

Chapter 23 Project

Inflation

Purpose

In this chapter, you have learned how to calculate a price index in order to measure changes in the average price level in the economy. You have used the index to find the rates of inflation across different time periods and distinguish between the core rate of inflation and the rate of inflation for all items. You have also learned to estimate the impact of inflation on purchasing power.

The first purpose of this exercise is to find and use inflation rates to forecast future prices of various goods and services in order to make economic decisions. The second purpose is to determine how much of a price change in goods and services is due to inflation and how much of the price change is due to demand and supply for that specific good or service.

Directions

This exercise has two parts. For both parts, you will use data from the Bureau of Labor Statistics (BLS). In the first, you will find the inflation rate for the previous twelve months and use it to forecast future prices of goods and services in order to make economic decisions. In the second, you will find previous and current prices of items and use the twelve-month inflation rate to identify how much of a price change in a good or service is caused by inflation and how much is due to supply and demand conditions in the market for that specific good or service.

Part 1 - Using Inflation Rates to Make Economic Decisions

To find the data that you need to answer the questions about the following scenarios, go to this webpage (hawkes.biz/BLSDataViewer).

Using the toolbar, select: Data Tools > Charts and Applications > Charts for Economic News Releases. In the Inflation & Prices section, select Consumer Price Index. From the dropdown, select “12-month percentage change, Consumer Price Index, selected categories (drilldown most recent month).” Then select “Show table” under the graph to see a table with more details.

1. Anna graduated from college last year and started her first job in marketing where her salary is \$50,000 per year. Her job reviews have been outstanding, so she plans to ask for a raise next year to at least compensate for inflation.
 - a. Using the BLS rate of inflation for the previous twelve-month period for all items, how much should Anna’s salary be next year to offset inflation in the last twelve months?
 - b. Suppose that Anna’s boss suggests using the core rate of inflation over the same period of time to make the adjustment. What salary will her boss suggest, and what should Anna point out about using the core rate of inflation to adjust her salary?
2. Ricardo has just completed his sophomore year in college. He is planning on taking a trip to London to celebrate his college graduation in two years. The cheapest airfare that he can currently find from Atlanta to London is \$1,200. Assuming the price of the ticket continues to be affected by inflation, how much will the ticket cost in two years using the BLS rate of inflation for:
 - a. Airline fare
 - b. All items
 - c. The core (all items except food and energy)
 - d. Which of the inflation rates would be the best one for Ricardo to use in estimating the future price of his ticket? Why?

3. Emil is currently driving an old car with a Kelly Blue Book value of \$10,000. In a year, he plans on trading it in for a new car that costs \$36,000. Use the BLS inflation rates for the last twelve months for used and new vehicles to estimate the cost of the new car and the value of Emil's old car when he trades it in. Assume his car does not depreciate in value.
 - a. Assuming the inflation rates for the next twelve months are the same as for the previous twelve months, how much will Emil owe after the trade?
 - b. If Emil could trade cars today, how much would he owe?

Part 2 - Price Changes Due to Inflation versus Price Changes Due to Demand and Supply Conditions in a Specific Market

To find the data that you need to answer the questions about the following scenarios, go to this webpage ([hawkes.biz/BLSDataViewer](https://www.bls.gov/blsdataviewer/)).

Using the toolbar, select: Data Tools > Data Retrieval Tools > Top Picks. In the Inflation & Prices table, navigate to the database named "Average Price Data" and select "Top Picks."

Select the goods in the following table to get the most recent price and the price twelve months ago.

1. Use the twelve-month inflation rate for the same time period to calculate the real price of the good (the price adjusted for inflation). Then determine how much of the total price change is due to supply and demand conditions for the good and how much is due to inflation.

Item	Previous Price	Current Price	Real Price	Price Change Due to Demand and Supply	Price Change Due to Inflation
Bacon (1 lb.)					
Bread (1 lb.)					
Chicken (1 lb.)					
Coffee (1 lb.)					
Milk (1 gal)					
Oranges (1 lb.)					
Electricity (1 kwh)					
Regular Gas (1 gal)					

2. Choose one item and research demand and supply conditions in that market to explain the change in its price that is not due to inflation.

Checklist

Part 1

- ☐ Find BLS statistics for inflation for all items and core inflation.
- ☐ Use inflation rates to forecast future prices of goods and services.
- ☐ Use inflation-adjusted salaries and prices to make economic decisions.
- ☐ Distinguish between inflation for all items and the core inflation rate and determine when each is appropriate.

Part 2

- ☐ Find BLS statistics on inflation rates and prices of specific items over time.
- ☐ Convert nominal prices into real prices.
- ☐ Determine how much of a price change is a real change and how much is a nominal change.
- ☐ Research market conditions to explain the source of a real price change.