## Activity 11: Motivating Aggregate Supply and Aggregate Demand— The Relationship Between Real GDP and Inflation

This activity focuses on economic growth and inflation, and you will use FRED<sup>®</sup> to find data that pertain to them. FRED<sup>®</sup> is a great and simple tool for finding, viewing, and transforming official data.

- 1. Go to <u>https://fred.stlouisfed.org/</u> and sign in to your personal FRED<sup>®</sup> account.
- 2. On the FRED<sup>®</sup> landing page, under the AT A GLANCE tab toward the bottom of the page, find the link to **Real Gross Domestic Product**. Click on this. The gray bars in the graph represent recessions. How many recessions have there been since 1950? What happened to real GDP during each of these recessions?

3. Look at the upper right of the screen for an orange button that says EDIT GRAPH. Click it and make sure the ADD LINE tab is highlighted. In the search bar, type in "CPI." One of the first few options should be Consumer Price Index for All Urban Consumers: All Items in U.S. City Average, Monthly, Index 1982-1984 = 100, Seasonally Adjusted. Click on this, and then click the Add data series button. Click in the Units box and change the units to Percent Change from Year Ago. Click in the Modify frequency box and change the frequency to Quarterly. What happened to the percent change of CPI (an estimate of inflation) during each of the past recessions?

4. Looking at the recessions, describe the relationship between the percent change in real GDP and the inflation rate. Do you see any patterns?

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5. Looking at the time periods right after the recessions, describe what tends to happen to the inflation rate and the percent change in real GDP. Do you see any patterns?

6. Looking at the time periods between recessions, describe what tends to happen to the inflation rate and the percent change in real GDP. Do you see any patterns?

7. What other observations can you make about these two data series?

- 8. Save the graph to your FRED<sup>®</sup> account: Find the **Account Tools** button under the graph and click it. Select **Save Graph**. Select an **Observation Range**. The middle choice—**Always chart from YYYY-00-00 to the last value available**—will ensure that your graph updates whenever new data are added to the series. Type in a title and click **Save Graph**. You may create a **Category** folder first, if you wish, and save the graph in the folder.
- 9. Dashboard option: Finish by adding the completed graph to your FRED<sup>®</sup> dashboard. Click the Account Tools button under the graph and select Add to Dashboard. Select your dashboard and in the Graph Name box, type "Activity 11-GDP and CPI." Select an Observation Range. Click Add to Dashboard. For additional instructions, see Activity 1.