

## Activity 2: National Income: Real GDP

This activity focuses on the real income component of the 2007-09 recession, and you will use FRED® to find relevant data. 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. In the search bar, type in “real GDP.” One of the first few results should be **Real Gross Domestic Product, Billions of Chained 2017 Dollars, Quarterly, Seasonally Adjusted Annual Rate**. Click on this. Real GDP is the most widely reported indicator for national income.
3. What is the source of this data?
4. Mouse over the graph line. You will see a pop-up displaying a value for real GDP at each of the data points. By what frequency do the periods change?
5. Place the cursor on the most recent point to find a current value for real GDP. What is the current level of GDP? What are the units? In what year/quarter is this reported?
6. Look at the upper right of the screen for an orange button that says EDIT GRAPH. Click it and make sure the EDIT LINE 1 tab is highlighted. Look below where there is an option that says **Units**. Click in the **Units** box and change the units to **Compounded Annual Rate of Change**. Look at the graph now. The (trend line of) percent change of real GDP is the most widely reported way to describe the economic growth rate. Current percent changes are a proxy for it. What is the current rate of economic growth?

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7. What was the rate of economic growth at the worst point during the 2007-09 recession? (The gray bars represent recessions.) In what year/quarter was this reported?
  
8. What is the highest rate of economic growth since the 2007-09 recession (December 2007)? In what year/quarter is this reported?
  
9. What was the historical context for the large trough and peak of growth during 2020?
  
10. What has the growth rate done since it reached this most recent high?
  
11. What is the highest rate of growth since 1950? What are the highest three peaks of growth and when did they occur? What was the historical context for each of these periods of growth?
  
12. How would you compare the changes since the last recession with those in prior decades?
  
13. 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.
  
14. 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 2-National Income: Real GDP.” Select an **Observation Range**. Click **Add to Dashboard**. For additional instructions, see Activity 1.