

Handout for September 2024 Newsletter Consumer Price Index Inflation Rates in FRED®

Purpose.

1. Create a plot of the consumer price index for both all items and all items less food and energy (core).
2. Change the graph format to show year-to-year inflation rates.
3. Describe and discuss highlights and patterns in the evolution of inflation over time.

Pedagogical Rationale. This assignment requires that you first search for data online, select a specific series, and plot them into a graph. Next, you will change the date range in the graph and add a second line to it. Next, you will change the units of the data series from levels to growth rates. Lastly, you will describe and discuss highlights and patterns in the evolution of the data series. These tasks will develop your proficiency in searching for, manipulating, and interpreting data.

Grading. Your grade will be determined by (a) how precisely you complete the search and manipulation data tasks and (b) how accurate your interpretation of the data is.

Steps to Search for and Manipulate the Data. Follow these steps:

1. Access <https://fred.stlouisfed.org/> and search for “Consumer Price Index for All Urban Consumers: All Items (CPIAUCSL).”
2. Select “Index 1982-1984=100, Monthly, Seasonally Adjusted” by clicking on the box to the left of the series name.
3. Plot the data series by clicking on “Add to Graph.”
4. Click on “10 Y” above the graph to limit the data range to the last 10 years.
5. Click on the orange “EDIT GRAPH” button and select the “ADD LINE” tab.
6. Search for “Consumer Price Index for All Urban Consumers: All Items Less Food and Energy (CPILFESL).”
7. Select “Index 1982-1984=100, Monthly, Seasonally Adjusted” and click on “Add data series.”
8. Click on the “EDIT GRAPH” orange button and select the “EDIT LINES” tab.
9. Select “EDIT LINE 1”, change “Units” to “Percent Change from Year Ago”, and click on “Copy to all”

Writing Prompts. Answer the following questions:

1. When was consumer price *all items* inflation at its highest value? Was the U.S. economy in recession or in expansion?
2. When was consumer price *all items less food and energy* inflation at its lowest value? Was the U.S. economy in recession or in expansion?
3. Consider the evolution of both categories of consumer price inflation over the last ten years. Is one more constant in value than the other? Briefly describe the concept of *core inflation* and explain the purpose of calculating consumer price inflation excluding the prices of food and energy.