

Chapter 1: Data Exploration Problems

1. Go to the FRED website (<http://research.stlouisfed.org/fred2/>). Register to set up your own account. Doing so will allow you to save and update graphs, alter them for submitting assignments and making presentations, and receive a notice whenever the data is updated.
2. To begin using FRED, plot the consumer price index (FRED code: CPIAUCSL) and find the date and level of the latest observation. Then, plot the inflation rate measured as the percent change from a year ago of this index.
3. Plot the level of real GDP (FRED code: GDPC1). Then, plot the rate of economic growth as the percent change from a year ago of this index. Describe how real GDP behaves in recessions, which are denoted in the FRED graph by vertical gray bars. If you registered on FRED (as in Data Exploration problem 1 above), save the graph so that you can recall and update it easily when new observations become available.
4. Examine nominal GDP (FRED code: GDP) by repeating the steps in Data Exploration Problem 3. Based on the figure showing percent change from a year ago, what was special about the behavior of nominal GDP during the financial crisis of 2007–2009 compared to previous decades?
5. Plot on one figure the percent change from a year ago of both the GDP deflator (FRED code: GDPDEF) and real GDP (FRED code: GDPC1). How does the GDP deflator link nominal and real GDP? Since the mid-1980s, does it fluctuate more or less than real GDP?