



QUARTERLY MARKET INSIGHTS
1ST QUARTER 2023



ARTIFICIAL INTELLIGENCE: CHAT BOTS, SEARCH, AND COPYRIGHT LAW

- Artificial intelligence (AI) has captured the world’s attention following the November launch of OpenAI’s generative AI chatbot ChatGPT.
- Microsoft (MSFT), which has a 40% stake in OpenAI, is preparing to challenge Alphabet’s (GOOGL) search dominance.
- Unreliable output, copyright infringement risks, and concerns about content liability could slow the adoption of AI.

The term artificial intelligence (AI) ascended to the upper echelon of global buzzwords in late 2022 alongside a surge in usage and media coverage of ChatGPT, an AI-enabled chatbot that can respond to open-ended questions in a human-like manner. AI and machine learning have existed for several decades, mostly in a development environment in which a program is exposed to a wide set of outcomes and is trained to remember the correct inputs and outputs for each outcome. Everyday examples of basic AI usage are suggestions to a user by Amazon, Netflix, and Google Search for the next product, movie, or service based on that user’s previous choices.

A more complex AI use case now being widely adopted is called “inference,” in which software can make an accurate determination about the correct output without being shown every potential outcome. These types of AI-enabled programs can “learn” to infer an appropriate answer to a random question by ingesting oceans of data across social media feeds, digital libraries, television, internet searches, statistics banks and so on. OpenAI’s ChatGPT is the most well known example of these inference-driven large language models (LLMs) that can interpret instructions in natural language and generate output including poems, essays, and computer code.

Due to its \$11 billion investment in OpenAI, technology giant Microsoft (MSFT) is one of the companies most likely to benefit from increased adoption of generative AI. MSFT intends to incorporate Chat GPT’s technology in its Bing search engine and its Office 365 suite of programs. As the second largest hyperscale cloud computing provider in the U.S. behind Amazon.com (AMZN), MSFT also stands to benefit from increased demand for AI computing power. Alphabet (GOOGL) could have the most to lose if MSFT successfully integrates Chat GPT into Bing considering it controls roughly 90% of the \$225 billion global search market. GOOGL’s early February introduction of its Bard AI interface was widely seen as a failure after several of its responses to straightforward questions during a promotional video were incorrect. Semiconductor giant NVIDIA is also a major player in the development of AI. Its high-end graphics processing units (GPUs) are often viewed as the “picks and shovels” essential to data centers, the video game industry, and now AI applications. Accenture (ACN), one of the world’s largest technology services consultancies, could benefit from helping its customers develop internal AI applications to streamline business operations. Smaller, more

speculative AI-related companies that have enjoyed a spike in investor attention in recent months include software firms Palantir (PLTR) and C3.ai (AI).

Several key risks associated with implementing AI in a commercial setting could slow its adoption. First, as seen by the wrong answers given by Google’s Bard to basic questions, unreliable output could erode its viability. Looming larger are a pair of ethical dilemmas surrounding intellectual property rights and liability protections for content seen as inflammatory or deceptive. Copyright holders of content available on the web ranging from images to songs to news have threatened legal action against the owners of generative AI programs that use this content, without payment, to train their underlying models. Some observers have questioned the commercial viability of consumer-oriented generative AI due to the potential tidal wave of copyright infringement litigation. They point to the rise and fall of Napster, a platform for sharing mostly bootlegged songs, in the early 2000s. A group of 1,000 prominent technologists

"AI-ENABLED PROGRAMS CAN "LEARN" TO INFER AN APPROPRIATE ANSWER TO A RANDOM QUESTION BY INGESTING OCEANS OF DATA."

including Tesla (TSLA) CEO Elon Musk and Apple (AAPL) co-founder Steve Wozniak penned an open letter on March 29 calling for a six-month pause in the development of ever more powerful large language models and for increased oversight of AI development. The letter warned, “AI systems with human-competitive intelligence can pose profound risks to society and humanity.”

Cynical observers might dismiss the current wave of enthusiasm surrounding generative AI as just the latest hype cycle spawned by the technology industry destined to fade into semi-relevance like consumer applications for 3D printing, fully autonomous vehicles, cryptocurrencies, the metaverse, and non-fungible tokens (NFTs). Over the long term, however, this degree of skepticism toward AI and its real-world applications might prove shortsighted given the technology’s underlying power and its potentially wide set of use cases across consumer and business environments.

FROM THE JANUARY EFFECT TO THE IDES OF MARCH

EXECUTIVE SUMMARY

- Seven stocks drove 80% of the S&P 500's 1Q23 return.
- The March bank failures represent a Fed-induced breakage.
- Liquidity risk was reduced but a credit contraction is likely.
- Inflation should gradually cool, but wages could be sticky.

The first quarter was full of surprises for investors, including a 20.5% rally in the mega cap technology-focused Nasdaq 100 index, a 150-basis point decline in yields on the 2-year U.S. Treasury note yield in mid-March, and a brief plunge in U.S. crude oil prices below \$70 per barrel. On the economic data front, a huge upside surprise of 517,000 workers added to domestic payrolls in January (later revised to 474,000) blew away the 225,000 mid-point of the estimate range from a contemporaneous Bloomberg survey of forecasters. The biggest thunderbolts of all, however, were the failures of several U.S. regional banks during the week of March 6-12 and the forced takeover of troubled Swiss lender Credit Suisse the following week. The multi-week period of acute stress across the U.S. and European financial systems rendered the major market storylines from January and February mere afterthoughts. Rapid and aggressive intervention from regulators to curb a potential contagion of deposit outflows from U.S. regional banks calmed the market environment by the final week of March. As the second quarter begins, questions about the potential impact of the recent banking sector turmoil on Federal Reserve policy, credit growth, bond yields, and corporate earnings are front of mind for most market participants.

UNLOVED WINTER RALLY

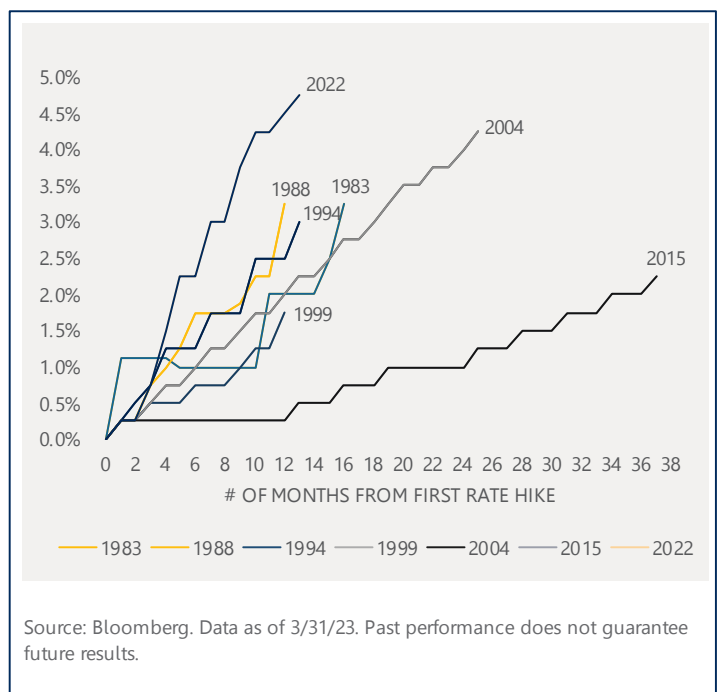
For several months prior to the warp-speed failure of Silicon Valley Bank on March 9, market sentiment had been improving, most economic data were stronger than expected, and fears of an imminent recession had been suppressed. The reason? Beginning in mid-October, a set of generally market-positive developments materialized. First, the emergence of signs that inflation in the U.S. was substantially cooling breathed hope into the narrative that the Federal Reserve would soon end its most aggressive rate hike cycle in over forty years (see Chart 1). Second, the short-term global growth picture improved significantly relative to expectations. Early forecasts for a historically mild winter in energy-fragile Europe and China's

pivot from its Zero-COVID policy to a full-scale reopening meant a global recession was probably off the table for 2023. Third, results from the bulk of third quarter U.S. corporate earnings season were better than many of the growing band of pessimists expected. Lastly, overstretched bearish positioning in the wake of a grinding 25% decline in the S&P 500 from January 4 to October 12 created fertile ground for a countertrend upside move.

ECHOES OF 2021

Many of the most beaten down areas of the equity market in 2022 were unlikely leaders in the first six weeks of the year. For some investors, the low-quality nature of the rally probably stirred up memories of the speculative excesses of 2021. The UBS Profitless Technology Index surged 33% to begin the year through February 15. This index is a basket of stocks designed to track the performance of emerging high growth technology and technology-enabled companies which have yet to complete a full-year with positive earnings. A wave of tax-loss selling in the fourth quarter by investors who wanted to realize losses sustained in 2022 was likely followed by the enthusiastic repurchase of many of those positions after the 30-day wash rule period elapsed. This so-called "January

CHART 1
FED RATE HIKE CYCLES: 1983 THROUGH 2022

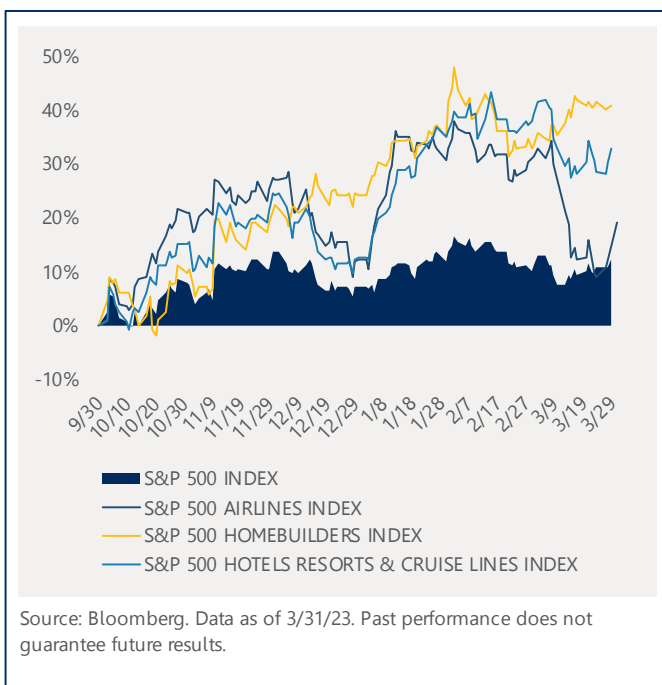


Effect” probably amplified the surprisingly strong start to 2023 for many of the weakest performers in 2022.

A notable group of highly cyclical consumer-oriented industries surged in January before coming back down to earth in February and March. As seen in Chart 2, the S&P 500 industry indexes for airlines, hotels/resorts/cruise lines, and homebuilders have been outperforming the broader market since October. Relative performance strength has been particularly notable with the homebuilding and hotels/resorts/cruise lines groups. Some market commentators have suggested stocks in these industries already priced in a period of forthcoming economic weakness earlier in 2022. Their subsequent rally beginning in October perhaps foretold an improved economic backdrop in 2023 as the Federal Reserve likely approaches the end of its tightening cycle.

Measures of equity market breadth surged in January as the percentage of NYSE-listed stocks trading above their 200-day moving average touched 69% on February 3, the highest level since August 2021. Broad participation faded in February,

CHART 2
 SELECTED S&P 500 INDUSTRIES PERFORMANCE



however, as an increasingly narrow group of mostly mega cap stocks in the technology and communication services sectors supported the broad market. Tesla (TSLA), Meta Platforms (META), and NVIDIA (NVDA) were the top three performing stocks in the S&P 500 in the first quarter. Shares of the three heavyweights (all with market capitalizations greater than \$550 billion) posted massive quarterly gains between 68% and 90%. These three stocks, along with Apple (AAPL), Microsoft (MSFT), Alphabet (GOOG/L), and Amazon.com (AMZN), accounted for approximately 80% of the S&P 500’s 7.44% return in the first three months of 2023 (see Chart 3). Strong relative performance from mega cap technology stocks was chalked up to their perceived safety in a period of increased economic uncertainty. More cynical observers have challenged this narrative as short-sighted given the software, semiconductor, digital advertising, cloud computing, and handset industries historically have not been insulated from the economic cycle. In March, the technology and communication services sectors clearly benefitted from a rotation away from several classic economically sensitive industries in the U.S. stock market including banks, industrial machinery, upstream energy, and base metal miners following the sudden eruption of stress in the U.S. banking system.

YES, SOMETHING BROKE...

Over the course of two weeks in March, the financial world was battered by a pair of U.S. bank failures, a voluntary shutdown of a cryptocurrency-focused lender, and a forced sale of Credit Suisse to rival UBS at a distressed price. The headliner was Silicon Valley Bank (SVB), a northern California-based lender focused on lending to venture capital (VC) firms and their portfolio companies that was shut down by regulators on Friday, March 10 after succumbing to a potent mix of depositor concentration and balance sheet mismanagement. In its final three days of existence, SVB abandoned an attempt to raise over \$2 billion of additional capital, realized \$1.8 billion of losses on balance sheet securities, and suffered over \$40 billion of deposit outflows. The immediate fallout from the failures of SVB and New York-based Signature Bank (SBNY) spurred fears of a banking sector contagion akin to the Global Financial Crisis fifteen years ago, extreme selling pressure in most U.S. regional bank stocks, and a historic decline in U.S. Treasury yields.

U.S. federal regulators engineered a swift and powerful response during the weekend of March 10-12, which included the Federal Deposit Insurance Corporation’s guarantee of all insured and uninsured deposits at the two failed lenders. Equally as important, the Federal Reserve announced a new Bank Term Funding Program (BTFP) that offers loans of up to 12 months to banks, saving associations, and credit unions that pledge high-quality collateral to be valued at par regardless of the securities’ market value. Critically,

the BTFP facility was designed to enable U.S. banks to avoid forced sales of securities with unrealized losses held on their balance sheet to meet deposit outflows. As seen in Chart 4, the pace of U.S. banks' borrowings through the BTFP and the Fed's discount window (the central bank's traditional liquidity backstop) ramped up in the second half of March but has stabilized in recent weeks.

The SIVB and SBNY failures represent a breakage in the real economy catalyzed by rapidly tightening monetary policy. They were among the first high profile ruptures related to the "long and variable lags" between the onset of Federal Reserve rate hikes and their eventual slowing impact on the economy. In hindsight, it is not surprising that the VC industry was one of the initial areas of the economy to come under stress as the cost of money was pushed sharply higher over the last 12 months. Especially in recent years, the VC industry had become populated with increasingly aspirational business plans that required large amounts of cash to launch or capture market share. As markets for financing innovation-focused startups closed beginning in early 2022, SIVB's customers began using the money they raised in previous years to finance their operations. This "cash burn" was avoided when financing markets were open and SIVB's deposit base was growing and stable. But the VC funding environment began to deteriorate in early 2022 as surging inflation forced the Federal Reserve into its most aggressive rate hike campaign since the 1980s.

...BUT THIS IS DIFFERENT THAN 2007-2009

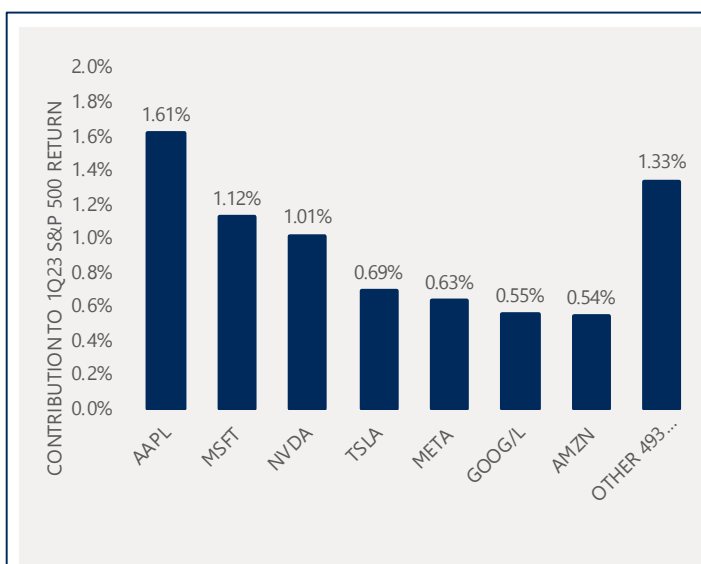
The acute phase of financial stress that erupted in March was most likely nipped in the bud by the actions of U.S. regulators to backstop liquidity in the banking sector for up to 12 months. In aggregate, U.S. banks are better capitalized and less exposed to counterparty risk than they were heading into the Global Financial Crisis (GFC) of 2007 to 2009. Importantly, however, capitalization ratios do not incorporate unrealized losses in both balance sheet securities and loans. The Fed's BTFP facility should address accounting losses on the balance sheets of U.S. banks, but the potential damage to loan books in the event of an economic slowdown is not under the central bank's protective umbrella. Mark-to-market losses in U.S. Treasuries and agency mortgage-backed securities (some of the safest securities in the world) on SIVB's balance sheet brought forth the lender's liquidity crisis, not the deeply impaired collateralized mortgage debt obligations held by Lehman Brothers, AIG, and others in 2008. This has created a self-limiting component to the liquidity challenges facing regional banks because episodes of fear in markets that result in lower U.S. Treasury yields (and higher prices) reduce the unrealized losses

of longer duration securities held on banks' balance sheets. Put differently, the "problem assets" in the current banking crisis tend to increase in value during market stress, whereas the opposite was true during the GFC.

NOT A GREASE FIRE, BUT MAYBE A SLOW BOIL

Although we do not view the events of March as another "Lehman moment," they are likely to accelerate the transmission of restrictive monetary policy into the domestic economy. Enhanced regulatory oversight of regional and sub-regional banks focused on capital requirements, balance sheet accounting, and depositor concentration is likely to weigh on aggregate industry profits. Higher funding costs needed to minimize deposit outflows or attract deposits will probably compress banks' net interest margins in coming quarters. Lending institutions facing profit headwinds tend to become more selective with creating and extending loans, which could lead to slower credit growth across the economy. A slowdown in the provision of credit from U.S. banks as they prioritize liquidity is likely to weigh on economic activity especially in areas like construction and commercial real estate. Weakening loan growth is also likely to keep inflation from accelerating in coming months, which could cement the end of the current Fed rate hike cycle.

CHART 3
CONTRIBUTION TO S&P 500 FIRST QUARTER RETURN



Source: Bloomberg. Data as of 3/31/23. Past performance does not guarantee future results.

To gauge the extent of credit contraction in coming months, investors will no doubt pay close attention to the Federal Reserve's Senior Loan Officer surveys. These quarterly surveys indicate whether lending standards at U.S. banks are tightening or easing for consumer loans, construction & industrial loans, and commercial real estate loans. On the communications front, commentary from bank management teams regarding deposit trends, loan growth, credit loss provisions, and exposure to potentially troubled areas of the commercial real estate market during mid-April (first quarter earnings season) and mid-July (second quarter earnings season) will be crucial. Notably, high yield credit markets have not indicated rapidly building stress. As seen in Chart 5, the yield-to-worst on the Barclays Capital U.S. Corporate High Yield Index (the additional yield investors demand to purchase below investment grade debt compared to a similar maturity Treasury security) climbed about 100 basis points in the middle of March but remains well below levels seen in prior periods of heightened stress in 2011, 2015-16, and 2020. In recent years, many U.S. companies extended the average term of their fixed rate debt at historically low rates. This has driven the overall corporate sector's interest expense-to-cash flow ratio near multi-decade lows.

TREASURY MARKET VOLATILITY

The most extreme market volatility in March occurred in rates markets, not in the broad credit market or at the index-level in the U.S. stock market. It is difficult to understate the magnitude of recent yield movements at the short end of the U.S. Treasury curve. The yield on the policy-sensitive 2-year U.S. Treasury note plunged from a 15-year intraday high of 5.08% on March 7 to 3.60% intraday on Friday, March 24 before stabilizing near 4.00% over the last two weeks. The two-day drop in 2-year note yields from the close on Thursday, March 9 (4.87%) to the close on Monday March 13 (3.98%) was larger than the declines over the periods of September 12-15, 2008 (Lehman Brothers failure) and September 11-13, 2001 (9/11 attacks). Meanwhile, the S&P 500 experienced a pedestrian drawdown of 4.8% from March 6 to March 13, although financial, energy and real estate sectors suffered peak-to-trough declines of 15% or more during the first quarter. A deeply inverted Treasury yield curve (when shorter dated maturities yield considerably more than their longer dated counterparts) suggests government bond market participants expect the Federal Reserve to ease policy in response to an economic slowdown.

WALK AND CHEW GUM

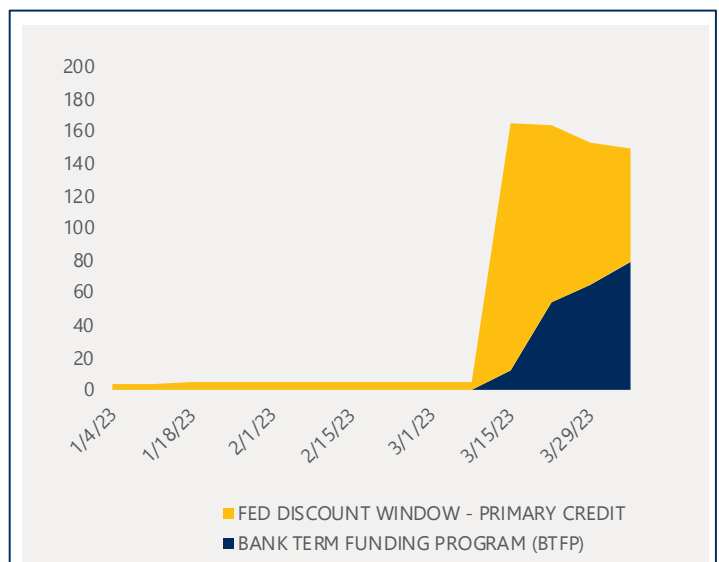
In thinking about the events of March, many investors are probably asking themselves: Can the Federal Reserve walk (battle inflation) and chew gum (alleviate episodes of acute

financial instability) at the same time? Over the short term (1-6 months), we think policymakers can most likely pull it off given the initial stabilizing impact of the emergency BTFP liquidity facility. As previously noted, this program substantially lowers or even removes the risk over the next 12 months that U.S. banks might be forced to liquidate government securities with unrealized losses in response to a wave of deposit outflows. Over a more intermediate-term period, however, a higher level of skepticism is probably warranted considering policymakers' main inflation-fighting tool (rate hikes) was a major driver of the recent banking sector wobbles. Fed Chairman Jerome Powell and his colleagues are trying to thread an increasingly delicate needle by combatting inflation without pushing the economy into a recession, while simultaneously keeping a lid on bouts of financial instability.

On March 22, the Federal Reserve delivered what many observers described as a "dovish hike" by lifting the policy rate by 25 basis points to a range of 4.75% to 5.00% and signaled that recent bank failures had further tightened financial conditions. Fed funds futures as of April 12 implied a 71% probability of another 25 basis point Fed rate hike at the May 2-3 Federal Open Market Committee (FOMC) meeting, up sharply from 24% on March 24. As of April 12, a notable

CHART 4

THE FED'S LIQUIDITY PROGRAMS (\$BILLIONS)



Source: Bloomberg. Data as of 4/5/23. Past performance does not guarantee future results.

CHART 5

U.S. HIGH YIELD BOND SPREADS ARE NOT SIGNALING DISTRESS IN CREDIT MARKETS



gap remains between market expectations for the Fed's policy rate at year end 2023 (4.4%) and the median forecast from the FOMC's Summary of Economic Projections (5.1%). We expect another 0.25% rate hike at the FOMC's May 2-3 meeting followed by a pause at the June 13-14 meeting. This assumes further cooling in domestic inflation and a moderate slowdown in bank lending during April and May.

IS INFLATION FINALLY TRANSITORY?

It was clearly misguided for Fed officials (and many in the investment community) to describe accelerating inflation in 2021 as "transitory" while many middle-class Americans struggled with surging shelter, food, and energy costs. And yet, parts of the original argument that excessive inflation would prove fleeting are now coming together nearly 18 months after the term "transitory" was abandoned by Chairman Powell. Headline inflation in the U.S. likely peaked in June 2022 when the consumer price index (CPI) reached an annual rate of 9.1% and has decelerated to 5.0% over the 12-month period spanning April 2022 to March 2023. Prices of goods including used cars and large household appliances have cooled markedly over the last nine months and are now bordering on deflation as many pandemic-driven supply chain bottlenecks have been resolved and consumers have shifted toward services spending. Meanwhile, the shelter component of the CPI basket

is very likely on the verge of substantial disinflation if one assumes cooling in more timely measures of housing costs, like Zillow's observed rents indexes, will lead the official CPI data.

"CORE SERVICES" INFLATION AND WAGES

There is a large piece of the inflation puzzle, however, that may remain peskier and more persistent. Fed officials have pointed to the services sector as the most important part of the U.S. inflation dynamic in coming quarters. Their concern is that inflation in many parts of the services economy may prove stickier than hoped amid a broad shift in consumer spending toward services and away from goods like autos, washing machines, computer monitors, and exercise equipment. As Chart 6 depicts, the Atlanta Fed's measure of annual core sticky inflation excluding shelter (which includes recreation, food away from home, medical care services, education, household furnishings, cell phone plans, and home maintenance services) has cooled from a peak of 6.1% in September to 5.1% in February. Services inflation excluding shelter is an important variable in projecting wage cost trends. This is because the domestic economy is predominantly services-oriented, and a majority of the labor force are service workers. If service sector employees continue to receive annual pay bumps near 5%, it could make the Federal Reserve's goal of restoring broad inflation in the U.S. to an annual rate of 2% out of reach absent a recession.

We have seen some signs of cooling in official labor market data. The four-week moving average of initial weekly claims for unemployment insurance in the U.S. touched a 14-month high of 242,000 in late March. Job openings fell to a 21-month low of 9.9 million in February but are still approximately 4 million more than the number of unemployed persons in the U.S. who are actively looking for a job. Year-over-year average hourly wage growth has cooled from a peak of 5.9% in March 2022 to 4.2% in March 2023 but is still elevated relative to the pre-2020 trend. A combined 1.03 million workers were added to U.S. nonfarm payrolls in the first quarter, down from 1.68 million in the first quarter of 2022 but nearly double the average of 548,000 in the 40 quarters from 2010 through 2019. Taken together, the above suggests only a modest amount of tightness has come out of the labor market in recent months.

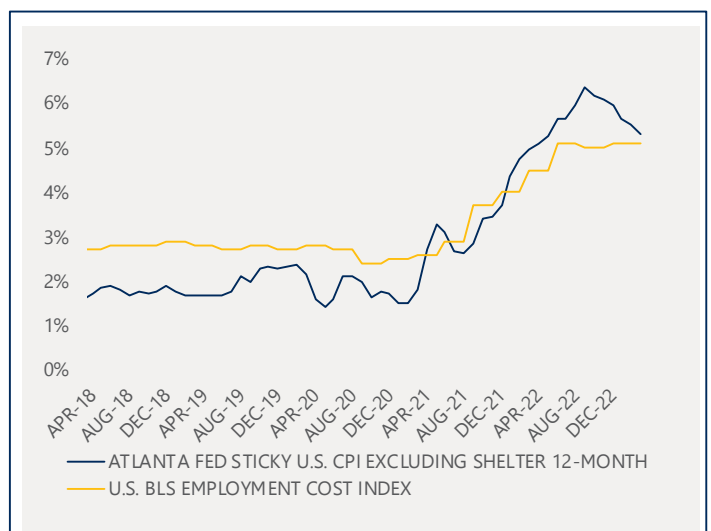
OUTLOOK AND POSITIONING

Over the next three to six months, we continue to expect an economic environment in which inflationary pressures in the U.S. subside at a pace between gradual and frustratingly slow. We think the U.S. labor market will cool but not enough for the Fed to justify cutting its policy rate. Of course, the recent banking sector stress and financial stability concerns require close monitoring. As noted earlier, a substantial retrenchment in bank lending could lead to an economic slowdown and an earlier-than-expected shift in the Federal Reserve's policy stance toward dovish territory. We would probably need to see a more menacing bout of financial instability than occurred in March to conjure for the Federal Reserve to seriously consider cutting rates in 2023.

U.S. households and corporations appear far less vulnerable to higher interest rates than during previous cycles. For instance, a vast majority of U.S. homeowners locked in sub-4% 30-year mortgages prior to the onset of the rate hike cycle in March 2022. In contrast, during the years leading up to the GFC, adjustable-rate mortgages were commonly extended to sub-prime borrowers with little or no down payment and dubious proof of income. Although credit card debt and delinquencies have been rising in recent months, the total burden of consumer debt payments as a percent of disposable income is near multi-decade lows. The surge in U.S. household savings as a percentage of disposable income from April 2020 through March 2021 led to roughly \$2 trillion of excess savings compared to the pre-pandemic trend. In aggregate less than half of this excess savings has been tapped into by consumers, which suggests another several quarters of resilient consumer spending.

We recommend client portfolios remain near, or slightly above, neutral risk exposure (equity and credit) and look for opportunities to reduce risk if markets overshoot to the upside in coming months. At some point over the next 6 to 12 months, we expect the cumulative effect of approximately 500 basis points of Fed rate hikes to weigh on economic activity and corporate earnings. Absent signs of a deep and protracted recession, a drawdown of 10% to 15% in the U.S. stock market will likely present an attractive opportunity to position client portfolios for the next durable equity bull market. In both equity and fixed income allocations, we believe investors will be well-served to focus on higher quality areas of the market. In fixed income markets, examples include shorter duration Treasuries and investment grade corporate bonds. Investors should probably avoid extending duration too much in fixed income allocations following the sharp drop in Treasury yields during March. In equity markets, many companies in the healthcare sector provide an attractive balance of near-term cash flow visibility, reasonable valuations, and relatively healthy balance sheets. Certain industries and companies in the cyclical energy, materials, and industrial sectors are worth considering for portfolios given the exposure they provide to important secular themes including automation, supply chain reshoring, increased global defense spending, energy grid expansion, and the renewable energy transition.

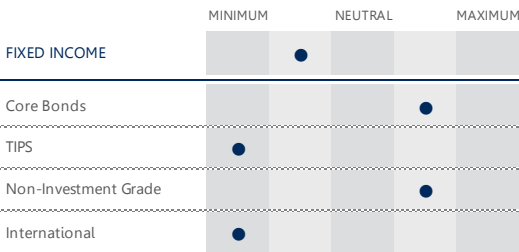
CHART 6
SERVICES INFLATION EX-SHELTER AND WAGES



Source: Bloomberg. Data as of 3/31/23. Past performance does not guarantee future results. The Atlanta Fed sticky-price consumer price index is a weighted basket of items that change price relatively slowly.

ECONOMIC OUTLOOK AND INVESTMENT POLICY

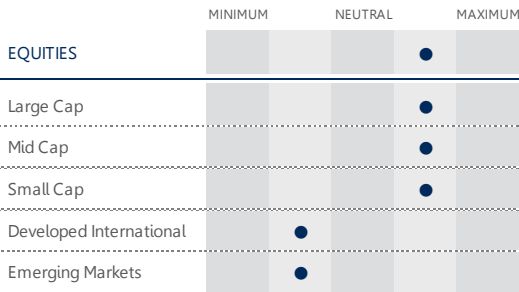
ECONOMIC FACTORS	CURRENT OUTLOOK
U.S. GDP Growth	The median estimate of full year 2023 real U.S. GDP growth in a Bloomberg survey of forecasters improved from 0.0% in mid-February to 1.4% in early April.
Federal Funds Rate	As of April 14, fed funds futures markets implied 84% odds that Fed officials will hike the policy rate by a final 0.25% increment on May 3 to a range of 5.00% to 5.25%.
Inflation	Market-based expectations for annual inflation in the U.S. over the next two years declined from a 7-month high of 3.4% in early March to 2.5% in mid-April.
Employment	Recent declines in U.S. job openings and an increase in weekly jobless claims suggest the domestic labor market has become a bit less tight in the first quarter.
Consumer Confidence	The Univ. of Michigan's consumer sentiment index has trended higher since recording an all-time low in June 2022 but remains well below its 2012-2021 range.
Oil	China's reopening and a 1.1 million barrel-per-day production cut by OPEC and its allies beginning in May could keep WTI above \$80 per barrel in coming months.
Housing	A stabilization in mortgage rates and a cooling in home price gains have led to a modest pickup in sales activity as the spring selling season gets underway.
International Economies	Among the world's biggest economies, India (6.9%) is projected to grow the most in 2023, followed by China (5.3%), Australia (1.7%), Mexico (1.5%), and the U.S. (1.4%).



CURRENT OUTLOOK

The back-up in yields across the fixed income universe over the last 15 months has made high-quality bonds a more attractive component for diversified portfolios due to the combination of stability and income they can provide in most market environments. This contrasts with most of the period from 2009 to 2021, in which easy Fed policy and ultra-low yields suppressed the income component of bonds. Elevated Treasury market volatility and aggressive expectations for Fed rate cuts later in 2023 have probably put more downward pressure on long-term bond yields than is justified by the current economic backdrop. In mid-January, we recommended allocations to short-term Treasuries be further increased in our three most conservative portfolios. If signs of a substantial deterioration in the U.S. labor market or corporate profits emerge in coming months, we would likely consider further increasing our recommended allocation to high-quality segments of the fixed income universe and reducing our recommended exposure to non-investment grade bonds.

We believe most fixed income portfolios should target a neutral or moderately lower-than-benchmark duration given 1) the inverted structure of the Treasury yield curve and 2) a still-wide set of potential Fed policy outcomes ranging from several more 0.25% hikes to substantial rate cuts beginning in late summer. Depending on the path of Treasury yields, it may make sense to selectively add duration in client portfolios depending on the objective. Treasuries remain favored over corporates when purchasing maturities less than one year, given corporate illiquidity in this maturity range.

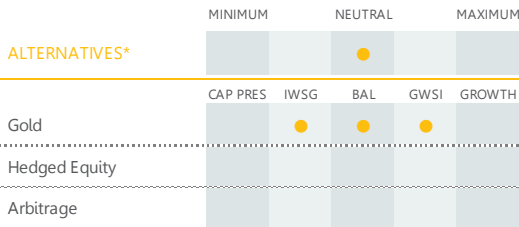


CURRENT OUTLOOK

In our view, a moderate equity overweight remains justified given the Federal Reserve is likely near the end of its rate hike cycle and inflationary pressures are likely to continue cooling off in the first half of 2023. An environment of decelerating inflation, high, but relatively stable policy rates, and a labor market that gradually slows from overheated territory should provide a decent backdrop for stocks. The impact of recent banking sector stress on the economy is a clear risk but is likely to take several quarters or more to drag on consumer spending and broad economic activity.

The S&P 500 is certainly not cheap with a forward 12-month price-to-earnings ratio around 18.5, which is 5% to 10% more expensive than its long-term average. Earnings expectations will be key in determining the path of stocks in coming months as further multiple expansion seems unlikely. We think many companies in the healthcare sector provide an attractive balance of near-term cash flow visibility, reasonable valuations, and relatively healthy balance sheets.

Certain industries and companies in the cyclical energy, materials, and industrial sectors are worth considering for portfolios given the exposure they provide to important secular themes including automation, supply chain reshoring, increased global defense spending, energy grid expansion, and the renewable energy transition. A growing list of mega cap technology sector companies appear fully valued following a strong five-month run. The classic defensive sector duo of consumer staples and utilities have seen valuations come back down from elevated levels in the fourth quarter.



CURRENT OUTLOOK

Over the last seven months, we recommended that hedged equity and merger-arbitrage strategies be sold in client portfolios and reallocated to a combination of short-term Treasuries and cash. The ultra-low interest rate world of the last 12 years appears to be shifting to one in which market interest rates establish trading ranges meaningfully higher than existed for most of 2009 through 2021. In this environment, we expect the risk-adjusted return benefits of most alternative strategies to subside especially compared to assets traditionally viewed as risk-free including cash and short-term U.S. Treasury notes.

Although gold did not produce positive absolute returns in 2022, it held up better than the broad stock and bond market last year. The precious metal rallied 8% in the first quarter to within 5% of its all-time closing high of \$2,063 an ounce on October 6, 2020. We believe gold can benefit most client portfolios given its low historical correlation with stock prices and its tendency to behave as a safe haven asset in periods of equity market stress. The macroeconomic backdrop appears favorable for gold given the Fed's rate hike cycle is likely nearing an end, inflation remains elevated, and many central banks in Asia and the middle east drastically increased gold purchases in 2022. Our alternatives allocations, as seen in the table to the left, are designed to decrease the overall risk profile of our five investment objective-based portfolios (CAP PRES, IWSG, BAL, GWSI, and GROWTH).

The above minimum/neutral/maximum recommendations represent MainStreet Advisors' current positions relative to our Strategic Asset Allocation ranges. Views expressed have a 6-12 month horizon and are those of the MSA Investment Committee.

*Cap Pres: Capital Preservation, IWSG: Income with some growth, Bal: Balanced, GWSI: Growth with some income

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