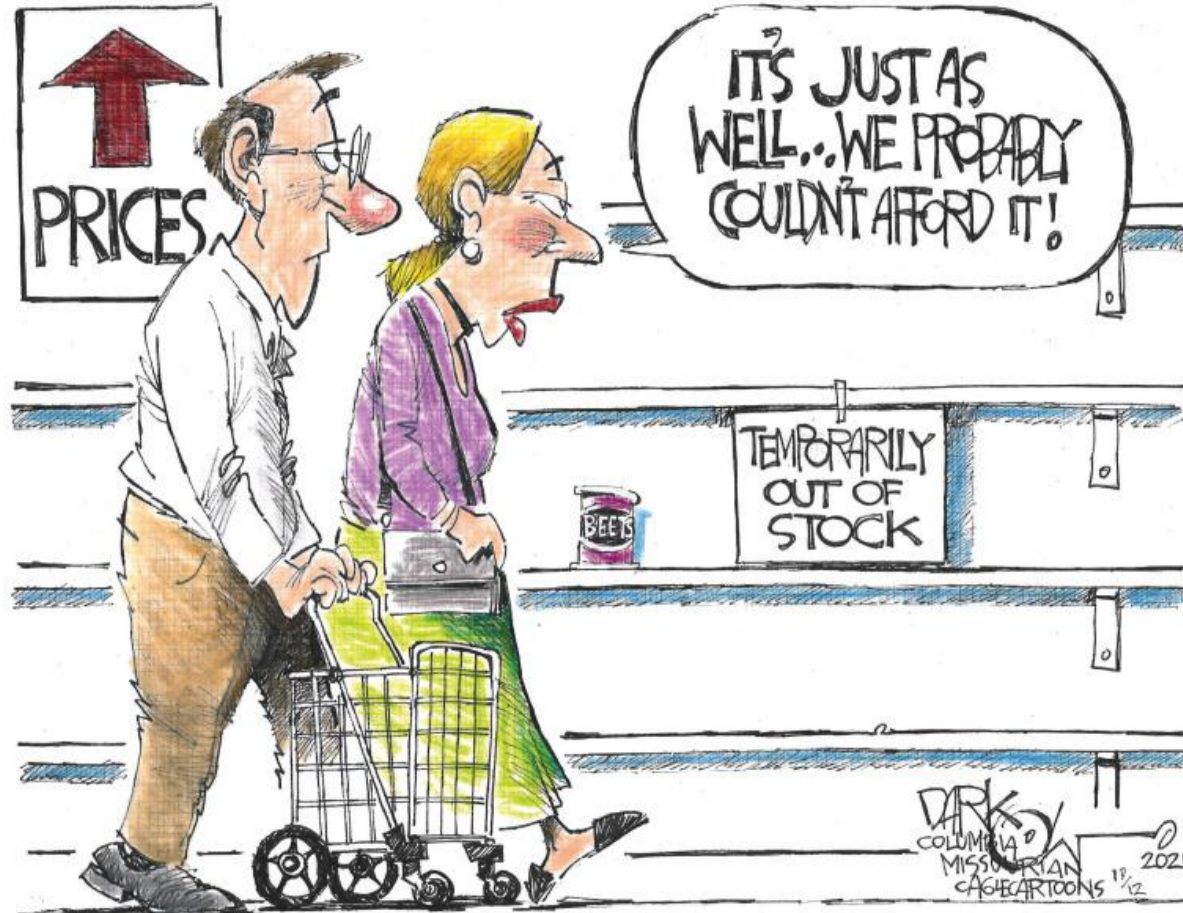


Asking Questions about Inflation



IMPORTANT GUIDELINES

Here are some main ideas to think about when working with Economic Data:

1. An individual's personal financial data is not public information

- Do not expect to be able to look up your neighbor's net worth or other private facts and figures about their finances. You can use **financial samples** done in your area of interest to estimate it.

2. Understand the difference between sample & population data

- **Sample data** is data gathered from a specific group while **population data** is data gathered from the entire group. Estimating is done with samples. Definitive values are generated with populations. Almost all data you will find will be sample data except **census data**.

3. Correlation does not mean Causation

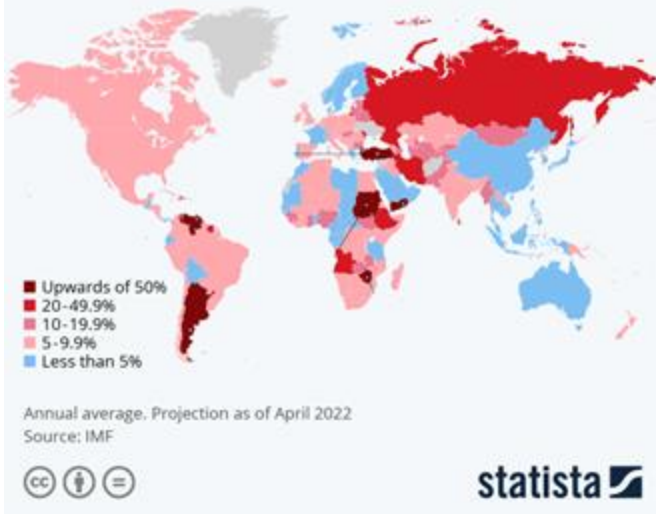
- Data from your sample might not accurately reflect your population. This is a good reason to include a measure of **margin of error** in your predictions because this will determine your **accuracy**.

4. Clean your data before using it

- Most datasets will include **unnecessary information that has no relationship with the data** you are trying to analyze, and you may not know what data is necessary just by looking at it. Being able to interpret the **correlations between datasets** is important because that is what allows us to draw our conclusions.

The Global Inflation Outlook

Projected annual inflation by country in 2022



INFLATION

Description:

In simple terms, it costs more to buy the same thing now, than may have in the past. The past can be any amount of time you want to look back until (lookback period). This could be 1 month, 3 months, 6 months, 1 year, 5 years, 10 years, really any amount you want to use. Most economists care about the 1-year inflation rate.

Example:

Let's say 1 year ago I could buy a box of cereal for \$5.00, but now when I go to buy that same box of cereal, it costs \$5.50. That is a price increase of 10% in comparison to last year's price. In other words, if we measured inflation for one year for this box of cereal, it would be 10%.

Global Food Prices Keep Rising

FAO global food price index 2018-2021*



* 100 = 2014-2016 average price level

Source: FAO

Why ask questions about inflation?

Inflation is very hot topic in 2022, as it affects nearly everyone around the world. There is not a single country in the world unaffected by inflation. It is important to understand why prices go up and down, and how that affects the economy, because ultimately that is going to affect you too. Inflation can rise in a hot economy where people have a lot of cash to spend, and businesses must raise prices to keep up with demand for their products. However, supply chain issues, the ability to get goods from one place to another, like the ones we saw as the global economy rebounded from the COVID-19 pandemic in late 2021, can also lead to increased prices. Global conflicts such as Russia's invasion of Ukraine can create shortages of goods like oil, which in turn cause gas prices to spike. Inflation is rarely caused by just one factor.

EXAMPLE INFLATION RESEARCH QUESTIONS

1. What are the mental health implications of high inflation? (e.g. Higher Anxiety, Depression, etc.)
2. The COVID-19 pandemic had a large inflationary impact on the US Economy in 2020-2022. What part of the US population, including their gender, race, and/or location in the US, was affected the most?
3. For what medical condition (e.g. Diabetes, High Blood Pressure, etc.) has medication usage been affected by inflation the most?
4. Does increased inflation lead to higher or lower recreational drug use among teens or adults, or both?



INFLATION DATA SETS



Bureau of Labor Statistics: Consumer Price Index

Time Frame: Feb. 1971 to Present

Location: United States

Use Directions:

Utilize the **consumer price index** as a measure of **inflation** rate. This will tell you periods of high and low inflation which you can use to compare with other datasets to draw correlations between them. Since inflation is most often used as an **explanatory variable**, changes in this dataset should be used to explain the **responses** you see in another.



SAMHSA: NSDUH Annual National Report

Time Frame: Yearly Survey

Location: United States

Use Directions:

Utilize Figure 32. Serious Mental Illness in the Past Year: Among Adults Aged 18 or Older; 2008-2020 to see how many illness' there were each year for different age groups. Pair this with the yearly **average** inflation to see if a high or low average inflation correlates with a higher or low amount of illness across each age group.

INFLATION DATA SETS



Office of Procurement, Acquisition and Logistics (OPAL): Pharmaceutical Prices

Time Frame: 2012 - Present

Location: United States

Use Directions:

Filter the data for specific drugs you would like to track offered by the U.S. D.o.V.A. Plot the price of any drug on the **y-axis** with its corresponding inflation rate on the **x-axis** to see the price response to changes in inflation.



SAMHSA: NSDUH Annual National Report

Time Frame: Yearly Survey

Location: United States

Use Directions:

Utilize Section 5: Illicit Drug Use from the Report to measure increases and decreases in different drug usage to see if a high or low average inflation correlates with a higher or lower amount of each respective drug usage.

ADDITIONAL SOURCES TO EXPLORE



HealthData.gov



Google Dataset Search Beta

