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Equity Market Outlook 4Q 2022

Economic and Market Review: Key Considerations for Equity Investors

The outlook we laid out last quarter remains unchanged, and yet the debate about whether we are in a bull or bear market has been as volatile as the market itself. Bullish investors felt vindicated for a while, and offered base-case scenarios vastly at odds with our own: Inflation has peaked and is declining; that reduces the need for the U.S. Federal Reserve (Fed) to continue tightening; therefore the U.S. should avoid a recession; and therefore June marked the cycle trough in the S&P 500 Index, which could reach a new all-time high by year-end.

We think this logic leaves investors at the mercy of the most recent market moves to seed the narrative, likely leading to reflexive volatility. We think our framework-oriented approach can lower the noise by describing a wider context for intermittent market rallies. In this quarter's *Equity Market Outlook*, we will revisit our framework, address why it leads us to disagree with the cheerier suggestions, and discuss positioning ideas for portfolios when traveling south.

Investment Themes and Views¹

Based on their relative sensitivity to changes in inflation and financial conditions, and their historical beta to the stock market, we offer the following as our overweight and underweight views.

OVERWEIGHT VIEW ON:

Factors and Styles:

- Low beta
- High quality
- Large caps
- Momentum
- High earnings visibility
- U.S. stocks

Industry Groups:

- Household & Personal Products
- Telecom Services
- Food & Staples Retailing
- Health Care
- Utilities
- Food Beverage & Tobacco
- Equity Real Estate Investment Trusts (REITs)

UNDERWEIGHT VIEW ON:

Factors and Styles:

- High beta
- Low quality
- Small caps
- Low earnings visibility
- Speculative growth
- Ex-U.S. stocks

Industry Groups:

- Automobiles & Components
- Energy
- Banks
- Consumer Durables & Apparel
- Transportation
- Semiconductors & Semiconductor Equipment
- Technology Hardware & Equipment
- Capital Goods

NEUTRAL VIEW ON:

- Value
- Growth

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The outlook for the market and the economy that we laid out in our last quarterly note remains unchanged. Based on the trends we see in growth and inflation, and Fed Chair Jerome Powell's recent remarks, we now have higher conviction in the view.

To recap, our current base-case scenario is:

1. A greater than 90% probability of a U.S. recession in the next 12 months
2. A recession of moderate intensity: a greater economic contraction than the mild recessions of 1980, 1990 and 2000 (which is where the consensus is), but a lesser one than the severe recessions of 1973, 2008 and 2020
3. The U.S. unemployment rate to increase by three to four percentage points; economic growth to continue to decline into mid-2023; Real GDP to contract by two to three percentage points and nominal GDP growth to fall by more than six percentage points
4. The S&P 500 Index to trough below 3,000 and next 12 months (NTM) S&P 500 earnings per share (EPS) consensus expectations to trough at \$180
5. Low-beta portfolios to continue to outperform while the economy decelerates, as they have thus far this year

The first four are included in the Conference Board's Coincident Economic Index, which quantifies economic activity that is broader in its scope than GDP. This index is produced monthly and is therefore a timelier indicator than GDP data, and we recommend investors monitor it regularly in the months ahead.

We assess U.S. recession risk using a combination of Conference Board's Leading Economic Index (LEI) and Goldman Sachs' Current Activity Index (CAI), and on that basis the U.S. economy appears to be sliding down the recession path.

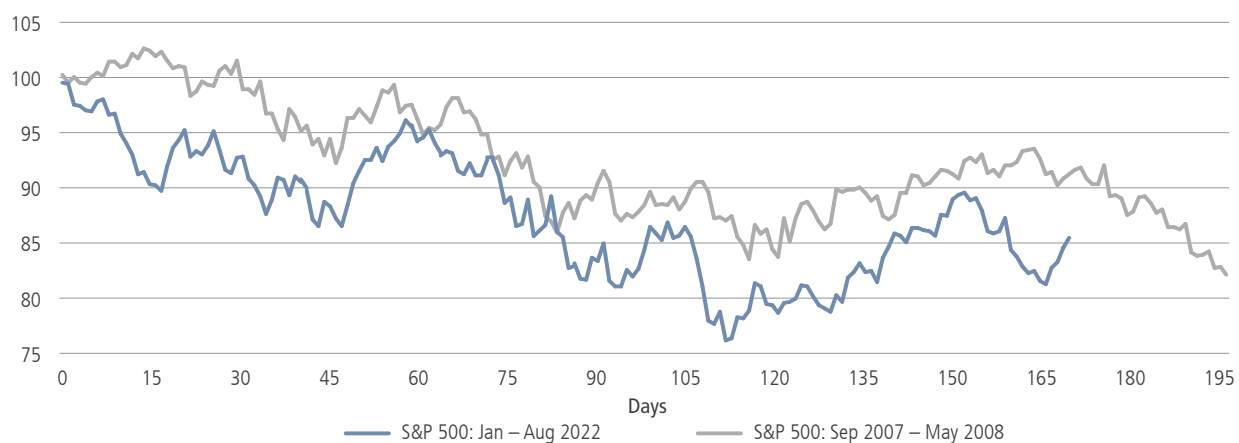
Based on our analysis of the recessionary and slowdown patterns of the past 50 years, the LEI growth rate has dropped to a level that suggests a recession probability of 70 – 80%. The CAI, which aggregates the breadth of current U.S. economic activity, has just turned negative. Given its low propensity for giving false alarms, our assessment of the probability of a U.S. recession, based on this indicator alone, is now 80%. Based on all of the data, we believe the subjective probability of a U.S. recession in the next two to four quarters is over 90%—and we think it likely to arrive sooner rather than later.

A Rallying, Dancing Bear—But a Bear, Nonetheless

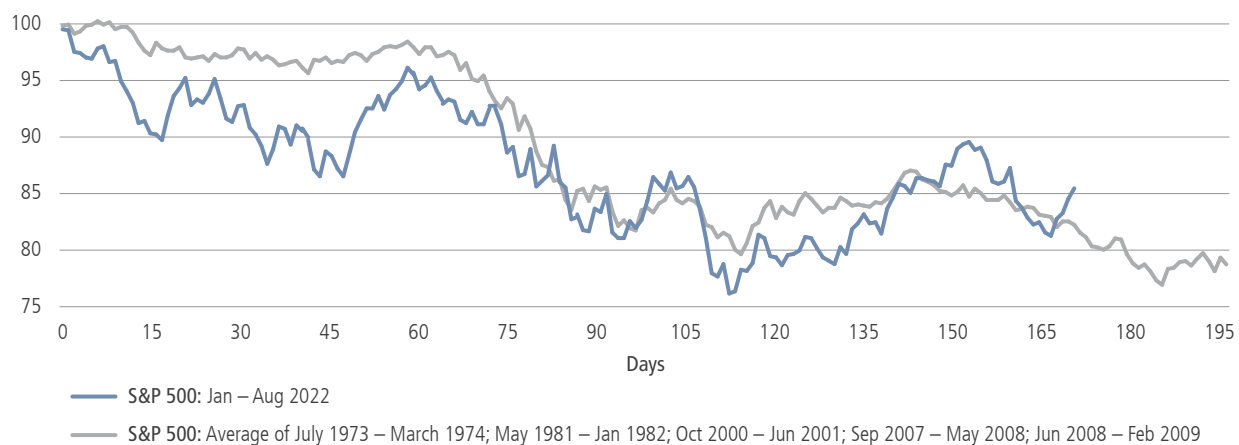
The current bear market, including the countertrend rallies, has closely followed patterns seen in the bear markets of 1973 – 74, 1981 – 82, 2000 – 01 and 2007 – 09. Multi-week rallies are a feature of extended bear markets, especially those associated with recessions. We expect a few more before the ongoing bear market ends.

THE RECENT S&P 500 RALLY OF YORE

This year's path for the S&P 500 recalls that of the early stages of the Great Financial Crisis...



... and other bear markets from the past 50 years



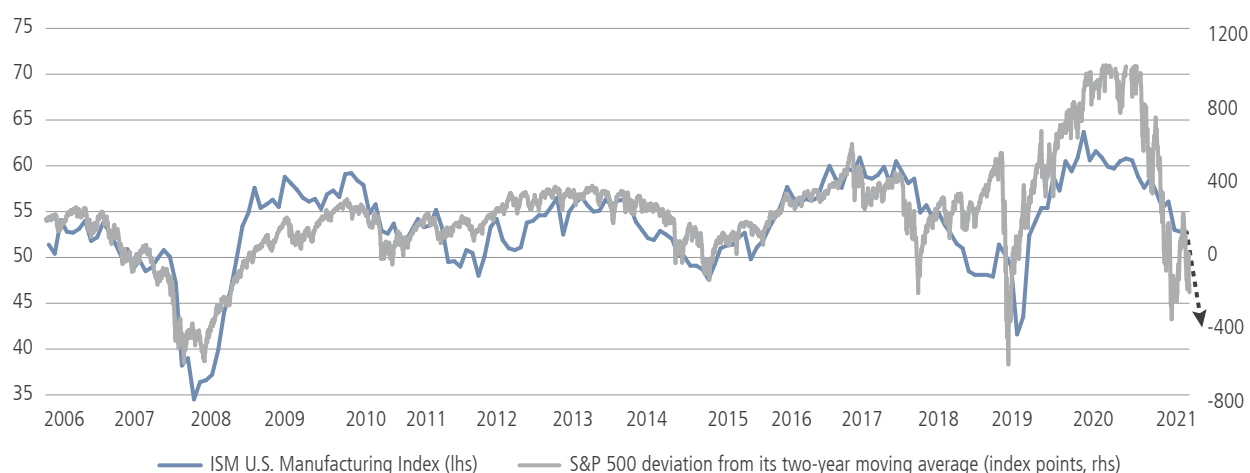
Source: Neuberger Berman and FactSet. Data as of September 9, 2022. For illustrative purposes only. Nothing herein constitutes a prediction or projection of future events or future market behavior. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed or any historical results. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal.

Past performance is no guarantee of future results.

We have often noted that S&P 500 Index returns have been meaningfully affected by accelerations and decelerations in industrial growth. For example, the deviation of the S&P 500 from its two-year moving average has tracked the rise and fall in the ISM U.S. Manufacturing Index. This relationship can help us to quantify and identify unusual and potentially unsustainable deviations between S&P 500 Index performance and ISM Index data.

EQUITY MARKETS APPEAR TETHERED TO THE REAL ECONOMY

ISM U.S. Manufacturing Index versus the deviation of the S&P 500 Index from its two-year moving average



Source: Neuberger Berman and FactSet. Data as of September 14, 2022. For illustrative purposes only. Nothing herein constitutes a prediction or projection of future events or future market behavior. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed or any historical results. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal.

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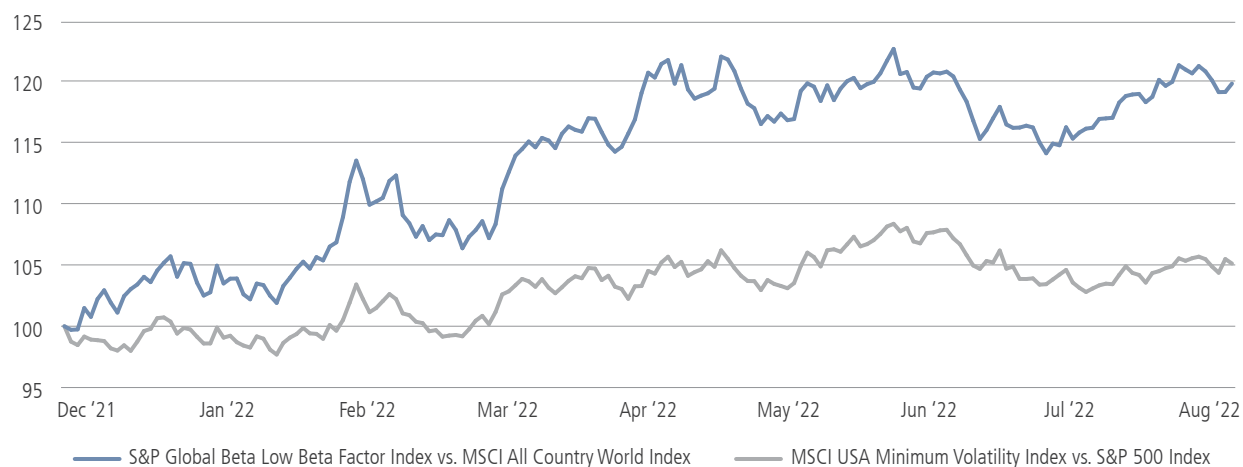
In June, the S&P 500 Index had fallen by approximately 600 points below its modeled value, as suggested by the level of the ISM Index. The ISM Index, though it had been steadily declining for 17 months, was at 53, a robust reading consistent with industrial expansion. Meanwhile, the S&P 500 had fallen to a level consistent with an ISM Index level of 42, a reading we have seen almost exclusively during recessions. The market then rallied to its fair value relative to the prevailing ISM reading.

The S&P 500 Index may try again to climb back up to 4,250, which we think is its current ISM-modeled fair value. But we expect the ISM, and by extension the S&P 500 fair value, to decline through the middle of 2023. We think the actual value of the market will ultimately gyrate down with it.

When might we see the true trough, after all these ups and downs? That usually comes when extremes in investor sentiment accompany large and lumpy outflows from equities. While investor sentiment did get quite bearish in June, equity inflows have totaled \$166 billion so far this year, with no net outflow since March. This is neither capitulation nor a bear market trough, which we believe lies ahead of us in 2023. Our current analysis suggests that the S&P 500 Index could then be trading below 3,000, or another 23% down from its current level.

This dance around a fair value that's declining has been an integral part of the investor experience during many bear markets: a dancing bear is still a bear, and we think lowering portfolio beta exposure below benchmark is key to navigating this recessionary bear market successfully. That is our overarching theme for this quarter—as it has been so far this year, and as we anticipate it will be for at least another nine to 12 months.

LOW-BETA AND MINIMUM-VOLATILITY STOCKS HAVE OUTPERFORMED SO FAR THIS YEAR



Source: S&P Dow Jones Indices, MSCI, Neuberger Berman. Data as of Sep 14, 2022. For illustrative purposes only. Nothing herein constitutes a prediction or projection of future events or future market behavior. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed or any historical results. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results.**

The Fed and the Commentators

Widespread inflation of a magnitude not seen since the 1970s has been testing the Fed's resolve to deliver on its price stability mandate. The U.S. Consumer Price Index (CPI) has been rising at a rate well above the 2% widely regarded as consistent with price stability, so it's no surprise to us that economic commentators have busied themselves guessing and second-guessing the extent of the Fed Chair's resolve to fight inflation.

Between the last Federal Open Market Committee (FOMC) meeting in July and Fed Chair Powell's speech in Jackson Hole in August, the central bank has, in our view, been remarkably clear and consistent about its action plan for inflation. There should be little doubt about its steadfastness. Yet, the median investor appears unconvinced, questioning the Fed Chair's determination to fight inflation, speculating that Powell will stop monetary tightening as soon as job losses start, and assuming that he will be content with a 3 – 5% inflation rate to avoid a political backlash. It is crucial, therefore, to comb through his Jackson Hole speech and unpack its important policy statements.

Powell Is Talking, Why Aren't We Listening?

What Jerome Powell Said at Jackson Hole

"Restoring price stability will take some time and requires using our tools forcefully to bring demand and supply into better balance."

"The labor market is particularly strong, but it is clearly out of balance, with demand for workers substantially exceeding the supply of available workers."

"In current circumstances, with inflation running far above 2% and the labor market extremely tight, estimates of longer-run neutral are not a place to stop or pause."

"I said then that another unusually large increase could be appropriate at our next meeting."

"Restoring price stability will likely require maintaining a restrictive policy stance for some time."

"Central banks can and should take responsibility for delivering low and stable inflation."

"If the public expects that inflation will remain low and stable over time, absent major shocks, it likely will. Unfortunately, the same is true of expectations of high and volatile inflation."

"The longer the current bout of high inflation continues, the greater the chance that expectations of higher inflation will become entrenched."

"We are taking forceful and rapid steps to moderate demand so that it comes into better alignment with supply, and to keep inflation expectations anchored. We will keep at it until we are confident the job is done."

What We Believe He Meant

Investors should expect the Fed to tighten policy meaningfully and for quite some time until it is confident about achieving approximately 2% inflation. Bringing down inflation will take priority over supporting growth.

Labor demand is completely out of sync with labor supply, the Fed needs to restore the balance to solve the inflation issue, and that means job losses.

Raising policy rate to "neutral" and stopping there would be insufficient to achieve price stability, so the Fed is prepared to implement restrictive rates and induce a recession.

Investors shouldn't be surprised if the Fed hikes interest rates by 75 to 100 basis points in September.

Rate cuts are unlikely any time soon.

Don't doubt the Fed's resolve to deliver price stability.

The Fed cannot allow high inflation expectation to become entrenched as they did in the 1970s.

The Fed will be playing with fire if it acts slowly or without resolve. The longer the inflation stays elevated, the greater will be the economic cost to regain price stability.

The Fed is determined to slay the inflation monster. Its commitment is unwavering.

Source: U.S. Federal Reserve, Neuberger Berman. As of August 26, 2022. For illustrative purposes only.

For the Fed, credibility equals effectiveness in our view. When we see messaging this clear, we think to waver or go back on it would likely be very damaging to that credibility. We think the Fed is extremely unlikely to deviate from its said course in any meaningful way as it battles to bring inflation down to the 2% range.

How Did Investors Get August Inflation So Wrong?

But isn't inflation cooling off already? That appeared to be the market's optimistic view leading up to the release of U.S. CPI data for August, on September 13. That data was hotter than expected and caused a violent sell-off. The optimism appeared to be based on the decline in Headline U.S. CPI between June and July.

Inflation is cooling in some CPI components, but not in others. The Atlanta Fed's disaggregated "Sticky-Price" and "Flexible-Price" CPIs, sometimes seen as the "new and improved" versions of the traditional Core and Non-Core CPIs, are helpful in understanding where the inflation is happening and what it means for the longer term.

Flexible-Price components constitute 30% of the CPI basket by weight. Consumer goods dominate this category. Their prices are quick to adjust to supply-and-demand imbalances in the goods markets, and as such they do not reflect longer-term inflation expectations or supply and demand in the labor market. Sticky-Price components make up the other 70% of the CPI. They are dominated by services, many of which are contractual (such as rents and home insurance) or have low price elasticity (such as education and medical care services). We believe this services tilt means they more accurately reflect the supply-and-demand imbalances of the labor market, and because they are "stickier", their current rate of inflation tends to embed itself into consumers' expectations for longer-term inflation.

The Flexible-price CPI is mostly noise as far as Fed policy is concerned, then, and because it is six times more volatile than the Sticky-Price CPI, it can drown out the true signal from the Headline CPI. That's why we think the Sticky-Price CPI can help us get a much better understanding of the probable extent and duration of the Fed's response than the Headline measure. Until Sticky-Price CPI begins to move down convincingly toward 2%, we think the Fed is unlikely to stop tightening, whether or not Headline CPI has peaked.

When data in the report released on August 10 showed a drop in the U.S. Headline CPI inflation rate in July, many investors and commentators took it as a positive sign. As the table below suggests, however, that decline was due mostly to falling prices of Flexible-Price items, linked to the declining oil price.

The Decline in U.S. Inflation in July Came Mostly From Volatile, Flexible-Price Items

Categories in the CPI basket for which the month-over-month change in inflation was negative

Flexible-Price Items	Relative Importance
Motor fuel	3.2%
Car and truck rental	0.1%
Fresh fruits and vegetables	0.9%
Fuel oil and other fuels	0.3%
Gas (piped) and electricity	4.2%
Meats, poultry, fish and eggs	1.9%
Used cars and trucks	1.6%
Leased cars and trucks	0.6%
New vehicles	4.5%
Women and girls apparel	1.5%
Dairy and related products	0.9%
Nonalcoholic beverages and beverage materials	1.0%
Lodging away from home	2.5%
Processed fruits and vegetables	0.3%
Men and boys apparel	0.9%
Cereals and bakery products	1.2%
Footwear	0.7%
Other food at home	2.0%
Jewelry and watches	0.4%
Motor vehicle parts and equipment	0.4%
Tobacco and smoking products	0.8%
Total, flexible-price items with declining prices	13.9%
Total, flexible-price items	29.9%

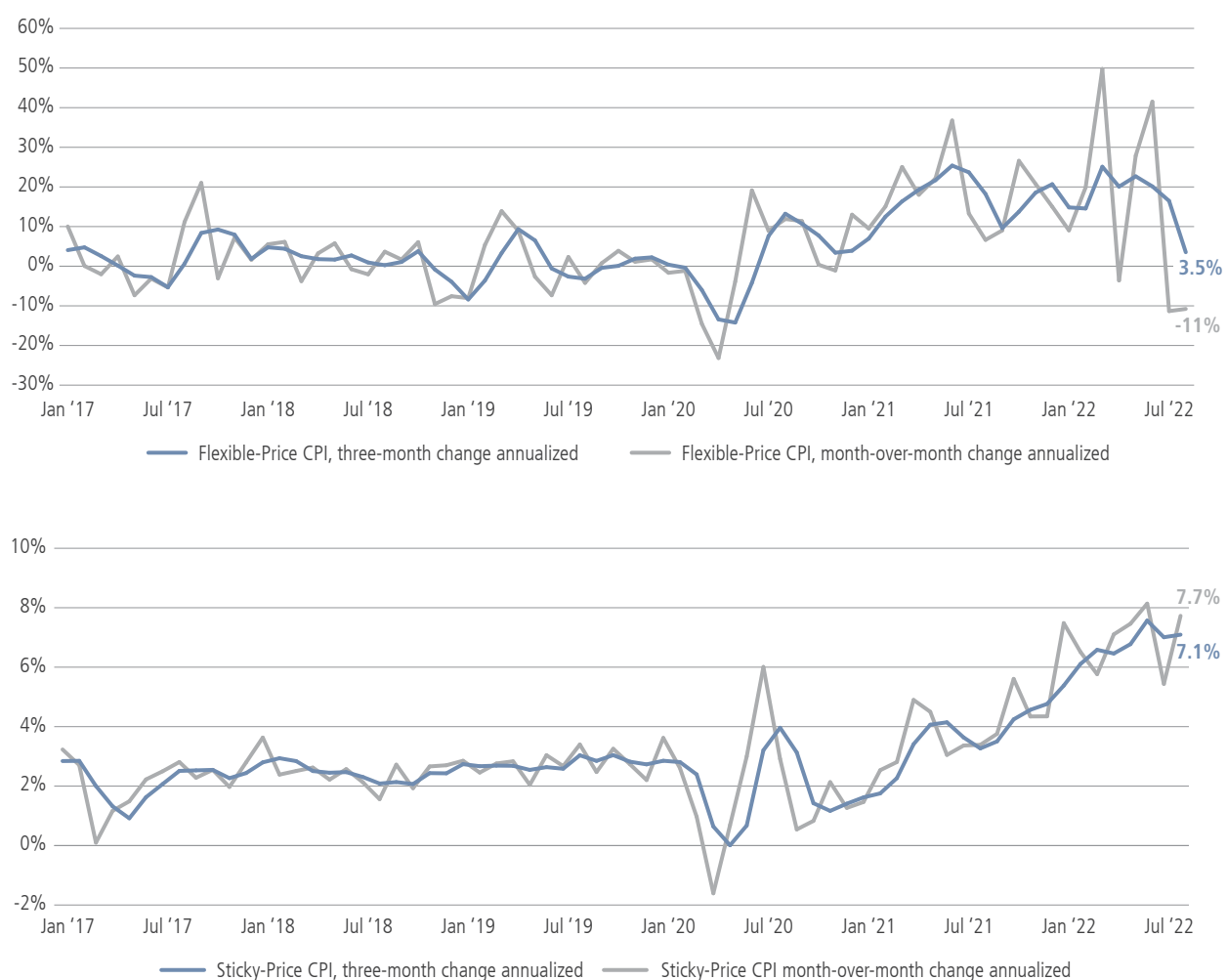
Sticky-Price Items	Relative Importance
Infant and toddler apparel	0.2%
Household furnishings and operations	4.8%
Motor vehicle maintenance and repair	1.2%
Motor vehicle insurance	2.0%
Medical care commodities	1.6%
Personal care products	0.7%
Alcoholic beverages	1.1%
Recreation	5.7%
Miscellaneous personal goods	0.2%
Communication	3.2%
Public transportation	1.1%
Tenant and household insurance	0.3%
Food away from home	6.5%
Rent of primary residence	6.0%
Owner-equivalent rent (OER), Northeast	5.3%
OER, Midwest	4.5%
OER, South	7.7%
OER, West	6.9%
Education	3.1%
Medical care services	4.8%
Water, sewer and trash collection services	1.0%
Motor vehicle fees	0.5%
Personal care services	0.6%
Miscellaneous personal services	1.1%
Total, sticky-price items with declining prices	4.4%
Total, non-OER sticky-price items	45.7%
Total, sticky-price items	70.1%

Source: Bureau of Labor Statistics, Atlanta Fed, Neuberger Berman. Based on CPI data for July 2022, released by the Bureau of Labor Statistics on August 10, 2022. Nothing herein constitutes a prediction or projection of future events or future market behavior. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed or any historical results. Investing entails risks, including possible loss of principal.

Past performance is no guarantee of future results.

The services-heavy, labor market-sensitive Sticky-Price items are much more relevant to Fed policy, and their prices continued to rise rapidly. Data from the latest inflation report, out on September 13, showed average year-over-year Sticky-Price inflation running at 6.1%. The timelier one-month and three-month annualized rates are higher still, at 7.7% and 7.1%, respectively.

WHILE FLEXIBLE-PRICE INFLATION HAS BEEN DECLINING, STICKY-PRICE INFLATION APPEARS STRONG



Source: FactSet, Neuberger Berman. Data as of September 13, 2022. Nothing herein constitutes a prediction or projection of future events or future market behavior. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed or any historical results. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results.**

As the label suggests, this inflation tends to be sticky, so the Fed is unlikely to find cause to ease off on monetary tightening soon. Realistically, it could get even more aggressive, because we think the inflation peak that matters for policy is likely ahead of us.

Data in the table above shows shelter (owner-equivalent rent, or OER) is 24% of the CPI. Some commentators have suggested that rental inflation will moderate now that home price inflation is slowing, and that this could make a big contribution to a decline in Headline inflation. We think that's simplistic and potentially misleading. Rents have been rising, but with the U.S. house price-to-rent ratio sitting at an all-time high, according to the OECD, and homes less affordable now than at any time since the 1980s, renting is more attractive relative to owning than it has been for at least 50 years. It's no surprise that Millennials, whose demand for housing remains strong, are now more likely to rent than own.

While cooling home prices may begin to show up with a lag in the OER component of CPI, we see little prospect of rental deflation, and without it we believe more monetary tightening, a recession and sustained net job losses are likely to be required to bring down inflation expectations and achieve the 2% target.

There's one final point that's worth making for equity market investors. In our view, the Fed will not only need to destroy jobs to beat inflation—it will need to destroy some stock market and housing wealth, too.

A great bifurcation exists today between the recessionary spending patterns of lower-income U.S. consumers and the strong spending patterns of wealthier consumers. The former depend on (shrinking) real incomes to spend and save, whereas wealthier consumers tend to take their spending cues from the value of their assets. Thanks largely to pandemic-era stimuli, stock market and housing booms have made those wealthier U.S. consumers some \$15 trillion richer today than they would have been otherwise, with \$2 trillion of that in excess, readily spendable cash. They are in a spending boom which started in goods, has moved to services and is still ongoing.

We think moderating that boom will require a hit to wealth. We estimate that in order to bring the ratio of household net worth to GDP back to its pre-pandemic level, consistent with labor market equilibrium and no wealth or spending excess, the S&P 500 Index needs to drop below 3,000.

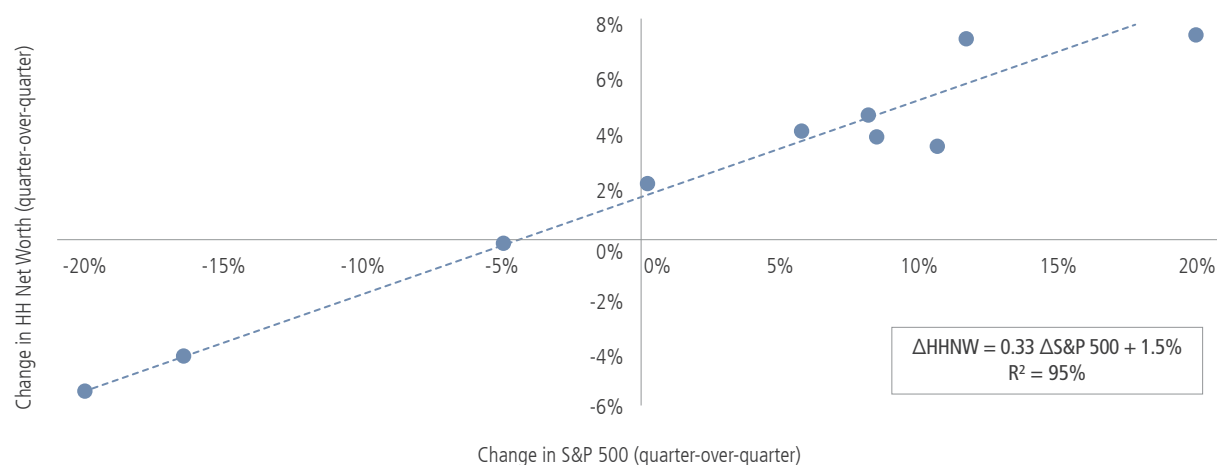
COVID STIMULUS KNOCKED U.S. WEALTH OUT OF WHACK WITH THE ECONOMY, AND STOCK MARKETS MAY NEED TO FALL TO CORRECT IT

Log U.S. Household Net Worth vs. Log U.S. Nominal GDP



Source: FactSet, Neuberger Berman. Data as of June 30, 2022. For illustrative purposes only. Nothing herein constitutes a prediction or projection of future events or future market behavior. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed or any historical results. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results.**

U.S. Household Net Worth and the Stock Market, 4Q2019 – 2Q2022



Source: FactSet, Neuberger Berman. Data as of June 30, 2022. For illustrative purposes only. Nothing herein constitutes a prediction or projection of future events or future market behavior. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed or any historical results. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results.**

We Can't Stop the Rain, But We Can Suggest an Umbrella

Since our last *Outlook*, some readers have described us as “very bearish”—even relative to the more bearish scenarios of the consensus outlook. We don’t feel “very bearish” ourselves, however. We regard our view as merely realistic, given the economic, inflationary, policy and market dynamics at play.

Since last quarter, the data most significant in shaping our economic and market outlook has worsened. The U.S. Leading Economic Index has now declined five months in a row, and the OECD Global Leading Indicator has declined for 13 months. Goldman Sachs’ CAI has been negative three months in a row. Global corporate earnings downgrades have outpaced upgrades for six consecutive months and NTM S&P 500 EPS expectations have declined for two months. These developments are consistent with an economy sliding toward recession and none are conducive to taking or adding to equity portfolio risk, in our view.

While we can’t stop the rain, we can provide ideas that can serve as an umbrella. It is not too late to consider lowering portfolio beta exposure and switching to more defensive choices within equities.

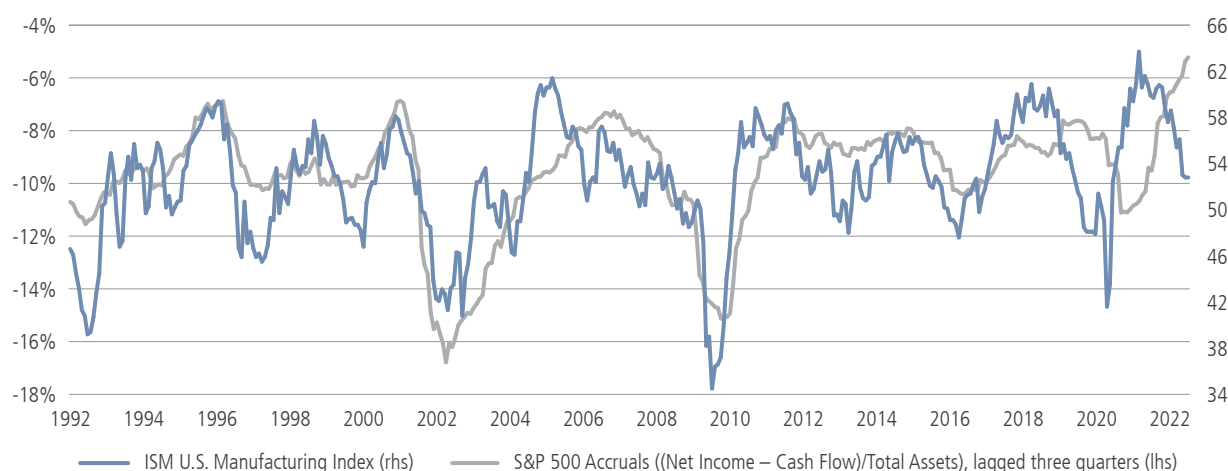
Historically, investors have tended to reward accounting conservatism when recessions are on the horizon. When the business outlook disappoints, stocks with low earnings quality have tended to fall much more than can be explained by lower earnings guidance alone. This is often because these companies have made aggressive use of accruals in their accounting—revenues or liabilities that have yet to be realized as cash flows. When growth slows, accrued revenues can quickly lose a lot of their value, if not all of it, causing a rapid deflation of future earnings estimates. By contrast, conservative accounting with less use of accruals keeps future earnings estimates aligned more closely with cash flows, in both the good times and the bad times, reducing the likelihood of unpleasant surprises.

Unfortunately, the use of accounting accruals relative to assets in the S&P 500 Index is higher than it has been in at least 30 years.

Based upon the historical relationship between accruals and the ISM Manufacturing Index, the tide could be about to turn, potentially leading to a collapse in the value of accrued revenues and rising earnings disappointments. In our view this underscores the importance of minimizing exposure to stocks with poor earnings quality more than ever.

S&P 500 EARNINGS QUALITY APPEARS TO BE AT A GENERATIONAL LOW AND MAY BE DUE A CORRECTION

ISM U.S. Manufacturing Index versus S&P 500 Index accruals lagged by three quarters



Source: Piper Sandler, Neuberger Berman. Data as of August 31, 2022. For illustrative purposes only. Nothing herein constitutes a prediction or projection of future events or future market behavior. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed or any historical results. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results.**

We have seen that the stocks that have tended to outperform during recessions have been larger and more defensive, with strong balance sheets and conservative accounting, a beta to the market of less than 1.0, and high-quality, very visible earnings that are less sensitive to the economic cycle. They represent only a narrow slice of the equity market—and given today's earnings quality, they are likely to be an even narrower slice during the current slowdown.

Index Definitions

The **S&P 500 Index** consists of 500 U.S. stocks chosen for market size, liquidity and industry group representation. It is a market value-weighted index (stock price times number of shares outstanding), with each stock's weight in the Index proportionate to its market value.

The **MSCI USA Minimum Volatility Index** aims to reflect the performance characteristics of a minimum variance strategy applied to the large and mid cap USA equity universe. The index is calculated by optimizing the MSCI USA Index, its parent index, in USD for the lowest absolute risk (within a given set of constraints). Historically, the index has shown lower beta and volatility characteristics relative to the MSCI USA Index.

The **S&P Global Beta Low Beta Factor Index** tracks the components of the S&P 500 Index with the lowest beta to the S&P 500 Index.

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