# US Chartbook v0.0

**Notes:**

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Unless otherwise noted: data are seasonally adjusted and adjusted for inflation where necessary; growth and interest rates are presented on an annualized basis; and average growth rates are simple averages of individual period growth rates, rather than annualized cumulative growth.

# Overall Economic Activity

This analysis of the United States economy begins with the most popular measure of economic activity, Gross Domestic Product (GDP). According to the Bureau of Economic Analysis, GDP–the seasonally-adjusted annualized value of goods and services produced in the US–was $21,339 billion in the second quarter of 2019, compared to an inflation-adjusted equivalent of $10,209 billion in the first quarter of 1989.

The US population is growing by about sixth-tenths of a percent per year. GDP per capita (see —), adjusted for inflation to 2019 Q2 dollars, has increased to $64,834 in 2019 Q2 from $41,425 in 1989 Q1.

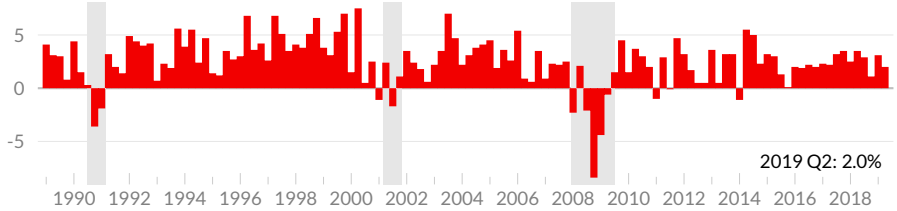
**GDP per capita**
*in 2019 Q2 dollars*


Source: Bureau of Economic Analysis

## Economic Growth

GDP (see ■) increased at an annual rate of 2.0 percent during the second quarter of 2019, compared to an increase of 3.1 percent in the first quarter of 2019. Quarterly growth has averaged 2.5 percent over the past three years, 2.2 percent over the past 10 years, and 2.5 percent over the past 30 years.

**Real Gross Domestic Product Growth**
*quarterly growth at seasonally adjusted annual rate, percent*

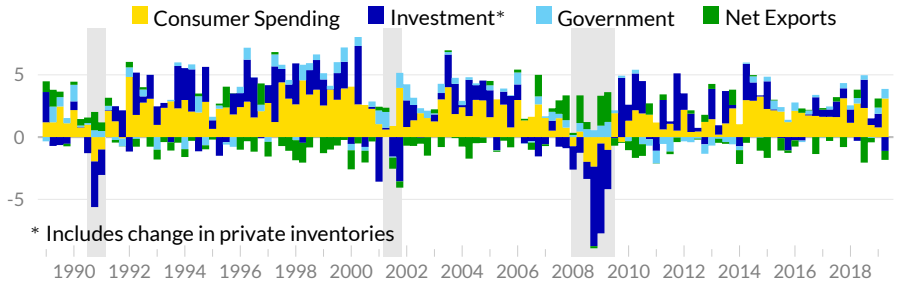



Source: Bureau of Economic Analysis

## Components of Growth

The **expenditure approach** compiles GDP from the sum of spending on domestic goods and services. Major spending categories are consumer spending (see ■), private investment (gross spending on capital goods) and changes in private inventories (see ■), government spending and investment (see ■), and net exports (see ■) which is measured as foreign spending on US goods and services less US spending on goods and services produced by the rest of the world.

**Real GDP Growth by Expenditure Type**
*percentage point contribution to GDP growth*

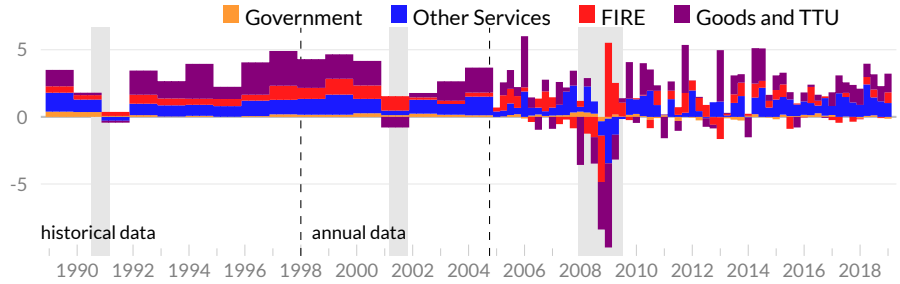



Source: Bureau of Economic Analysis

The **production approach** calculates GDP as the sum of gross value added–output minus inputs–in each sector. This identifies contributions from: goods-producing sectors combined with trade, transportation, and utilities (see ), finance, insurance, and real estate (see ), other service-providing sectors (see ), and government (see ).

### Real GDP Growth by Industry Group

*percentage point contribution to GDP growth*

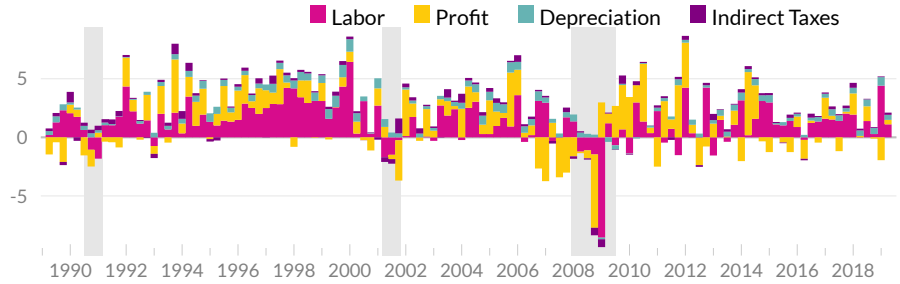



Source: Bureau of Economic Analysis

The **income approach** calculates GDP as the sum of market income to persons (in exchange for labor (see ) or from returns on capital (see )), indirect taxes such as sales taxes or tariffs (see ), and depreciation (see ).

### Real Gross Domestic Income Growth

*percentage point contribution to GDI growth*

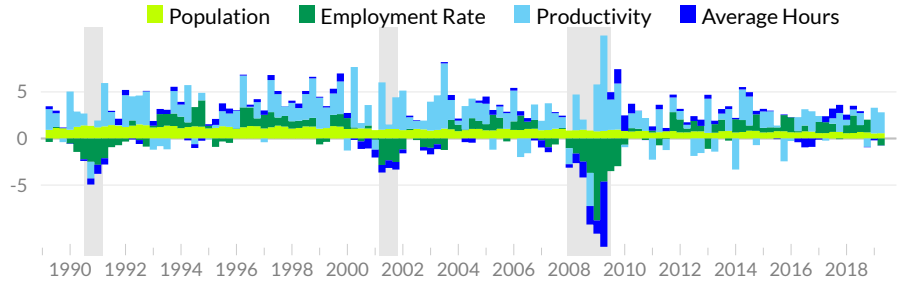



Source: Bureau of Economic Analysis

Changes to GDP can be assigned to changes in **household inputs**: population (see ), employment rates (see ), average hours worked (see ), and total economy productivity (see ).

### Real GDP Growth by Inputs

*percentage point contribution to GDP growth*




Source: Author's Calculations

## Components of Economic Growth

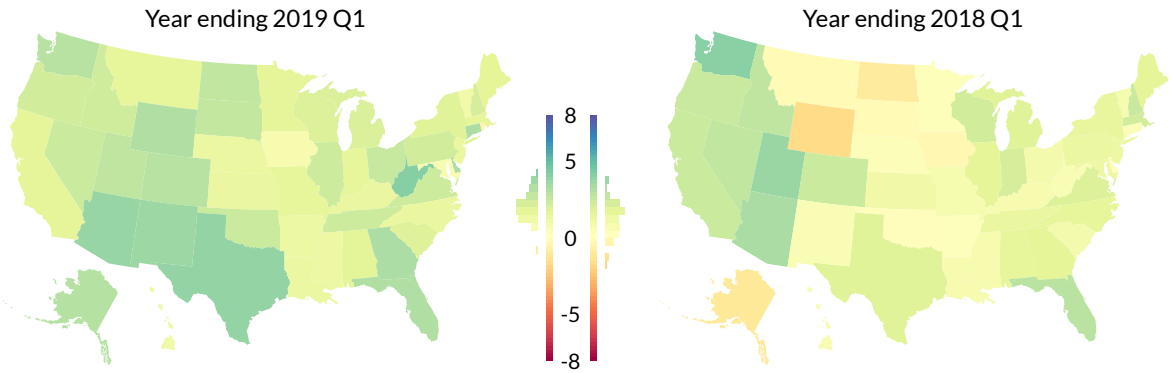
*percentage point contribution to real GDP/GDI growth* — *moving averages*

| | 2019 Q2 | '19 Q1 | '18 Q4 | '18 Q3 | '18 Q2 | 3-year | 10-year | 30-year |
|---|---|---|---|---|---|---|---|---|
| **Gross Domestic Product** | 2.0 | 3.1 | 1.1 | 2.9 | 3.5 | 2.5 | 2.2 | 2.5 |
| Consumer Spending | 3.10 | 0.78 | 0.97 | 2.34 | 2.70 | 1.88 | 1.58 | 1.81 |
| Durable Goods | 0.87 | 0.02 | 0.09 | 0.25 | 0.56 | 0.44 | 0.42 | 0.42 |
| Non-durable Goods | 0.91 | 0.30 | 0.24 | 0.50 | 0.57 | 0.40 | 0.30 | 0.33 |
| Services | 1.32 | 0.46 | 0.65 | 1.59 | 1.57 | 1.03 | 0.85 | 1.06 |
| Gross Investment | -1.11 | 1.09 | 0.53 | 2.27 | -0.30 | 0.62 | 0.87 | 0.59 |
| Residential | -0.09 | 0.60 | 0.64 | 0.29 | 1.04 | 0.60 | 0.58 | 0.54 |
| Non-residential | -0.11 | -0.04 | -0.18 | -0.16 | -0.15 | -0.01 | 0.11 | 0.03 |
| Change in inventories | -0.91 | 0.53 | 0.07 | 2.14 | -1.20 | 0.04 | 0.17 | 0.03 |
| Government | 0.77 | 0.50 | -0.07 | 0.36 | 0.44 | 0.25 | 0.00 | 0.24 |
| Federal | 0.52 | 0.14 | 0.07 | 0.19 | 0.25 | 0.14 | 0.01 | 0.07 |
| State and Local | 0.25 | 0.36 | -0.14 | 0.17 | 0.19 | 0.12 | -0.00 | 0.17 |
| Net Exports | -0.72 | 0.73 | -0.35 | -2.05 | 0.67 | -0.25 | -0.20 | -0.15 |
| Exports | -0.71 | 0.49 | 0.18 | -0.78 | 0.71 | 0.27 | 0.48 | 0.51 |
| Imports | -0.01 | 0.23 | -0.53 | -1.27 | -0.04 | -0.52 | -0.67 | -0.66 |
| | | | | | | | | |
| Goods and TTU | – | 1.39 | 1.13 | 1.13 | 0.99 | 0.89 | 0.57 | 0.91 |
| Manufacturing | – | 0.51 | 0.32 | 0.31 | 0.26 | 0.32 | 0.15 | 0.33 |
| Construction | – | 0.00 | -0.09 | 0.12 | 0.11 | 0.07 | -0.00 | -0.01 |
| Retail Trade | – | 0.63 | -0.14 | 0.34 | -0.06 | 0.24 | 0.13 | 0.20 |
| FIRE | – | 0.80 | -0.07 | 0.59 | 0.55 | 0.21 | 0.48 | 0.47 |
| Other Services | – | 1.03 | 1.16 | 1.33 | 2.35 | 1.19 | 0.86 | 0.89 |
| Education & Healthcare | – | 0.51 | 0.16 | 0.24 | 0.34 | 0.24 | 0.18 | 0.19 |
| Professional & Business | – | 0.27 | 0.48 | 0.59 | 0.96 | 0.48 | 0.33 | 0.34 |
| Information | – | 0.25 | 0.47 | 0.41 | 0.70 | 0.41 | 0.29 | 0.26 |
| Government | – | -0.14 | -0.02 | 0.12 | 0.07 | 0.06 | 0.00 | 0.10 |
| | | | | | | | | |
| Population | 0.57 | 0.55 | 0.66 | 0.70 | 0.59 | 0.64 | 0.72 | 0.98 |
| Employment Rate | -0.75 | -0.05 | 1.36 | 0.74 | 1.88 | 0.61 | 0.30 | 0.02 |
| Average Hours | -0.02 | -0.15 | -0.04 | 0.20 | 0.40 | 0.09 | 0.14 | 0.02 |
| Productivity | 2.24 | 2.75 | -0.90 | 1.29 | 0.64 | 1.16 | 1.10 | 1.48 |
| | | | | | | | | |
| **Gross Domestic Income** | 2.1 | 3.2 | 0.8 | 3.3 | 0.7 | 2.0 | 2.4 | 2.5 |
| Labor | 1.11 | 4.41 | 0.28 | 1.39 | -0.03 | 1.38 | 1.18 | 1.29 |
| Profit | 0.38 | -1.95 | -0.11 | 1.26 | 0.12 | 0.06 | 0.79 | 0.63 |
| Depreciation | 0.43 | 0.73 | 0.53 | 0.59 | 0.47 | 0.44 | 0.31 | 0.42 |
| Indirect Taxes | 0.19 | 0.06 | 0.07 | 0.05 | 0.15 | 0.15 | 0.15 | 0.17 |

Source: Bureau of Economic Analysis and Author's Calculations

**Real GDP Growth by State**

*percentage point change in real GDP*




Source: Bureau of Economic Analysis

Over the year ending YYYY QQ, real GDP growth in n states was five percent or more, n2 states had real GDP growth between 2.1 and 5 percent, n3 states had less than two percent GDP growth, while n4 states had no or negative GDP growth. xstate (rate%) had the highest GDP growth rate over the one year period.

Table will go here.

Then do a regional breakdown with four columns (full width) and the various state IDs and the latest, 1-year and 3-year moving averages. Then do a stacked bar chart that assigns GDP growth to the various regions.

May also want to have some text that describes the contributions to total GDP growth, some of the top and bottom states, and some overall trends. For example, how many states have averaged GDP growth of 2 percent or more over the past three years? Which states have averaged GDP growth of 4 percent or more the past year? If len(states) < 4 print out the state names.

How many states does it take to make up half of US GDP growth?

# Poverty

**Share of local population in bottom third of housing-adjusted income, 2017**

*Share of commuting zone householders with after-housing-expense annual income below $13,060*