



WINTER 2023

# PERCSPECTIVES ON POLICY

## THE SIGNS OF THE TIMES

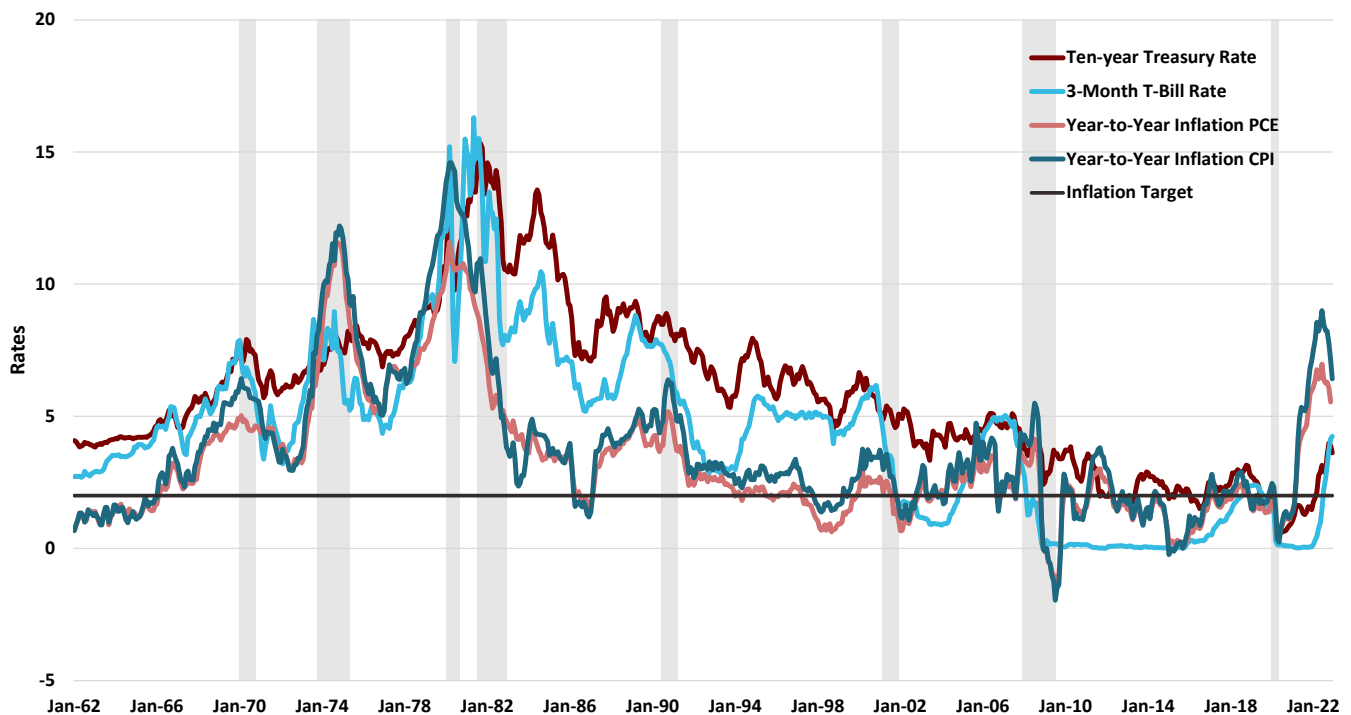
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In the past several years we have experienced quite a number of events that have been described as “extreme,” “unprecedented,” and “once in a lifetime.” These tumultuous times have brought us these events in arenas that include politics and political figures, weather, international relations, and the economy. Focusing on the economy’s gyrations, we’ve had extreme unemployment and extreme inflation rates. The shutdowns during the early months of the pandemic produced the highest unemployment rates since the Great Depression, and the shortest recession. The fiscal responses to the government-mandated shutdowns produced the highest federal spending as a share of GDP since WWII, and are responsible, at least in part, for the highest inflation rates in forty years.

While the economy has largely recovered from the COVID Recession – employment is back to its pre-pandemic levels, as is the unemployment rate – the subsequent high inflation rates have produced serious headwinds for the economy. How much of the inflation is due to the lingering effects of the fiscal responses, the post-COVID supply chain issues, and the Russian invasion of Ukraine, is open to debate.

Whatever the cause, there is a widely perceived need to reduce the inflation rate. The Federal Reserve Bank policy response to reduce high inflation comes from its standard playbook, which is to raise the interest rate on its short-term policy rate, currently the rate of interest it pays on reserve balances held by banks. The intent is to reduce the rate of

FIGURE 1. INFLATION RATES AND INTEREST RATES





growth of the money supply and thus to reduce the rate of price level increases. However, the side effect of this policy action is a slowdown in economic activity that may lead to an actual recession.

Recession fears have been rising in recent months even as inflation rates have started to turn a corner. The year-over-year annual inflation rate based on the Consumer Price Index (CPI) reached 9% in June, and as of December, it had declined to 6.4%. Using the Federal Reserve's preferred inflation rate based on the Personal Consumption Expenditures (PCE) price index, the year-to-year inflation rate as of November was 5.5%, down from a high of 7% in June. By either measure, the inflation rate is still well above the Fed's target of 2%.

The CPI and PCE inflation rates from 1962 to the present are shown in Figure 1 along with two interest rate series. We must go back to the early 1980s to find inflation rates like those of the past year.

The year-over-year CPI inflation rate exceeded the Fed's 2% target in March 2021 and continued to increase rapidly, reaching just over 7% by the end of 2021. At first the Fed's response to the high and rising inflation rates was to delay taking action in the belief or hope that the inflation would be 'transitory' or short-lived.

Ultimately though, during 2022 the Fed raised the federal funds rate on seven separate occasions. The increases began with an increase of 25-basis points in March, by which time the inflation rate was over 8%. This was followed by a 50-basis point increase in May; 75-basis point increases in June, July, September, and November; and finally a 50-basis point increase in December.

Looking at annual inflation rates, measured as year-over-year percentage increases in the price level, is the traditional way of discussing inflation. The latest such measure from December is 6.4% inflation over the preceding twelve months. However, this masks an underlying pattern in the data, which is higher monthly increases in the price level in the first half of that twelve month period, and lower monthly increases in the price level in the second half of that twelve month period.

In fact, the monthly percentage increases in the CPI starting in July 2022 have been consistent with an annual inflation rate of just under 2%. Stated differently, if we have seven additional months with monthly percentage increases such as we had in the last five months, the annual inflation rate that we

measure would be just under 2%, essentially at the Fed's target.

If inflation rates have declined after peaking back in June, why do recession fears persist, and why is the Fed continuing to raise interest rates?

A recession or near recession in 2023 is anticipated in numerous forecasts. In October 2022, the Conference Board predicted a 96% chance of a recession within 12 months. It also forecasts only 0.2% real GDP growth for 2023. During the Fed's December 14, 2022 Federal Open Market Committee (FOMC) meeting, the median forecast of real GDP growth was 0.5% for 2023, down from a median forecast of 1.2% from its September meeting.

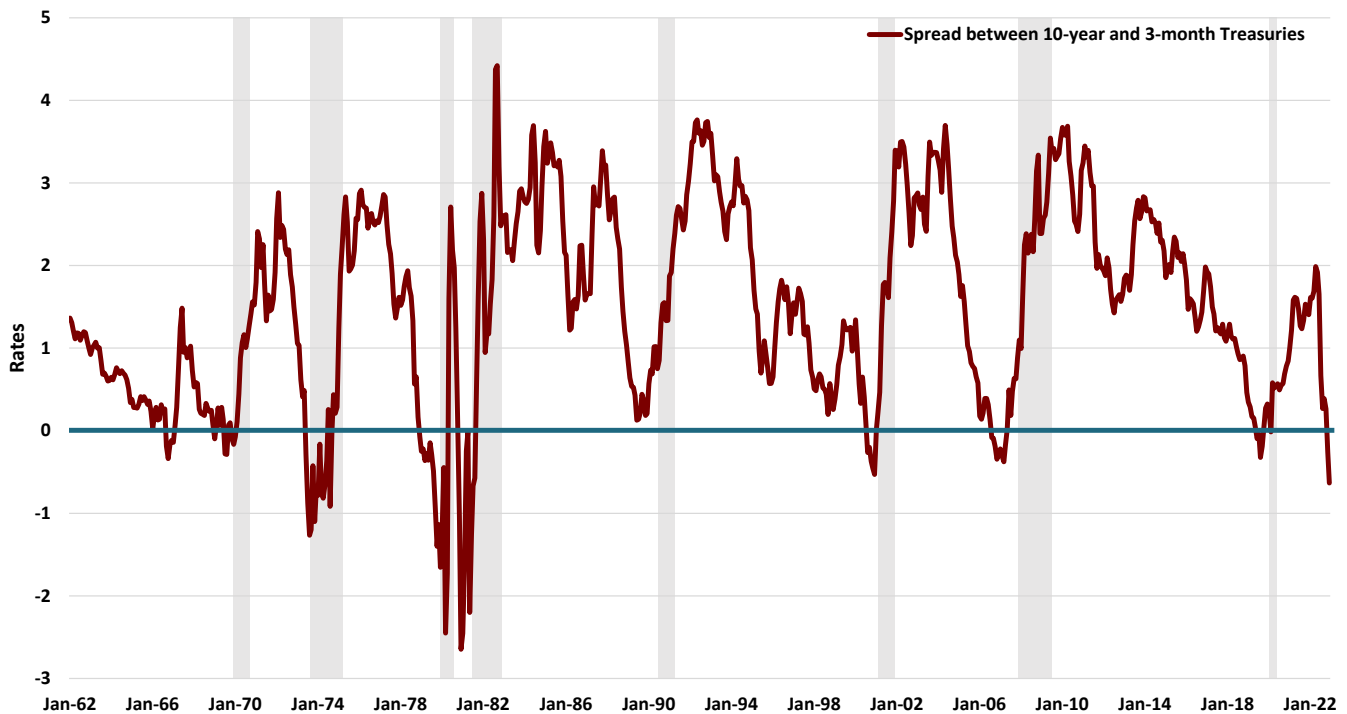
Also at the December meeting, the median unemployment rate forecast for 2023 was 4.6%, or more than a percentage point increase from the December 3.5% rate. These estimates are in line with the results from the Philadelphia Federal Reserve's fourth quarter 2022 survey of professional forecasters. Based on this survey, GDP is expected to grow 0.7% in 2023 and the unemployment rate is expected to rise to 4.2% for the year.

Another frequently used indicator that a recession is on the horizon is an inverted yield curve – when the short-term interest rates are higher than the long-run rates. As seen in Figure 1, the ten-year Treasury rate is typically higher than the 3-month Treasury bill rate. Longer horizons bring with them more uncertainty, particularly uncertainty about future inflation, and investors must be compensated with higher returns. In addition, investors must be compensated more for tying up their resources over a longer horizon as they forgo other investment opportunities. However, as the figure shows, there are a few periods during which the short-run rate has been above the long-run rate. One of those is now occurring.

The yield curve inverts when the market interest rate on short-term borrowing is higher than the rate on long-term borrowing. The present situation is consistent with an idea that short-term rates have adjusted upwards to compensate for higher present inflation, but the long-term rates have not kept pace because investors believe the current high inflation will not persist. Basically, this story is that investors believe the Fed will successfully restore the inflation rate to its 2% target. Thus, long-term rates rise, but not as rapidly as the short-term rates.

These periods of an inverted yield curve are more

FIGURE 2. SPREAD BETWEEN 10-YEAR AND 3-MONTH TREASURIES



easily seen in Figure 2 which depicts the spread between the 10-year and 3-month Treasury securities. A positive value indicates that the 10-year rate is higher than the 3-month rate, while a negative value indicates an inverted yield curve. In this figure, we see that there are nine distinct periods during which the yield curve was inverted. These inversions typically precede a recession, and sometimes continue during a recession. However, the inversion in 1966 was not followed by a recession, and the COVID Recession, while preceded by an inversion 2019, was the result of COVID and government shutdowns. While a “regular” recession may have been on the horizon at that point, we’ll never know. In December 2022, the spread between the 10-year and 3-month rates was 0.63%, the largest spread since the early 1980s, but still much smaller than the inversions of 1979-1982.

Referring back to Figure 1, we see that the current episode, like the inversions in the 1970s and early 1980s, are associated with a period of high inflation. The inversions between these two periods all occurred during periods with lower inflation rates.

Our current inverted yield curve is also seen by the New York Federal Reserve Bank as signaling a possible recession on the horizon. In Novem-

ber, based on the spread between the 10-year and 3-month treasuries as graphed in Figure 2, the New York Federal Reserve predicted a 38% probability of a recession within one year.

The recession fears continue to persist because the year-over-year inflation rate, while declining, remains high relative to the recent past, and remains above the Fed’s 2% target. This means that the Fed will likely continue to raise the interest rate on reserves until it is confident that inflation is under control. It appears that the Fed is now considering a 25-basis point increase at the end of January. That would move the Fed Funds Rate to between 4.5% and 4.75%, up from 0.25% to 0.50% in March of last year.

Finally, as many commentators have said, if there is a recession in 2023 it will be one of the most widely expected recessions ever. In a way, if ‘everyone’ is expecting a recession, they hold off on investments, they wait for the uncertainty to clear, and an economic slowdown occurs. In this way the expectation of a recession can be self-fulfilling. But whatever 2023 holds, we enter it with a strong labor market and declining inflation. A soft-landing may still be possible, but as the last few years have shown, some things just can’t be predicted with accuracy.



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