

## Chapter 22 Project

### Inflation

#### Purpose

In this chapter, you have learned how inflation is tracked. You have also learned that all market participants are not equally impacted by changes in the cost of living. The cost-of-living index allows for a calculation of real values, which adjust important variables for changes in the cost of living.

**The purpose of this exercise is to illustrate how inflation can affect market participants in everyday life and to research information provided by the Bureau of Labor Statistics to develop a greater understanding of how inflation is tracked.**

#### Directions

This exercise has two parts. In the first, you will read several scenarios and identify how inflation should be considered when making everyday life decisions and how changes in the cost of living can affect market participants. In the second, you will utilize consumer price index data in an effort to calculate real values and develop a price index.

### Part 1 - Considering How Inflation Impacts Outcomes of Life Choices

Read the following scenarios, and answer the questions associated with each.

#### Scenario 1

Gerson and his wife, Stevie, are having a disagreement regarding finances and consumption. Gerson lives near a country club that offers golf, tennis, a swimming pool, and social events. Unfortunately, Gerson's family has not been able to afford a membership. Since Gerson just received a \$1,500 raise to his annual \$75,000 salary, he believes he can now afford to purchase a membership for the upcoming year. Member dues would be \$120 per month. Stevie agrees that a membership would be nice, but disagrees that the family can now afford the membership because of the \$1,500 raise. Assuming inflation has been steady at 2.5% per year, does Stevie have a point?

#### Scenario 2

Malak and Lella are coworkers and friends. They started their jobs in the same year and work the same positions at their firm, earning the same salaries. They even purchased homes in the same neighborhood at the same price. Malak and Lella currently both pay \$1,400 per month for their mortgages. The only difference is that Malak has a fixed-rate mortgage, while Lella opted for the adjustable-rate mortgage. Since inflation has been higher than normal, Malak and Lella both received a salary increase equal to changes in the consumer price index. Lella has complained that she cannot afford any more than she could last year, despite the raise. She is surprised to see that Malak was able to purchase an expensive gym membership after the raise. She is just as thrifty as Malak and does not understand why she cannot also afford to purchase the gym membership. How could it be possible that Malak can afford the gym membership while Lella cannot?

### Scenario 3

Keisha has been presented an offer by her sister, Shanice. Shanice has asked to borrow \$10,000 for one year and promises to pay Keisha \$10,900 at the end of the year. Keisha is happy to help her sister out and is excited to earn \$900 in interest. Keisha has made a list of items that she hopes to purchase next year with the extra \$900. Once she received her money from Shanice, she was disappointed to find that her list now cost \$950. What real interest rate did Keisha earn? Assume that Keisha's basket price increased at the same rate as the consumer price index.

## Part 2 - Using CPI Data from the Bureau of Labor Statistics

Conduct some research online related to nominal values. Think of your favorite movies (gross income), sporting event prize purses, wage rates, or item prices. Pick one and find the nominal values across two time periods and convert these to real values. Show and explain how the real values change/difference compares to that of the nominal values. Keep in mind that you can convert any nominal value to its base period (1982–1984) equivalent by dividing the nominal value by the CPI for the respective period and then multiplying the quotient by 100. Do this for each period and then compare those real values. Use this webpage ([hawkes.biz/BLSDDataViewer](http://hawkes.biz/BLSDDataViewer)) to locate historical CPI values.

Next, select a month and year to calculate a price index for the following four items, utilizing data from the Bureau of Labor Statistics. Use January 2012 as your base period when determining your index values. The following items are in your index basket:

- 1 lb. white uncooked rice
- 1 lb. white bread
- 1 lb. chocolate chip cookies
- 1 gal. of regular unleaded gas

1. What is the cost of your basket in the base period?
2. What period did you select? What was the cost of the basket in this period?
3. What is the calculated value of the index in each period that you have researched? This will include the base period and the period that you selected. Be sure to show your calculations.
4. What was the percentage change in the cost of your basket between the period selected and the base period (inflation/deflation rate)? Be sure to show your work.

 Checklist**Part 1**

- Read the three scenarios and answer the given questions.
- Consider how inflation affects real wage rates.
- Consider how inflation affects fixed-interest loans.
- Calculate real interest rate after inflation.

**Part 2**

- Find the cost of a basket of goods for a base time period.
- Find the cost of a basket of goods for a selected time period.
- Find the calculated value of the index for each time period.
- Determine the amount of inflationary/deflationary change.