Activity 1: Longer Set of Readings

Name: _____   **Date:** _____

Reading 1: Overall State of the Economy

Your group will specialize in the overall state of the economy. Study the next three graphs that show the unemployment rate, real GDP, and the labor force participation rate for the United States from 2005 until the present. You will focus on trying to answer the following question:

Does the economy currently need more stimulus?

Each graph will have questions for your group to analyze. After your group has analyzed the three graphs, you will discuss the answer to the main question.

Unemployment Rate

U.S. Bureau of Labor Statistics, Unemployment Rate [UNRATE], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/UNRATE, March 19, 2021.

- How does the increase in unemployment compare to the Great Recession of 2008?
- How quickly has unemployment recovered compared to the Great Recession of 2008?
- Has unemployment completely recovered since the beginning of the pandemic?

Real Gross Domestic Product
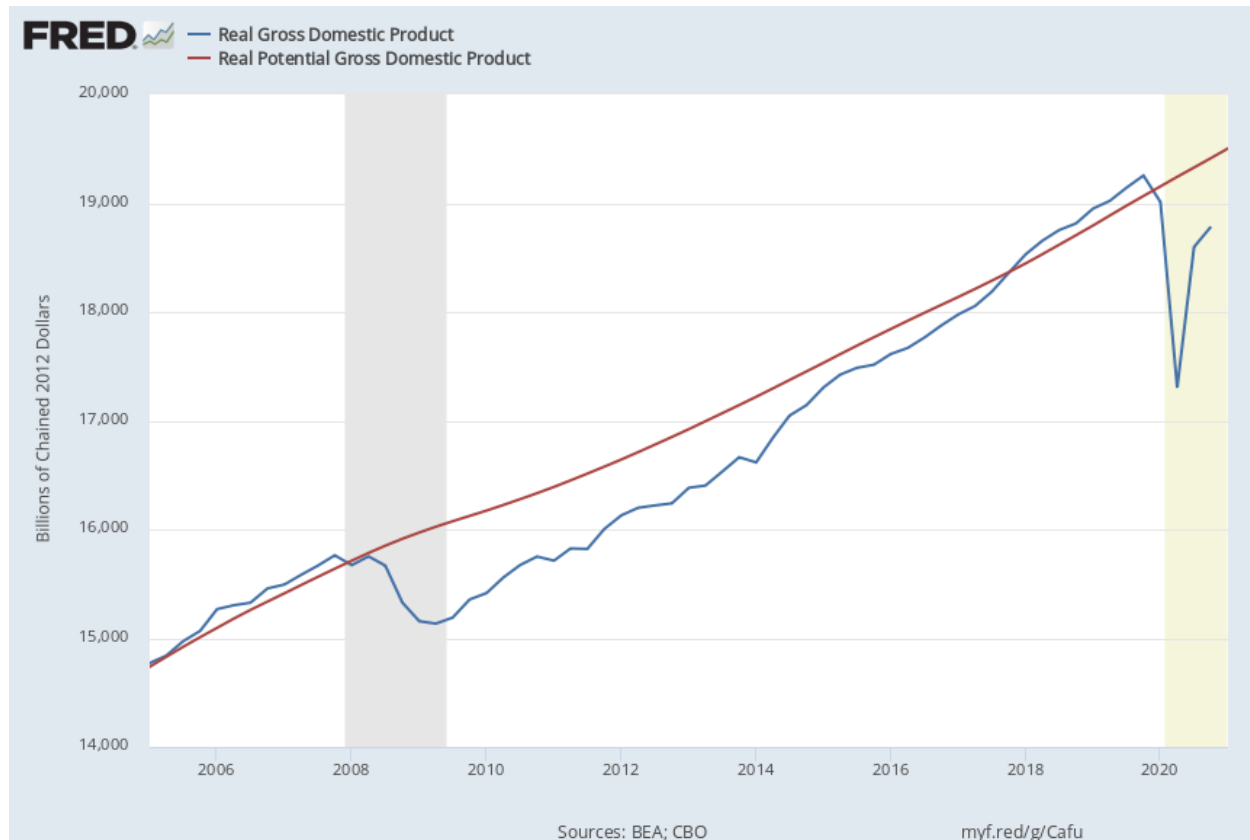
U.S. Bureau of Economic Analysis, Real Gross Domestic Product [GDPC1], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/GDPC1, March 19, 2021.

- Is the size of the economy as measured by real GDP above or below real potential GDP (real potential GDP is an estimate of the capacity of the economy)?
- How quickly has real GDP recovered compared to the Great Recession of 2008?

Labor Force Participation Rate

FRED — Labor Force Participation Rate

Source: U.S. Bureau of Labor Statistics   myf.red/g/Cafw
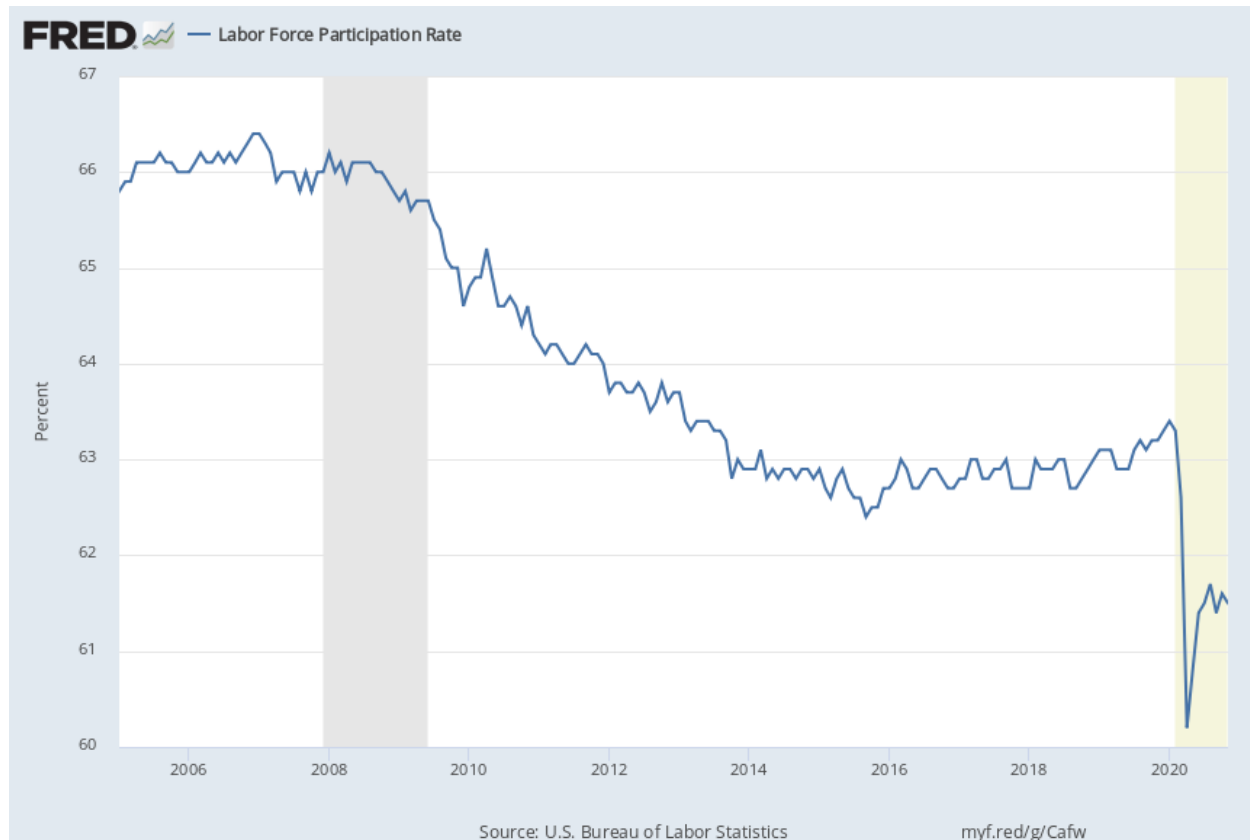
U.S. Bureau of Labor Statistics, Labor Force Participation Rate [CIVPART], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/CIVPART, March 19, 2021.

- What has been the overall trend of labor force participation (defined as the percentage of the working age population who are in the labor force)? What do you think is the reason for the trend?
- What has happened to labor force participation since the beginning of the pandemic?

### Reading 2: Impact on Businesses, People, State and Local Governments

Your group will specialize in how businesses, people, and governments are doing during the pandemic. Study the next three graphs that show business closures, stress measures, and changes in hiring by state and local governments. You will focus on trying to answer the following question:

Are households, businesses, and state and local governments stressed and in need of help?

Each graph will have questions for your group to analyze. After your group has analyzed the three graphs, you will discuss the answer to the main question.

Business Closures Continue to Increase Nationally

Number of businesses marked closed on Yelp that were open March 1
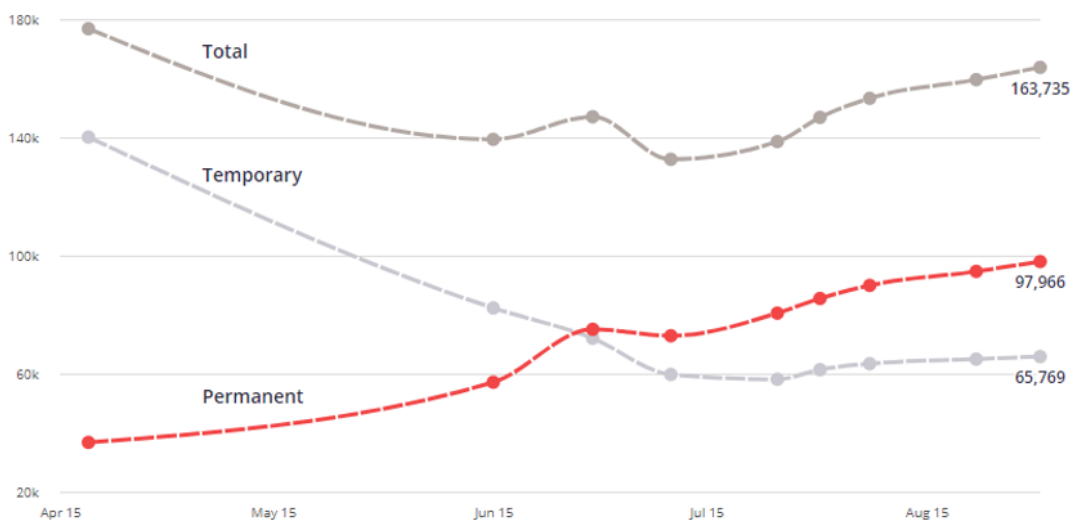
Yelp Data, Yelp: Local Economic Impact Report, September 2020,
https://www.yelpeconomicaverage.com/business-closures-update-sep-2020, accessed on December 9, 2020.

- How are business closures measured in this graph? What kind of businesses are generally on Yelp?
- What is the trend in the total number of businesses that are closed?
- What is the trend in the total number of businesses that are permanently closed?

Symptoms of Anxiety Disorder or Depressive Disorder in Households

	Value in %
Pre Pandemic Comparison	11.0
Apr 23 - May 5	35.9
May 7 - May 12	34.4
May 14 - May 19	33.9
May 21 - May 26	34.3
May 28 - June 2	35.5
June 4 - June 9	36.1
June 11 - June 16	36
June 18 - June 23	36.1
June 25 - June 30	37.8
July 2 - July 7	39
July 9 - July 14	40.3
July 16 - July 21	40.9
Aug 19 - Aug 31	36.4
Sep 2 - Sep 14	36.2
Sep 16 - Sep 28	37.2
Sep 30 - Oct 12	37.5
Oct 14 – Oct 26	37.8
Oct 28 – Nov 9	41.4
Nov 11 – Nov 23	42.6
Nov 25 – Dec 7	41.4
Dec 9 – Dec 21	42.4
Jan 6 – Jan 18	41.1
Jan 20 – Feb 1	41.5
Feb 3 – Feb 15	39.2
Feb 17 – Mar 1	38.9

U.S. Census Bureau, Household Pulse Survey 2020, Anxiety and Depression, https://www.cdc.gov/nchs/covid19/pulse/mental-health.htm, accessed March 19, 2021.

- Are symptoms of anxiety disorder or depressive disorder higher or lower than before the pandemic?
- Have the symptoms increased or decreased since April when the recent surveys began?

Local and state government
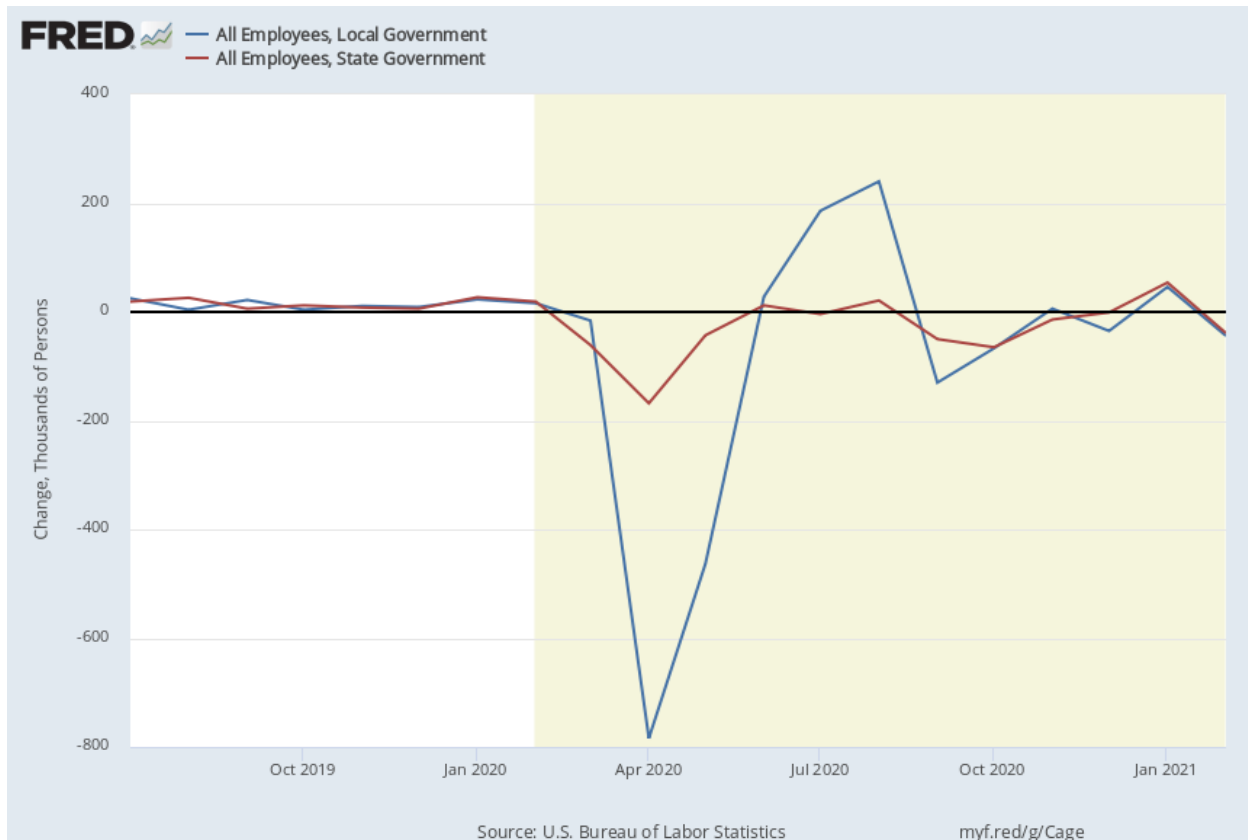
U.S. Bureau of Labor Statistics, All Employees, Local Government [CES9093000001], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/CES9093000001, March 19, 2021.

U.S. Bureau of Labor Statistics, All Employees, State Government [CES9092000001], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/CES9092000001, March 19, 2021.

- The graph measures the change in the number state and local government employees. What has happened to state and local government employment since the beginning of the pandemic?
- Overall, are there more or less state and local employees than before the pandemic? (Estimate if more jobs have been lost than gained during the pandemic based on the changes given in the graph.)

Reading 3: Crowding out and interest rates

Your group will specialize in the effects of government borrowing on interest rates. Study the following short article, a graph of historical interest rates, and projections of future interest rates. You will focus on trying to answer the following question:

Based on historical levels and future projections, are high interest rates currently a concern?

After reading the article and examining the data, you will discuss the answer to the main question.

### Article: Crowding Out and the Federal Budget Deficit

A federal budget deficit occurs when the federal government's outlays (payments) are larger than their receipts (revenues). When the federal government runs a deficit, it must borrow to cover the shortfall. The federal government borrows by having the Treasury Department issue Treasury bills, notes and bonds. People buy these securities from the Treasury and receive regular interest payments from the Treasury until the security matures. By buying these Treasury securities, people are loaning money to the federal government. Because the U.S. government is considered to be a very secure investment risk, the interest rate paid by the federal government tends to be low relative to other investments such as corporate bonds.

One possible problem with the government borrowing funds from the public is that this might cause interest rates to rise. As the government wants to borrow more and more funds, people may not want to loan their money to the government unless they are paid a higher interest rate.

As interest rates rise, this means that not only will the government pay more to borrow money, it means that businesses will also pay more to borrow money. If interest rates are high, businesses may not be able to borrow money to fund their investment projects like expanding their factories or updating their software. When this happens, economists say that private investment is being "crowded out" by federal government borrowing. A government budget deficit will lower private investment and slow economic growth if the borrowing significantly increases interest rates.

- How does the federal government borrow funds?
- What might happen to interest rates if federal government borrowing increases?
- What is meant by crowding out?
- Because businesses borrow funds to fund expansions and improvements what will happen to economic growth if interest rates rise significantly?
- How can you tell if crowding out is a problem?

Historical interest rates
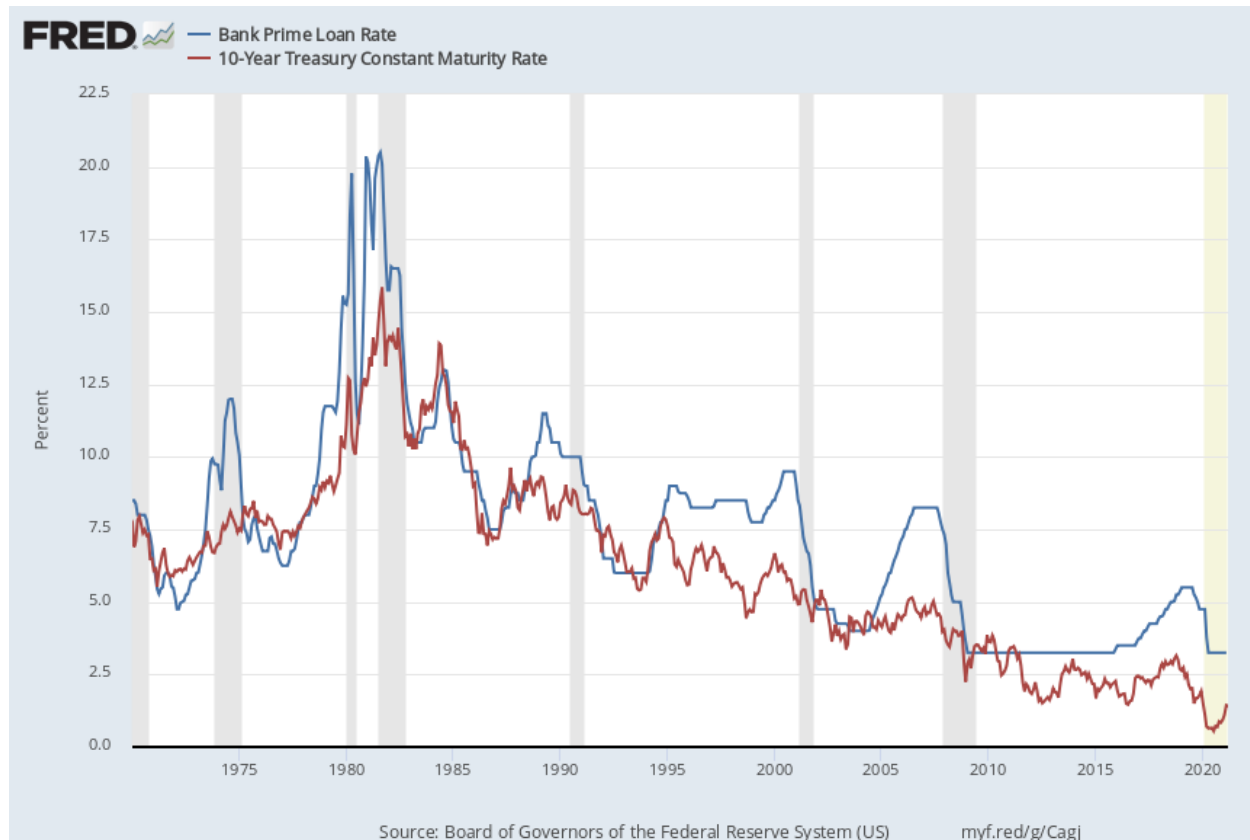
Board of Governors of the Federal Reserve System (US), Bank Prime Loan Rate [MPRIME], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/MPRIME, March 19, 2021.

Board of Governors of the Federal Reserve System (US), 10-Year Treasury Constant Maturity Rate [DGS10], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/DGS10, December 9, 2020.

Notes: The prime loan rate is the interest rate banks charge their best customers for loans. The 10-year Treasury Constant Maturity Rate represents the interest rate on 10-year Treasury Notes.

- Have interest rates (measured in the graph by the interest rates for businesses and federal government) increased or decreased over the last 40 years? Over the last 20 years?
- Would you describe current interest rates as relatively high or relatively low?

Interest Rates Paid by Federal Government

Projections by Congressional Budget Office

Interest Rates on 10-Year Treasury Notes in CBO's July 2020 Economic Forecast	
Percent	
	10-Year Treasury Notes
2021	1.1
2022	1.3
2023	1.5
2024	1.8
2025	2.1
2026	2.5
2027	2.7
2028	3.0
2029	3.2
2030	3.3
Source: Congressional Budget Office.	
These projections were originally published in Feb 2021 as part of CBO's economic forecast (https://www.cbo.gov/data/budget-economic-data#3).	

- According to the Congressional Budget Office, are interest rates forecasted to increase or decrease?
- Based on your knowledge of historical interest rates, will interest rates in the next 10 years be historically high or low?

Reading 4: Opportunity Cost of Interest

Your group will specialize in how big an expense interest payments are in the federal budget. Study the following table, pie chart and graph that describe the federal budget. You will focus on trying to answer the following question:

Based on current and historical measures, are interest payments currently a concern to the overall federal budget?

Each graph will have questions for your group to analyze. After your group has analyzed the three diagrams, you will discuss the answer to the main question.

Budget breakdown

	2019 ($ Trillion)	2019 (% of GDP)	2020 ($ Trillion)
Revenue	3.5	16.3%	3.4
Total Spending	4.4	21.0%	6.6
Mandatory Spending	2.7	12.9%	4.6
Discretionary Spending	1.3	6.3%	1.7
Interest	0.4	1.8%	0.3
Deficit	1.0	4.6%	3.3

CBO, 10 Year Budget Projections, https://www.cbo.gov/data/budget-economic-data. The numbers here reproduce the tables detailing CBO's budgetary projections that appear in the agency's September 2020 report An Update to the Budget Outlook: 2020 to 2030.

- Is interest a large portion of the federal government's budget?
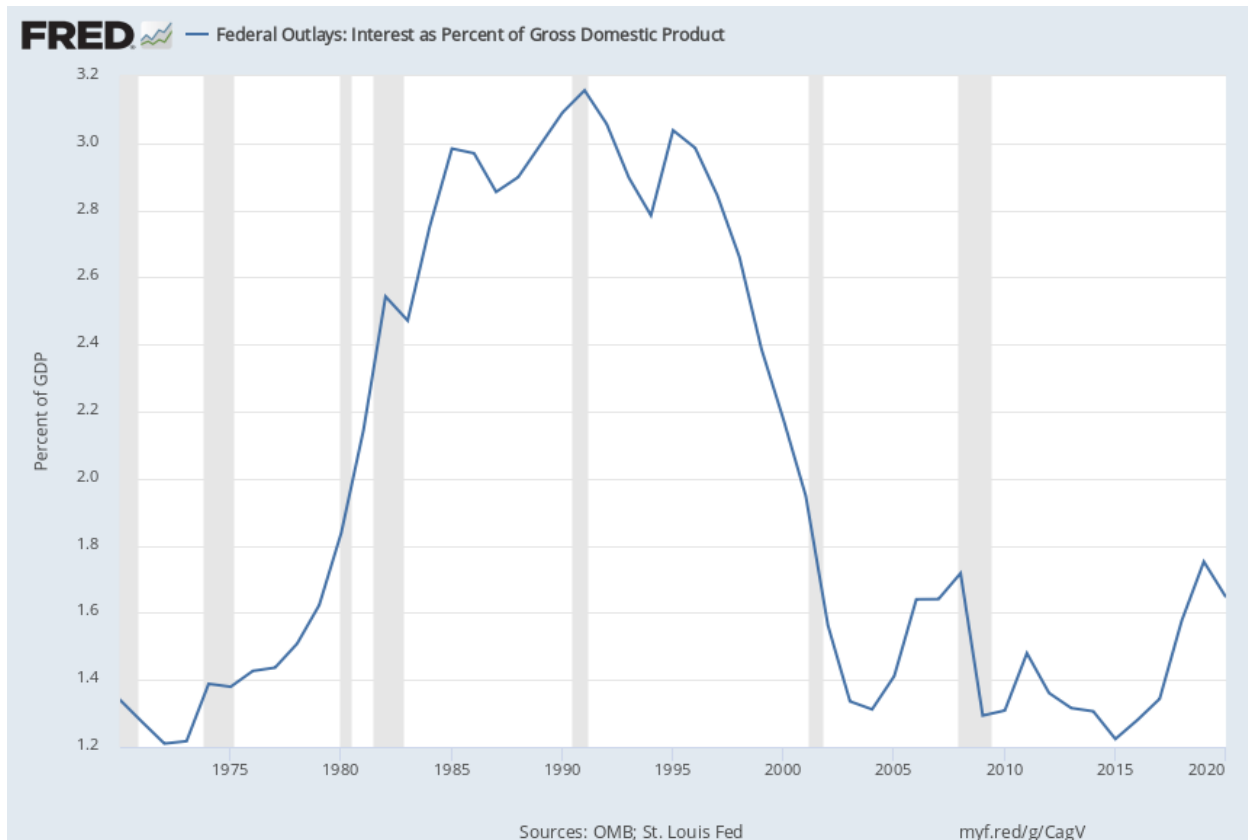- Did total spending increase from 2019 to 2020? Why?

2019 Federal Spending by Categories
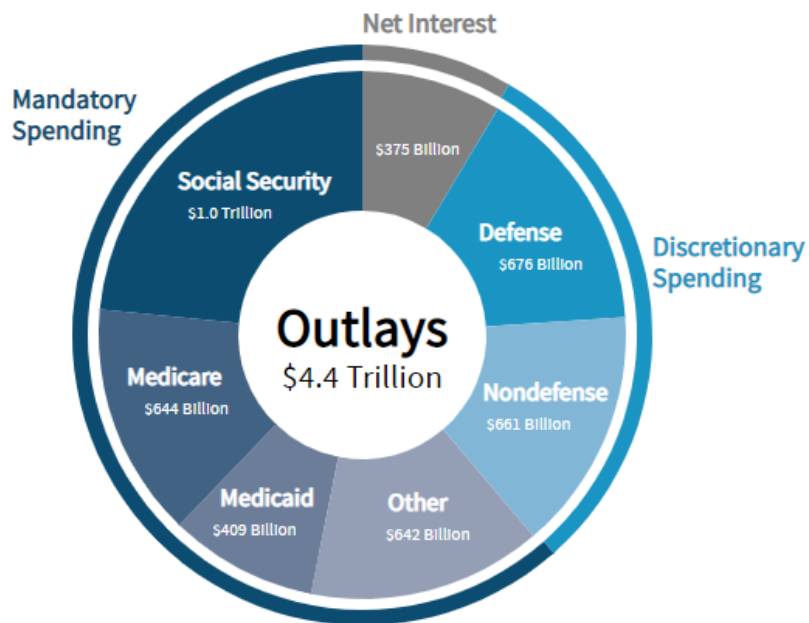
CBO, The Federal Budget in 2019: An Infographic, https://www.cbo.gov/publication/56324.

- What government programs account for a large portion of the federal budget?

To Intervene or Not To Intervene

Interest as a percentage of GDP

Federal Reserve Bank of St. Louis and U.S. Office of Management and Budget, Federal Outlays: Interest as Percent of Gross Domestic Product [FYOIGDA188S], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/FYOIGDA188S, March 19, 2021.

- Historically speaking, is the total amount of interest paid on the national debt as a percentage of GDP high or low?
- What is the trend for the total amount of interest paid on the national debt recently?

Reading 5: How Big is the Debt and Deficit?

Your group will specialize in the size of the federal debt and deficit. Study the next two graphs that show the federal budget deficit and national debt. The third figure shows the components of the CARES Act. You will focus on trying to answer the following question:

Did the CARES Act expense have a big impact on the budget deficit and national debt?

Each graph will have questions for your group to analyze. After your group has analyzed the three diagrams, you will discuss the answer to the main question.
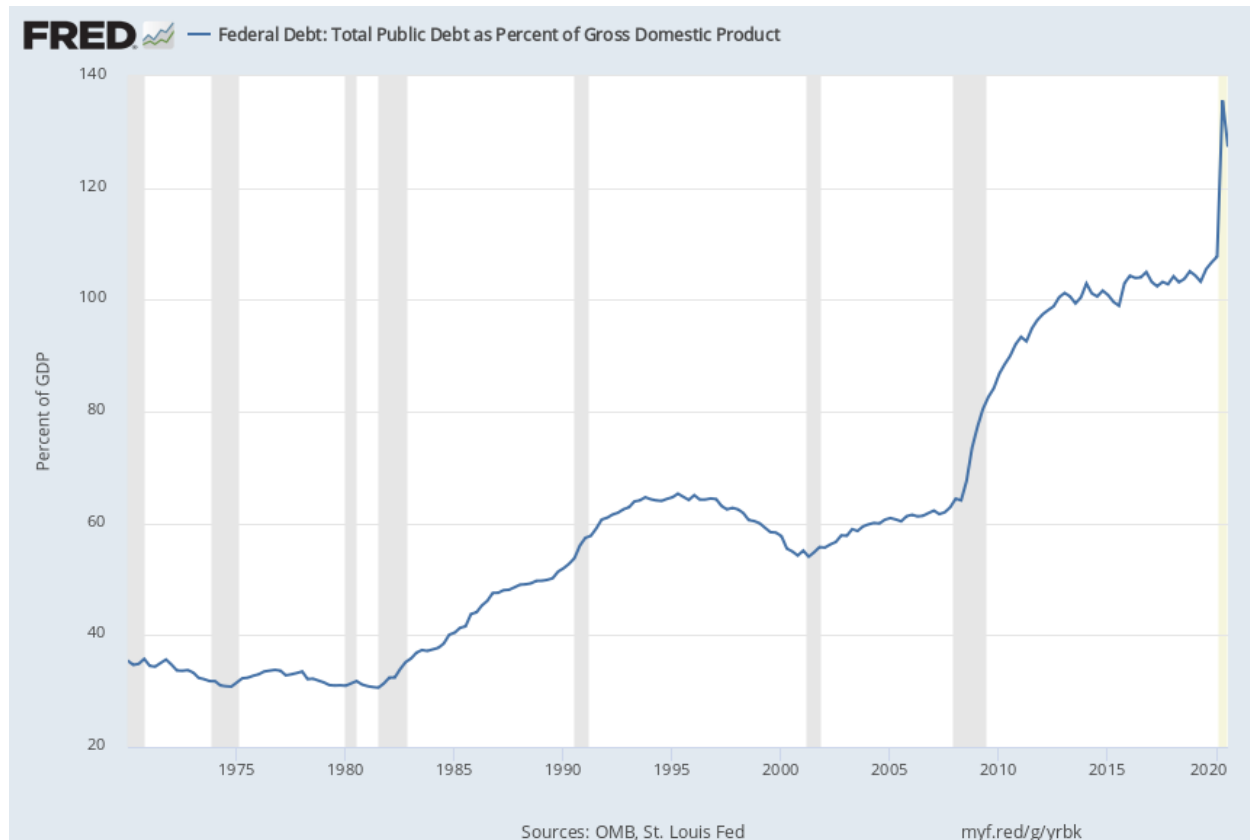
Size of Deficit (CARES included, 2020 the largest since 1945)
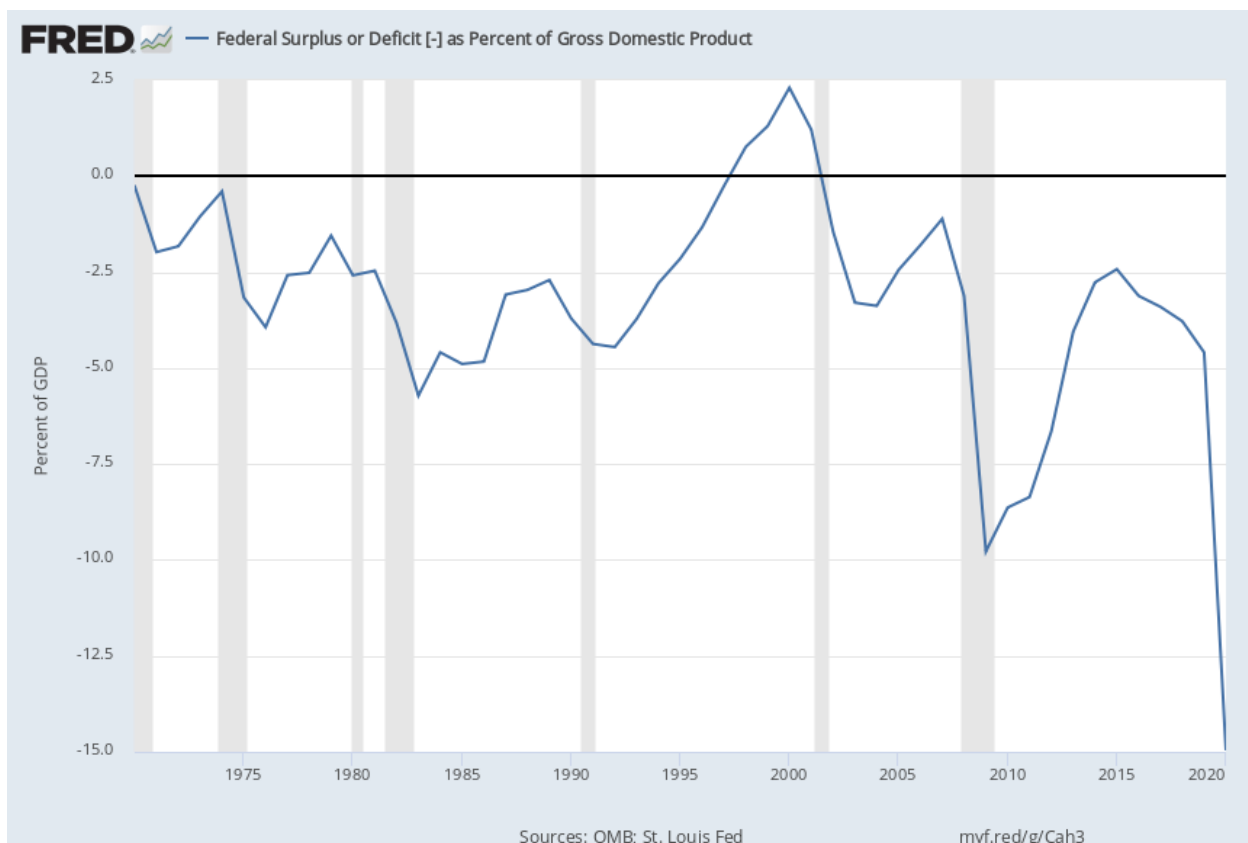
U.S. Office of Management and Budget and Federal Reserve Bank of St. Louis, Federal Surplus or Deficit [-] as Percent of Gross Domestic Product [FYFSGDA188S], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/FYFSGDA188S, March 19, 2021.

- Recessions are shown by the shaded portions of the graph. What generally happens to the federal budget in times of recession?
- When was the last time the U.S. federal government ran a surplus?
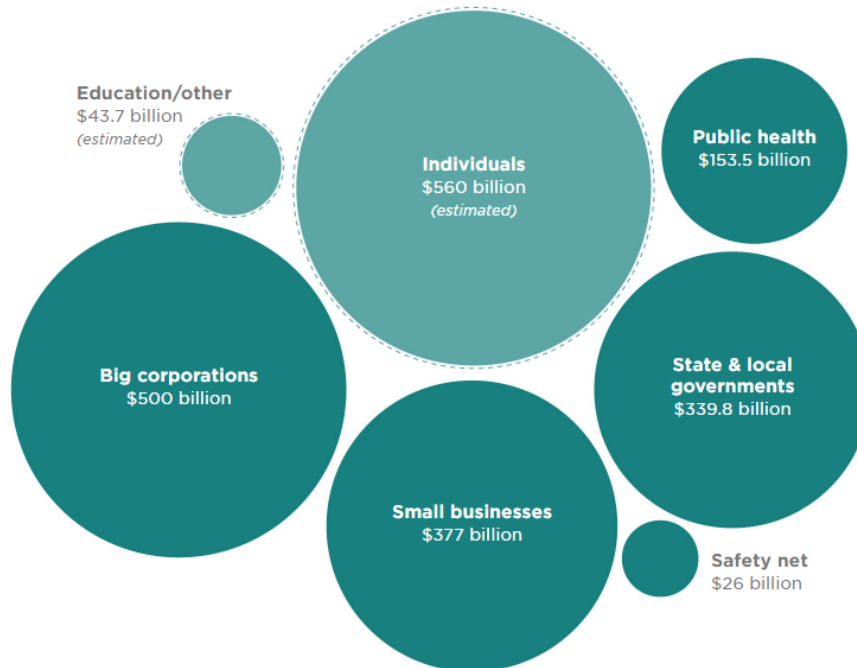
Size of National Debt (CARES included)

U.S. Office of Management and Budget and Federal Reserve Bank of St. Louis, Federal Debt: Total Public Debt as Percent of Gross Domestic Product [GFDEGDQ188S], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/GFDEGDQ188S, March 19, 2021.

- During the Great Recession 2008 and the current recession, what has happened to the national debt?
- Why did the national debt decrease in the late 1990s? (Hint: Look at deficit graph on previous page.)
- Why did the national debt as a percentage of GDP decrease in the last measurement (what happened to GDP)?

One time funding - Size of CARES Act and other proposals

How The $2 Trillion Breaks Down

The CARES Act provides relief to several groups impacted by the coronavirus pandemic.

Education/other
$43.7 billion
(estimated)

Individuals
$560 billion
(estimated)

Public health
$153.5 billion

Big corporations
$500 billion

State & local
governments
$339.8 billion

Small businesses
$377 billion

Safety net
$26 billion

Source: Estimates for third relief bill based on bill text, committee and administration numbers.
Credit: Audrey Carlsen/NPR

Note: $2 trillion is about 9.5% of GDP. GDP was about $21 trillion before the pandemic.

https://www.npr.org/2020/03/26/821457551/whats-inside-the-senate-s-2-trillion-coronavirus-aid-package

- What are some of the components of the CARES Act? (You can go to the NPR article for more details than provided by the graphic.)
- Who is helped by the CARES Act?

Reading 6: Projections of the Future

Your group will specialize in what the future projections are for the future federal deficit and federal debt. Study the next two graphs that show the projected federal deficits and projected federal debt. The final table shows projections of federal government outlays (payments) and revenues. You will focus on trying to answer the following questions:
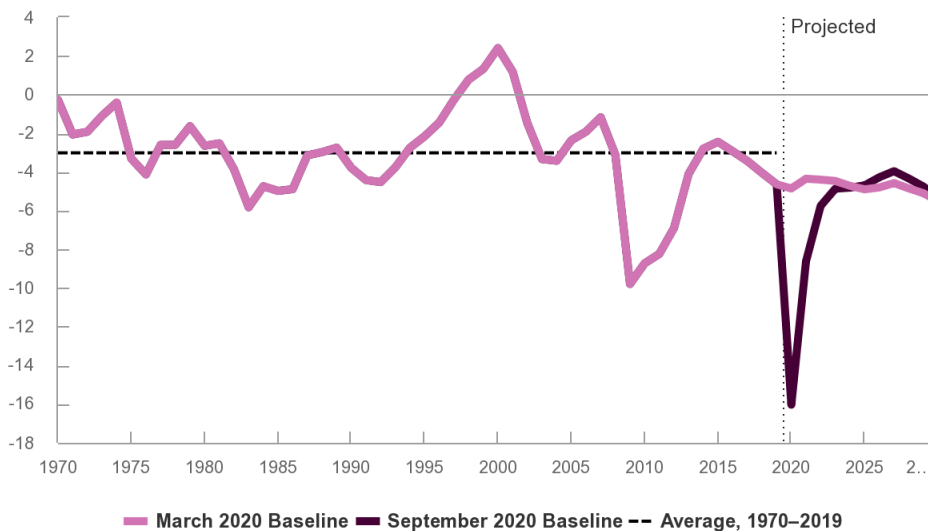
Does a one-time intervention such as the CARES Act have a continued effect on the long-term deficit or debt? What government programs are likely to contribute to increased deficits and federal debt in the future?

Each graph will have questions for your group to analyze. After your group has analyzed the three diagrams, you will discuss the answer to the questions.

Deficit (before and after CARES)

Deficits in CBO's September 2020 Baseline Versus Its March 2020 Baseline

Percentage of Gross Domestic Product

CBO, An Update to the Budget Outlook: 2020 to 2030, September 2020, https://www.cbo.gov/system/files/2020-09/56517-Budget-Outlook.pdf.

Note: The March 2020 baseline shows estimates without the CARES Act. The September 2020 baseline shows estimates that include the impacts of the CARES Act.

- Based on the projected deficits by the CBO, will the CARES Act stimulus have continued impacts on the deficit?

Federal Debt (with CARES)

Federal Debt Held by the Public

Percentage of Gross Domestic Product
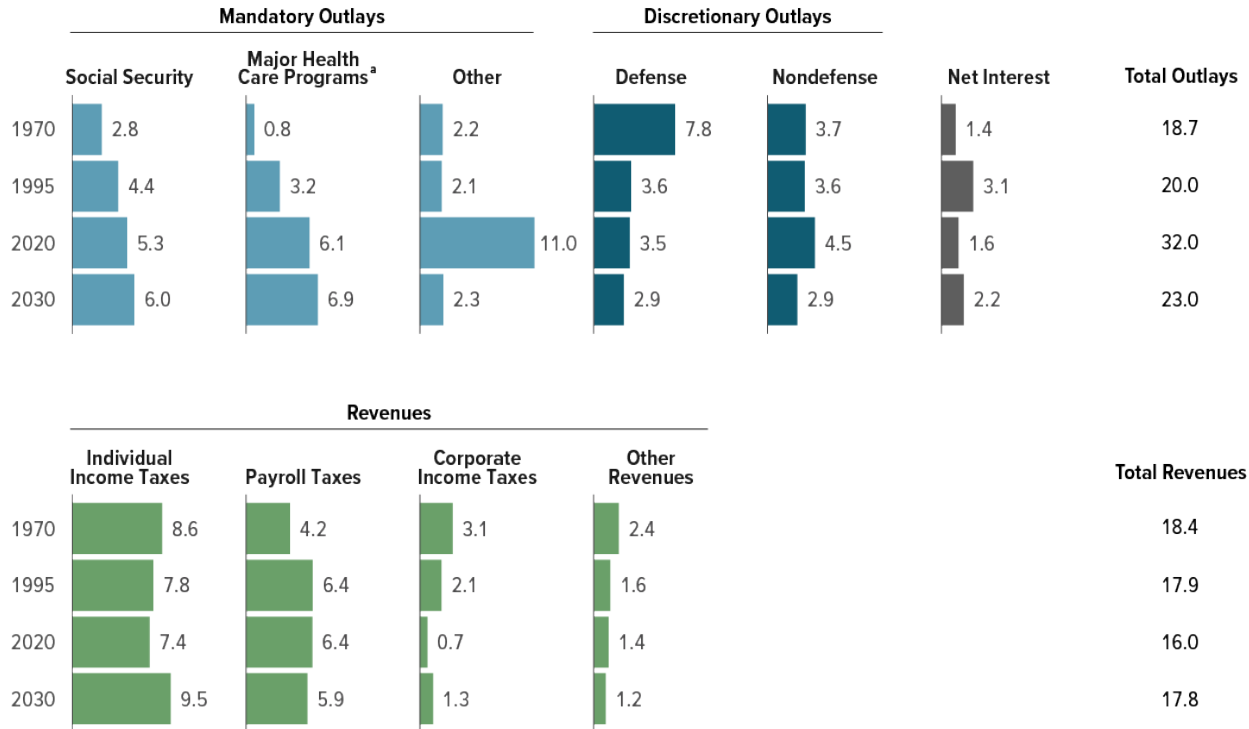

CBO, An Update to the Budget Outlook: 2020 to 2030, September 2020, https://www.cbo.gov/system/files/2020-09/56517-Budget-Outlook.pdf.
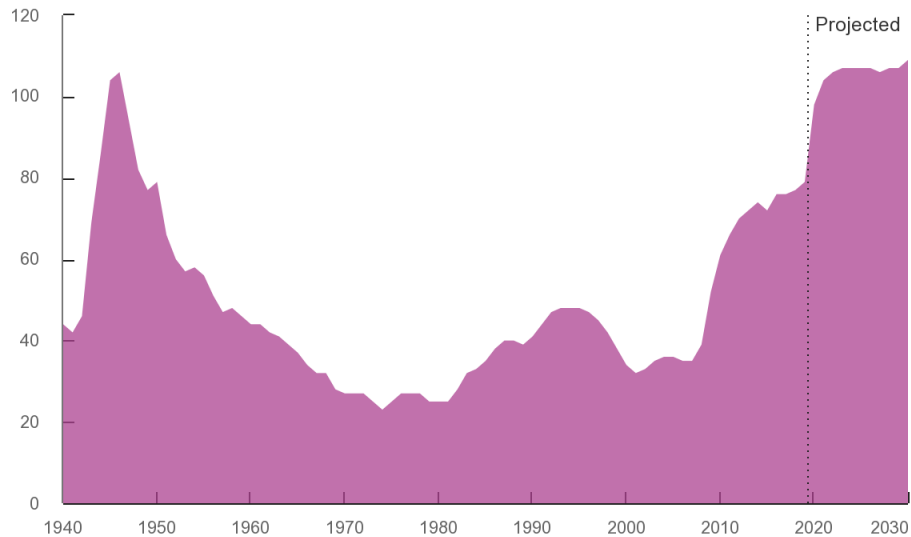
- Based on the projected debt by the CBO, will the CARES Act stimulus have continued impacts on the debt?

CBO's Baseline Projections of Outlays and Revenues, Compared With Actual Values 25 and 50 Years Ago

Percentage of Gross Domestic Product

	Mandatory Outlays			Discretionary Outlays			
	Social Security	Major Health Care Programs[a]	Other	Defense	Nondefense	Net Interest	Total Outlays
1970	2.8	0.8	2.2	7.8	3.7	1.4	18.7
1995	4.4	3.2	2.1	3.6	3.6	3.1	20.0
2020	5.3	6.1	11.0	3.5	4.5	1.6	32.0
2030	6.0	6.9	2.3	2.9	2.9	2.2	23.0

	Revenues					Total Revenues
	Individual Income Taxes	Payroll Taxes	Corporate Income Taxes	Other Revenues		
1970	8.6	4.2	3.1	2.4		18.4
1995	7.8	6.4	2.1	1.6		17.9
2020	7.4	6.4	0.7	1.4		16.0
2030	9.5	5.9	1.3	1.2		17.8

CBO, An Update to the Budget Outlook: 2020 to 2030, September 2020, https://www.cbo.gov/system/files/2020-09/56517-Budget-Outlook.pdf.

- Identify the impact of the CARES Act in the figures.
- The United States is projected to have **increasing long-term deficits**. What **spending** programs are **increasing** over time? Why do you think these are projected to increase?
- The United States is projected to have **increasing long-term deficits**. What sources of **revenue** have been **trending downward** over time? Why do you think these have been decreasing?