

## Activity 1: National Income: GDP

This activity focuses on the income component of the 2007-09 recession, and you will use FRED®—Federal Reserve Economic Data—to find relevant data. FRED® is a great and easy-to-master tool for finding, viewing, and manipulating official data.

1. Go to <https://fred.stlouisfed.org/> and sign in to your personal FRED® account.
2. In the search bar, type in “nominal GDP.” One of the first few results should be **Gross Domestic Product, Billions of Dollars, Quarterly, Seasonally Adjusted Annual Rate**. Click on this.
3. Mouse over the graph line. You will see a pop-up displaying a value for GDP at each of the data points. By what frequency do the periods change?
4. Place the cursor on the most recent point to find a current value for GDP. What is the current level of GDP? What are the units?
5. 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 **Percent Change from Year Ago**. Look at the graph now. What is the current percent change in nominal GDP? Why might this value overstate actual GDP growth?
6. Place the cursor on the most recent point to find a current value for GDP, **Percent Change from Year Ago**. What is the current level of GDP? What are the units?
7. What is the highest rate of percent change in nominal GDP since the end of the Great Recession? In what year/quarter is this reported?

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8. The gray bars represent recessions. Take a closer look at the Great Recession (December 2007 to July 2009). Drag the left button of the slider bar below the x-axis to the right so that the date range in the display begins just before the most recent gray bar (use October 2007). Now, mouse over the starting point of the recession. What is the annual percent change in nominal GDP at the start of the recession?
9. What is the lowest annual percent change from a year ago in nominal GDP during the recession?
10. 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.
11. Dashboard option: Finish by adding the completed graph to a FRED® dashboard that you will now create. Begin by clicking the dropdown menu under MY ACCOUNT and select **Dashboards**. Click the **+Add New > Dashboard** buttons and give your dashboard a name. An appropriate name for these activities would be “AP Macro Dashboard\_[First Name\_Last Name Initial].” Click the **Create** button.
12. Next, click the **Graphs** tab on the left and find your recently saved graph. Click on it. Click the **Account Tools** button under the graph and select **Add to Dashboard**. Select your dashboard and in the **Graph Name** box, type “Activity 1-National Income: GDP.” 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. Click **Add to Dashboard**.
13. Once added to your dashboard, the graph may be resized or re-arranged, along with other graphs you add to the dashboard. To share the dashboard you must click **Actions > Make Public**. Then anyone with the URL can view a copy of your dashboard.

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