

## Activity 10: Motivating Aggregate Supply and Aggregate Demand— The Relationship Between Real GDP and Unemployment

This activity focuses on economic growth and the unemployment rate, and you will use FRED® to find data that pertain to them. FRED® is a great and simple tool for finding, viewing, and transforming official data.

1. Go to <https://fred.stlouisfed.org/> and sign in to your personal FRED® account.
2. On the FRED® 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 “unemployment rate.” One of the first few options should be **Unemployment Rate, Monthly, Percent, 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**. Click in the **Modify frequency** box and change the frequency to **Quarterly**. What happened to the unemployment rate during each of the past recessions?
4. Looking at the recessions, describe the relationship between the percent change in real GDP and the unemployment 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 unemployment rate and the percent change in real GDP. Do you see any patterns? Are these patterns as clear as those during the Great Recession?
  
6. Looking at the time periods between recessions, describe what tends to happen to the unemployment rate and the percent change in real GDP. Do you see any patterns?
  
  
  
  
  
  
  
  
  
  
7. What other observations can you make about these two graphs?
  
  
  
  
  
  
  
  
  
  
8. Save the graph to your FRED® 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® 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 10-Real GDP and Unemployment.” Select an **Observation Range**. Click **Add to Dashboard**. For additional instructions, see Activity 1.