

## **Handout for September 2017 Newsletter Stacking GDP Components in FRED®**

### **Purpose.**

1. Create a plot of the three largest expenditure components of GDP: personal consumption expenditures (C), gross private domestic investment (I), and government consumption expenditures and gross investment (G).
2. Change the graph format to show relative proportions.
3. Describe and discuss highlights and patterns in the evolution of C, I, and G.

**Pedagogical Rationale.** This assignment requires that you first search for data online, select specific series, and plot them into a graph. Next, you will edit the format of the graph. Lastly, you will describe and discuss highlights and patterns in the evolution of the data series. These tasks will develop your proficiency in searching for, manipulating, and interpreting data.

**Grading.** Your grade will be determined by (a) how precisely you complete the search and manipulation data tasks and (b) how accurate your interpretation of the data is.

**Steps to Search for and Manipulate the Data.** Follow these steps:

1. Access <https://fred.stlouisfed.org/> and follow these links: Release > Gross Domestic Product > SECTION 1 - DOMESTIC PRODUCT AND INCOME > Table 1.1.6. Real Gross Domestic Product, Chained Dollars > Annual
2. Select the concepts “Personal consumption expenditures,” “Gross private domestic investment,” and “Government consumption expenditures and gross investment” by clicking on the box to the left of their names.
3. Plot the data series by clicking on “Add to Graph.”
4. Click on the “EDIT GRAPH” orange button and select the “FORMAT” tab.
5. Change “Graph type” to “Area.”
6. Change “Stacking” to “Percent.”

**Writing Prompts.** Answer the following questions:

1. When was government spending (as a percent of C+I+G) at its highest value? What domestic/global event took place during that time? Briefly describe the economic role of the government during that time.
2. When was private capital formation (as a percentage of C+I+G) at its lowest value? What domestic/global event took place during that time? Briefly describe the economic role of private enterprises during that time.
3. Consider the evolution of government spending since the past recession (2008-2009). Has government spending increased or decreased (as a percentage of C+I+G)? Briefly describe the economic role of the government during and after the past recession (2008-2009).
4. (EXTRA CREDIT) What GDP component is missing from the graph you created earlier? Consider the following graph: <https://fred.stlouisfed.org/graph/?g=ewS5>. Briefly describe the main difference between that graph and the one you created earlier. Do your answers to questions 1 to 3 change depending on the graph you consider?