MARKET COMMENTARY

The Money Illusion

February 2023

- Markets have begun to share the Federal Reserve's "higher-for-longer" interest rate narrative, as inflation levels remain well above the 2% target and recent reports indicate the ongoing strength of the U.S. economy.
- As interest rates have risen, bond prices have suffered – the Bloomberg U.S. Aggregate Bond Index ended February down 2.6%, the fifth-worst monthly decline since 1993.
- S&P 500 earnings growth for 2023 has been revised downward to 2.1%, from 5.6% at the start of the year.
- Retail sales rebounded in January, following two consecutive months of declines. However, the impact of ongoing elevated inflation on consumers' purchasing power remains unclear, as inflation creates an illusion of strength that is not carried through to inflation-adjusted data.

Overview

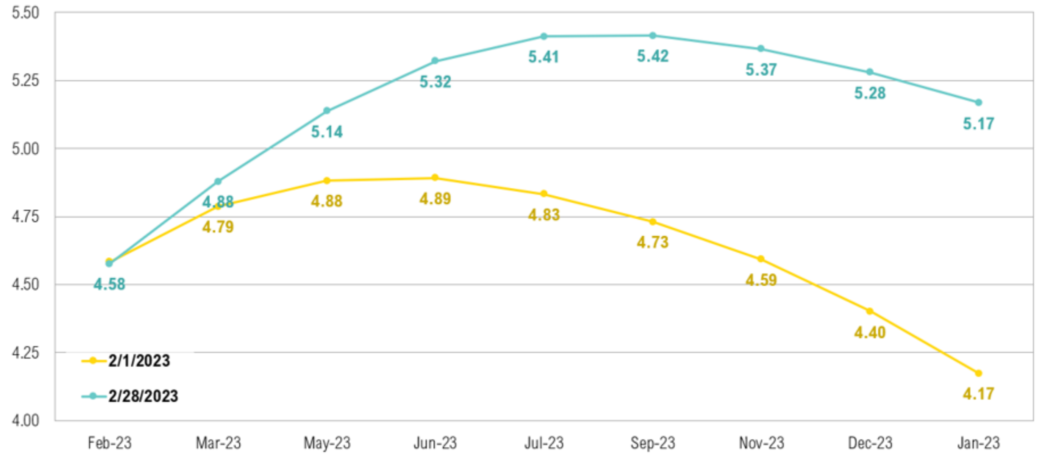
Compared to the strong gains posted in January, February was a difficult month for the markets. The only asset class to produce positive returns was U.S. bank loans, ending February marginally up with a gain of 0.6%. The S&P 500 ended the month down 2.4%, and the Bloomberg U.S. Aggregate Bond Index ended the month down 2.6%, erasing almost all of January's gains. In fact, February was the fifth-worst monthly decline for bonds since 1993. Bonds are now up only 0.4% for the year to date, after ending 2022 down 13%.

U.S. earnings growth estimates for 2023 have declined to just 2.1%, down from 5.6% as recently as December

By the end of February, almost all major U.S. public companies had reported fourth-quarter 2022 results. In the midst of ongoing concerns about a possible global economic slowdown and subsequent recession, U.S. earnings growth estimates for 2023 have declined to just 2.1%, down from 5.6% as recently as December.[1] Focusing on just the fourth quarter, earnings are expected to decline 4.6% on a year-over-year basis. Lower earnings estimates have pushed the forward 12-month price-to-earnings ratio of the S&P 500 back up to 17.5x, below the five-year average of 18.5x but above the 10-year average of 17.2x.[1] More than 325 S&P 500 companies cited the term "inflation" during their fourth-quarter earnings calls, which is well above the five-year average of 201.[2] Despite these persistent concerns, this represented the lowest number of companies citing inflation concerns since the third quarter of 2021.[2]

On February 1, the Federal Reserve hiked interest rates by 0.25% to 4.75%, slowing the pace from the 0.5% hike in December, itself a smaller hike than the 0.75% hikes done in the prior four meetings.[3] Despite the reduced pace, markets were caught off guard by a combination of stubbornly high inflation and the unexpected jump in consumer spending data in January, compared to its weak showing at the end of 2022.[4] As a result, markets quickly moved up their expectations of the future path of Fed interest rates, as proxied by the Fed Funds futures market. On January 30, expectations were that rates would reach a peak of 4.93% by June 2023 and drop down to 4.51% by the end of the year. However, by the end of February, estimates were for rates to reach a high of 5.42% in September and end 2023 at 5.17%.

Fed Funds Curve Shifted Higher in February as Markets Accepted "Higher for Longer" Narrative
Implied Fed Funds Rate (%)



Source: Bloomberg

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The Consumer Price Index (CPI) increased by 0.5% in January, rising 6.4% from a year ago. Between the Global Financial Crisis and the 2020 COVID-19 pandemic, there have only been five other month-over-month increases of 0.5% or higher for the headline inflation reading.[5] As inflation in the U.S. remains well above the Fed's target of 2%, the interplay between economic activity—wages, spending, and corporate earnings—in nominal and in real (inflation-adjusted) measures becomes equally important and perplexing. Now, markets face the unusual challenge of accounting for this apparently strong nominal activity—which would be better news, were it not for the considerable erosion in purchasing power over the past 12 months.

The Money Illusion

"Inflation is when you pay $15 for the $10 haircut that you used to get for $5 when you had hair." — Sam Ewing.[6]

An economic theory known as the money illusion states that individuals tend to view their income in nominal terms, instead of real (or inflation-adjusted) terms, and thus they ignore the effect of inflation on their wealth

One of the great challenges over the past year has been determining inflation's impact on economic data and on capital markets. As inflation moderates from decades-high levels, an increasingly challenging task will be determining the path of inflation and the trajectory of economic activity after inflation is taken into account. An economic theory known as the money illusion states that individuals tend to view their income in nominal terms, instead of real (or inflation-adjusted) terms, and thus they ignore the effect of inflation on their wealth.[7] The money illusion theory can also be applied to overall economic activity, which is reported nominally. The impact of inflation on wages, sales, and earnings needs to be accounted for to accurately gauge economic growth in an inflationary environment. For investors, the stakes are high. Higher inflation results in higher nominal activity, higher corporate revenues, and potentially even higher profits, but the value that investors assign to every dollar of earnings can be lower—potentially substantially so.

Despite the Federal Reserve's aggressive rate-hiking cycle, bringing rates from 0.25% last January to their current 4.75%, the U.S. economy has been surprisingly resilient.[8] After a muted holiday spending period, retail sales rebounded significantly in January.[9] This, combined with a strong January jobs report (which saw unemployment sink to the lowest levels since May 1969) and a rebound in consumer spending, renewed hopes that a recession could be avoided and the economy would enjoy a soft landing.[10] The unexpected strength in spending data was summarized well by Visa CEO Ryan McInerney:

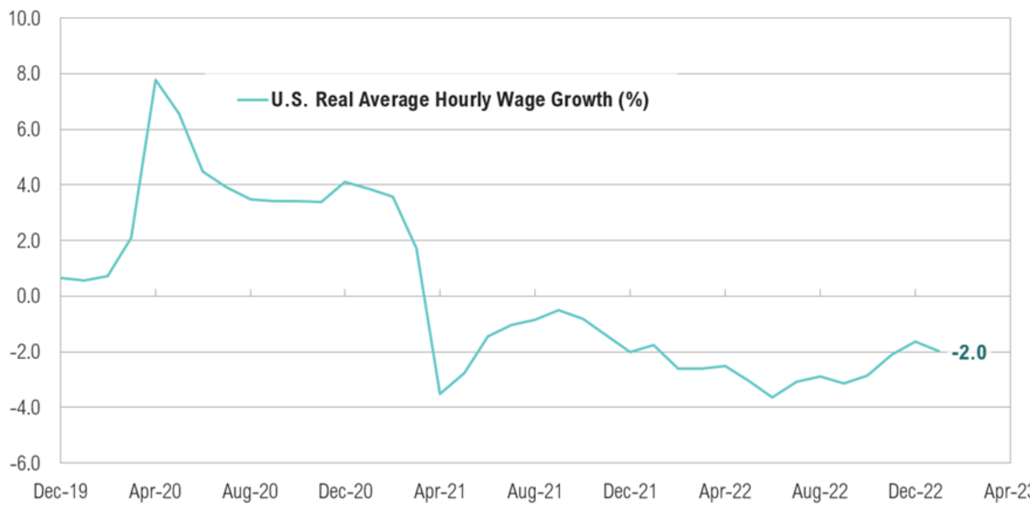
> *"But when we look at our data around the world globally, by country, by product, by consumer segment, it is remarkably stable…So resilient, stable, consistent, that's what we're seeing in our data around the world."* [11]

Real wage growth has been negative since March 2021, and when adjusted for inflation, wage growth has declined by 1.8% year-over-year

However, when things seem too good to be true, they often are. According to the Bureau of Labor Statistics, average hourly wages increased by 4.4% in January 2023, compared to the same time a year ago.[12] In reality, however, real wage growth has been negative since March 2021, and when adjusted for inflation, wage growth has declined by 1.8% year-over-year.[12]

Real Wages Have Been Declining Since March 2021

U.S. Real Average Hourly Wage Growth, Year-Over-Year (%), *December 2019 - Present*



Source: FRED

Retail sales measured before and after the impact of inflation provide another clear example of this phenomenon. After two consecutive months of decline, retail sales increased by the most in almost two years in January, jumping 3.0%.[9] However, because these figures are not adjusted for inflation, any perceived gains over the last year are illusory, eaten away by higher prices.

When adjusted for inflation, retail sales have remained relatively flat and are currently below March 2021 levels

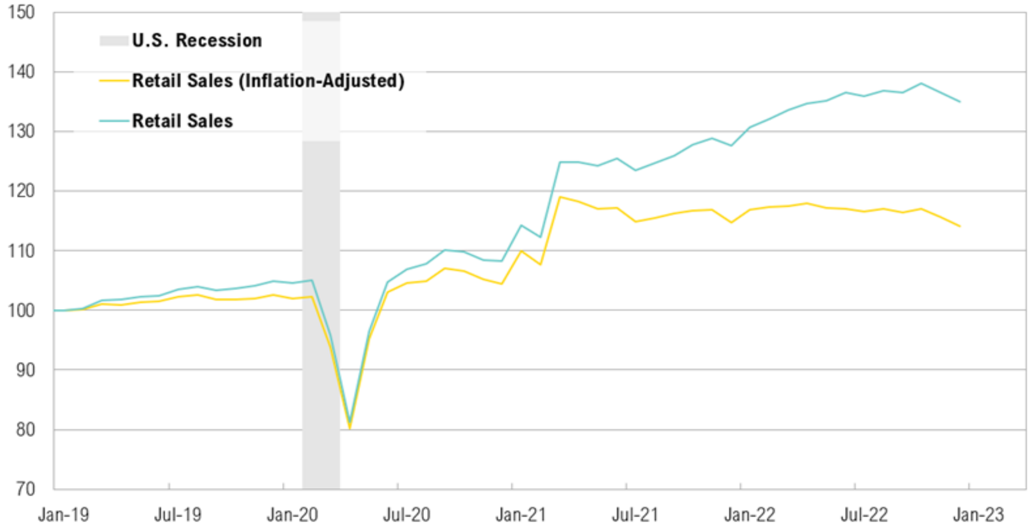
Retail sales may have been strengthened by lingering excess savings from COVID-era stimulus checks, as well as a steady uptick in credit card debt, which hit a new high of $986 billion in the fourth quarter of 2022.[13] In addition, a cost-of-living adjustment of 8.7%, which came into effect in January, could also have contributed to the short-term boost in sales.[14] Measuring retail sales in real terms represents a more accurate gauge of the impact of inflation on consumers' purchasing power. When adjusted for inflation, retail sales have remained relatively flat and are currently below March 2021 levels.

When broken down into retailer-specific categories, the impact of inflation on spending levels becomes even clearer. The chart below shows the difference between real and nominal sales by retail category between January 2022 and January 2023.

Consumers may be spending 6.6% more on groceries, but they are taking home 4.2% less groceries than they did a year ago

Real Retail Sales Remain Below March 2021 Levels

U.S. Retail Sales Indexed to January 2019 ($ Millions), *January 2019 - Present*



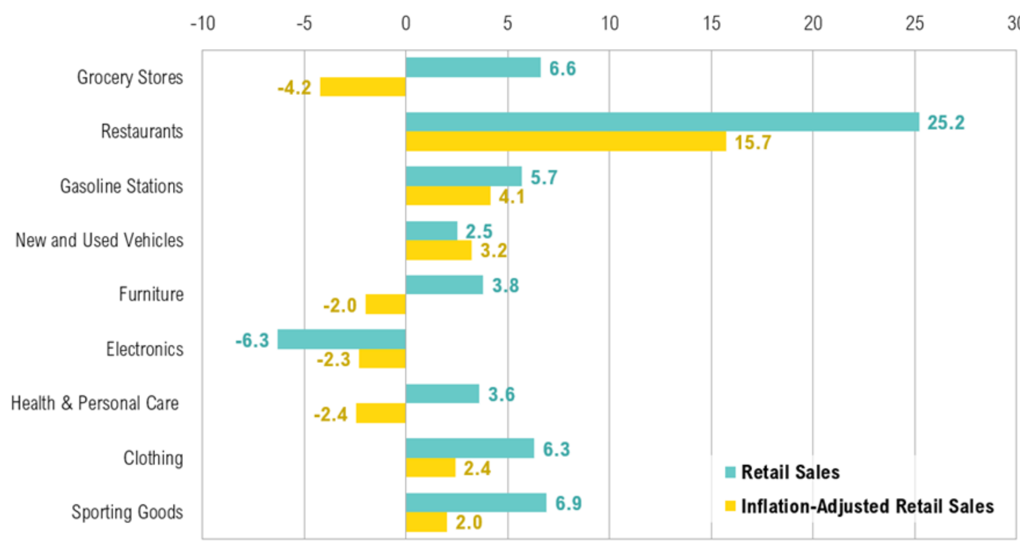
Source: FRED

This difference is most profound in the food category. Consumers may be spending 6.6% more on groceries, but they are taking home 4.2% less groceries than they did a year ago, as inflation erodes the purchasing power of consumers and the value of the dollar. Sales of health and personal care (such as pharmacies and drugstores) reveal a similar dynamic. Consumers are spending 3.6% more on personal care items but taking home 2.4% less than they did twelve months ago. Sales of electronic items, such as televisions and smartphones, skyrocketed during the pandemic and have declined significantly over the past twelve months as consumers have shifted their spending to other categories.

One area where consumers are not cutting back is dining out

Retail Sales versus Inflation-Adjusted Retail Sales

Retailer Categories (Year-over-Year % Growth), *January 2022 - January 2023*

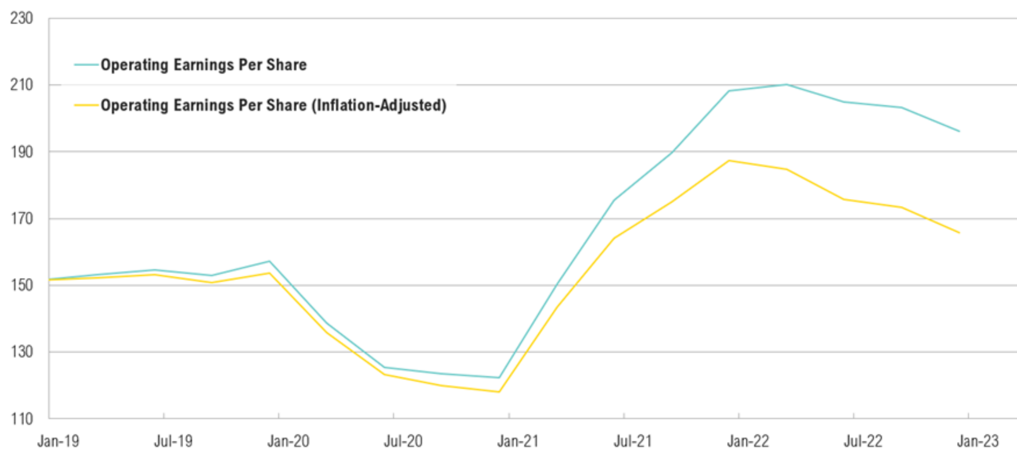


Source: Bureau of Labor Statistics, Bloomberg, U.S. Census Bureau

One area where consumers are not cutting back is dining out. The 25.2% year-over-year increase in spending at restaurants has seen a still-impressive, inflation-adjusted increase of 15.7%. There are, of course, several factors that could account for this increase, as demand for dining out skyrocketed after the pandemic. Dining out is also influenced by seasonal factors, such as the recent warmer weather.[15] Another area where consumers are spending more is on clothing items (+2.4%) and recreational items (+2.0%), which includes sporting goods and hobby items.

Inflation also influences the performance of companies. S&P 500 operating earnings per share have grown approximately 30% since January 2019. However, when adjusted for inflation, earnings have only grown 10% over the past three years. Earnings per share peaked at the end of March 2022 and have since declined to December 2021 levels; however, when adjusted for inflation, real earnings peaked in December 2021 and are now back below September 2021 levels. S&P 500 earnings expectations for 2023 are currently at 2.1%.[1] If inflation remains above the Fed's 2% target for the rest of the year, real earnings growth may be negative for the remainder of 2023.

Inflation-Adjusted S&P 500 Operating Earnings Per Share Have Dropped to September 2021 Levels
S&P 500 Operating Earnings Per Share ($), *January 2019 - Present*



Source: Bloomberg

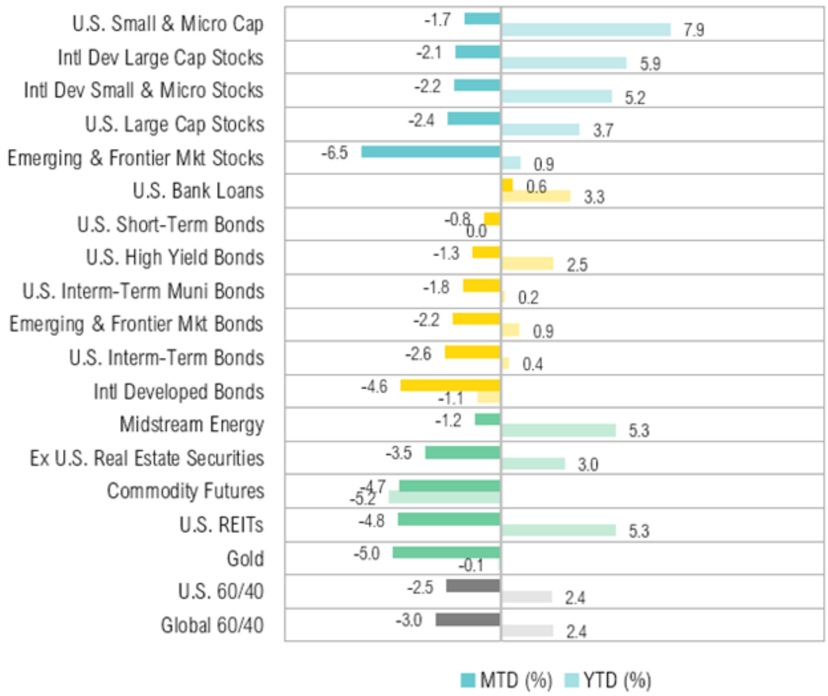
Markets

The 10-year minus 2-year Treasury yield remains deeply inverted, ending February at one of the lowest readings since the early 1980s

February was a short and not-so-sweet month in the markets. Both U.S. and international equity markets posted negative returns in February. The MSCI EAFE Index ended the month down 2.1%, while the S&P 500 ended the month down 2.4%. Emerging market equities fared the worst. The MSCI Emerging Market Index declined 6.5% in February, erasing almost all the gains made in January. The Bloomberg U.S. Aggregate Bond Index dropped 2.6% in January. The 10-year minus 2-year Treasury yield (which is a common indicator of economic growth and a general representation of the shape of the Treasury yield curve) remains deeply inverted, ending February at -0.89, one of the lowest readings since the early 1980s.[16]

In the last week of February, the Bank of Japan once again had to do unscheduled bond buying as the 10-year Japanese Government Bonds continued to push above the 50-basis point cap. Year-to-date purchases are now at approximately $232 billion or 6% of Japan's GDP. The Bank of Japan has also announced a nominee for the new governor position, Kazuo Ueda. At a recent parliamentary hearing on February 24, Ueda was quoted as saying "Japan's inflation trend is likely to rise gradually. But it will take some time for inflation to substantially and stably achieve the BoJ's 2% target," despite Japan's inflation hitting a four-decade high of 4.3% this month.[17]

February 2023 Key Market Total Returns



Source: Bloomberg

Looking Forward

Protecting assets against inflation—preserving purchasing power—is arguably the first and most important objective of any long-term investment program. Over longer time horizons cash seldom outperforms other longer duration assets, including stocks and bonds. In fact, since 1920, a dollar sitting idle in cash would have lost 94% of its purchasing power, whereas a dollar invested in the stock market would be worth approximately $1,365. [18]

Protecting assets against inflation is arguably the first and most important objective of any long-term investment program

Realizing that inflation posed a serious and sustained economic threat, the Federal Reserve rapidly tightened monetary conditions. Even though inflation has somewhat slowed, February's events suggest that still more work needs to be done. The longer elevated inflation lingers, the more it can hurt consumers, given their continued negative real wages. However, this additional tightening will occur when neither the economy nor the capital markets has fully adjusted to the impact of tighter monetary policy, the effects of which typically take some time to work their way through the system. Whether the Fed can accomplish its balancing act will determine if the anticipated recession is an illusion or not.

Citations

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18. SpringTide calculation

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DEFINITIONS

Asset class performance was measured using the following benchmarks: U.S. Large Cap Stocks: S&P 500 TR Index; U.S. Small & Micro Cap: Russell 2000 TR Index; Intl Dev Large Cap Stocks: MSCI EAFE GR Index; Emerging & Frontier Market Stocks: MSCI Emerging Markets GR Index; U.S. Intermediate-Term Muni Bonds: Bloomberg Barclays 1-10 (1-12 Yr) Muni Bond TR Index; U.S. Intermediate-Term Bonds: Bloomberg Barclays U.S. Aggregate Bond TR Index; U.S. High Yield Bonds: Bloomberg Barclays U.S. Corporate High Yield TR Index; U.S. Bank Loans: S&P/LSTA U.S. Leveraged Loan Index; Intl Developed Bonds: Bloomberg Barclays Global Aggregate ex-U.S. Index; Emerging & Frontier Market Bonds: JPMorgan EMBI Global Diversified TR Index; U.S. REITs: MSCI U.S. REIT GR Index, Ex U.S. Real Estate Securities: S&P Global Ex-U.S. Property TR Index; Commodity Futures: Bloomberg Commodity TR Index; Midstream Energy: Alerian MLP TR Index; Gold: LBMA Gold Price, U.S. 60/40: 60% S&P 500 TR Index; 40% Bloomberg Barclays U.S. Aggregate Bond TR Index; Global 60/40: 60% MSCI ACWI GR Index; 40% Bloomberg Barclays Global Aggregate Bond TR Index.

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