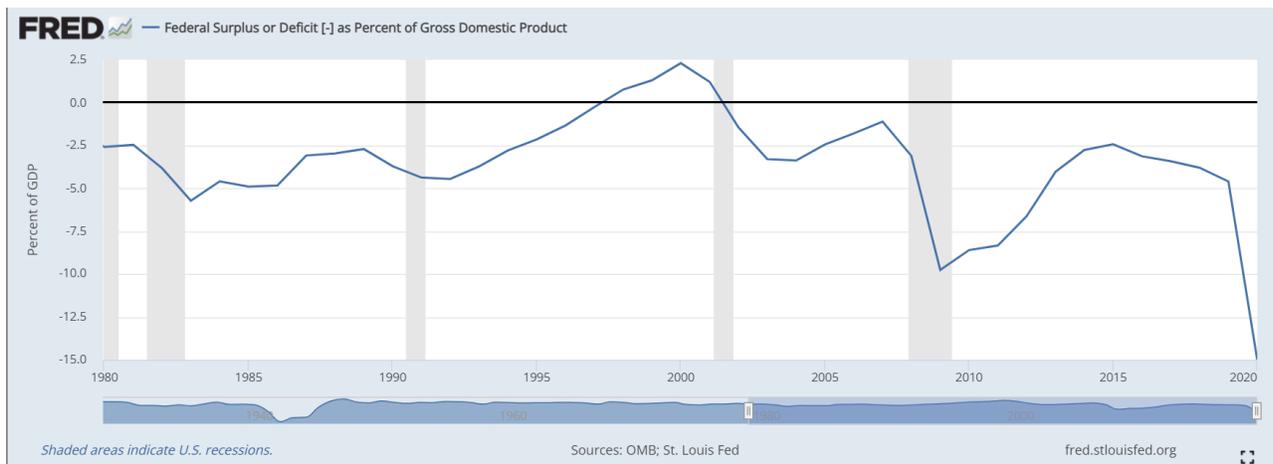


# Week 13 Recitation

For this week's recitation, we will study government spending and fiscal policy, focusing on the relationship between budget results and the business cycle. We will also debate how budget surpluses/deficits impact (but are different from) the debt/GDP ratio. After analyzing data for the United States, we will compare that with data from other countries, that you will collect using FRED.

- 1) Analyze the graph below, showing the Federal Government annual budget result for the United States since 1980 (as a percentage of GDP). Is the government running a surplus, deficit, or balanced budget during the past 40 years? Considering that the shaded areas represent recessions, what can you tell about the fiscal policy adopted by the United States during those periods?



- 2) Compare the fiscal policy observed for the United States Federal Government in the question above with the common budget strategy advised for households—families should decrease their consumption during periods of low income (smaller revenues), and only increase expenditure when income increases—to avoid debt. How are those strategies different? How is that debate associated with the balanced budget discourse?
- 3) Now, compare the graph from Question 1 with the graph below, which shows the Federal Debt as a percentage of GDP for the United States during the same period (1980-2020). What's the relationship between the budget result and the debt/GDP ratio?



- 4) Now, let's take a look at other countries budget results, debt/GDP, and business cycles. Go to <https://fred.stlouisfed.org/> and follow these steps:
1. Pick one of the following countries: Japan, Spain, France, United Kingdom, Canada, Taiwan Province, Bolivia, Colombia, China, Paraguay, or St. Vincent and the Grenadines.
  2. Look for “General government net lending/borrowing *chosen country*” at the search bar. Save that graph by taking a screenshot or copying the image and paste it in a Word document.
  3. Go to the search bar again and look for “Central government debt *chosen country*”. Paste that graph right below the one you just found, in the same Word document.
  4. Finally, go to the search bar one more time and look for “Gross domestic product *chosen country*”. Paste that last graph in the same page as the two previous ones, so it makes it easier for you to do a visual analysis. Now answer the following questions:
    - a) Based on the business cycle movements (from the GDP graph) and the budget result graph, do you believe that the observed country follows a countercyclical fiscal policy, a procyclical fiscal policy, or a strict balanced budget strategy?
    - b) How does the budget result associate with the debt/GDP relationship? Is it similar to the relationship observed for the United State in the questions above?
    - c) How does the size of the debt/GDP compare with the size of the debt/GDP of the United States? How about the size of the surplus(deficit)/GDP?
    - d) One of the main arguments favoring a low level of debt/GDP (and, therefore, encouraging the pursue of consecutive budget surpluses as a way to decrease the level of debt) is that countries with a high debt/GDP ratio struggle to keep a sustainable GDP growth. Does the data that you observed corroborate with this

argument? Based on your knowledge of macroeconomics, do you agree with that perspective?