Inflation: Everything You Need to Know

May 5, 2022

- What is the current state of inflation?
- What areas of the economy are being most impacted?
- What areas of the financial markets are being most impacted?
- Where do prices head from here?

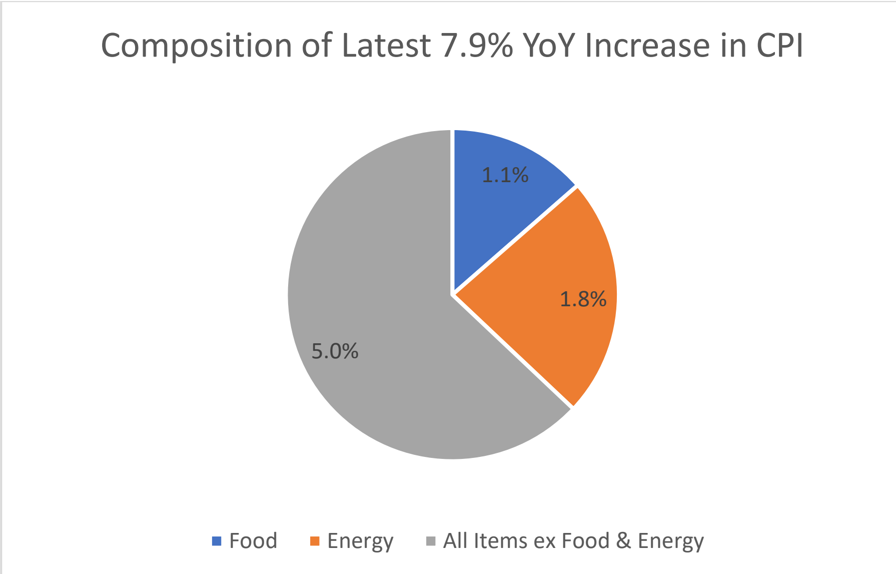
It feels like you cannot have a conversation these days without discussing inflation – prices at the pump, the grocery store, construction costs – it is a very long list and rising prices are touching all our daily lives. Inflation is not only top of mind for individuals, but also for Central Bankers looking to keep the economy on a sustainable growth path. To be certain, the Federal Reserve (Fed) has shifted its focus from full employment (growth) to price stability (inflation). Is the Fed now willing to roll the dice on economic growth to ensure lower inflation? Have the chances of a recession increased? These questions have become increasingly appropriate, in our view.

Bottom line: We believe a "soft landing" scenario for the economy is still possible. Because we think inflation may have peaked, the Fed will be able to justify a slower pace of monetary tightening later in the year. This will result in a mid-cycle economic slowdown, but not a severe recession. Should inflation remain stubbornly high, the Fed will have no choice but to hike rates until something breaks – either the economy, the stock market, or both.

Current State: High and Broad

Each month the Bureau of Labor Statistics ("BLS") sends collectors throughout the U.S. to gather prices on everything from milk to new cars. Goods and services are grouped into eight major categories (housing, transportation, medical care, etc.) and the BLS updates the representative list every two years to reflect changes in consumption patterns. Those prices are packaged together and weighted based on average out-of-pocket expenses incurred by consumers. That basket of goods is then tracked month-to-month, which is how the Consumer Price Index (CPI) is generated. In February, the CPI was up 0.8% from the month prior, bringing year-over-year inflation to 7.9%, the highest since January 1982. Meanwhile, Core CPI, which excludes more volatile Food and Energy prices, accelerated to a 6.4% 12-month rate, the fastest since August 1982. Although excluding categories that impact our daily lives may dilute the true magnitude of price increases at any given moment, the Core reading is the best measure of the underlying trend in consumer prices.

<u>Consumer Price Index Breakdown</u>



Source: Bureau of Labor Statistics

The concern is that higher prices are becoming so broad-based that they will become entrenched in our economy. Persistent inflation would be problematic for economic growth. Not only would it lead to a destruction of consumer demand, but it would necessitate tighter monetary policy to intentionally cool economic growth.

Causes of Inflation: Both Supply & Demand

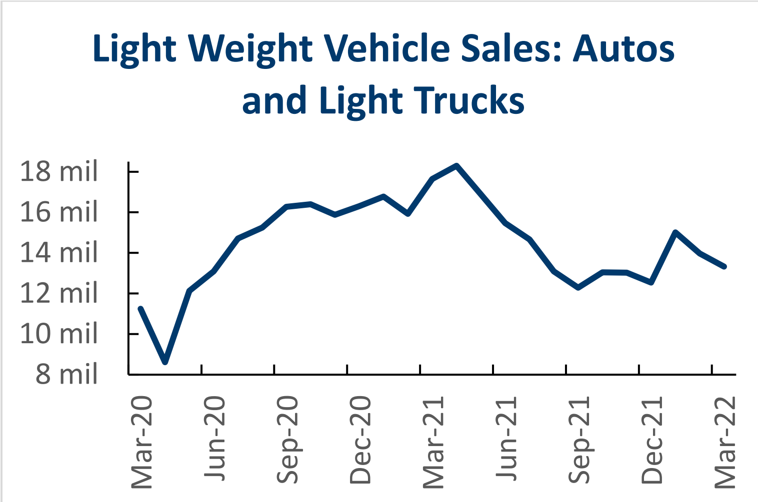
To fully understand the economic impact of inflation, the current causes must be well understood.

<u>Supply Constraints</u>

Between China's "Zero-COVID Policy" lockdowns and the ongoing Russia-Ukraine War, supply chain disruptions will likely cause inflation to last longer than we originally expected.

For example, in Asia, since the beginning of the pandemic, semi-conductor plants have been shutting down to control the spread of the virus. This loss of production capacity has pushed the cost of semiconductor chips higher which has weighed on new vehicle production and sales. In fact, over the past year, according to BEA through March 31, 2022, lightweight vehicle sales have decreased by about 25%.

Supply Constraints Hit Production



Source: U.S. Bureau of Economic Analysis

Due to the lack of inventory, car buyers have turned to the used car market which has driven up prices. According to the US CPI Urban Used Cars & Trucks Index, prices have increased roughly 35% over the past year through March 31, 2022.

In Eastern Europe, the Ukraine-Russia war has also contributed to supply disruptions for products such as fertilizer, an important ingredient for crop and soil nutrients. Russia, a top exporter of nitrogen fertilizer, has experienced slowing activity due to sanctions and the ongoing conflict. Farmers around the world have been feeling the resulting price pinch which has impacted the production of agricultural commodities including corn and soybeans. Combined with elevated natural gas prices, an important input to producing fertilizer, agricultural prices are rising as output falls.

Although predicting unfolding events in Eastern Europe is obviously very challenging, we do see some evidence prices may have peaked for items such as used cars. And although supply disruptions will likely linger well into 2023, we believe we have reached peak supply disruption.

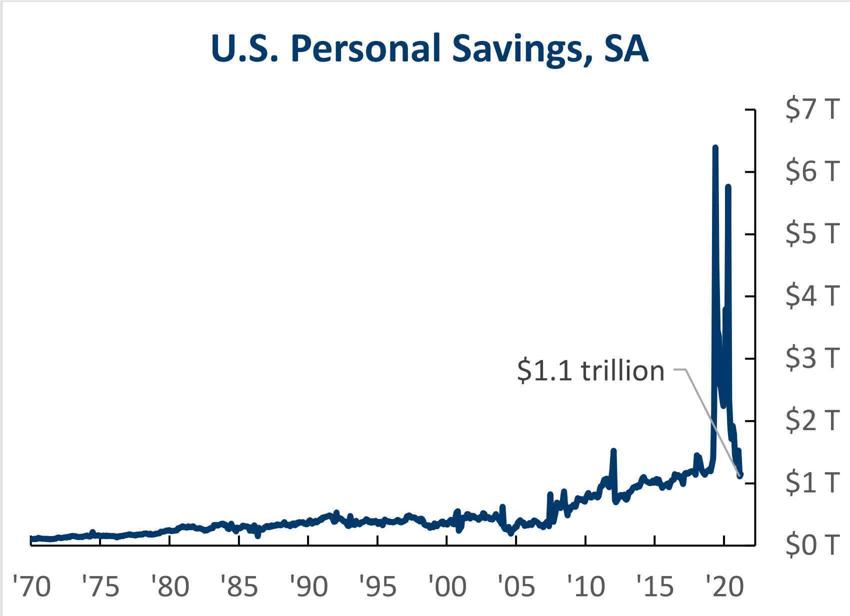
Supercharged Demand

While the pandemic limited the supply of certain goods/services, consumers were the beneficiary of unprecedented amounts of fiscal stimulus and cash payments that undoubtedly provided a boost to consumer spending power.

During the onset of the pandemic, the unemployment rate reached nearly 15% as firms reduced staff. The U.S. government stepped in with multiple fiscal packages designed to provide cash payments directly to consumers and offset some of the lost income driven by the ensuing recession. The roughly $1.9 trillion American Rescue Plan signed into law by President Joe Biden on March 11th in 2021 alone was estimated to distribute more than $400 billion directly to individual taxpayers. The resulting impact on things like real estate prices further increased consumers' ability to spend. Over the last two years, individuals have taken $427 billion in equity out of their homes at rock bottom interest rates.

As a result, despite the recession, individuals were able to accumulate savings and spending capacity.

US Personal Savings (12/31/1970 – 02/28/2022)



Source: Bloomberg Inc.

This is the exact opposite of what typically occurs during a recession, especially since U.S. GDP contracted -5.1% and -31.2%, during the first two quarters of 2020. So, while the pandemic was wreaking havoc on supply chains, demand surged.

Spending preferences, however, varied notably from pre-pandemic times. Partly due to lockdowns and health concerns, consumers shifted more of their spending towards goods as opposed to services putting upward pressure on goods prices. In fact, in 2021, when excluding food and energy, the consumer price index of goods increased 10.7%, the highest since 1995. Items such as furniture, sporting goods, and electronics were the beneficiaries while service areas including travel and leisure lagged. The former benefited from the "stay at home" mentality.

Economic Impact: Slower Growth…with Some Mitigating Factors

The Bad

Rising prices are being felt by consumers across the board, and inflation at 7.9% on a year-ago basis compared with the 2.1% average in 2018 and 2019, is costing the average household $296.45 per month[1]. Higher prices affect the economy in various ways.

Falling "Real" Incomes: The most obvious impact is affordability, as income adjusted for the rise in prices declines. While non-inflation-adjusted wage growth has been strong, it is failing to keep up with inflation. The best proxy we have for consumer purchasing power is the Wages and Salaries component of the Employment Cost Index. That measure is up 5.0% as of the fourth quarter of 2021, while inflation is at 7.9%. That means that real wage growth is negative, and consumers are losing purchasing power with each passing day.

[1] Bureau of Labor Statistics CEX average annual expenditure data with 7.9% inflation minus 2.1% (pre-pandemic average in 2018 and 2019).

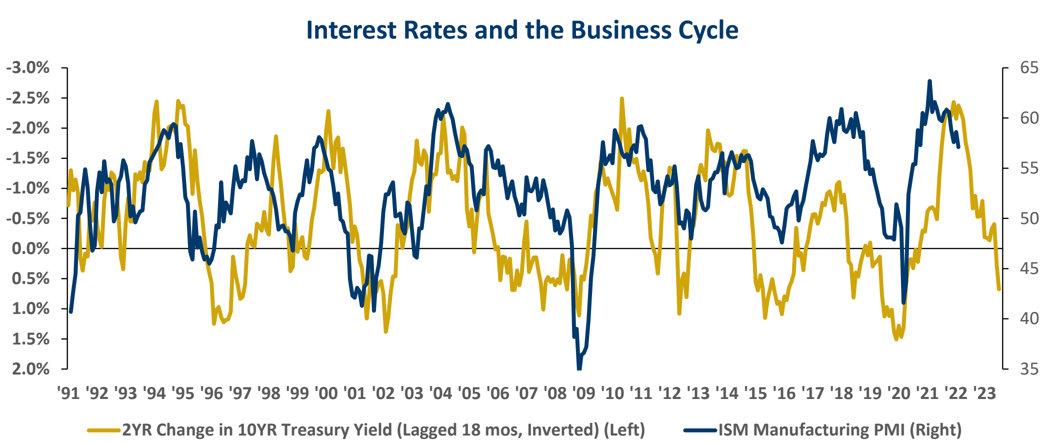
That negative impact on the consumer is going to weigh on economic growth in the form of lower consumption. Personal consumption expenditures account for a staggering 68% of US Gross Domestic Product[2]. In an economy that is levered to the consumer, economic growth will surely slow from consumption headwinds.

<u>Income Adjusted for Inflation Declines</u>

Sources: FactSet, Inc.; Bryn Mawr Trust

Higher Interest Rates: Meanwhile, rising interest rates will also be a headwind to economic growth. The Fed is focused on combating price pressures by raising short-term interest rates while longer-term interest rates are normalizing to reflect the impact higher inflation has on the future path of monetary policy. An increase or decrease in interest rates works its way through the economy over time and leads to changes in economic growth by about 18 months. As seen in the chart below, the economy is poised to slow given the rise we have already experienced in interest rates.

<u>Higher Rates and Economic Growth</u>



Sources: FactSet, Inc.; Bryn Mawr Trust

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[2] [Shares of gross domestic product: Personal consumption expenditures (DPCERE1Q156NBEA) | FRED | St. Louis Fed (stlouisfed.org)]

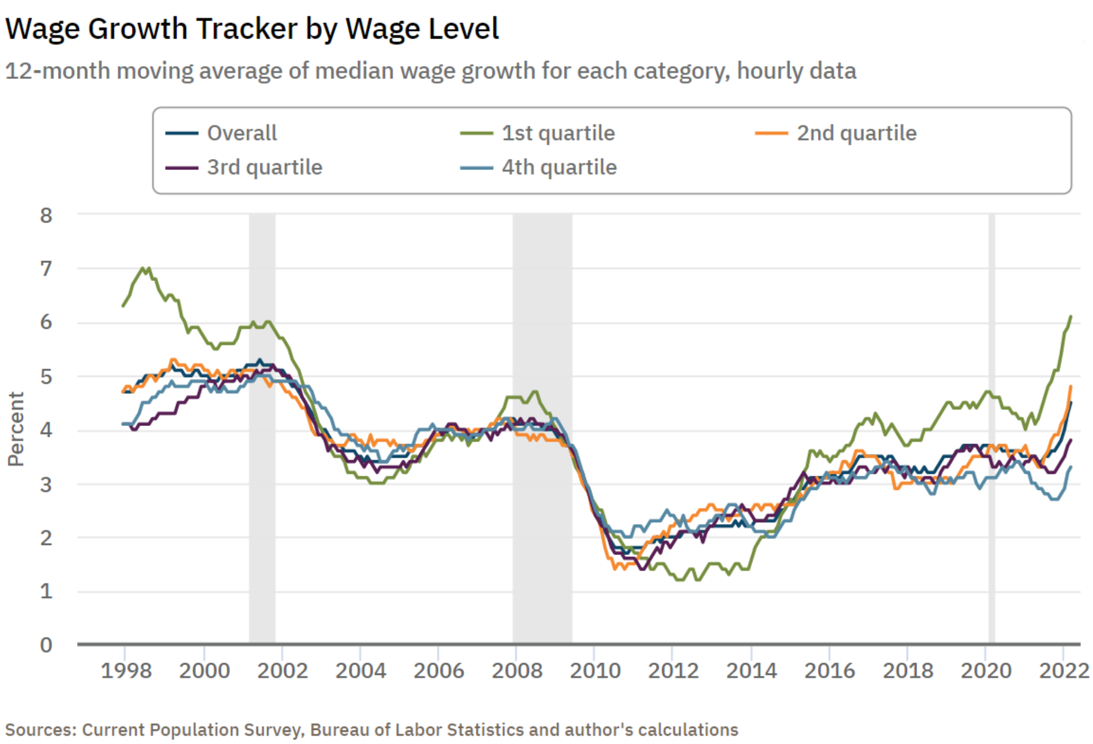
The Good

Acknowledging that the risks stemming from higher inflation are to the downside for the economy, we must also acknowledge that this is a unique period with some mitigating factors. Indeed, there are certain elements of the current economic backdrop that inform our view that the economy will slow, but a severe recession is less likely.

Excess Savings: The relatively strong position of the US consumer should not be underestimated. It is estimated that households accumulated about $2.5 trillion in excess savings from the beginning of the pandemic to the start of this year[3]. That will provide a nice cushion to the headwinds from rising prices, helping the economy avoid the typical collapse in consumption that one may expect given such a dramatic increase in prices.

Consumer Demand Supported by the Composition of Wage Growth: Furthermore, the inflation rate implied by the CPI is not going to lead to the same behavior for all demographics or income cohorts. The pain of higher gas, food, and rent prices is going to be felt more by lower-income households with a higher propensity to spend. However, the good news is that most wage gains since the pandemic have been clustered in the lower-wage cohorts. The Atlanta Fed Wage Growth tracker highlights this relationship, with the lowest 25 percent of average wages in the 1st quartile and those with the highest 25 percent of average wages in the 4th quartile.

Wage Growth Composition



Source: Federal Reserve Bank of Atlanta

[3] BCA Research

A Strong Labor Market: Additionally, there are currently a historically high 11.2 million job openings[4] in the US. That means there are almost 2 jobs available for every unemployed person in the country. This is a remarkable stat that speaks to the potential for households feeling the sting of higher prices to find employment and higher wages.

Financial Market Impact

Equity Market

Higher inflation is often a headwind for equity markets given the prospects of higher input costs (raw materials, wages), which in turn leads to lower profit margins. In addition, rising inflation expectations often coincide with higher interest rates, which diminishes the purchasing power of future cash flows. Absent other factors, high and persistent inflation will cause stocks to trade at lower P/E multiples, or said another way, decrease the price an investor is willing to pay for a dollar of earnings. Although stock market returns may be challenged, since the beginning of the 20th-century stocks have been a reasonable hedge against rising prices. During periods of high inflation (readings between 5%-10%), equities on average have delivered positive returns, on both an absolute and inflation-adjusted basis[5]. Over the very long term, stocks are by the far the best asset to own if you want to protect your purchasing power.

In our opinion, rising prices are not the main reason for the recent bout of equity market volatility. For example, inflation readings (CPI and PPI) rose rapidly in 2021, yet the equity market, as measured by the S&P 500 Index, rose 28.7% that calendar year. We believe markets are more concerned that overly hawkish Fed monetary policy, in an effort to tame inflation, could lead to an economic slowdown and lower corporate profits. So, inflation in and of itself is not the integral issue, but a potential central bank policy misstep, such as aggressive interest rate hikes or accelerated quantitative tightening, that has investors worried.

As the pace of economic growth starts to slow, the next phase of the market cycle will commence, where the economy continues to expand but at a slowing pace. During this phase, stock pickers typically gravitate to companies that can exhibit strong pricing power and have more consistent revenue and earnings growth. Investors are more willing to pay a premium for growth when it becomes scarcer. At this juncture, we believe it's advisable to reduce exposure to more cyclical, higher beta segments of the equity market. At the same time, we feel it's prudent to increase exposure to reasonably priced, higher-quality growth stocks given their resilient earnings profile and improved valuations.

Bond Market

It's important to keep in mind that bonds have notable exposure to inflation given their fixed-income characteristics. The coupon payment for most bonds is fixed, which reduces their purchasing power when prices for goods and services are increasing. Investors receive the same amount of coupon interest but are stuck paying a higher price tag for the same product or service.

During periods of high inflation, investors will often drive bond yields higher to compensate for the loss of purchasing power. Higher yields lead to lower bond prices, and generally lower returns on fixed-income investments.

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[4] Bureau of Labor Statistics: Job Openings and Labor Market Turnover Survey

[5] O'Shaughnessy, Jim. "Inflation and the US Bond and Stock Markets." O'Shaughnessy Asset Management Market Commentary, April 2011, p. 3.

Along with investors, the Federal Reserve (Fed) has also been an active contributor to higher yields this year. The Fed's primary focus is price stability - 2.0% annual inflation based on their definition. With inflation running at roughly 8.00%, the Fed has work to do.

During unwanted periods of inflation, the Fed normally responds by increasing the federal funds target rate, its primary policy tool for controlling inflation. The objective is to influence borrowing rates higher, making it more expensive for businesses/consumers to borrow and spend.

The Fed raised its main policy rate by 25 basis points in March, with more increases planned for subsequent meetings. Investors are currently expecting nine rate hikes this year, roughly in line with the Fed's March Summary of Economic Projections. Increased rate expectations have contributed to higher yields/borrowing costs across fixed income sectors. For example, 30-year fixed mortgage rates have already increased roughly 180 basis points this year, making it costlier for homebuyers to finance their home purchases. By increasing financing costs, the idea is to soften demand enough to ease some of the pricing pressures that are well noted not only within housing but in other areas of the economy.

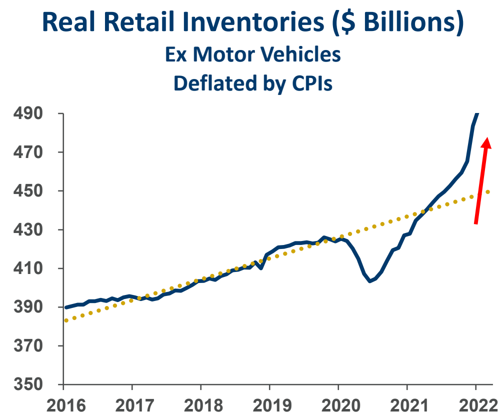
Outlook: Peak Inflation?

As always, the key question is where do we go from here? Although lingering COVID lockdowns in Asia and the ongoing Russia-Ukraine war are going to create some level of persistent supply-induced inflation, we believe many factors driving today's inflation will ease as we move through the rest of 2022.

Falling Demand - Inflation Ultimately Creates Deflation: goods prices have notably increased, driven by strong consumer demand. Although consumer savings remains high, the impact of the stimulus is fading, and we have experienced a significant pull-forward in demand. It's also likely that as individuals revert to normal lifestyles, consumers will shift their spending towards service-related activities including travel, restaurants, and entertainment at the expense of durable goods purchases.

Higher Inventories: Productions levels have been increasing as businesses look to increase supply levels to keep up with strong consumer demand. However, with demand poised to shift from goods to services, there is an increased risk that production may soon outstrip demand. Not to mention that the Fed has already taken steps to slow down economic growth, a negative for future consumer spending. Too much inventory when consumers are pulling back on spending could put downward pressure on prices and create the opposite impact from the demand/supply mismatch the U.S. economy has been experiencing.

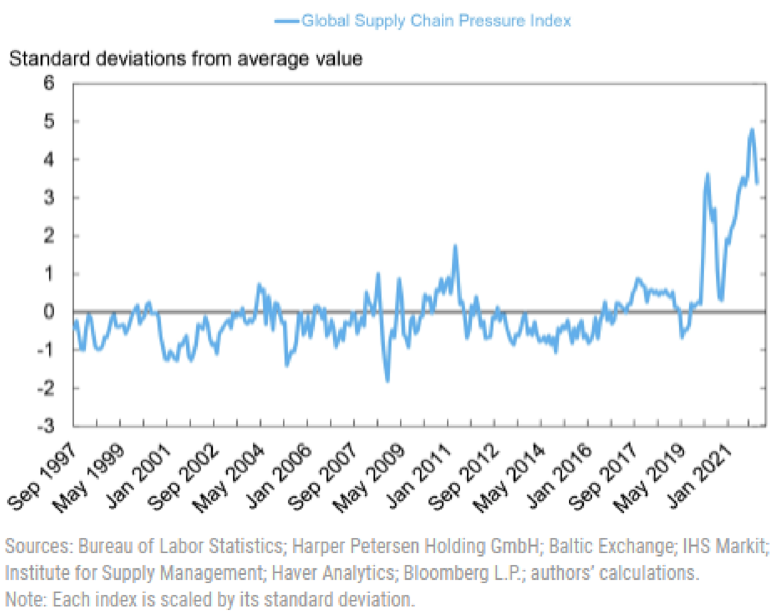
Surging Inventories



Sources: FactSet, Inc.; Bryn Mawr Trust

Peak Supply Chain Disruptions: the pandemic undoubtedly disrupted supply chains. Shortage of workers, plant shutdowns, excess demand, etc. contributed to bottlenecks and elevated delivery times. Pricing power has been in the hands of suppliers. Now, with easing covid restrictions coinciding with decreasing covid cases, data has indicated supply chains have started to improve, albeit modestly, presenting potentially more benign pricing in the future.

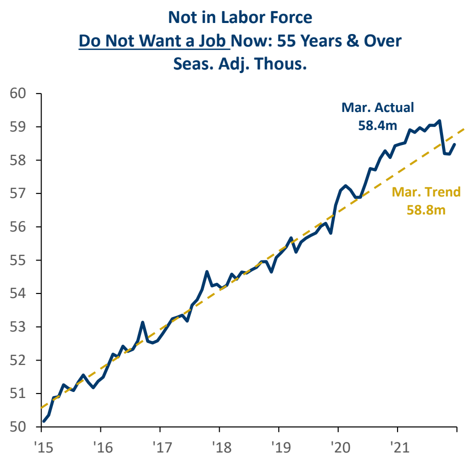
New York Fed Global Supply Chain Pressure Index



Source: Federal Reserve Bank of New York

A Shift in Policy: The Fed is actively pulling back the amount of accommodative monetary policy supporting consumer demand. Given that monetary policy acts with a lag, current and subsequent rate hikes will eventually weigh on economic activity, becoming an additional headwind to U.S. economic activity. This would put downward pressure on prices if, as we would expect, consumer demand declines.

Increasing Labor Supply: As COVID fears subside and the impact of fiscal stimulus wanes, we believe additional labor supply will be introduced to the market. Additional labor supply will put a cap on rising wages, reducing the likelihood of a 1970's-style wage-price spiral. Meanwhile, there are growing signs that a surge in Capex spending, in part to onshore supply chains, is helping drive more domestic employment opportunities. As the impact of stimulus measures wanes, people will be drawn back into the labor force. As evidence, we are already seeing the 55 years and over cohort return from the sidelines. The "Great Retirement" may be short-lived, as the percentage of this group not in the labor force that does not want a job has fallen back below the pre-COVID trend.



Source: Piper Sandler Macro Research

Base Effects: Inflation is a year-over-year measurement in most cases. Very high inflation in the second half of 2021 will make large year-over-year increases later in 2022 much harder. Although a measuring issue, a lower headline number is likely given this measurement fact alone. In combination with the other factors mentioned above, this base effect will be a headwind to sustained price increases at current levels.
