

Analyzing Inflation Trends Using Fred

Which (if any) of these groups have been subject to higher inflation and which groups may be avoiding it?

The Analysis showed some pretty consistent results across years, showing that Meat, Poultry, Fish, and Eggs showed the highest volatility in Inflation. Dairy products, however, did have the highest peak inflation of any of the categories in 2022. In pretty stark contrast to the other two categories, Fruits and Vegetables have had very little volatility since the end of the 80s. Even in recent years, Fruits and Vegetables have remained steady while other groups fluctuate strongly.

Compare the inflation trends over the past 5 years to other time periods and explore for differences

The 1970s and 80s saw periods of extreme inflation, the likes of which we still haven't seen since. The 70s saw high inflation from OPEC quadrupling oil prices, and the recession in the 80s was because of the monetary policy meant to combat residual high inflation from the recession in the 70s (unfortunate chain reaction). In the past, food inflation follows total inflation back down after a recession, but we've seen that food inflation (particularly dairy + eggs) has remained high despite total inflation falling.

What patterns are prevalent among each food category?

Monetary Policy can never be tight enough (without a physical standard to back it, ie. gold) to completely stop inflation. Since central banks continue to print money as the country and its economy grow, that bakes a natural level of inflation into the value of that currency. This is reflected in the data, with each group showing a steady upward trend. The Pearson correlation coefficients also show a positive linear relationship between all three food categories.

What are the factors that possibly influenced trends in the data during the five year timeframe?

Through some outside data from the Bureau of Labor Statistics and the US Census Bureau, we were able to determine that unemployment has an inverse relationship with CPI. Along with this, we found that an increase in SNAP assistance programs correlated with a rise in CPI in the last 5 years.