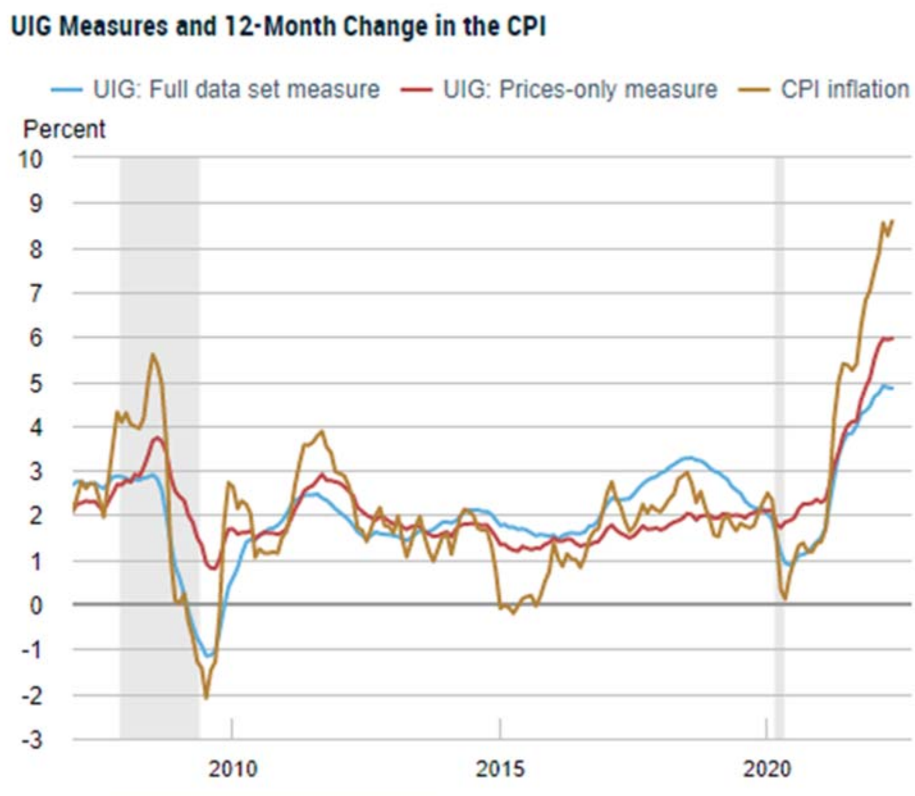
ECONOMIC REVIEW

July 2022

Inflation Takes Center Stage: Inflation is proving more persistent than hoped, with the most recent CPI (Consumer Price Index) report showing 8.6% inflation. The average U.S. household is expected to spend $4,000 to $5,000 more this year due to higher prices. The Federal Reserve Bank of New York's Underlying Inflation Gauge (UIG) measures underlying inflation defined as the persistent portion of overall inflation. The following chart shows the UIG measures in the 5% to 6% range, indicating some inflation is persistent while some may be temporary.



Source: Federal Reserve Bank of New York

Inflation arises from an imbalance between supply and demand. Supply shortages are evident in the global food supply, which has been impacted by Russia's invasion of Ukraine. The following chart shows the rapid increase in global food prices, although it has paused for the past two months.

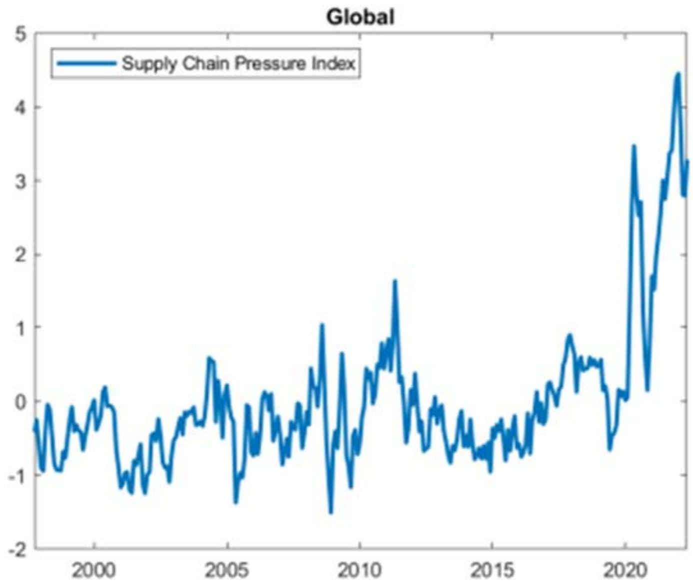
World Food Price Index

Source: United Nations Food and Agriculture Organization

Monetary Tightening Has Begun: As inflation is a global phenomenon (CPI in Europe has risen as much as in the U.S.), many global central banks are tightening monetary policy. While monetary policy cannot solve the supply side of the imbalances, it can reduce the demand side. Monetary tightening has begun on two fronts. First, the Federal Reserve has begun raising short-term interest rates, and second, the Federal Reserve has begun to shrink its balance sheet by no longer reinvesting proceeds of maturing bonds (commonly referred to as Quantitative Tightening). Both strategies began in earnest in June 2022. The Fed is expected to continue raising interest rates aggressively until late 2022 or early 2023, reaching nearly 3.5%, up from 0% at the beginning of 2022 and 1.75% at the end of June.

Global supply chains remain strained though have shown signs of easing, as demonstrated below. We expect supply pressures to ease gradually. However, some supply issues will remain long-term, as most commodity markets face significant challenges stemming from underinvestment and will take years to meaningfully increase supply. Also, labor tightness and wage growth may prove more persistent.

Global Supply Chain Pressure Index



Source: Federal Reserve Bank of New York, through May 2022; Standard Deviations from Average

<u>Consumer Spending Remains Strong:</u> Despite high inflation, and very low consumer sentiment readings from surveys, consumer spending remains strong, as shown in the chart below. Manufacturing data also indicates strong economic expansionary trends are in place. Corporate earnings are forecast to increase 7.8% this year and 12.2% over the next twelve months; these growth projections have increased since the beginning of the year. The consensus real GDP growth forecasts are 2.5% for 2022 and 1.9% for 2023, with projections slightly higher in Europe (2.8% and 1.9%, respectively). “Real” GDP growth means inflation is subtracted. “Nominal” GDP growth, unadjusted for inflation, is closer to 10%, the highest level since the early 1980s.

U.S. Personal Consumption Expenditures

<u>Recession Risk Growing</u>: The combination of higher prices and monetary tightening should slow down economic growth, with the risk of recession growing. According to the Bloomberg consensus of economists, there is a 33% chance of recession in the U.S. over the next 12 to 18 months (compared to 30.0% in Europe). This is up from 15% at the beginning of the year and 20% in Europe. It is possible that the economy is already technically in recession, but if so it would be a unique one with the lowest unemployment rate in more than 50 years.

As an example of the economic impact of higher prices and higher interest rates, we can look at the housing market. Since the beginning of 2021, the average home price in the U.S. has risen 42%. The interest rate on 30-year mortgages has more than doubled to 5.8%. This combination of higher prices and higher mortgage rates results in the average monthly mortgage payment rising 107% in the past 18 months. Even taking into account higher wage growth, home affordability has declined, by about half. The following chart goes through March 2022, and affordability has worsened further through June. This is likely to reduce demand for home purchases, which will lead to reduced prices. Often the best cure for high prices is the high prices themselves, as consumers make adjustments to spending.