

## FEDERAL RESERVE ECONOMIC DATA (FRED) AND FEDERAL BUDGETS LESSON

### FRED Activity Worksheet

#### Directions

#### Part A

1. Access the FRED Dashboard: <https://research.stlouisfed.org/dashboard/14943>
2. Use the *President and Congressional* budget graphs (box 1) to calculate the budget deficit/ surplus for each budget year. Use the sliders in the timeline below the graph to display the appropriate date range.
  - a.  $\text{Total Receipts} - \text{Total Expenditures} = \text{Deficit/ Surplus}$
3. Use the data in *Total Public Debt Change from Year Ago in Millions of USD* graphs (box 2) to indicate how much the budget added to the total public debt in comparison to the previous year. Use the sliders in the timeline below the graph to display the appropriate date range.
4. Use the data you have gathered to answer questions 1–6.

#### Part B

1. Access the FRED Dashboard: <https://research.stlouisfed.org/dashboard/14943>
2. Use the Gross Federal Debt in Billions of USD and as Percent of GDP 1988-2010 (box 3).
3. Use the data on the graph to answer questions 1–6.



President Ronald Reagan and Congressional Budgets: Use the data on the graph in Box 1

1988:  
 Total Receipts =  
 Total Expenditures =  
 Total Deficit/Surplus =

1989  
 Total Receipts =  
 Total Expenditures =  
 Total Deficit/Surplus =

\*Use data on the graph in Box 2 to indicate how much the budget added to the total public debt in comparison to the previous year:

1988 =  
 1989 =



President Bill Clinton and Congressional Budgets: Use the data on the graph in Box 1

1998:  
 Total Receipts =  
 Total Expenditures =  
 Total Deficit/Surplus =

1999:  
 Total Receipts =  
 Total Expenditures =  
 Total Deficit/Surplus =

\*Use data on the graph in Box 2 to indicate how much the budget added to the total public debt in comparison to the previous year:

1998 =  
 1999 =



President George Bush and Congressional Budgets: Use the data on the graph in Box 1

1991:  
 Total Receipts =  
 Total Expenditures =  
 Total Deficit/Surplus =

1992:  
 Total Receipts =  
 Total Expenditures =  
 Total Deficit/Surplus =

\*Use data on the graph in Box 2 to indicate how much the budget added to the total public debt in comparison to the previous year:

1991 =  
 1992 =



President Barack Obama and Congressional Budgets: Use the data on the graph in Box 1

2009:  
 Total Receipts =  
 Total Expenditures =  
 Total Deficit/Surplus =

2010:  
 Total Receipts =  
 Total Expenditures =  
 Total Deficit/Surplus =

\*Use data on the graph in Box 2 to indicate how much the budget added to the total public debt in comparison to the previous year:

2009 =  
 2010 =

## **Part A**

1. Which year had the highest deficit?
2. Which year had the lowest deficit?
3. Which year added the most to the Total Public Debt?
4. Which year added the least to the Total Public Debt?
5. Identify and explain the costs of increasing the Total Public Debt in regards to how it affects taxes, and spending in other categories (healthcare, defense, education, etc....).
6. Identify and explain some of the benefits a balanced budget would have on taxes, and spending in other categories (healthcare, defense, education, etc....).

## Part B:

- Words to know:
  - Gross Domestic Product: The market value of all final goods and services produced in a country in a calendar year.
  - Consumption: Spending by households on goods and services. The process of buying and using goods and services.
  - Productivity: The amount of output (goods and services) produced per unit of input (productive resources) used.
  - Investment: The purchase of capital goods (including machinery, technology or new buildings) that are used to produce goods and services.
  - Recession: A decline in the rate of national economic activity, usually measured by a decline in real GDP for at least two consecutive quarters (i.e., six months).
- The use of the debt-to-GDP ratio is a tool use in comparing a country's debt to its total output for a year. It is used to measure the capacity for a country to pay back its debts. The closer the debt is to being a percentage of GDP (according to the world bank a percentage above 77 percent can slow economic growth), the less capacity they may have to pay back the debt, and the lower the debt is to being a percentage of GDP the more capacity to pay back debt and positive outlook for growth an economy has.
- One of the most severe recessions began in 2008. The gray shaded areas on the graph (box 3) indicate a recession.

Use the data on the graph to analyze the gross federal debt as percent of GDP during this time period. Answer the following questions using the data on the graph (box 3).

1. What is the gross federal debt as percent of GDP for the following years?
  - a. 2008 =
  - b. 2009 =
  - c. 2010 =
2. Recessions are characterized by a decline in economic activity. What types of economic activity experience declines during recessions?

3. During the 2008 recession, what federally funded need based programs do you believe needed increased spending that are not mandatory programs?
  
  
  
  
  
  
  
  
  
  
4. What happens to tax revenues when there is a recession and how does this affect the gross federal debt as percent of GDP?
  
  
  
  
  
  
  
  
  
  
5. During a recession the gross federal debt as percent of GDP is (*higher/lower*), due to a(n) (*increase/decrease*) in GDP. At the same time government spending was (*increasing/ decreasing*), therefore the federal budget is heading towards a larger (*deficit/surplus*).
  
  
  
  
  
  
  
  
  
  
6. Keeping in mind that the economy was experiencing a recession, why did the gross federal debt as percent of GDP increase so dramatically during those years?