The Davis Center For Portfolio Management

University of Dayton

U.S. Equity Outlook

Spring 2023 Outlook: Managing Market Volatility: Insights for the U.S. Equity Market

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The opinions expressed herein are those of the student-managers of the Flyer Investments Fund and do not necessarily represent the views and opinions of the University of Dayton.

Macro Conditions

Real GDP Growth

The U.S. economy has seen a slowdown in growth since the more rapid pace in 2021 that was driven by a surge in business reopenings, fiscal stimulus, and the ending of pandemic effects. The effects of the Federal Reserve's monetary tightening policies in 2022 are starting to slowly show on recent data releases. Hikes to the federal funds rate designed to curb inflation have had a water drop effect on every aspect of the economy as the price to borrow money increases. Generally, interest rate hikes have a lagging effect, which has not yet been fully observed, generating some concern as we had already experienced two negative quarters at the beginning of the previous year. Real GDP increased at an annual rate of 2.1% for the year of 2022, a decrease from 5.9% in 2021. For Q4 of 2022, real GDP increased by an annualized rate of 2.9%, down from 3.2% in Q3. Although consumer spending, which makes up two-thirds of U.S. GDP, saw resilient gains throughout 2022, it faltered compared to Q3 due to wage gains and uncertainty in the economy that convinced Americans to save rather than spend. Real disposable income saw a 230bps increase in Q4 2022, which reflects the effect of rising prices on wages. Meanwhile, residential fixed investment experienced a jaw-dropping -2670bps change caused by a slide in housing. Nondurable goods sold internationally dropped, causing a -130bps change in total exports. Government spending (federal, state, and local) increased by 850bps, contributing .64% to total 2022 GDP. This increase came mostly from nondefense outlays. Private inventory investment increased in Q4, led by manufacturing, mining, and utilities.

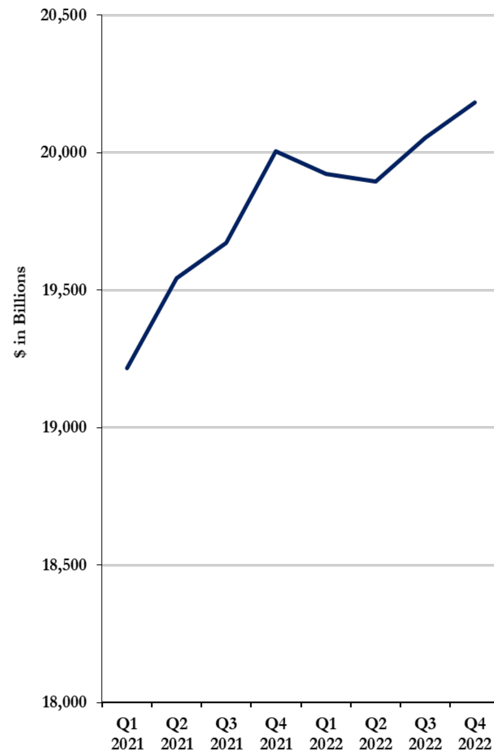

Figure 1: U.S. GDP; seasonally and inflation adjusted

Source: FRED. St. Louis Economic Data

The future, however, remains uncertain, with many economists predicting a few negative quarters of GDP in the mid to late half of the year. The IMF is projecting 1.6% U.S. GDP growth for the current year, and an even further decline in growth at 1.1% for 2024. That same forecast also has the global economy growing at 2.8% this year, indicating that the U.S. is being hit harder than other parts of the world. The Federal Reserve is on a warpath to bring inflation down, which according to the Phillips curve, should drive up unemployment and further hurt U.S. production. Compared to other data, GDP focuses primarily on what a country produces, so an increase in unemployment could have significant impacts on U.S. GDP growth in the future.

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Labor Market Conditions

December 2022

Since the last U.S. Equity Outlook, the hiring environment has shown strength despite continued interest rate hikes from the Federal Reserve. Since March, the unemployment rate has hovered between 3.5%-3.7%, hitting the pre-pandemic mark of 3.5% in July, September, and December. The labor force participation rate increased slightly to 62.3%, remaining relatively consistent throughout 2022. Average hourly earnings increased 4.8% in December compared to the prior year period, up 0.3% from November, which was less than anticipated. The Bureau of Labor Statistics reported that 223,000 jobs were added, coming in above market expectations. The industries that saw the highest increases were leisure and hospitality (67,000), health care (55,000), construction (28,000), and social assistance (20,000). Over the three-month period ending December 2022, the U.S. added an average of 247,000 jobs, which is dramatically lower than prior three-month periods. For example, the three-month average for October, November, and December of 2021 was 637,000, and in July, August, and September of 2022, an average of 366,000 jobs were added. The Council of Economic Advisers prefers to use a three-month average because numbers can be volatile and subject to revision within a single month. December reported relatively strong labor market conditions; however, over a longer period of time, there has been a recent slowdown in jobs added.

January 2023

January recorded another relatively strong month in labor market conditions. The unemployment rate hit a 53.5-year low of 3.4%, signaling a very tight labor market even as the Federal Reserve attempts to lower inflation. Additionally, the labor force participation rate increased 0.1% from December to 62.4%, remaining relatively consistent with the past several months. Average hourly earnings increased 4.4% from the prior year period, the smallest rise since August 2021 and down 0.4% from December. The Bureau of Labor Statistics reported extremely strong job gains, adding 517,000 jobs compared to the Dow Jones estimate of 187,000. The industries that saw the highest increases are leisure and hospitality (128,000), professional and business services (82,000), government (74,000), health care (58,000), retail (30,000), and construction (25,000). Chairman of the Federal Reserve, Jerome Powell, commented on the report by saying the labor market remains very tight and is still out of balance. Some experts believe that the Federal Reserve will continue to raise interest rates following this strong jobs report.

Outlook

Considering the strong jobs reports since the last U.S. Equity Outlook, experts have differing opinions on where they believe the labor market is headed. Fitch Ratings released a report on February 14, 2023, stating that the U.S. labor market is expected to weaken in 2023 as the economy responds to the lagged effects of interest rate hikes. The Head of U.S. Regional Economics at Fitch Ratings noted that job growth has slowed five of the last six months and that January's impressive jobs gain figure of 517,000 is a level that cannot be sustained. While some, like Fitch Ratings, predict a dramatic cooling in 2023, others believe there may be a softer landing. The Chief

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Economist at LinkedIn, Karin Kimbrough, admits that there will most likely be a decline in hiring as it comes down from record highs, but sees unemployment moving up only to a maximum of 5%. She also says that education, government, health care, and retail are industries that will continue to expand hiring in 2023. December and January posted strong jobs reports, and it will be interesting to see if this growth can be maintained.

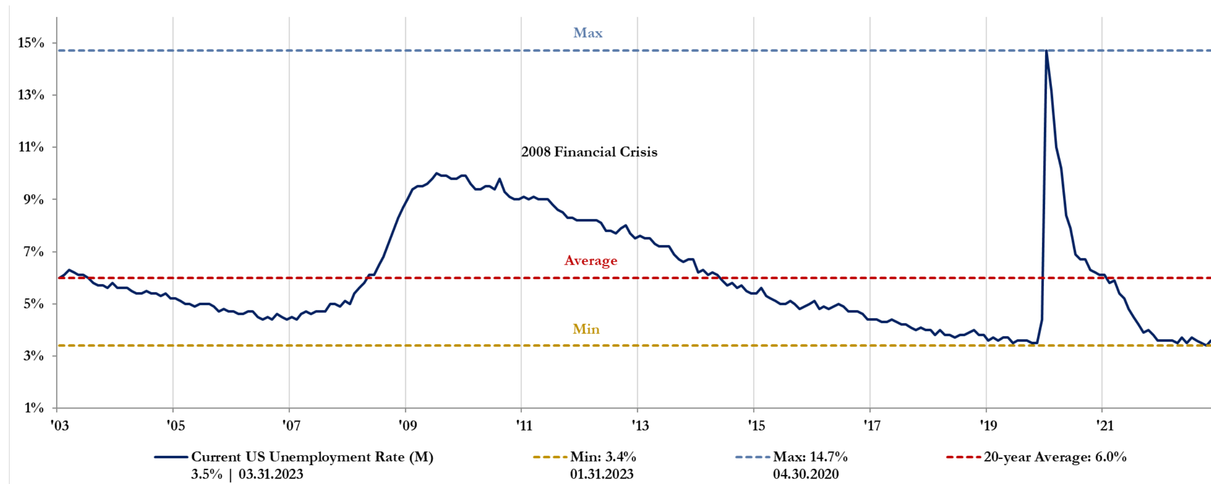

Figure 2: U.S. Unemployment Rate
Source: Bureau of Labor Statistics

Inflation Woes

The Spring Equity Outlook analyzes inflationary pressures in the U.S. and global economy from December of 2022, at which time inflation settled at 6.5% on an annual basis according to the CPI, and seasonally adjusted consumer spending fell 0.2%, down from 7.1% in November and a 9.1% peak in June of 2022. Inflation had risen in the first half of 2022 due to the heavy surplus of funds in the economy resulting from the actions of the Federal Reserve during COVID-19, coupled with the geopolitical pressures of the Russia-Ukraine war. In addition, the surplus of funds provided by the government in a low-rate environment collided with backlogged supply chains, bolstering prices for core goods in the CPI. The inflation rate declined in December 2022 as consumers saw a drop in prices at the gas pump and the OPEC daily price basket stood at $81.14 per barrel on December 22. Gas prices had spiked due to the Russia-Ukraine war and OPEC output cuts of two million barrels a day, but later fell when the Biden Administration released 165 million barrels from the strategic petroleum reserves. This was illustrated by the barrel prices of oil ranging from $76.08 at the beginning of 2022 to $123.70 March 8, to $81.24 on December 30. As a key driver of consumer spending and overall inflation, these price swings and eventual drops allowed the inflation rate to fall in line with economists' expectations entering 2023. Specifically, the Core-PCE index, which removes volatile food and energy prices, rose 4.4% in December

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from a year earlier, its slowest pace since October of 2021. But on a month-to-month basis, the index rose 0.1% in December, matching that of November. This data validated the Federal Reserve's decision to continue its interest rate increases.

In January 2023, inflation rose by 0.5% following the 0.1% increase in December according to the CPI. Core inflation read 5.6%, down from 5.7% in December. Both numbers were higher than expected as across-the-board increases in shelter, food, and energy prices were realized. These rising prices, coupled with the lowest unemployment rate in 53 years and a 3% jump in retail sales, have left Federal Reserve officials once again hawkishly determined to raise interest rates by another 25bps towards its goal of a federal funds rate between 4.5% and 4.75%. Looking forward, the market sees inflation as dependent on three driving forces: overall goods, shelter, and other services, excluding volatile food and energy. The surge in manufacturing prices seen in 2021 has subsided now that supply chains have been restored. Consumer spending demands have also shifted back towards services over goods, but more importantly, shelter prices rose 7.9% in January YoY, the most since 1982. This reflected the lagged effects of booming demand for houses and apartments moving off an incredibly low interest rate environment during the pandemic. The Fed and economists expect this momentum to continue through the spring, but then to decelerate as the housing market catches up to the Fed's fiscal policy.

After removing these shelter prices as well as goods, food, and energy, what is left to analyze is what's called "superinflation." In January, this was running at around 4%, once again further signaling the work in store for the Federal Reserve in combating inflation while simultaneously facing strong wage growth and a tight labor market. Despite positive progress toward bringing down inflation, the Federal Reserve may have to raise its fed funds target rate to as high as 5% in 2023 to stagnate spending, according to economists. Coupled with expected job cuts to come in the second quarter (approximately 7,000 a month according to one survey), many economists see a recession as unavoidable. While many believe it will be shallow and short lived, it will nonetheless affect the profitability of businesses, their hiring practices, and consumer spending habits.

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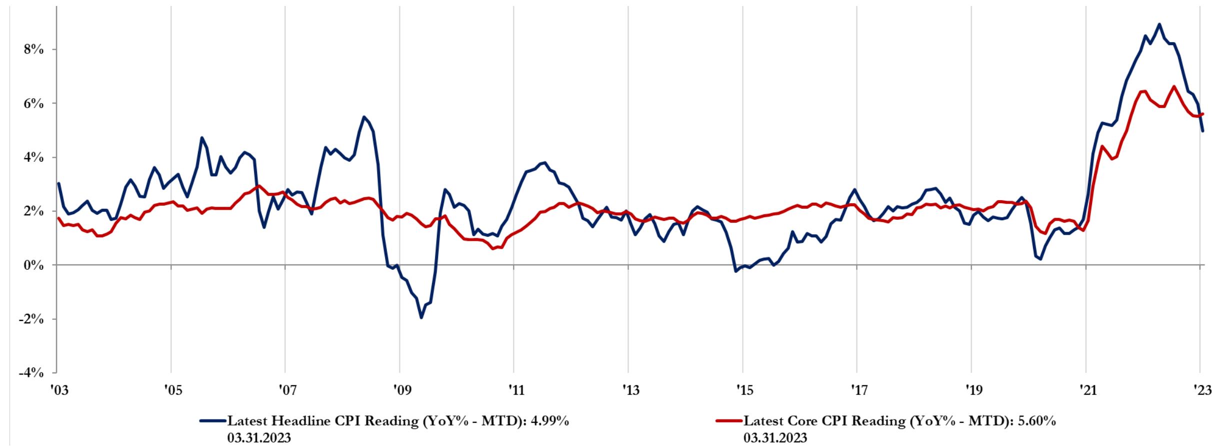

Figure 3: Headline vs. Core Consumer Price Index

Source: FactSet

Federal Reserve Actions

The Federal Reserve continues to take an active approach to fighting the United Sates' sticky, wide-ranging inflationary environment through hawkish monetary policies that started in March 2022. The Fed has raised rates in the last eight FOMC meetings to arrive at a total federal funds rate range of 4.50% to 4.75% from ~0% a year prior. This is the highest the target range has been since 2007, achieved through the fastest rate-hiking cycle in 40 years. In its last meeting on February 1, the Fed hiked rates by 25bps, continuing to slow its pace of rate hikes after four consecutive 75bps spikes and a 50bps increase in December of last year. The slowdown in rate hikes was widely expected as inflation continues to decrease, although it is considerably higher than Fed Chairman, Jerome Powell's long-term goal of 2%. Futures markets have increased the terminal rate to ~5.5% in the back half of the year as the Fed has hinted at continued rate hikes in its next three meetings, with a strong possibility of 25bps each meeting. In December, most Fed officials proposed raising the federal funds rate to a range between 5% to 5.25% this year, with none projecting any rate cuts. Following the February meeting, Powell noted that FOMC members would base their decisions and any revisions to projections on fresh reports on hiring, inflation, and growth issued before the March meeting. He also acknowledged that the extremely resilient and strong labor market would continue to put upward pressures on wages and prices even though both have recently moderated slightly. Meanwhile, the Fed remains committed to its Quantitate Tightening strategy, reducing the size of its balance sheet by $95 billion (only ~1% of its holdings) each month through roll-offs of Treasury securities as well as agency debt and agency mortgage-backed securities. The balance sheet remains high at roughly $8.3 trillion, but is down ~7.0% from its peak in April 2022.

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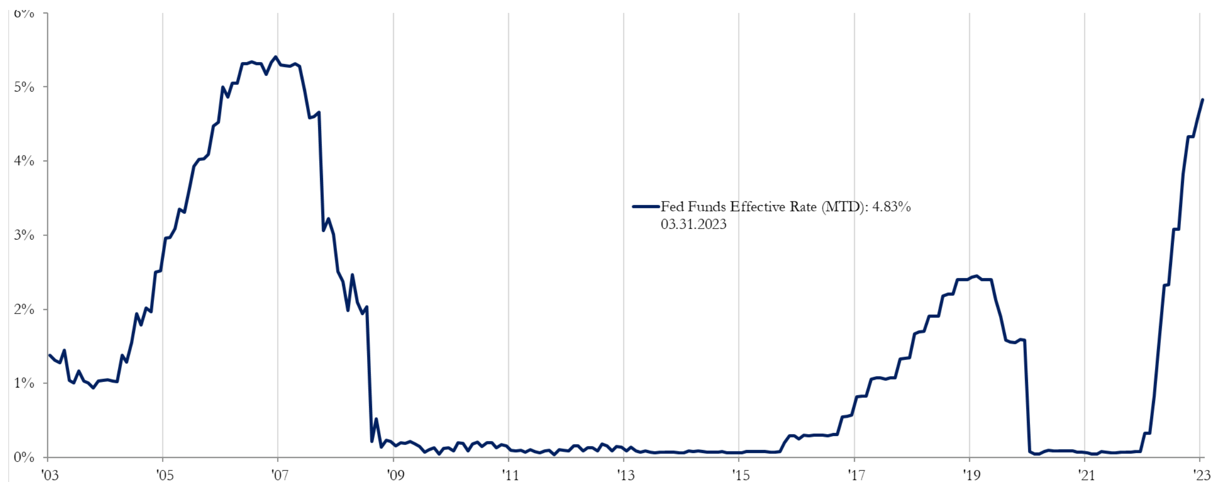

Figure 4: Effective Federal Funds Rate
Source: FactSet

Supply Chain

For many, the pandemic seems like a forgotten bad dream as we head into 2023, without considering the hidden lingering effects of the event. The COVID-19 pandemic adversely affected supply chains globally, leading to an extremely large mismatch between supply and demand in numerous industries. At one point in 2021, there were a record 109 container ships stalled outside America's largest port in California, with over $20 billion worth of products. Even as late as 2Q22 we were still seeing 10%-12% of global container ships idling outside of ports for weeks at a time, according to S&P Global. Just as supply chains started to get closer to their pre-pandemic efficiency, the Russian-Ukrainian war broke out. This war has again affected supply chains significantly; for example, around 5% of trade between Asia and Europe moved by rail through Russia. The effects of these various shocks can all be boiled down to the most important variable in supply chain management: the lag time between ordering and delivery. Imagine you are a retailer who experienced a big spike in demand for your product. You would immediately order large amounts of product from your wholesaler. This wholesaler would then place a large order with the manufacturer, who looks to suppliers for components. Between each of these entities, there will be a delay between order processing and shipment. Unfortunately, by the time a manufacturer ramps up production to meet this spike in demand, the spike in demand has already ended because there has been a significant amount of time between the retailer's order in the downstream and the manufacturer's production in the upstream. Supply chain disruptions resulting from the pandemic exacerbated these lead times at each stage of the logistics network.

So how can businesses and entire countries change their processes in order to avoid future supply chain disruptions, or at least handle them better? First, according to supply chain specialist Peter

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Tirschwell at *The Wall Street Journal*, ports are starting to consider operating all hours of the day. Traditionally, many ports have only operated during typical business hours due to union restrictions or port owners' refusal to pay higher overnight wages. Next, ports are contemplating ways to reduce the idle time a container sits at a port. Often, containers will sit for months just waiting to be unloaded. Imposing fees on containers that sit idle is a step that many ports are taking to alleviate this issue. A key, but controversial problem, is the United States' reticence towards automation. Labor unions are adamantly opposed to the idea of implementing more automated container handling technology, yet this technology is what has allowed Chinese and Arab ports to be much more productive than U.S. ports, according to Mr. Tirschwell.

Likewise, according to Forbes' Terry Ingram, who covers supply chain news, the most obvious step a company can take to solidify and increase the efficiency of its own supply chain is to invest in new technologies. Businesses need to internally develop software systems that can track their orders/deliveries as well as forecast supply and demand, or they must outsource to vendors such as Descartes Systems, Manhattan Associates, SAP, IBM, etc. Descartes Systems and Manhattan Associates can provide intensive software that connects a company's supply chains via the cloud as well as specialized products for personal supply chain optimization. Both firms have seen massive revenue growth following COVID-19, indicating a market shift towards better supply chain control. Firms like SAP and IBM offer supply and demand forecasting products that incorporate lag times into the calculation and allow for more effective decisions when it comes to inventory management. Companies should also consider diversifying and localizing its suppliers. A larger and more diverse group of suppliers for a product automatically lowers the risk of a supply chain issue because one supplier's delay won't completely jeopardize inventory levels. Localizing suppliers can provide protection against geopolitical shocks such as China's Zero COVID policy or the Russia-Ukraine war. However, both of these initiatives will naturally increase operating expenses. Fundamentally, businesses must conduct a comprehensive risk analysis while considering the financial implications of investing more money into a better supply chain.

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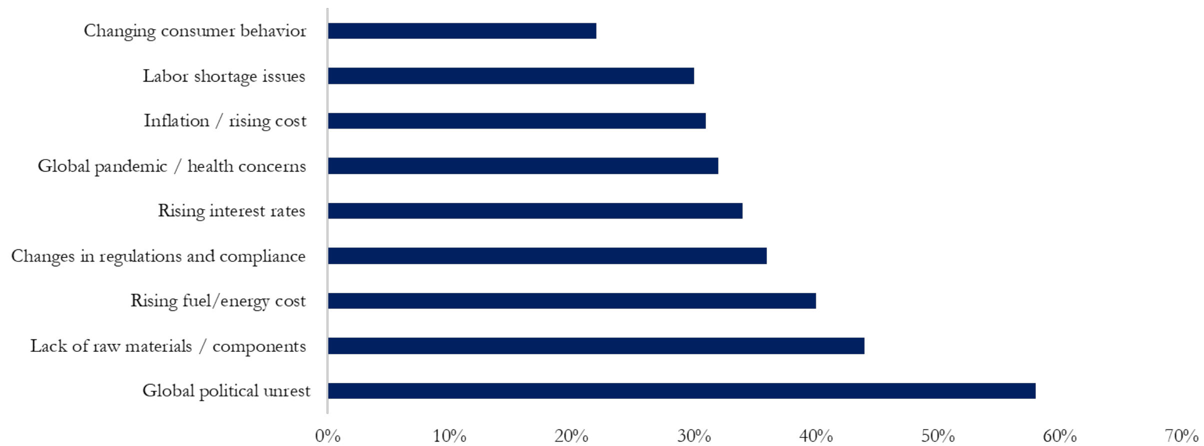

Figure 5: Factors Contributing to the Supply Chain Issues
Source: SAP Research

Manufacturing and Services Activities

The Purchasing Managers' Index, based on data from the manufacturing and service sectors, is the most influential economic metric for future production outlook. Conducted by the Institute for Supply Management, this index is calculated from a monthly survey of supply chain managers from 400 companies across 19 industries, covering both upstream and downstream production. The survey covers five major topics: new orders, inventory levels, production, supplier deliveries, and employment. Each of these survey areas is equally weighted, and responses produce a figure between 0 and 100. A PMI score above 50 represents economic expansion while a PMI below 50 indicates contraction. Not only does this metric affect the overall economy, but greatly influences the decisions of manufacturing companies through guidance on annual budget planning, managing staffing levels, and forecasting cash flows.

The ISM Manufacturing PMI dropped from 48.4 to 47.4 in December, which was below the expected consensus of 48; about a 2% drop month-over-month. According to Capital Economics' senior U.S. economist Andrew Hunter, the decline "… is consistent with our forecast that the economy will soon slip into a recession." For three consecutive months, the PMI has been wallowing in contractionary territory. The index is reporting its lowest figures since the pandemic's May of 2020 and the earlier manufacturing downturn in 2015-16. Factories have begun slowing output to better match anticipated demand for the first half of 2023, with intentions to plan for growth later in the year. However, given the Fed's inclinations toward continued rate hikes, this plan may slip into 2024. Month-over-month declines were seen for new orders (42.5 vs. 45.| 6% decline), production (48 vs. 48.6 | 1% decline) and inventories (50.2 vs. 52.3 | 4% decline). Order backlogs grew (43.4 vs. 41.4 | 5% increase) as well as the price index (44.5 vs. 39.4 | 13%

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increase) given the recorded inflation. The supplier deliveries index grew one percent month-over-month, but that is due to the reduced output. Employment saw a slight decline, but managers remain optimistic and do not intend to reduce head count significantly in the second half of 2023. The outlook for the remainder of the year seems positive as it is forecasted that the PMI will return to neutral near year end.

Given the Federal Reserve's policy and consensus expectations of continued rate hikes with no cuts, the bearish economic outlook will continue to influence the PMI. The last 12 PMI reports have recorded slowing growth. In addition to Fed rate hikes, consumer spending appears to be drastically declining thanks to ongoing inflation, yet the job market continues to present positive numbers.

Energy Outlook

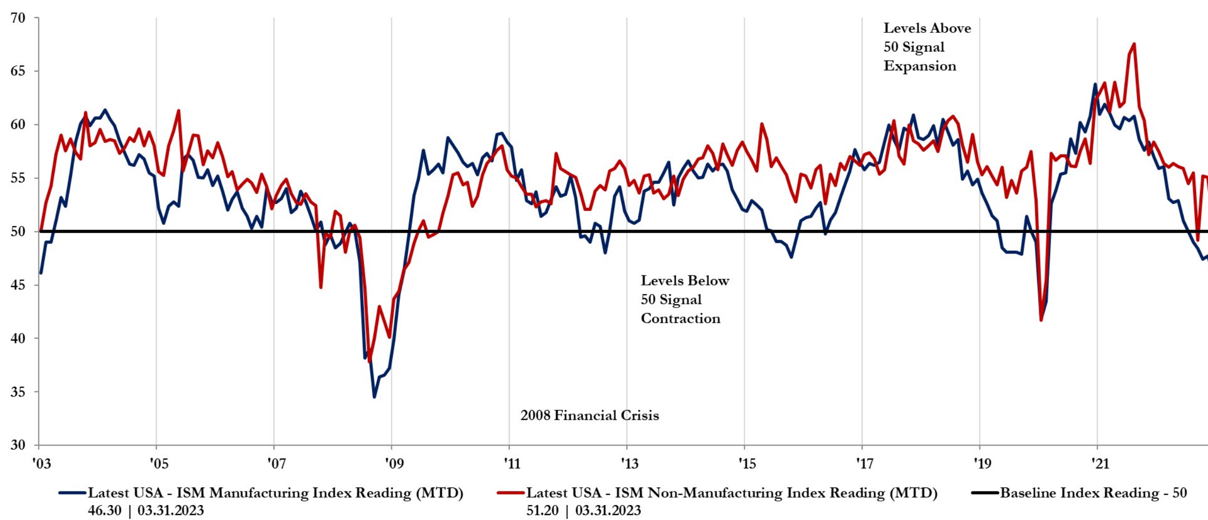

Figure 6: ISM Manufacturing PMI vs. Non-Manufacturing PMI
Source: FactSet

Energy prices have been a cause for concern since the beginning of 2023. Natural gas prices rose 26.7% compared to last year and 6.7% since December, according to the most recent CPI report. World oil demand for 2022 was up 2.6% or 99.6 mb/d. Forecasts going into 2023 predict that oil demand will slow down slightly, with an expectation of 2.3% YoY growth. Data shows that U.S. imports hit a three-year high in January, averaging 6.6 mb/d while U.S. crude oil exports were down to 3.6 mb/d. The Biden Administration has taken an aggressive approach to decreasing gas prices by releasing disbursements from the oil reserve. In 2022, 236 million barrels were released for sale within the U.S. Prior to 2022, oil reserves were primarily used only in response to natural disasters. The administration concluded that rising prices caused by excess demand and decreased

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supply could be considered a legitimate reason to tap the oil reserves. Natural gas prices have been the most volatile out of all energy sources. In contrast, electricity was up barely 0.5% since a year ago. Uncharacteristically high volatility caused by the unknowns associated with the Ukraine-Russia war, China-Taiwan conflict, and other supply and demand pressures has created uncertainty for short-term investors.

With the invasion of Ukraine by Russia, there are significant worries by investors about the short and long term. West Texas Intermediate (WTI) crude oil is down 51% since February 2022 when Russia attacked Ukraine. The management of energy prices has been key to controlling inflation within the U.S. In February 2023, Russia announced that it would decrease production by 5% in March after major countries around the world placed strict price ceilings on its oil. With demand for Russian oil down significantly, it is expected that Russia will have to commit to even more cuts in its effort to raise prices and increase revenue. This could cause larger issues; the main one being higher inflation. The China-Taiwan conflict and the reopening of China have turned many heads, but few are focused on the energy industry. China is the largest energy importer in the world and is relying on Russia to meet its demand. Prior to the Ukraine-Russia war, China and Russia announced a no-limit partnership, which means that there are no "forbidden" areas of cooperation. Their alliance has held strong, but in question, throughout the war in Ukraine. China has tried to remain "neutral" on the conflict due to threats of sanctions. China's reopening is expected to increase energy demand significantly over time as citizens return to work.

With all of the uncertainty going forward, some oil executives have weighed in with Exxon's CEO Darren Woods saying, "As you get supply and demand tighter, events that happen around the world ... lead to a lot more volatility because there's less of a buffer, and I think we're going to see that for some time now." There is some hope in the market, however, as Azerbaijan's oil exports through its Baku-Tbilisi-Ceyhan pipeline have restarted following the Turkey-Syria earthquake. With demand remaining strong, we can expect to see continued growth in the energy sector through the end of 2023 and into 2024.

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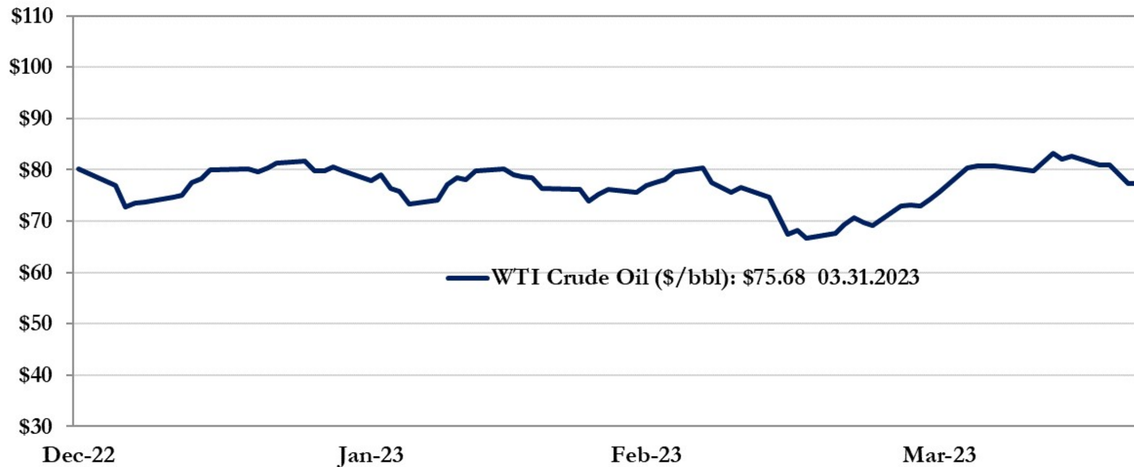

Figure 7: U.S. Crude Oil Prices: West Texas Intermediate (WTI)
Source: FactSet

Yield Curve

Treasury yields achieved new highs the week of February 27 as ten-year yields hit 3.88% and the two-year yield reached 4.78%. These highs have come in the midst of labor data that indicates the U.S. is still tackling persistent inflation. In addition, strength across consumer spending and the job market, reflected by a 3% increase in retail sales in January, has further complicated how the Federal Reserve should go about tackling inflation. The monetary-policy-sensitive two-year Treasury yield's jump puts it at its highest level since July of 2007, and the ten-year Treasury yield (often used as a benchmark for the economy) hit its highest level since December 30, 2022. These yield curves are currently inverted; historically, this has been an indicator of an impending recession. Prior to this year, the yield on the ten-year Treasury note has never been more than a percentage point lower than the three-month Bill yield, but in January, it dropped 1.32 percentage points below. Historically, when long-end yields fall below short-end ones, it has fueled concerns that the Federal Reserve will raise its benchmark significantly enough to push the economy into a recession.

Much of this data has come out following the Fed's February 1st FOMC meeting, in which it was decided to slow down rate increases. Investors' inclination to pay a premium or stocks or corporate bonds is eroded when faced with attractive returns available through Treasury yields. The ten-year Treasury yield is a crucial metric in the measurement of mortgage rates and market confidence. Higher yields could result in even more struggles in the housing market, as sales of previously owned homes decreased 0.7% in January to the lowest level since October of 2010. The

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housing market has weakened for the 12th straight month amidst high mortgage rates, and sales in January fell 36.9% from the prior year. This weakened activity reflects the sensitivity of the housing market to these rates.

Looking back six months, the ten-year Treasury yield climbed above 4% in September 2022 for the first time in over a decade. This increase in September was sparked by announcements from the Federal Reserve that it would be raising rates faster than expected . Moving a few months forward to February 2023, economists anticipated inflation to subside after January's increase of 6.4% to an expected 6.2%. Inflation persisted in February, however, and remained at 6.4%, furthering recessionary fears on Wall Street and confirming that the Federal Reserve would need to continue raising interest rates in an effort to curb inflation. Looking back at 2022 and the start of 2023, the Fed has not raised rates so aggressively since its attack on inflation in the late 1970s; these efforts resulted in two recessions in the 1970s. However, the added complications of the pandemic and its devastating effects make it difficult to compare the current economy to past recessionary environments that were plagued by inflation.

Borrowing within the federal funds market reached $120 billion on January 27, the highest one-day total since 2016. This activity, which is used by government-backed lenders and banks to exchange cash stored at the Federal Reserve, has surged throughout the past year in the presence of swift interest rate hikes. The federal funds rate sets the benchmark across the economy for the cost of borrowing and, when it surges, banks' ability to fund operations are put under pressure. U.S. banks depleted deposits at the fastest rate on record in the second and third quarters of 2022, the first time since 2010 that there were two consecutive quarters of decline.

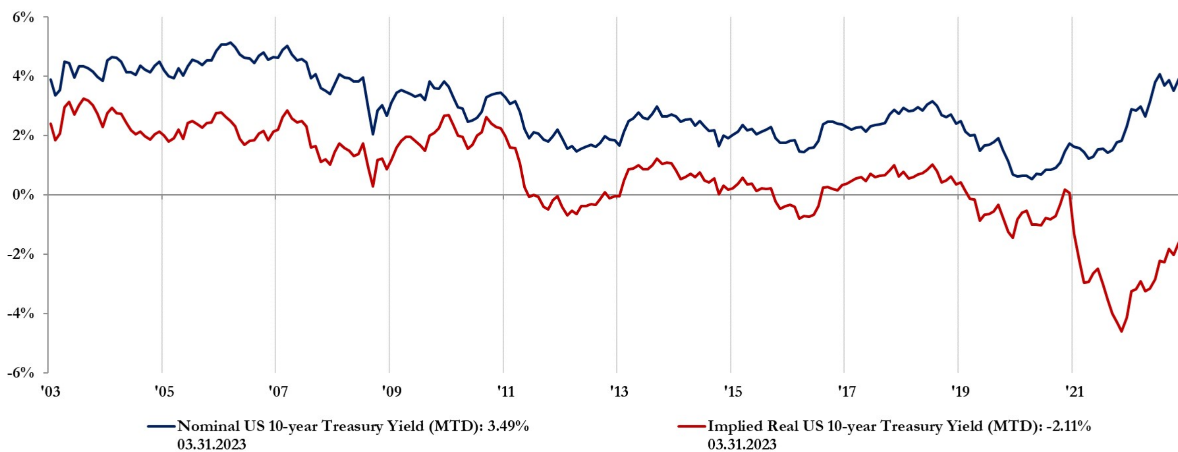

Figure 8: Nominal vs. Real U.S. 10-Year Treasury Yield
Source: FactSet

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Global Economic Outlook

The International Monetary Fund projected a slightly more positive outlook for the global economy in its January 2023 World Economic Outlook report than in its previous report in October. Although the IMF projected 2023 global economic growth to be 0.2% higher, the total projected growth rate of 2.9% is almost one percentage point lower than the 20-year average annual global economic growth rate of 3.8%. Rampant inflation growth worldwide has cause central banks in many economies to tighten monetary policy in an attempt to combat inflation growth, which has, in turn, hampered economic growth. Although pent-up demand following the Covid-19 pandemic and decreasing rates of inflation could potentially cause better than expected global economic growth in 2023, numerous factors in various countries around the world could further disrupt economic progress.

Covid-19 has remained a persistent issue in one of the world's largest economies, China. Chinese economic growth in the fourth quarter of 2022 slowed as Covid-19 outbreaks and subsequent strict lockdowns ravaged many large cities in the country, such as Beijing. The Chinese government ended its draconian Covid-19 restrictions, known as its Zero-COVID Policy, in November and December of 2022, launching the full reopening of the Chinese economy. China's real estate sector, a large portion of its GDP, had continued its decline throughout 2022 as property developers remained unable to complete the construction of many of their presold homes, and Chinese real estate prices continued to plummet. The Chinese government responded to these economic headwinds by easing both monetary and fiscal policy, increasing efforts to vaccinate the vaccine-hesitant elderly population, and providing monetary support to property developers to help them complete unfinished construction projects. Despite the Chinese government's efforts, Chinese economic growth slowed significantly in 2022, and both Chinese business and consumer sentiment remained unfavorable at the end of the year. Given the size of the Chinese economy, China's ability to recover from these headwinds will have a crucial effect on global economic growth in 2023.

The European economy was adversely affected by the war in Ukraine throughout 2022, although to a lesser degree than what was initially projected. The war in Ukraine and the subsequent energy crisis it triggered are estimated to have caused the European Union's GDP to decline by 1.2%. Despite this decline, the European energy crisis likewise has not been as severe as originally expected This is because gas prices began to fall as natural gas production increased, and the European winter has been warmer than usual. Despite decreasing energy prices, the outlook for the European economy looks dire. In the fourth quarter of 2022, both consumer and business confidence slumped while both the manufacturing and service sectors of the economy shrunk. Inflation remains rampant at 10% or more throughout several countries in the European Union and the United Kingdom, putting pressure on consumer and business spending. In response to these high inflation rates, both the European Central Bank and the Bank of England have rapidly raised interest rates, inhibiting growth. Europe's economic struggles will likely be a headwind for global economic growth in 2023.

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As central banks throughout the world have tightened monetary policy in response to inflation, both demand and inflation have begun to decline. This shift in monetary policy will be a persistent factor affecting economic growth throughout all of 2023, with the full ramifications of these policy changes not likely to come to fruition until 2024. Global headline inflation is believed to have reached its peak in the third quarter of 2022, with both fuel prices and other commodity prices steadily declining since then. But core inflation, which excludes fuel prices and other volatile commodity prices, has continued to persist throughout much of the world. This persistence has been due to strong labor markets increasing wage growth and the resilience of consumer demand. The perseverance of core inflation has caused many central banks, notably the Federal Reserve and European Central Bank, to raise interest rates at a more rapid pace than what was initially expected. The course of global inflation rates, specifically global core inflation rates, will be one of the single biggest factors affecting global economic growth in 2023.

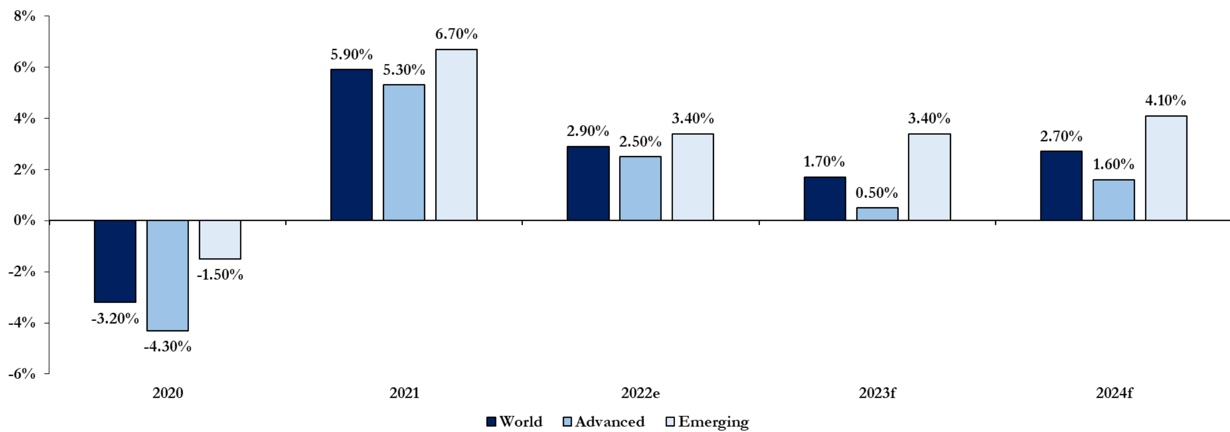


Figure 9: World Bank Gross Domestic Product Growth Estimates
Source: The World Bank

Macro Conditions

The Russia and Ukraine Conflict

With over 7,000 civilians killed and almost 12,000 injured between February 2022 and February 2023, the Russia and Ukraine conflict has been named the largest threat to peace for millions of people all over Europe. Unrest in Ukraine arose in late 2013 and culminated in protests against President Viktor Yanukovych as a result of his decision to reject an agreement that would cause greater economic integration into the European Union (EU). The continuation of protests in 2014 led to a violent crackdown on demonstrators by state security forces. Due to widening opposition and the escalating rebellion, President Yanukovych fled the country in February 2014. One month later, armed conflict arose in eastern Ukraine following Russia's annexation of Crimea, which was a historic turning point for European security due to the littoral importance of Crimea. Crimea is critical to Russia's political, economic, and military interests because it hosts the natural harbor of Sevastopol. This major warm-water, deep-water port, which accesses the Mediterranean Sea, is vital for Russia, which is landlocked except in the cold north. Russia would not have a home base for its Black Sea fleet without Sevastopol. Amid the various conflicts then arising, France, Germany, Russia, and Ukraine attempted to resolve their issues and end all destructive violence through the Minsk Accords. The series of international agreements included provisions for a cease-fire, withdrawal of heavy weaponry, and full Ukrainian government control. Despite the efforts to end this dispute, the settlement was largely unsuccessful.

In 2016, the North Atlantic Treaty Organization (NATO) deployed four battalions to Eastern Europe to deter possible future Russian attacks on the continent. These troops were routed through Estonia, Latvia, Lithuania, and Poland. Then, in 2017, the United States deployed two U.S. Army tank brigades to Poland to boost NATO's presence in the region, and a year later, imposed new sanctions on 21 separate individuals, including Russian officials and companies that were linked to the conflict in eastern Ukraine.

The U.S. has been heavily involved in the defense of Ukraine following the February 2022 Russian invasion. In addition to deploying brigades, the U.S. has sent around $9.9 billion in emergency food assistance, health care, refugee support, and other humanitarian aid and $15.1 billion in budgetary aid through the Economic Support Fund, loans, and other financial means. The U.S. has also provided $22.9 billion in military aid that included security assistance, which encompassed training, equipment, weapons, logistics, and support through the Ukraine Security Assistance Initiative; weapons and equipment from Defense Department stocks; and grants and loans for weapons through the Foreign Military Financing Program.

The global economy is expected to slow down even further in the upcoming year as the massive energy shock from Russia's aggressive war against Ukraine continues to trigger inflationary pressures. The Russia/Ukraine conflict is causing widespread suffering, and the global economy is reeling from the consequences.

University of Dayton

S&P 500 Outlook & Fundamentals

S&P 500 Outlook

The Consumer Confidence Index fell continuously throughout the year of 2022 as the economy was faced with unprecedented headwinds, sending the S&P 500 Index into bearish territory. The geopolitical tensions in Ukraine, the highest inflationary environment in 40 years, and aggressive tightening by the Federal Reserve are all potential catalysts for the decreasing consumer confidence. Since 1950, there have been a total of 13 bear markets, each lasting an average of 12 months. The S&P 500 Index ended 2022 with a total drop of 19.44% closing at 3,839.50. A glimmer of optimism exists for the rest of the year as some believe the Federal Reserve will start to pivot its aggressive policy in response to a disinflationary environment, rising unemployment and declining corporate sentiment. Analysts are currently placing the bottom-up target price for the S&P 500 for 2023 at 4,493.50, which represents a 17.03% increase from the December 30 closing price of 3,839.50. Considering the average overestimation of 8.3% over the previous 20 years, the 2023 bottom-up target price would be 4,134.02. At the sector level, Consumer Discretionary (+27.0%) and Communication Services (+25.2%) are expected to see the largest price increases based on the difference between the bottom-up target price and last year's closing price. At the other end, Consumer Staples (+3.4%), Materials (+4.2%) and Utilities (+4.7%) will see the smallest price increases according to analysts' predictions. While the S&P 500 anticipates an upside, market volatility is expected to remain elevated, with the Volatility Index averaging around 25. A VIX reading below 20 generally corresponds to more stable periods in the market. While many have an overall positive outlook for the market this coming year, investors should still be prepared for economic turmoil and headwinds that will cause intense market fluctuation and ups and downs in overall consumer confidence.

Earnings

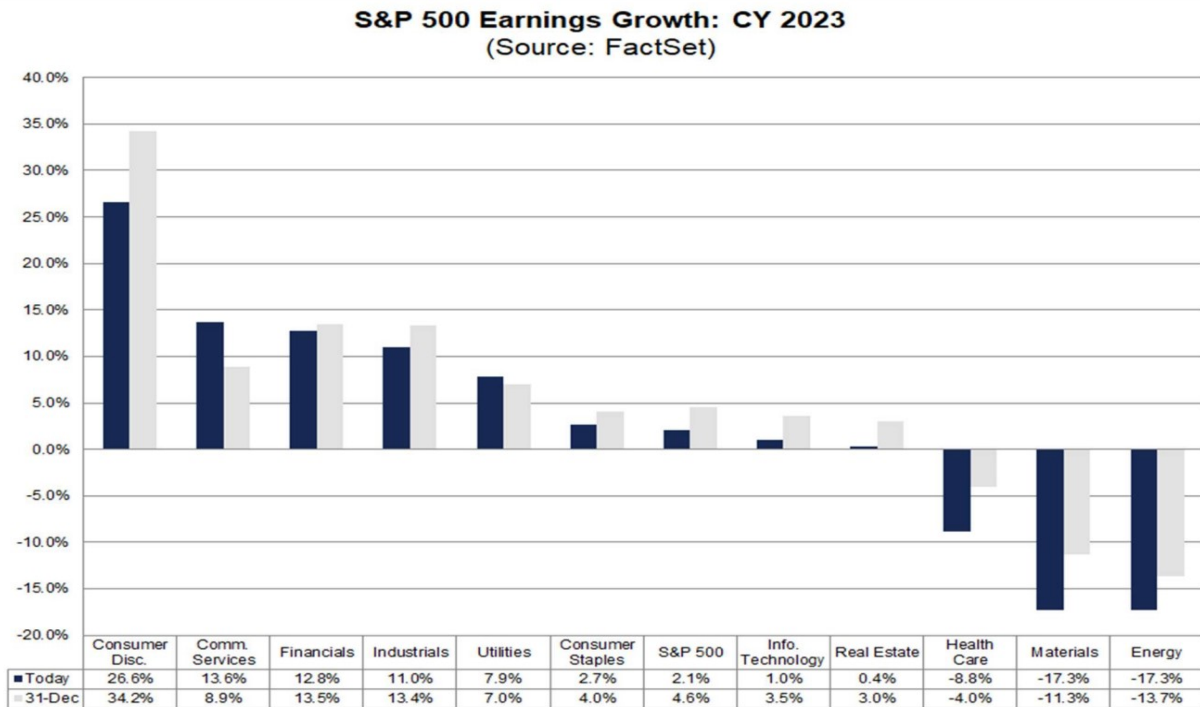
Eighty-two percent of the S&P 500 companies have reported results for Q4 2022 as of February 17. Aggregate earnings have thus far exceeded estimates by 1.3%. While this beat appears positive for markets, it is below the one-year average of 3.7%, the five-year average of 8.6%, and the ten-year average of 6.4%. As a matter of fact, this was the lowest quarterly earnings surprise reported since 2020 and the second lowest since 2009. The key driver for this disappointment is the current macroeconomic environment which has shifted away from the low interest rate, low inflation economy we had been enjoying. From Q1 2021 to Q3 2021, more than 85% of companies had earnings surprises due to a lower rate economy coming out of the COVID-19 pandemic. Earnings surprises have compressed since 2021, and this trend looks to continue into 2023. In more recent quarters, analysts have overestimated earnings as economic growth slowed due to inflation and higher rates. Over the last three quarters, Q2 2022 to Q4 2022, 71% of S&P 500 companies reported a positive EPS surprise while the Communication Services and Consumer Discretionary sectors reported negative earnings surprises in each.

Earnings in Q4 continued the trend of subpar earnings that was seen throughout 2022. Sixty-eight percent of companies reported actual EPS above estimates, below the five-year average of 77% and the ten-year average of 73%. Blended earnings, the combination of actual results and estimated

S&P 500 Outlook & Fundamentals

results for companies, declined 4.7% in the quarter. Positive earnings surprises by companies across multiple sectors, mostly Health Care, were top contributors in mitigating this decline while revisions to the Financials and Communication Services sector were the main reason why overall earnings fell in Q4. Only four sectors are projected to report year-over-year earnings growth, led by the Energy and Industrials sectors. The seven other sectors are reported an earnings decline, led by Materials, Consumer Discretionary, and Communication Services.

Revenue performance was much stronger during Q4 than earnings performance. Sixty-five of companies in the S&P 500 reported actual revenue above estimates, below the five-year average of 69% but above the ten-year average of 63%. Overall, companies are reporting revenues that are roughly 1.9% above estimates, which is in line with the five-year average and above the ten-year average of 1.3%. Blended revenue growth for Q4 was 5.1%. The largest contributors to this positive revenue surprise were the Utilities, Health Care, and Consumer Discretionary sectors. Only two sectors reported year-over-year revenue declines: Materials and Information Technology.



	Consumer Disc.	Comm. Services	Financials	Industrials	Utilities	Consumer Staples	S&P 500	Info. Technology	Real Estate	Health Care	Materials	Energy
Today	26.6%	13.6%	12.8%	11.0%	7.9%	2.7%	2.1%	1.0%	0.4%	-8.8%	-17.3%	-17.3%
31-Dec	34.2%	8.9%	13.5%	13.4%	7.0%	4.0%	4.6%	3.5%	3.0%	-4.0%	-11.3%	-13.7%

Figure 10: S&P 500 CY 2023 Earnings Estimates
Source: FactSet

Valuation

With continually rising long-term yields, marginally cooling inflation, and an expectation that the Fed will raise rates moderately in the next meeting, the market has responded with contractions correlated with one sentiment: no one knows where the market will move. The forward 12-month P/E ratio for the S&P 500 is 18.0, which is below the five-year average of 18.5 but above the ten-year average of 17.2. It is also above the forward 12-month P/E ratio of 16.7 recorded at the end of the fourth quarter 2022. Since the end of the fourth quarter, the price of the S&P 500 Index has increased by 6.5% while the forward 12-month EPS estimate has decreased by 1.5%. At the sector level, the Consumer Discretionary (24.9) and Technology (23.3) sectors have the highest forward 12-month P/E ratios, while the Energy (10.3) and Financials (13.0) sectors have the lowest forward P/E ratios. Questions are arising as to whether we are approaching a market bottom, and hesitancy in the markets may follow. The anatomy of market bottoms usually consists of low P/E ratios followed by a quick hike in P/E ratios as earnings fizzle out, which is especially observable in the Financials sector. The Flyer Investments Team emphasizes tracking valuation metrics and their growth over time to adequately prepare for any drastic market movements.

Valuation Matrix	March 31, 2023	3 Month Median	5-Year Median	10-Year Median	20-Year Median	Current vs 10-Year Median Difference	Premium (Discount) vs 10-Year Median
S&P 500 (LTM)							
P/E	**19.9x**	19.2x	20.2x	18.9x	17.3x	1.0x	5.2%
P/B	**4.0x**	3.9x	3.8x	3.3x	2.9x	0.8x	23.3%
EV/Sales	**2.8x**	2.7x	2.7x	2.5x	1.9x	0.3x	10.6%
EV/EBITDA	**13.6x**	13.2x	13.7x	12.9x	10.7x	0.7x	5.8%
S&P 500 Sectors (Forward P/E)							
Energy	**10.2x**	10.1x	14.3x	16.8x	12.7x	(6.5x)	(38.9%)
Materials	**16.8x**	16.9x	16.3x	16.1x	15.0x	0.7x	4.4%
Industrials	**18.8x**	18.9x	18.4x	16.7x	15.9x	2.0x	12.1%
Consumer Discretionary	**25.9x**	25.0x	25.2x	22.3x	17.9x	3.6x	16.0%
Consumer Staples	**20.4x**	20.0x	20.0x	19.5x	17.4x	0.9x	4.6%
Healthcare	**17.3x**	17.4x	16.4x	16.2x	15.9x	1.1x	6.7%
Financials	**12.6x**	13.6x	14.0x	13.5x	12.6x	(0.9x)	(6.8%)
Technology	**24.7x**	22.8x	21.1x	16.5x	16.3x	8.2x	49.5%
Communication Services	**16.5x**	15.9x	18.5x	18.6x	18.0x	(2.1x)	(11.0%)
Utilities	**17.8x**	17.8x	18.4x	17.4x	15.2x	0.4x	2.5%
Real Estate	**17.4x**	17.9x	20.5x	18.7x	18.6x	(1.3x)	(7.0%)
Macroeconomic Enviroment							
10-Year US Treasury Yield (Nominal)	**3.38%**	3.55%	1.84%	2.33%	2.76%	1.1%	45.1%
Effective Federal Funds Rate	**4.83%**	4.58%	1.55%	0.36%	0.40%	4.5%	1241.7%
Core CPI (YoY)*	**5.53%**	5.53%	2.27%	2.08%	2.03%	3.4%	166.0%

Figure 11: S&P 500 Price Valuation Matrix
Source: FactSet

Valuation

Figure 12: S&P 500 Forward EV/EBITDA
Source: FactSet

Figure 13: S&P 500 Forward P/E
Source: FactSet

Sector Positioning

Information Technology

The Economic Analysis Team recommends a neutral position in the Information Technology sector relative to the S&P 500 Index for the upcoming semester. Facing numerous market challenges, the technology sector had endured a difficult and underperforming year last year. However, current market trends indicate that the remainder of 2023 holds more promise and optimism, with increased interest and positive growth projections. Opportunities in cloud computing, 5G, AI, and semiconductors are beginning to shift the sector into a less cyclical and more-mission critical industry, suggesting growth potential in both the short and long terms. In addition, the Nasdaq has suffered back-to-back declines only twice since its debut 50 years ago, and XLK only once since its introduction. However, valuations remain stretched beyond historical averages and are currently trading at a 28% premium to their ten-year PE average.

Health Care

The Economic Analysis Team recommends a neutral weight position in the Health Care sector relative to the S&P 500 Index for the upcoming semester. The sector has been plagued by difficult conditions in 2023, primarily because of continuing high inflation, both in wages and supplies, and labor shortages. In addition, the increased cost of capital, combined with underperforming financial markets, has had a negative impact on some investment portfolios. Despite these challenges, health care leaders are very optimistic. More than nine of out of ten respondents to J.P. Morgan's 2023 Business Leaders Outlook survey expect to maintain or increase revenues this year. This traditionally defensive sector has also shown some growth prospects that will allow for mitigation of certain headwinds.

Financials

The Economic Analysis Team recommends a neutral position in the Financials sector relative to the S&P 500 Index for the upcoming semester. While many financial institutions welcome the return of higher interest rates, they bring their share of risks as well. Increasing rates and elevated inflation have raised recessionary fears and the prospect of notably higher loan losses for banks, slower growth for life insurers, and risk to downside for the property and casualty insurance space. The sector could also face pressures associated with credit risk should a recessionary environment challenge the ability of borrowers to make their required loan payments to banks. Companies with proven track records of navigating economic downturns, strong fundamentals, and low valuations could show resilience.

Sector Positioning

Consumer Discretionary

The Economic Analysis Team recommends an underweight position in the Consumer Discretionary sector relative to the S&P 500 Index for the upcoming semester. Despite strong performance in the first quarter and resilient spending and savings rates, there are fundamental headwinds that will inhibit growth. While consumer spending remains strong, the steep increase in credit card debt highlights the degree to which spending is being supported by borrowed money. The escalated dependence by consumers on borrowed capital may render it impossible to achieve a further increase in spending, implying that a possible deceleration may be pending, as indicated by management comments. Additionally, consumer sentiment remains extremely low and valuations remain stretched as the sector is trading at a 13.5% premium to its ten-year historical P/E average. The outlook for Discretionary continues to be uncertain, and macroeconomic concerns will likely be a strong factor in sector performance.

Industrials

The Economic Analysis Team recommends a neutral position in the Industrials sector relative to the S&P 500 Index for the upcoming semester. The industry has surpassed the expectations of previous years, with manufacturing demonstrating continued strength in 2022, building from the momentum it gained emerging from the pandemic. The near-term outlook for this cyclical sector may not be as bright, however, as global supply chain issues, cost pressures, and worldwide recessionary worries slow production. Despite that, several demand drivers, such as sustainability, onshoring, and increased technology spending, will provide some insulation from a downturn and will keep overall fundamentals positive.

Communication Services

The Economic Analysis Team recommends a neutral weight position in the Communication Services sector relative to the S&P 500 Index for the upcoming semester. The expansion into 5G may provide a boost by driving upgrades to premium plans, while gains in broadband share will help offset some weakness in wireless. However, many of the same fundamentals causing underperformance and volatility will continue to act as headwinds, including high interest rates, inflation, and global slowdowns. Regardless, the sector's wide diversity of companies with differing cyclical exposures will offer opportunities both now and long term.

Sector Positioning

Consumer Staples

The Economic Analysis Team a neutral position in the Consumer Staples sector relative to the S&P 500 Index for the upcoming semester. Last year's strong outperformance proved Staples' defensive nature as it ranked as the third best performing sector. While recessionary fears may play into the inelastic demand for the sector's products, the persistence of last year's challenges--including rising input costs stemming from higher outlays for labor and materials as the result of stubborn inflation--will hinder growth. Any inability to pass those along to consumers will cause profit margins to contract.

Energy

The Economic Analysis Team recommends an overweight position in the Energy sector relative to the S&P 500 Index for the upcoming semester. The sector is coming off an extremely strong year in 2022, and although the country is facing recessionary fears, the short- and medium-term fundamentals remain attractive while supply shortages and strong demand persist. The IEA projects that demand will outpace supply by 0.9mb/d in 2023, driven by a continuing global rebound from the pandemic, supply constraints due to disruptions related to the Russia-Ukraine war, and years of low investment in production. The companies in this sector possess extremely strong and resilient balance sheets that allow them to combat an economic downturn. Valuations remain compelling, given that the sector is currently trading at the lowest P/E among all sectors.

Real Estate

The Economic Analysis Team recommends a neutral weight in the Real Estate sector relative to the S&P 500 Index for the upcoming semester. Components of this sector are very sensitive to increasing interest rates and have historically underperformed in high interest rate economies. This sensitivity was illustrated in 2022 when the Fed' s sharp rise in rates caused the sector to underperform the overall market by -8%. However, in counterbalance to this risk, certain REITs can act as a strategic hedge against inflation since they can quickly increase their revenue streams to adapt to an inflationary environment. In addition, REITs could see some stabilization in 2023 if interest rates start to slow down.

Materials

The Economic Analysis Team recommends a neutral weight in the Materials sector relative to the S&P 500 Index for the upcoming semester. Given the sector's cyclical nature, it could be at risk as the result of worldwide recessionary concerns and declining global growth prospects. A continued resilient economy could combat these risks, however, should factors such as unemployment continue to show strength. While growth for 2023 looks uncertain, the longer-term outlook for the sector remains more attractive.

Sector Positioning

Utilities

The Economic Analysis Team recommends a neutral weight in the Utilities sector relative to the S&P 500 Index for the upcoming semester. The sector's defensive characteristics could look attractive to investors seeking shelter during market and economic choppiness as it historically is less sensitive to economic cycles compared to other sectors. However, high bond yields are headwinds for Utilities in 2023 as the sector's defensive appeal diminishes while risk appetites rise in the face of an increasingly hawkish Fed hinting at more-than-expected rate hikes. The yield spread between Utilities' dividends and the ten-year Treasury turned negative for the first time in 14 years in Q3 2022 and that phenomenon could likely persist throughout 2023.