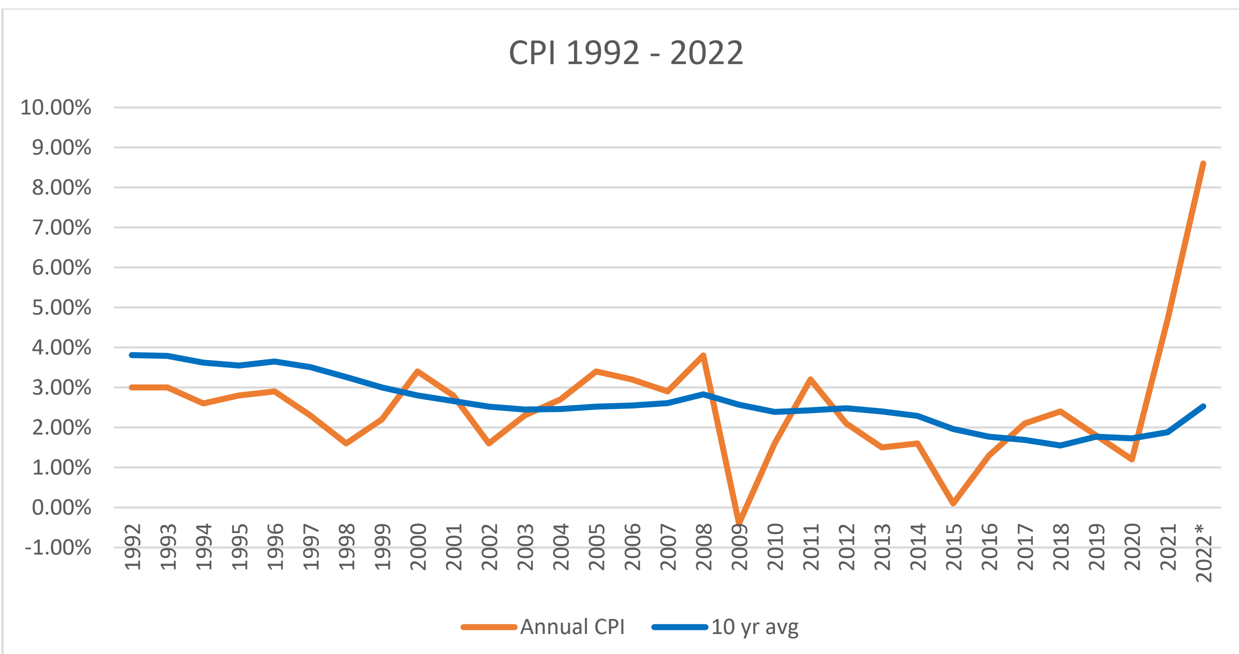
Market Commentary: CPI – Same Data Through Three Different Lenses

October 2022

Numbers don't lie. People do. OK, perhaps that is not (always) fair. The numbers may simply be hard to interpret.

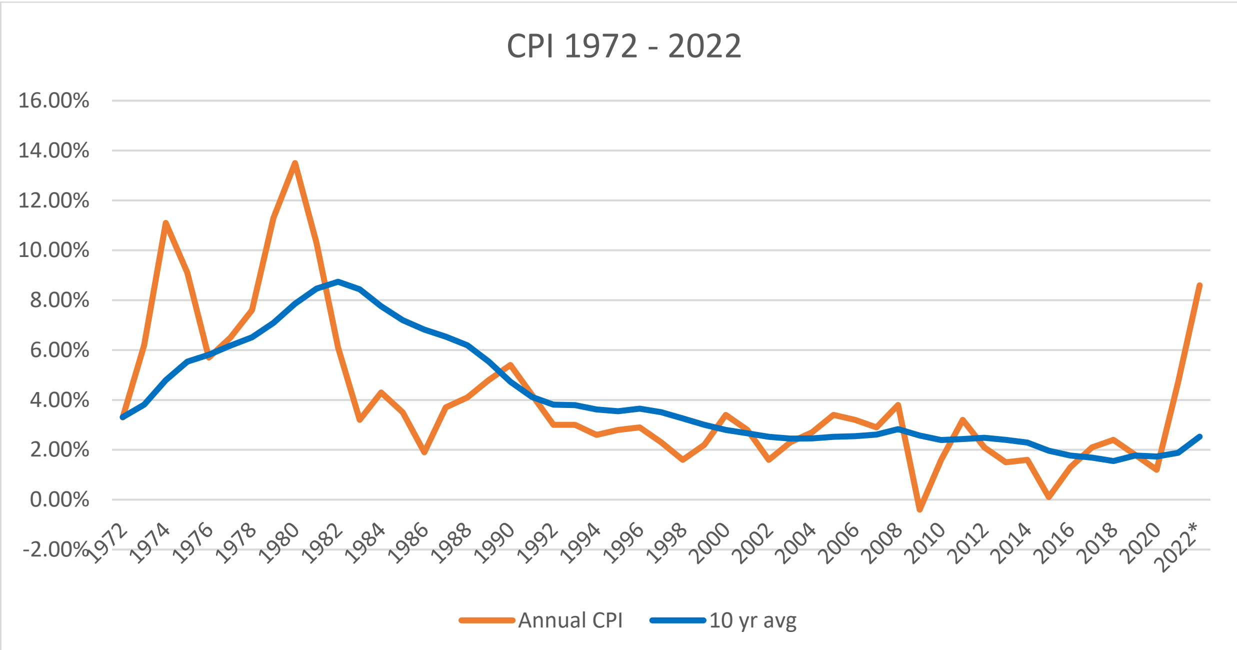
Our analyst team was on a call recently where a well-respected (to us) manager thought inflation would remain heightened because the most recent period of inflation had been unusually tame. Inflation has been driving both the equity and fixed income markets this year and will continue to have a material effect on performance going forward, so it's worth drilling down and try to define what the "usual level" of inflation really is.

The Berlin wall came down in 1989. The Cold War ended (only temporarily, in retrospect) in 1991 with the dissolution of the Soviet Union. China began market reforms in the late 1970s, opening the door to vast international market growth over the ensuing 40 years. The US and the world should have benefited. More supply should have kept a lid on inflation.



As can be seen from the chart above, CPI was rather tame over the last 30 years, with a roughly 2% annual CPI over the last decade.

Widening our lens to the last 50 years, however, tells a different story. By doing so, we now capture the 1970s, which were affected by a couple of energy shocks. The first was an embargo by Arab OPEC members in retaliation for American support to Israel during the Yom Kippur War. The second shock came in the late 1970s and was due mainly to the Iranian revolution and the subsequent Iraqi invasion of Iran.

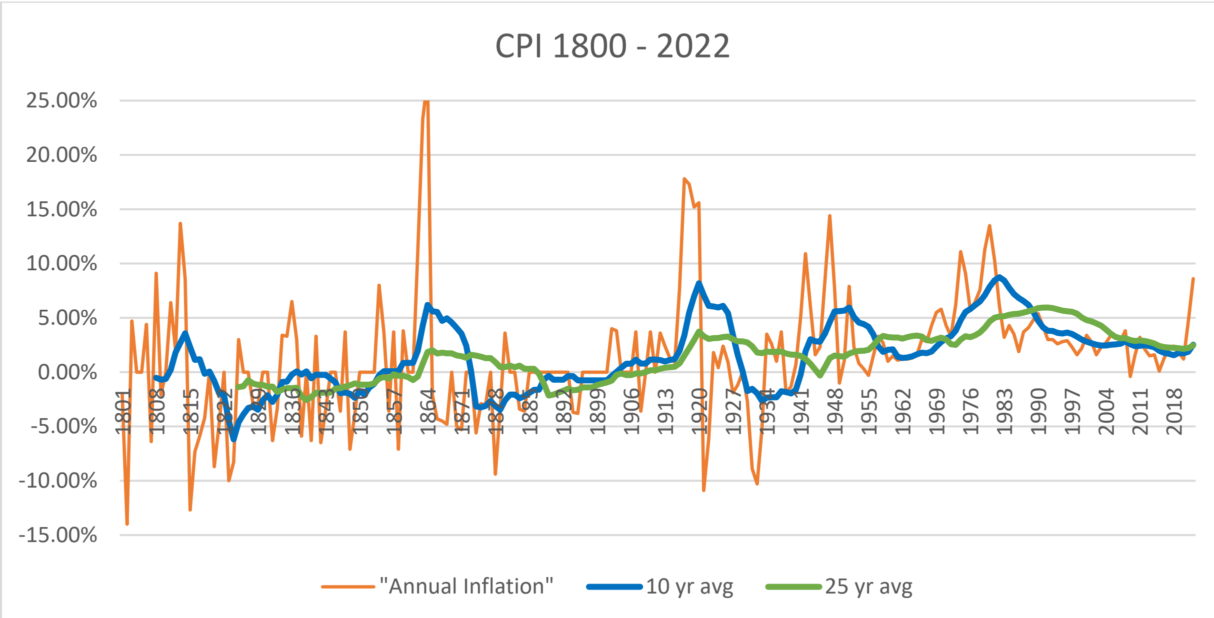


In the early 1980s, the ten-year CPI average surpassed 8% inflation on the back of the two spikes in inflation corresponding with energy shocks. Back then we had way more energy dependency as a country, and the world was not quite as open given the Cold War with the Soviet Union, and China just beginning the market reforms that would result in their becoming an exporting powerhouse. Are the next 10 years going to mimic the 1970s and '80s, look more like the more recent period, or chart their own unique course?

What if we widen our lens even further? The Federal Reserve Bank of Minneapolis provides CPI data back to 1800. The Bureau of Labor Statistics (BLS) has calculated CPI in a similar way since 1913. Prior to that, there are other historical data sources that reflect a similar inflationary measure, though the data seems less robust and have a hole here and there. [1]

- 1800 – 1851: Index of prices paid by **Vermont Farmers for Family Living**
- 1851 – 1890 – Consumer Price Index (CPI) by Ethel D. Hoover
- 1890 – 1912 – Cost of living index by Albert Rees

[1] While perhaps a slight tangent to this analysis, innovation plays a significant role, in our opinion, in lowering inflation – One can follow the data source, beginning with a focus on Vermont Farmers when America was primarily agrarian, through to individual authors of the data and finally to today's CPI which is able to incorporate increasing inputs in a technological manner:



Reviewing over 200 years of data seems to point to sharp bouts of inflation followed by deflationary periods. The 1970s shows up as an outlier, responsible for the highest 10- and 25-year periods of inflation. The Civil War took the record for the largest spike.

And herein lies the problem with data. It still needs to be interpreted. Is the data simply not as rigorous for the 1800s, where average inflation was flat for the century? Or is it a function of a country with incredibly abundant resources that was not filled close to capacity (meaning incredible supply matched with less demand)?

With a rear-view mirror historical data can be interpreted in many ways. Is it therefore reasonable to think we can predict future data? Should we forecast hyperinflation given today's changing global world order coupled with declining old-world (and climate affecting) energy capacity? Or will inflation revert to the historical norm due our novel ability to innovate as we have done through many concerns in the past (e.g., threat of mass starvation as human population exploded)?

One can speculate but certainty is a fool's game. It is one of the reasons we strongly believe in diversification on one hand and looking at many cuts of data on the other. This approach helps to provide more context for potential outcomes and for our attempts to best understand reasonable paths forward.