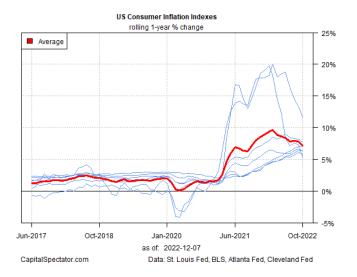
8 December 2022

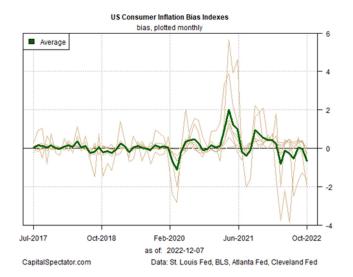
James Picerno, editor +1.732.710.4750 caps@CapitalSpectator.com

Inflation continues to show signs of easing

A growing list of indicators suggest that inflation has peaked. The debate is focused on how quickly inflation will fall. It's too early to make confident forecasts, but the incoming numbers over the next few months may provide clarity. Meanwhile, the numbers continue to show a moderation in the inflation trend.



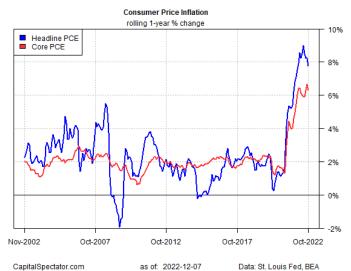
Reviewing the year-on-year changes for seven varieties of consumer-price indexes clearly shows that the trend has rolled over. The average of these inflation measures, shown by the red line in the chart at left, declined again in October to 7.2%, the lowest print in more than a year (see p. 3 for details on the underlying indexes).



The "bias" of the one-year changes in the inflation metrics per the chart above also shows a persistent downside tilt. The average for the US Consumer Inflation Bias Indexes was negative for a second month in October. Since May, this measure of bias has been sub-zero for six of the past seven months, which suggests that inflationary pressures will continue to ease.

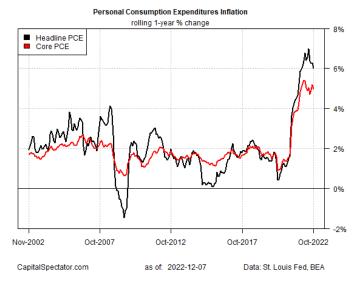
CPI and PCE Inflation: 1-year % change				
Date	CPI:Headline	CPI:Core	PCE:Headline	PCE:Core
Aug 2022	8.2	6.3	6.2	4.9
Sep 2022	8.2	6.7	6.3	5.2
Oct 2022	7.8	6.3	6.0	5.0

Headline/Core Consumer Price Indexes: 1-Year Trend



Consumer Price Indexes (CPI). Core CPI excludes food and energy, offering what tends to be a more reliable measure of the trend vs. headline CPI.

Headline/Core PCE Inflation Indexes: 1-Year Trend



Personal Consumption Expenditures (PCE) inflation measures. Core PCE excludes food and energy, offering what tends to be a more reliable measure of the trend vs. headline PCE. Core PCE is widely reported as the Federal Reserve's preferred measure of inflation.

Consumer Inflation Indexes: 1-Year Trend

US Consumer Inflation Indexes rolling 1-year % change 25% Average 20% 15% 10% 5% 0% Jun-2017 Oct-2018 Jan-2020 Jun-2021 Oct-2022 as of: 2022-12-07 CapitalSpectator.com Data: St. Louis Fed, BLS, Atlanta Fed, Cleveland Fed

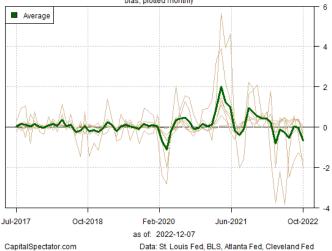
This chart offers a broad review of inflation indexes. The assumption is that including alternative measures of inflation provides a more robust estimate of the trend. In addition to the standard headline and core CPI estimates of inflation, the chart at left includes:

- Sticky price core CPI
- Sticky price core CPI exshelter
- Median CPI
- Flexible CPI
- Flexible core CPI

For details on the alternative CPI numbers, see: fred.stlouisfed.org and related links to the regional Fed banks that maintain the data.

Consumer Inflation Bias Indexes

US Consumer Inflation Bias Indexes bias, plotted monthly



The bias indexes are calculated by comparing the month-to-month change in the rolling 1-year changes for the indexes listed directly above.

Consumer Inflation Expectations Indexes

US Consumer Inflation Expectations Indexes

1-, 2-, 3-, 4-, 5-year expectations

5%

4%

3%

2%

Jul-2017 Oct-2018 Mar-2020 Jul-2021 Nov-2022
as of: 2022-12-07

Data: St. Louis Fed, Cleveland Fed

Model estimates of inflation expectations for various time horizons, based on analytics from the Cleveland Fed. See www.clevelandfed.org for details.

Treasury Market 5-Year Inflation Forecasts

CapitalSpectator.com

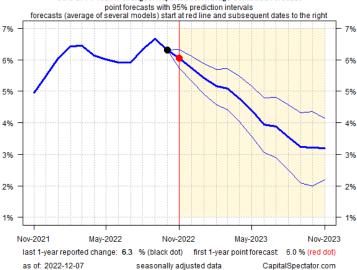
US Treasury Market Implied Five-Year Inflation Expectations 5-year expectations, daily 2.8% Average 2.7% 2.6% 2.5% 2 4% 2.3% 2.1% 02-Sep-2022 26-Sep-2022 20-Oct-2022 13-Nov-2022 07-Dec-2022 as of: 2022-12-07 CapitalSpectator.com Data: St. Louis Fed

Five-year inflation expectations based on two models. The first is 5-Year/5-Year Forward Inflation Expectation Rate. For details, see: fred.stlouisfed.org/series/T5YIFR

The second model is based on the implied market forecast using the yield spread on the 5-year nominal Treasury less its inflation-indexed counterpart.

Core CPI Ensemble Model Forecast

Core CPI 1-Year % Changes: Reported vs. Average Combined Forecast

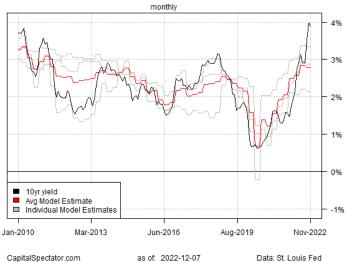


The Ensemble model forecast of core CPI is based on analytics developed by CapitalSpectator.com. For details, see:

www.capitalspectator.com/combinationforecasts

10-Year Treasury Fair Value Estimate

10-Year Treasury Yield vs. Average Of Three Fair-Value Model Estimates



The "fair-value" of the 10-year Treasury yield is based on three models. The average estimate offers a baseline for guesstimating the level of the 10-year yield according to a variety of economic and markets indicators. For details, see:

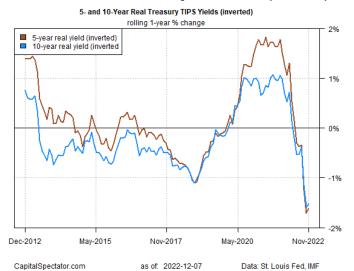
www.capitalspectator.com/10-yeartreasury-yield-fair-value-estimate

Monetary Base vs. Industrial Materials Prices

Monetary Based vs. Industrial Materials Prices rolling 1-year % change 0.8% Monetary Base
 Industrial Materials 0.6% 0.4% 0.2% -0.4% Nov-2012 Apr-2015 Oct-2017 Apr-2020 Oct-2022 CapitalSpectator.com as of: 2022-12-07 Data: St. Louis Fed, IMF

The US base money supply and prices of industrial materials are useful indicators for estimating the trend bias for inflation. The main takeaway: stronger (weaker) trends imply stronger (weaker) inflation.

5- and 10-Year Real Treasury TIPS Yields (Inverted)



The rolling 1-year change (inverted) for 5- and 10-year real Treasury yields (via TIPS securities) offers a useful benchmark for estimating the near-term outlook for the inflation trend. The main takeaway: higher real yields (shown by falling trends in the chart at left) imply lower inflation, and vice versa.

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