

Notes:

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Very early stage draft

Contents not considered reliable until version 1.0 is released.

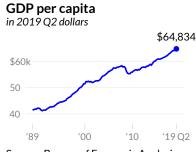
Proposed Contents:

- Overall Economic Activity
- Overall Financial Activity
- Households
- Businesses
- Government
- External Sector
- Labor Markets
- Capital Markets
- Prices
- International Comparisons
- References

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.



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

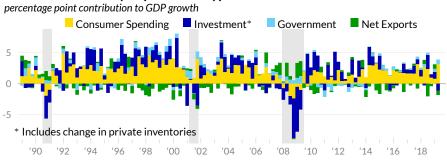


Source: Bureau of Economic Analysis

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 \square), private investment (gross spending on capital goods) and changes in private inventories (see \square), government spending and investment (see \square), and net exports (see \square) 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

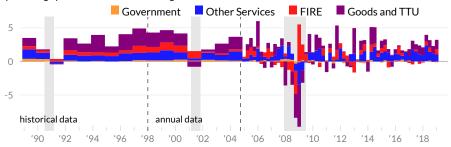


Source: Bureau of Economic Analysis

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

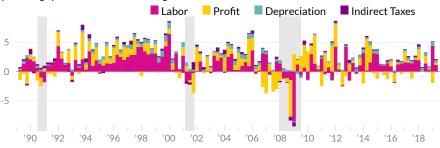


Source: Bureau of Economic Analysis

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

Real Gross Domestic Income Growth

percentage point contribution to GDI growth

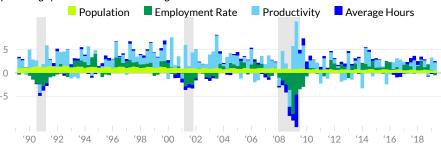


Source: Bureau of Economic Analysis

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

Real GDP Growth by Inputs

percentage point contribution to GDP growth



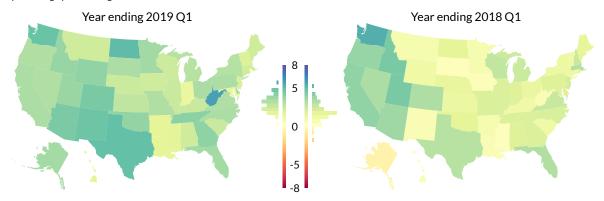
Source: Author's Calculations

Components of Economic Gr	owtn					
percentage point contribution to real G	DP/GDI gr	owth				
	2019	'19	'18	'18	'18	

	ntage point contribution to real G		rowth				moving	average	2S
		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	-0.49	0.10	1.21	0.56	2.05	0.63	0.30	0.02
	Average Hours	0.27	-0.22	-0.19	0.24	0.64	0.12	0.15	0.02
	Productivity	1.70	2.66	-0.60	1.43	0.23	1.10	1.08	1.47
	Gross Domestic Income	2.1	3.2	8.0	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

For the year ending 2019 Q1, one state (West Virginia) had real GDP growth of more than five percent, 40 states had real GDP growth between two and five percent, 10 states had less than two percent GDP growth, and no states had negative GDP growth.

Real GDP Growth by State

quarterly growth at seasonally adjusted annualized rate				total growth, 2019 Q1				
	2019 Q1	'18 Q4	'18 Q3	'18 Q2	'18 Q1	1-year	3-year	10-year
United States	2.2	4.2	3.4	2.2	3.1	3.2	8.3	23.4
Pacific	1.7	6.4	2.0	2.3	2.8	3.3	11.8	31.5
Washington	7.2	7.2	5.4	3.1	3.1	4.7	16.2	38.1
California	0.9	6.6	1.2	2.2	2.7	3.2	11.4	32.1
Oregon	2.0	3.6	4.2	1.3	3.1	3.1	12.1	27.7
Hawaii	0.0	2.4	1.6	1.1	1.2	1.6	4.7	16.1
Alaska	-5.7	1.7	2.9	4.9	3.9	3.4	0.2	-2.9
West South Central	2.4	4.1	2.5	5.6	4.7	4.2	6.7	26.7
Texas	2.4	4.5	3.3	6.6	5.1	4.9	8.3	34.0
Oklahoma	8.0	5.4	0.2	5.5	3.9	3.7	1.4	18.7
Arkansas	1.0	1.7	0.6	1.5	2.5	1.6	3.0	12.2
Louisiana	4.3	1.4	-0.1	1.3	3.8	1.6	2.0	-1.5
Middle Atlantic	1.2	4.1	2.8	1.2	3.1	2.8	6.9	20.2
New York	0.5	4.7	3.0	0.2	3.8	2.9	7.8	26.7
Pennsylvania	0.7	4.0	3.2	2.5	2.9	3.2	6.3	18.5
New Jersey	3.6	2.4	1.8	1.8	1.8	2.0	5.3	7.9
Mountain	2.7	4.0	4.8	3.3	3.8	4.0	10.0	20.0
Utah	5.9	3.7	4.7	1.8	4.2	3.6	12.2	32.8
Colorado	0.3	5.9	4.1	3.8	3.6	4.4	10.8	29.9
Idaho	2.0	5.6	3.6	2.7	2.7	3.6	12.5	21.6
continued on next page								

	2019 Q1	'18 Q4	'18 Q3	'18 Q2	'18 Q1	1-year	3-year	10-year
continued from previous	page							
Arizona	5.2	2.6	7.4	3.5	3.8	4.3	12.4	18.9
Montana	-0.4	3.2	1.4	1.3	3.2	2.2	2.4	15.0
Nevada	6.4	2.5	2.7	2.8	4.0	3.0	9.0	11.0
New Mexico	-1.1	4.3	5.5	4.1	4.6	4.6	4.7	7.6
Wyoming	-6.2	3.0	2.8	6.0	3.3	3.8	-0.2	-13.3
South Atlantic	2.0	3.2	4.7	1.7	2.7	3.1	8.4	18.6
Georgia	-0.5	2.6	7.6	2.1	3.1	3.8	10.6	24.2
South Carolina	1.4	2.5	3.2	1.6	2.5	2.4	7.6	21.2
Florida	4.1	1.4	7.2	2.0	2.9	3.4	10.3	20.8
Maryland	0.4	3.7	-0.9	1.2	1.8	1.5	6.9	18.5
District of Columbia	3.7	1.4	6.3	0.1	1.4	2.3	7.2	17.6
North Carolina	2.0	7.7	0.5	1.9	2.8	3.2	7.9	15.1
Virginia	2.9	2.9	4.9	1.5	2.7	3.0	6.4	14.7
Delaware	-1.2	8.0	9.0	0.0	3.9	3.4	0.6	13.8
West Virginia	-2.0	6.8	9.3	1.8	5.2	5.7	6.1	6.5
West North Central	0.9	6.4	1.5	1.4	2.7	3.0	4.7	17.0
North Dakota	0.5	9.6	3.2	3.5	3.9	5.0	-0.9	52.0
Nebraska	0.7	4.7	-0.8	2.2	3.4	2.4	3.5	25.8
South Dakota	4.6	2.4	4.5	2.1	3.6	3.1	1.2	22.7
Minnesota	0.1	7.6	2.5	1.1	2.6	3.4	7.5	20.4
Iowa	1.4	6.5	-0.2	0.3	2.3	2.2	2.1	19.7
Kansas	0.6	5.4	1.2	0.9	3.1	2.6	5.7	14.7
Missouri	1.4	6.2	1.8	1.8	2.3	3.0	4.6	5.0
East North Central	2.8	1.8	3.9	1.5	3.0	2.5	5.9	16.4
Ohio	0.2	3.1	4.9	1.4	3.5	3.2	5.8	18.8
Michigan	2.3	3.8	3.3	1.8	2.6	2.9	7.5	18.4
Wisconsin	4.9	1.6	2.4	2.1	2.9	2.3	6.4	17.3
Indiana	4.0	-0.4	1.9	0.9	2.9	1.3	6.5	14.8
Illinois	4.0	0.6	5.0	1.3	2.9	2.4	4.5	13.6
New England	3.6	0.6	3.3	1.7	2.5	2.0	5.2	15.1
Massachusetts	4.7	2.2	1.8	1.8	2.7	2.1	7.2	25.4
New Hampshire	6.4	-0.7	3.9	1.7	2.6	1.9	5.7	20.7
Vermont	0.9	4.0	-1.1	1.9	2.5	1.8	5.0	11.9
Maine	2.0	2.5	3.1	0.7	2.6	2.2	6.1	8.6
Rhode Island	1.3	3.2	-5.7	1.0	2.2	0.1	0.9	7.7
Connecticut	1.7	-3.6	9.0	1.8	2.2	2.2	1.8	-0.1
East South Central	0.3	4.5	3.0	1.6	2.4	2.9	6.3	14.4
Tennessee	0.6	6.6	5.2	1.6	2.4	3.9	8.9	23.6
Kentucky	-1.8	4.5	0.9	1.8	2.5	2.4	4.1	12.8
Alabama	1.2	2.2	1.8	2.1	2.7	2.2	5.8	10.6
Mississippi	1.3	2.2	2.0	0.5	1.9	1.7	2.8	0.0

Source: Bureau of Economic Analysis

Financial Accounts

A high-level overview of US financial activities can be provided by dividing the world economy into three sectors: the US private sector (see), the US government (see), and the rest of the world (see), then examining the net lending and borrowing between the groups, which must sum to zero at an aggregate level. That is, if one sector is running a deficit, another sector must be running a surplus.

Sectoral Financial Balance

net lending (+) or borrowing (-), NIPA basis, by sector, as share of GDP Government Rest of World 10 -10 94 '96 '98 '00 '02 '04 '06 '08 10 '12 '14 '16

Source: Bureau of Economic Analysis

In 2019 Q1, the US private sector was a net lender (running a surplus) of the equivalent of 4.3 percent of GDP, compared to 2.3 percent in 2015 Q1. The rest of the world was a net lender to the US, to the equivalent of 2.6 percent of GDP in 2019 Q1 compared to 2.4 percent in 2015 Q1. Balancing these transactions, the government (federal, state, and local combined) was a net borrower (running a deficit) of the equivalent of -6.9 percent of GDP, compared to -4.7 percent in 2015.

Wealth

Total US wealth is the tangible assets of all non-corporate sectors of the US, plus the market value of domestic corporate equities, less US financial obligations to the rest of the world. The ratio of US total wealth, excluding public lands, to GDP increased to 4.7 in 2019 Q2 from 3.65 in 1989 Q1. The market value of corporate equities (see ■) increased to a 1.92 multiple of GDP in 2019 Q2 from 0.56 in 1989 Q1. The market value of residential real estate (see ■) increased to 1.53 times GDP from 1.33 in 1989. The other category (see ■), which includes tangible assets other than residential real estate less US financial obligations to the rest of the world, decreased to 1.26 from 1.76 in 1989.

Total US Wealth to GDP Ratio



Source: Federal Reserve

Households

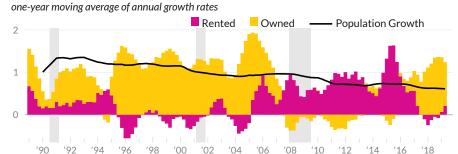
This section covers the household sector of the economy loosely defined, and touches on demographics, personal income and outlays, residential fixed investment, household balance sheets, home ownership, housing prices, and housing construction and permitting.

Demographics and Household Formation

The rate of household formation since 1989 can offer a high-level overview of some major demographic and economic developments. From 1989 to 1994,

This section should capture 1) population, 2) population growth, 3) aging, 4) increased education.

Household Formation by Type



Source: Census Bureau

Income to Persons

This section looks at income received by people, by type of income, adjusted for inflation using the PCE implicit price deflator. Income is divided into labor income (see ■), which is measured as compensation of employees, capital income (see □), measured as the sum of proprietor income, rental income, and dividend and interest income, and welfare income (see □), which is measured as transfers to persons less contributions to social insurance.

Personal Income



Source: Bureau of Economic Analysis

Labor Income

Capital Income

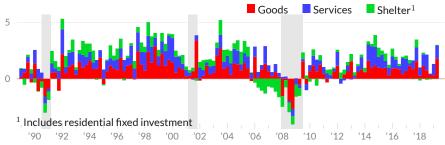
Welfare Income

Consumer Spending

Consumer spending drives the US economy. The category includes spending on goods (see ■) and services (see ■). Shelter (see ■) is a major component of household spending and is calculated below as household spending on housing services and utilities combined with private residential fixed investment.

Consumer Spending and Residential Investment

percentage point contribution to GDP growth



Source: Bureau of Economic Analysis

[Detailed PCE table to go here]

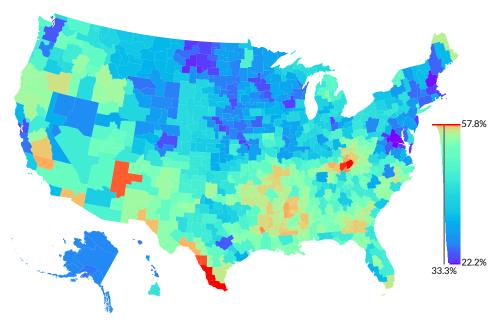
Household balance sheets

Housing prices

Housing permits

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



Source: American Community Survey

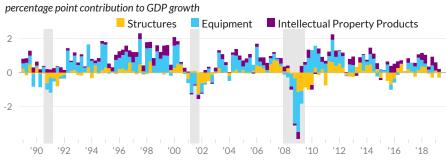
Businesses

Overview text goes here and perhaps a chart.

Business Fixed Investment

When businesses invest in ways that make workers more productive, the economy is able to meet more material needs with the same inputs. Business investment is grouped by structures (see \blacksquare), equipment (see \blacksquare), and intellectual property products (see \blacksquare).

Private Non-Residential Fixed Investment



Source: Bureau of Economic Analysis

Durable goods new orders

Corporate profits

Industrial production

Retail sales

Free cash flow

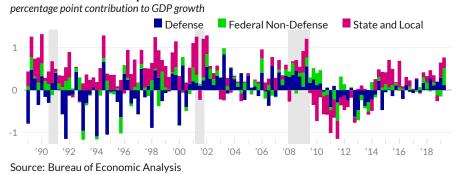
Balance sheets

Government

Overview

Government Consumption and Investment

Government Consumption and Investment



Federal

State

Local

Balance sheets

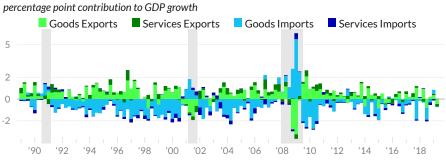
External Sector

Overview Text goes here.

Trade

The US runs a persistent trade deficit, which often shows up as a negative contributor to GDP growth. The trade balance is the exports of goods (see \blacksquare) and the exports of services (see \blacksquare) minus imports of goods (see \blacksquare) and imports of services (see \blacksquare).

International Trade



Source: Bureau of Economic Analysis

Current account balance

Trade in Goods

Trade in Services

Trade balance

Exchange rates

Direct and Portfolio Investment

International Investment Position

Labor Markets

I his will be the largest section
Overview
Employment Rate
Unemployment Rate
Job growth
Wage growth
Quits
Openings
Jobless claims

Reasons for non-participation

Capital Markets

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Prices

CPI

PPI

XMPI

PCE

Expectations

International Comparisons

Demographics
Economic Activity
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Poverty

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List of tables and sources along with some notes...