

# Inversion

Weather inversions occur quite frequently. Air temperature normally is warmer closer to the ground. During an inversion, air temperature is cooler closer to the ground and the result is poorer visibility due to haze and discomfort due to air pollution. Financial inversion occurs less frequently. Interest rates normally are lower for shorter maturities. During a financial inversion, interest rates are lower for longer maturities, and financial visibility is poorer due to the relative higher cost of short-term borrowing. Discomfort rises from the potential for an economic recession and a stock market correction. A review of prior periods can bring perspective for economic activity and investing as an inversion is underway.

## PERSPECTIVE

A recession is a period of significant decline in activity across the economy that lasts more than a few months. A shorthand indicator of recession is two consecutive quarterly declines in real gross domestic product ("GDP"). **Chart I** highlights the twelve periods officially declared as recessions since World War II. Highlighted as well are the first two quarters of 2022 as GDP declined in each quarter. This period has yet to be declared an official recession, and the consecutive GDP declines do not guarantee its declaration. Of the twelve declared recessions, GDP remained positive in 38% of the quarters within the recessionary periods. Nevertheless, there has not been a recession with less than two quarterly declines in GDP.

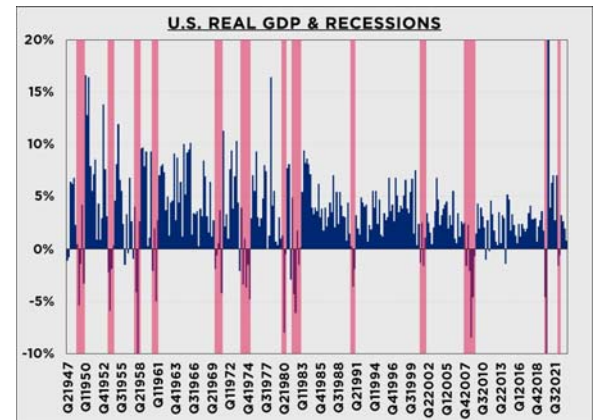
Financial inversions, short-term interest rates rising above long-term rates, have been associated consistently with periods of economic recession. As is the case currently, the relatively greater increase in short-term rates has reflected deliberate central bank monetary policy, usually intended to slow inflation but often at a cost of economic decline. The consistency of inversions and recessions over the past 60 years is shown in **Chart II**. Maximum inversion usually preceded periods of recession. Shown here as well is the path of the stock market as measured by the S&P 500 Index. Notable stock market corrections have come with periods of recession. Rising interest rates from policy and declining earnings from recession take their toll on valuations.

The most recent period of inversion, recession and stock market trend is shown in **Chart III**. The brief but dramatic pandemic recession is highlighted as well as the tentative, shorthand two-quarter GDP "recession" of 2022's first half. The S&P 500 posted a full bear-market price decline of -25.4%, but since has recaptured much of this loss with a +24.6% gain. However, the relative rise in short-term interest rates has continued with maximum inversion occurring well after the potential recession period. If this circumstance holds, i.e., the recession is behind, the current inversion relationship would be unprecedented.

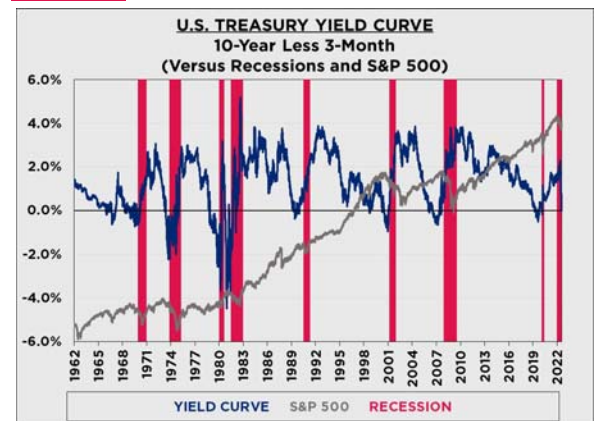
## INVESTMENT IMPLICATIONS

The pandemic wrought profound changes, the impacts of which continue to work through the economy and financial markets. Many pre-pandemic trends have been exacerbated, notably changes in employment and work patterns and the persistent march forward of technology applications. Technology-induced bank "runs" earlier this year reflect such change. Perhaps, the historical significance of financial inversion falls victim to pandemic change as well. But current low visibility from financial inversion warrants some portfolio caution.

**CHART I**



**CHART II**



**CHART III**

