

Chapter 2: Data Exploration Problems

1. Find the most recent level of M2 (FRED code: M2SL) and of the U.S. population (FRED code: POP). Compute the quantity of money divided by the population. Do you think your answer is large? Why? (LO1)

Hint: At the FRED Web site, <http://research.stlouisfed.org/fred2/>, type “M2SL” in the search box at the top right and find the most recent observation above the graph. Repeat for “POP.”

Note: Be careful about the units. M2 is reported in billions of dollars while population is measured in thousands.

2. Reproduce Figure 2.3 from 1960 to the present, showing the percent change from a year ago of M1 (FRED code: M1SL) and M2 (FRED code: M2SL). Comment on the pattern over the last five years. Would it matter which of the two monetary aggregates you looked at? (LO3)

Hint: Go to the FRED Web site, select “Data Tools” and then “Create Your Own Graphs.” In the search box under “Add Data Series,” type in the code for M1 (FRED code: M1SL). At the “Units” dropdown box, select “Percentage Change from Year Ago” and then the “Redraw Graph” button. To add M2, select “Add Data Series,” and type in the code for M2 (FRED code: M2SL) in the search box. Change the start date by selecting the first date in the “Observation Date Range” and choosing the year 1960, click “Copy to All Lines”, and then the “Redraw Graph” button.

3. Which usually grows faster: M1 or M2? Produce a graph showing M2 (FRED code: M2SL) divided by M1 (FRED code: M1SL). When this ratio rises, M2 outpaces M1, and vice versa. What is the long-run pattern? Is the pattern stable? (LO3)

Hint: Go to the FRED website, select “Data Tools” and then “Create Your Own Graphs.” At the “Add Data Series” box, graph M2 by typing in “M2SL” in the search box. To add M1 and calculate the ratio, select “Add Data Series,” click on the “Line 1” button – so that only one line will be graphed – and type “M1SL” in the search box. Scroll down to the Formula box, type in “a/b” and select “Redraw Graph.”

4. Traveler’s checks are a component of M1 and M2. Produce a graph of this component of the monetary aggregates (FRED code: TVCKSSL). Explain the pattern you see. (LO1)

Hint: Go to the FRED Web site, select “Data Tools” and then “Create Your Own Graphs.” In the search box under “Add Data Series,” type in the code for traveler’s checks.)

5. Plot the annual inflation rate based on the percent change from a year ago of the consumer price index (FRED code: CPIAUCSL). Comment on the average and variability of inflation in the 1960s, the 1970s, and the most recent decade. (LO3)

Hint: Go to the FRED Web site, select “Data Tools” and then “Create Your Own Graphs.” In the search box under “Add Data Series,” type in the code for the CPI. Next, at the “Units” dropdown box select “Percentage Change from Year Ago” and then “Redraw Graph.” Save this graph and name it “CPI Inflation” so that you can update it easily in the future.)

* Indicates more difficult problems