

Activity 4: More Measures of Inflation

This activity focuses on the price level component of the 2007-09 recession, and you will use FRED® to find data that pertain to inflation. 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 “CPI.” One of the first few results should be **Consumer Price Index for All Urban Consumers: All Items in U.S. City Average, Index 1982-1984 = 100, Monthly, Seasonally Adjusted**. Click on this.
3. Look at the graph. What is the source of the consumer price index? What are the units?
4. Now 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. The percent change of any price level measure is an estimate of inflation.
5. Click the EDIT GRAPH button and make sure the ADD LINE tab is highlighted. In the search bar, type in “GDP deflator.” One of the first few options should be **Gross Domestic Product: Implicit Price Deflator, Quarterly, Index 2017 = 100, Seasonally Adjusted**. Click on this, and then click the **Add data series** button. (The series units should default to **Percent Change from Year Ago**). Look at the graph now.
6. What are the sources of the GDP deflator?
7. Make an observation about how these measures of inflation have changed since 1947.

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8. We are going to add one more data series and then change the units for all three series. Click the orange button that says EDIT GRAPH. Make sure the ADD LINE tab is highlighted. In the search bar, type in “core CPI.” One of the first few options should be **Consumer Price Index for All Urban Consumers: All Items Less Food and Energy in U.S. City Average, Monthly, Index 1982-1984 = 100, Seasonally Adjusted**. Click on this, and then click the **Add data series** button.
9. Now make sure the **Units** box shows **Index (Scale value to 100 for chosen date)**, and then, in the **U.S. recession box**, select **2009-06-01 End**. Click the **Copy to all** button. Adjust the graph’s date range to begin on 2009-06-01.
10. Which measure of inflation has been the most volatile since the end of the 2007-09 recession? Why might that be? Which series is reported quarterly? How might that affect volatility?
11. If you could control the rate of inflation, what would you want it to be? Why? Which series would you use as a measure? Why?
12. 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.
13. 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 4-More Measures of Inflation.” Select an **Observation Range**. Click **Add to Dashboard**. For additional instructions, see Activity 1.