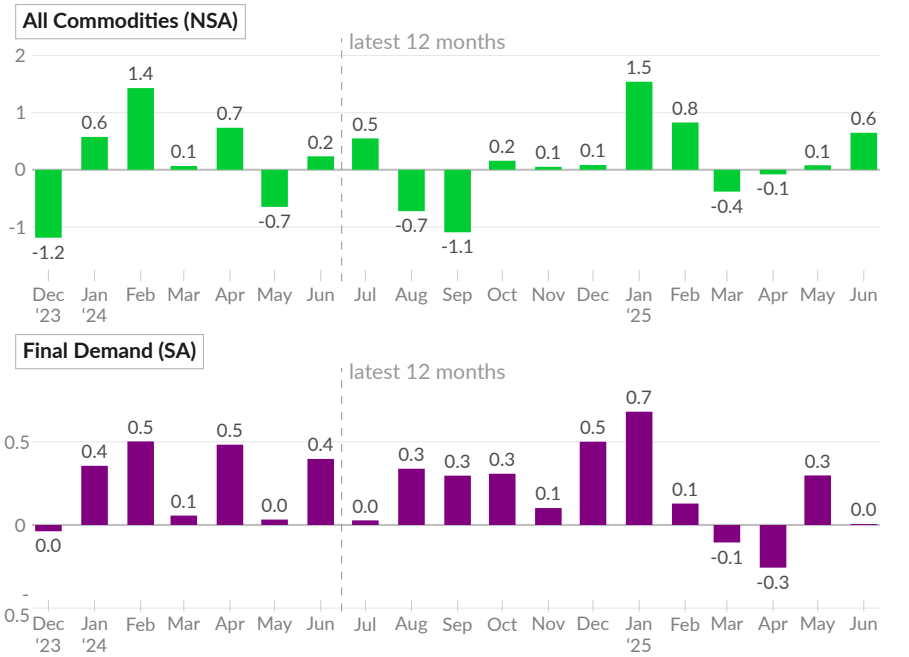


Source: Bureau of Labor Statistics

The one-month change in the prices producers receive can provide insight into recent trends. In June 2025, the one-month change in PPI final demand prices was 0.0 percent (see ■), following an increase of 0.3 percent in May 2025. The one-month change in the all commodities index was 0.6 percent (see ■) in June 2025 and 0.1 percent in May 2025.

PPI One-Month Growth

change from previous month, percent



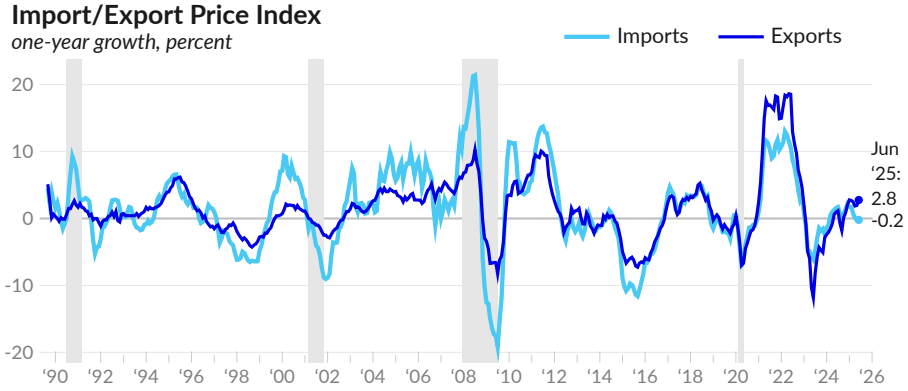
Source: Bureau of Labor Statistics

Import and Export Prices

The Bureau of Labor Statistics report changes in the prices of imports and exports. Over the year ending June 2025, **US import prices** fell 0.2 percent (see —), following decreases of 0.2 percent in May and virtually no change in April. Excluding fuels, US import prices increased 1.2 percent in June 2025 and grew 1.4 percent in May. In 2019, US import prices decreased at an average rate of 1.3 percent. Excluding fuels, import prices decreased at an average rate of 1.1 percent in 2019.

Prices of US exports grew 2.8 percent over the year ending June 2025 (see —), following increases of 1.9 percent in May, and 1.9 percent in April. In 2019, export prices decreased at an average rate of 0.8 percent.

Import/Export Price Index
one-year growth, percent



Source: Bureau of Labor Statistics

Commodity Prices

Commodities can have macroeconomic importance. Oil, which is a major input to production and transportation, has a particularly volatile history. Commodity prices can also send a signal to domestic producers. Higher prices encourage more production and lower prices discourage production.

Two important commodities for the construction and manufacturing industries are lumber and steel. From the producer price index, cold-rolled steel sheet and strip prices (see —) have increased 4.5 percent over the year ending June 2025, and increased 79.7 percent total since December 2019. Lumber prices (see —) increased 6.5 percent over the year ending June 2025, and increased 26.8 percent total since 2019.

Steel
cold-rolled steel sheet and trim, index 1989=1

Lumber
lumber and wood products, index, 1989=1

Source: Bureau of Labor Statistics

Crude Oil

On August 4, 2025, the spot price for a barrel of west Texas intermediate (WTI) **crude oil** is $67.33 (see —). Over the past year, this measure of oil prices decreased 12.2 percent. Over the past five years, the price increased 59.0 percent. The WTI price is currently $67 below its peak monthly average price of $134 per barrel in June 2008.

Oil Price

USD, west Texas intermediate crude, monthly average and latest value

Source: Energy Information Administration

Gasoline

On August 4, 2025, the US average price for a gallon of **gasoline** is $3.27 (see —), an increase of $0.02 from the week prior. This gas price measure, which is the average across formulations, grades, and locations, was $3.56 one year prior, and averaged $2.69 in 2019. During 2011–2013, the average gas price was $3.61.

Gasoline Price

dollars per gallon, all grades

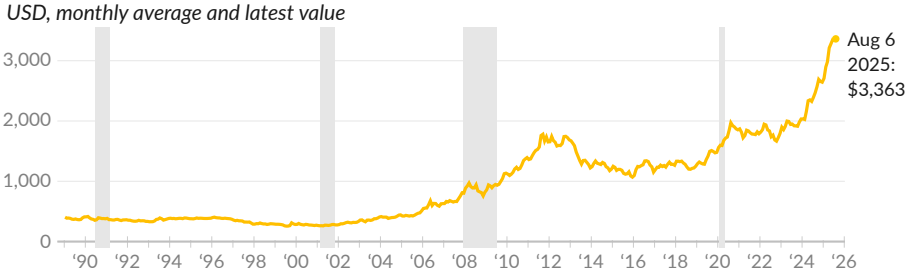
Source: Energy Information Administration

Gold

As of August 6, 2025, one troy ounce of **gold** sells for $3,363 (see —), compared to an average of $2,468 one year prior. Following the great recession, the monthly average price of gold reached $1,781 per ounce, in September 2011. In August 2025, the average monthly price reached $3,363 per ounce.

Gold Price

USD, monthly average and latest value



Source: London Bullion Market Association

Acknowledgments

This chartbook benefits from particularly helpful feedback on earlier versions from Gabriel Mathy, Iordan Koulov, Lara Merling, Kevin Cashman, and Rebecca Watts.

Additionally, the chartbook benefits immensely from other researchers who have shared their work in the public domain or provided me with guidance, including: Dean Baker, Matt Bruenig, Eileen Appelbaum, John Schmitt, Mark Weisbrot, Ben Zipperer, Alberto Rodelgo, Yevgeniya Korniyenko, Magali Pinat, Robert Blecker, Teasri Thiruvadanthai, Rainer Köhler, Gersenda Varisco, Venkat Josyula, Tom Augspurger, Claudia Sahm, Mike Sieferling, Andrew Paciorek, David Dorn, Skanda Amarnath, Ernie Tedeschi, Brad Setser, Joseph Politano, Arin Dube, Valerie Wilson, Mike Konczal, J.W. Mason, and Vikas Sharma.

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