

Rate Expectations



Cliffs of Moher, Ireland Caitlin Dixon, Director of Financial Planning

Q1 2024 - KEY TOPICS

- 1. The U.S. economy remains unstoppable and the rest of the world is showing resilience too.
- 2. The Federal
 Reserve is playing a
 risky waiting game
 while investors
 clamor for interestrate cuts.
- 3. Inflation's progress stalled in the first quarter but the setback appears temporary.
- 4. The stock market's initial broadening this year is a good sign even though the extended wait for rate cuts has hurt some asset classes as well as bonds.
- 5. Private credit is thriving in an opportunity-rich environment, and we continue to add to the category.



Federal Reserve Chair Jerome Powell led a steep interest-rate hike (shown in our October 2022 cartoon) to conquer inflation, and suggested late last year that the descent would start soon. But with inflation stalling and the economy still strong, he is in no hurry.

"We can have high times if you'll abide." Grateful Dead ("Sugar Magnolia")

This was supposed to be the Year of the Pivot, marking a much-awaited move by the Federal Reserve bringing interest rates down from rarefied air above 5% to a level where companies and investors can breathe more easily. We still expect that process to begin this year, but now in the back half and with fewer cuts. The theme has instead turned into the Great Rate Wait.

Jerome Powell, the Fed head and longtime Deadhead, was widely expected to have the Fed truckin' toward lower rates by now. Instead, he has investors in bonds and some other underperforming asset classes – bear with us for one more Dead lyric – going down the road feelin' bad after the decision to hold off on rate cuts sent yields higher. Most stocks, though, have abided the delay well, or at least did until an April slump pulled returns lower. The S&P 500 had

its best first quarter since 2019 and enjoyed broadened support beyond technology and artificial intelligence-tied stocks, with four of 11 sectors enjoying double-digit returns.

Powell and company are counting on conditions holding firm while they sit tight, poised to achieve a rare soft landing for the economy even as inflation resists the final push down toward 2%. So far, so good. Robust activity in the first quarter prompted the International Monetary Fund to boost its GDP estimates for the full year for both the U.S. and global economies.

Other threats abound, not least of which are wars in Gaza and Ukraine and the chance that either conflict could widen, as the exchange of hostilities between Israel and Iran illustrates. Rising energy prices and new global supply chain challenges pose a heightened risk to global inflation.

Despite the risks, we believe this bull market has staying power. Markets continue to embrace the Al wave and its potential impact on business productivity and the risk of a near-term recession has greatly receded. Federal infrastructure spending from three big-ticket programs – the Infrastructure Act (2021), the CHIPS and Science Act (2022) and the Inflation Reduction Act (2022) – is adding to economic momentum. Rate reductions, whenever they come, should help bonds and provide a positive catalyst for small caps in particular.

We maintain tactical overweights to U.S. large- and small-cap stocks and recommend that clients remain fully allocated to target levels in the higher-, medium- and lower-risk categories.

Please continue on for our full quarterly discussion of issues affecting the economy and markets.

1. The U.S. economy remains unstoppable and the rest of the world is showing resilience too.

The global economy has endured what seems like a full decade's worth of challenges in the 2020s already: a worldwide pandemic, wars in Eastern Europe and the Middle East, the highest inflation in decades, the steepest interest rates in years. Yet with the decade now at the one-third mark, the near-term outlook is solid and improving despite ongoing challenges.

To call this another Roaring Twenties would be misleading, as evidenced by the International Monetary Fund's modest growth estimates – upgraded in April – of 3.2% for the world economy and 2.7% for the United States this year. Kristalina Georgieva, the IMF's managing director, cautions that this could turn into the Tepid Twenties without measures to boost productivity and lower debt burdens. For at least the year ahead, however, we think investors can draw confidence from not only steady economic growth amid adversity but also the prospect of easing financial conditions ahead.

The U.S. economy remains the unquestioned global leader, holding firm so far in the face of high interest rates:

- Key indicators have turned positive. The Leading Economic Index, which tracks forward-looking data measures, posted its first monthly increase in two years. Among major indicators, only the inverted yield curve – short-term bonds yield more than long-term bonds – suggests a future recession.
- GDP is robust. The economy's first-quarter annual growth rate, estimated by the Atlanta Fed at 2.9%, reflected an inevitable easing from the vigorous pace of the prior two quarters the best second half since 2014. But it remains within the normal pre-pandemic range.

Economic Indicators



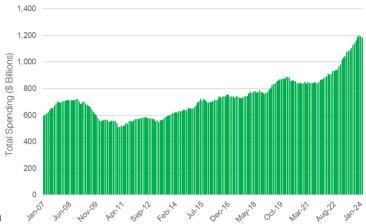
- The job market is healthy. The labor market is cooling gradually as job openings and resignations decline but shows no signs of stress. Businesses continue to hire, layoffs remain low, and unemployment of 3.8% is near a 50-year bottom.
- Consumers are hanging in there Consumer sentiment as measured by the University of Michigan sagged for months before rising to a three-year high in March amid market gains and expectations for inflation to continue to ease. A broad measure of consumer spending which includes services from data in the government's core PCE price index shows overall consumer spending trending higher on an inflation-adjusted basis.
- The corporate outlook is upbat. S&P 500 companies are well past their profits slump, estimated by FactSet to have posted higher year-over-year earnings from January through March for a third consecutive quarter of growth. In a nationwide survey of chief financial officers in March by Duke University and the Richmond Fed, companies signaled increased optimism about the economy and their own firms.
- Manufacturing is recovering. Factory activity expanded in March on a sharp rebound in production and strengthened demand, ending 16 consecutive months of decline.

The economy is not without soft spots. The national debt has accelerated by more than \$15 trillion in the 2020s to \$34 trillion, an increasing worry for the future. Inflation has proven sticky. And we are watching for evidence of consumers tiring, given that excess savings have fallen from a peak of \$2.1 trillion to \$321 billion.

One important tailwind is the substantial amount of government stimulus still being provided. Much of it has shifted from subsidizing consumers and discretionary spending toward subsidizing investment in infrastructure, clean energy, and semiconductor research and manufacturing. Although the three multibillion-dollar programs funding them were enacted several years ago, it takes time for the money to flow into the economy. It is now flowing.

Construction spending already has been soaring since 2022. In the 12 months ended in February, it was up 32% in manufacturing projects and 36% in the public safety category, according to Associated Builders and Contractors data.

Construction Spending Surges January 2007 – February 2024



Government Program (Date Enacted)	Amount (\$)	
Infrastructure Act (November 2021)	550B - 1.2T	
Cleaning Drinking Water	55B	
Broadband Internet Access	65B	
Repair and Rebuild Roads and Bridges	110B	
Modernizing Public Transit, Ports, and Airports	198B	
Energy Infrastructure and EV Charging Stations	73B	
Climate Change and Pollution Infrastructure Resilience	71B	
CHIPS Act (August 2022)	53B	
Manufacturing Subsidies	39B	
R&D, Worker Training, Global Partnerships	14B	
Inflation Reduction Act (August 2022)	433B	
Energy Security and Climate Change	369B	
Affordable Care Act Extension	64B	

Internationally, the outlook is more muted but stable. The European economy flirted with recession at the end of 2023 amid continuing threats from high energy costs, competition from surging Chinese imports and consequences of the ongoing war in Ukraine. Economic momentum has picked up, however.

Japan, too, slipped into near-recession late last year and ceded its position as the world's third-largest

economy to Germany as a consequence of its aging and shrinking population. But it appears on the upswing with deflation giving way to near 2% inflation, wages climbing, and an ill-advised experiment with negative interest rates ended.

While China has grappled with falling prices and a slowdown since the pandemic, the latest data show the economy rebounding at the end of the first quarter. Exports, electronics and manufacturing all strengthened, giving the economy a chance to attain the government's ambitious target of 5% growth this year.

One downside of an upgraded global economic outlook: Resurgent demand for raw materials could reaccelerate global inflation. Prices of copper, oil, gas and other commodities have already jumped this year.

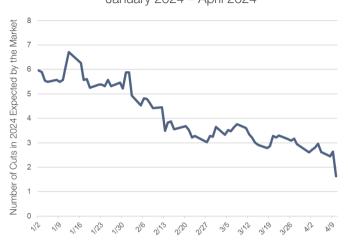
Geopolitical risks are ever-present, and wars that show no signs of ending imminently in Ukraine after two-plus years and Gaza after six months pose particular threats. An expansion of either conflict would worsen the outlook for the global economy, which so far has weathered most challenges reasonably well.

2. The Federal Reserve is playing a risky waiting game while investors clamor for interest-rate cuts.

Twenty-five months into its marathon effort to curb inflation, the Fed has discovered that the last mile truly is the hardest. Given the interruption in inflation's downward progress, standing still with rates at 5.25% strikes us as the appropriate tactic in the short term. But it has created more uncertainty about the outcome of this race.

The Fed's course looked relatively straightforward coming into the year. Steady progress on inflation coupled with public signals by Powell and his colleagues led to widespread expectations they would start lowering the federal funds rate at their meeting in either March or May. Now all bets are off as they await monthly inflation data they like better. We view a rate cut before September as unlikely.

Slower to Go Lower January 2024 – April 2024



Fed's Balance Sheet Provides Support January 2020 – April 2024



What happened? Three straight months in which prices were hotter than expected left the consumer price index at a year-over-year rate of 3.5%, or 3.8% excluding food and energy prices. On a monthly basis, core CPI was up almost 0.4% in both February and March – equivalent to an annual rate of nearly 5% that would be far too high for comfort. (See theme #3 for more inflation specifics.)

The economy's resilience has bought the Fed time. "We don't need to be in a hurry to cut," Powell said recently. How much time is unclear.

The Fed is taking a calculated risk that keeping rates at their highest in 23 years will not begin to take a steeper toll. The gamble should pay off if the economy continues to hold up, as we expect. But staying with rates above 5% for too long may eventually create a recession if they fail to ease up in time.

The flip side of that risk is declaring victory against inflation too soon – a mistake their predecessors have made in the past. Students of Fed history consider the decision to allow inflation to persist in the late 1960s a primary factor in why inflation became entrenched in the '70s. Backing off prematurely, as a result, is what Powell has stressed is important to avoid. "We are just being careful," he reassured Congress recently, ultimately avoiding rate-cut guidance.

The good news is the Fed remains on course to pull off the first clearly definable soft landing – pushing inflation down without a recession – in 30 years. Eight of the last nine times it has aggressively raised interest rates have resulted in recession. In 1994, the lone exception, the economy went on to average more than 4% annual growth through the end of the century.

Today's economy is unlikely to match that, given the budget surpluses and congressional unity of that period versus the fractiousness and deficits we see in Washington three decades later. But achieving a soft landing would certainly be positive for investors.

3. Inflation's progress stalled in the first quarter but the setback appears temporary.

The pothole the Fed hit in early 2024 on its journey toward 2% inflation jolted markets and rate-cut expectations. Looking under the hood, however, we see little evidence of real damage. Inflation continues to proceed down a rutted road and likely faces more delays ahead, as Powell warned in prescient comments more than a year ago: "This process ... is not going to be we think smooth. It's probably going to be bumpy."

The big picture on inflation both in the U.S. and worldwide remains encouraging, albeit with some

cause for concern as supply-chain issues reemerge. Even IMF chief Georgieva, while cautioning in April that inflation has not been fully defeated, acknowledged that the global rate is easing faster than expected – down to 2.3% for advanced economies at the end of 2023 from 9.5% in the summer of 2022.

Inflation Perking Up a Bit January 2020 – March 2024



Shelter Costs Remain Elevated January 2010 – December 2023



Housing and gasoline prices have been the key drivers of above-average U.S. inflation in recent months. Rising housing costs result from a lack of affordable supply and increasing building costs, while the runup in gas is tied to oil's climb worldwide amid soaring geographical tensions in the Middle East and a rebounding Chinese economy.

A cooling of housing costs – the single biggest element in too-hot services inflation – would help inflation resume its downward path. In fact, a trend still not yet fully reflected in official government readings points to those prices continuing to ease more than the CPI shows. The shelter category, which includes housing costs for both homeowners and renters, was up by a concerning 5.7% year-over-year in March. It is a lagging indicator of rents, however. Private data from Apartment List and elsewhere show that the average U.S. apartment cost is actually slightly cheaper than a year ago.

Apartment supply is rising, too, which should weigh on prices and help cool the shelter component further. The total stock of U.S. apartment units is expected to grow by 3.5% in 2024 in the highest annual increase since 1974, according to RealPage, which provides rent-setting software to property managers. In short, we believe U.S. housing inflation is already in the process of falling back to normal.

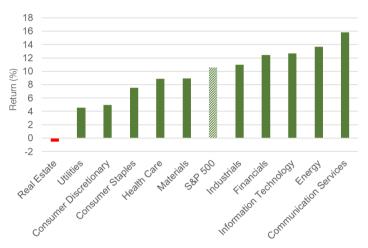
Supply-chain stress is a harder call, vulnerable to unpredictable events such as wars and calamities. The global supply chain, already burdened by disrupted trade routes because of Middle East turmoil, faces another challenge following the Baltimore bridge collapse that blocked access to a major port indefinitely. But we do not anticipate a big impact on prices from the Key Bridge disaster, nor have we seen a material rise in global inflation because of the Red Sea disruptions. The New York Fed's most recent Global Supply Chain Pressure Index showed supply chain conditions about in line with pre-pandemic levels.

4. The stock market's initial broadening this year is a good sign even though the extended wait for rate cuts has hurt some asset classes as well as bonds.

One look at chipmaker Nvidia's 2024 stock

performance – up 60% through April 22nd on top of last year's 139% surge – suffices to show that investors have not fallen out of love with the transformative potential of artificial intelligence. But the U.S. stock market's stellar start this year owes more to balanced strength than to generative Al and tech alone.

Market Broadening S&P 500 – Q1 Sector Returns



The once-Magnificent Seven tech giants that delivered nearly two-thirds of the S&P 500's return in 2023 are down to a Magnificent Two in Nvidia and Meta, with Apple and Tesla underwater in the first quarter and Alphabet, Amazon and Microsoft just fine but no longer in the lead pack. Technology stocks collectively delivered a powerful total return of 12.7% but had much company in double digits this time – joined by communication services and energy, the leaders, as well as financials and industrials.

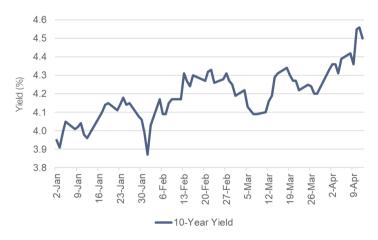
Despite the market's 37% gain from the beginning of last year through March, however, this does not look like a bubble to us. Even acknowledging that valuations are above average, today's market carries no resemblance to the dotcom era or even the bear market of 2022. Corporate profits are stable and growing, companies' balance sheets are firmer, and the enthusiasm and benefits of Al that powered much of this rally appear to have staying power.

Market pullbacks occur regularly and one could occur

at any time, interrupting the rally. Yet, the resilient economy provides no hint of any market meltdown ahead. The S&P 500's total return of 30.5% over the one-year period ended in March was its biggest 12-month gain since October 2021. In all but two of the 27 prior instances when one-year gains exceeded 30%, according to Bespoke, the index was positive in the subsequent 12 months, and the median return was 16.9%.

Some asset classes were left behind when the widely anticipated rate cuts went AWOL. The benchmarks for small-cap and international developed stocks trailed large caps by five and four percentage points, respectively. Bonds had a negative quarter when declining yields reversed course in a reflection of revised rate expectations; bond prices and yields are inversely related. Commercial real estate remained in a slump that began with the pandemic and has been exacerbated by high rates. We believe the market will broaden once rate cuts are made, helping all of those categories.

Rising Interest Rates Create Losses January 2024 – April 2024



Small and mid-sized companies' stocks have tended to rise with the first cuts in previous rate cycles, unlike large caps, which move in anticipation of future cuts. Large caps could languish or even decline once the first cut is made, based on evidence from prior cycles which may or may not be indicative. But the timing of coming cuts could offset that historical tendency. Ordinarily the Fed is cutting in response to

deteriorating economic conditions, which weigh on markets. However, in this cycle, the Fed is cutting to normalize monetary policy as inflation eases in a healthy economy.

International stocks face challenges from weaker economies than the U.S. as well as the consequences of two wars. But they may get a lift soon from rate cuts by foreign central banks. The European Central Bank, the world's second-largest after the Fed, signaled in April that it will likely commence cuts in June, lowering rates before the Fed does.

Japan has regained its appeal for investors; the Nikkei index has rebounded to finally surpass its previous all-time high from 1989. And in Europe, investor sentiment in the 20-nation eurozone as measured by the Sentix research institute was the highest in March since February 2022. Combined, those two regions comprise two-thirds of the international developed markets index.

Markets could move sideways in the near term until we get more visibility about inflation and rate cuts. But a sound economy and substantial fiscal stimulus provide a strong underpinning in the meantime. We think markets will benefit further once we are on the doorstep of cuts.

5. Private credit is thriving in an opportunity-rich environment, and we continue to add to the category.

Private debt assets have increased dramatically since the global financial crisis to a \$1.7 trillion market, as traditional banks have responded to regulations and de-risked by retreating from non-core lending. The regional banking crisis in March 2023 further accelerated this shift from banks to private lenders and asset managers.

Private debt is the extension of credit by non-bank financial lenders and is defined by the entity performing the lending rather than the kind of lending being done. Borrowers typically use the proceeds from these loans for growth capital, mergers and acquisitions, and purchasing assets. Businesses that

seek private capital may pay higher rates than from traditional banks, but they often enjoy greater deal flexibility as well as faster execution on loans.

Altair's first private debt recommendation was in 2020 during the COVID pandemic with a manager that focused on distressed debt and special situations lending to take advantage of the market dislocations. The following year, we expanded our exposure by adding two direct lending managers that provide first lien, senior secured corporate loans to small- and medium-sized businesses.

Given favorable secular trends, we believe the private debt asset category will continue to deliver what is currently an equity-like return but with arguably more moderate levels of risk. To this end, we are now adding another private credit manager with a more flexible mandate to complement our exposures in direct lending and distressed debt.

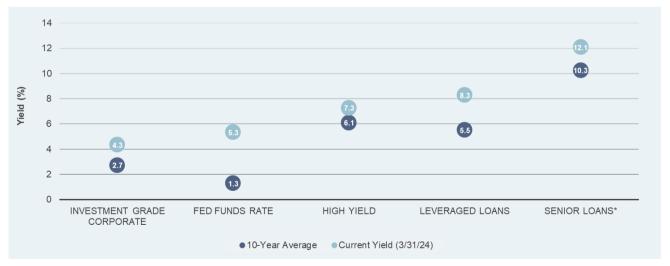
Similar to our direct lending managers, this manager

invests up to half of its portfolio in corporate credit However, it primarily invests in businesses with substantial deal complexity, and also has the ability to invest throughout a company's capital structure. The other half of the portfolio will focus on asset-based finance, which involves lending against collateral such as physical assets, financial assets or contractual cash flows such as auto loans or royalty streams. We believe this wider mandate is an important diversifier for portfolios. These loans have less correlation to the economy and mergers and acquisitions activity. In addition, this strategy has the flexibility to take advantage of market dislocations if or when they arise.

We continue to believe there is opportunity in private debt amid higher-for-longer interest rates and overall market volatility, as a return to a zero-interest-rate environment is unlikely despite the rate cuts that will likely begin later this year. We view this space as well-suited for the medium-risk category in portfolios – one where we can enhance portfolio diversification, while maintaining an attractive total return.

Current Yields Above 10-Year Average

March 31, 2024



Investment Grade Corporate (AGG), High Yield (HYG), and Leveraged Loans (BKLN) utilize end of 1Q24 SEC Yield to reflect the investments actual current yield. *Senior Loans are represented by the CDLI Index, as of 12/31/23.

OUR OUTLOOK

- The Federal Reserve's extended pause without lowering interest rates is a restraint for some markets but strikes us as prudent since premature cuts could reignite inflation. Fed policymakers repeatedly cite the risk of maintaining high rates for too long, so we still believe the first cut will come by fall.
- The U.S. economy is in strong shape and exceeding expectations. We believe inflation will ultimately fall to the Fed's 2% target level without a recession. Spending on infrastructure and other federal stimulus should help extend economic momentum for the rest of 2024.
- Inflation that has failed to cool as expected this
 year is not immediately concerning. While posing a
 continued challenge for many, inflation that is only
 modestly elevated indicates an economy on solid
 footing underscoring the strong labor market,
 the resilience of consumers, and the pricing power
 of businesses.
- Geopolitical friction and high energy costs, both tied closely to the wars in Gaza and Ukraine, pose the biggest threat to the world economy's continued expansion. Absent any shocks, however, the outlook for the rest of 2024 is positive and improving.
- Bond investments should benefit from interestrate cuts whenever they become reality. While bond yields have risen unexpectedly this year as the hoped-for timing of the first cut receded, we do not anticipate any material rise from here. Bond prices respond negatively to rising yields.



QUOTES OF THE QUARTER



"We have avoided a global recession and a period of stagflation—as some had predicted. But there are still plenty of things to worry about."

Kristalina Georgieva International Monetary Fund managing director

"There is no rush to cut the policy rate. ... The risk of waiting a little longer is significantly lower than acting too soon.."



Christopher Waller Federal Reserve governor



You have to really have a crash in employment to derail this consumer."

Diane Swonk
KPMG chief economist



MARKET DATA

U.S. Stocks

The biggest companies – and not just the Magnificent Seven this time – drove the market to new heights in the first quarter as a buoyant economy, declining inflation and expectations of interest-rate cuts encouraged investors. The iShares S&P 500 ETF gained 10.4% in the fastest start to a year in five years, falling just shy of matching the prior three months' best output for any quarter in that period (12.2%). While Nvidia and Microsoft remained high flyers among the formerly Magnificent Seven, a majority of the market gains came from large growth stocks outside the tech sector. Only real estate was negative among the S&P 500's 11 sectors.

Small caps struggled at the start of the year before rebounding as investors embraced risk amid a strong economic outlook, outpacing large caps in March. The iShares Russell 2000 ETF benchmark gained 5.0% – a good quarter, albeit only half the return of large caps, which are better-positioned to benefit from Al advances. Growth stocks outpaced value stocks at all capitalization levels for the three-month period. March saw a sharp reversal of that trend that enabled value to close the gap; the Russell 1000 Growth ETF outperformed its value peer index by 2.4% (11.3%-8.9%).

International Stocks

Stocks in developed markets overseas enjoyed a strong quarter. Only the dollar's 3% jump against foreign currencies kept them from matching the strength of the U.S. rally. The iShares MSCI EAFE ETF, which primarily tracks stocks in Europe, Japan and the United Kingdom, increased by 6.0% as the outlooks for those economies improved. Before conversion translation to the dollar, those stocks were up 10.1% in their local currencies. Japan led the way among major markets with a 16% rally in the Tokyo Stock Price Index (TOPIX) amid growing confidence in the economy. Markets in France, Germany, Spain and the United Kingdom all outperformed the U.S. in March as the global rally spread.

Emerging-markets stocks delivered muted gains amid headwinds from both the dollar and continued weakness in China. The iShares MSCI Emerging Markets ETF rose 2.2%. Investors concerned about China's economy who have made Hong Kong one of the world's worst-performing markets in the 2020s continued to shun it, resulting in an 11.1% quarterly drop for the Hang Seng Index. India's stocks, which rose 20% in 2023, continued to rally amid broadened optimism about the country's growth; a dollar-denominated India benchmark gained 5.7%.

Real Estate

Real estate investment trusts and stocks lagged the broader market in the wake of their fourth-quarter surge and solid 2023. In the U.S., the Vanguard Real Estate Index Fund edged 1.2% lower as expectations for rate relief from the Federal Reserve were put on hold. Regional malls were the only REIT sector to outperform the S&P 500, while diversified, manufactured homes and strip centers were the biggest losers.

International property stocks also pulled back as expectations of a coming global pivot to lower rates temporarily dimmed. The Vanguard Global ex-US Real Estate ETF, proxy for international real estate stocks in more than 30 countries, declined by 0.7%.

Hedged/Opportunistic

Publicly traded senior bank loans and private debt investments (direct lending) both delivered positive returns, outperforming nominal bonds. Investments in publicly traded senior bank loans as gauged by the Invesco Senior Bank Loan ETF gained 1.9%.

Investments in direct loans from private lenders also had a solid quarter. The floating rates used by our direct lending managers fared better than fixed rates when the Fed's rate-cut expectations fell.

Fixed Income

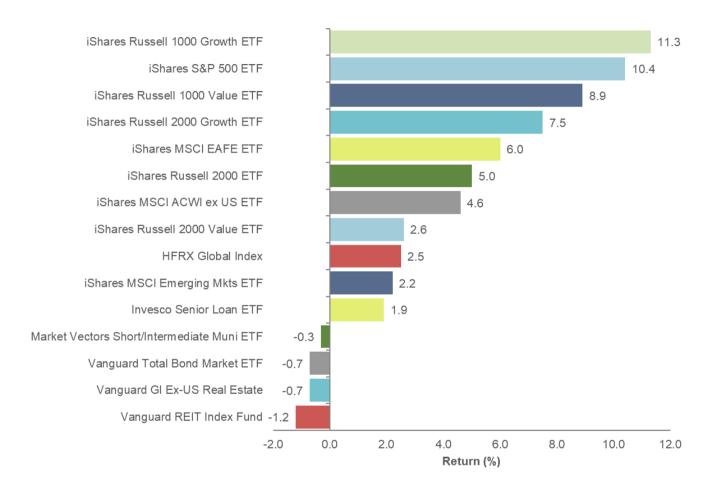
Rising yields crimped the bond market's performance,

resulting in slightly negative returns for both taxable and tax-exempt bonds on the heels of an impressive fourth quarter. The Federal Reserve's decision to hold off on expected rate cuts was the key factor, driving the 10-year U.S. Treasury yield from 3.8% to 4.2% in the first three months of this year. When yields rise, the value of bonds already on the market falls. The Vanguard Total Bond Market ETF declined by 0.7%.

The municipal bond market also took a breather from its late 2023 rally, pressured by both the rise in yields and elevated supply. Altair's municipal bonds benchmark, a blend of the Market Vectors short and intermediate ETFs, inched 0.3% lower.

FIRST QUARTER 2024

Market Returns



Investable Benchmark Returns through March 31, 2024

	Annualized					
	Quarter (%)	Year-to- Date (%)	1 Voor (%)	3 Voar (%)	E Voor (%)	10 Year (%)
	Quarter (70)	Date (70)	1 Year (%)	3 Year (%)	5 Year (%)	io rear (70)
Large Cap Equity						
iShares S&P 500 ETF	10.4	10.4	29.8	11.4	15.0	12.9
iShares Russell 1000 Growth ETF	11.3	11.3	38.9	12.2	18.2	15.7
iShares Russell 1000 Value ETF	8.9	8.9	20.1	7.7	10.0	8.7
Small Cap Equity						
iShares Russell 2000 ETF	5.0	5.0	19.5	-0.3	8.0	7.5
iShares Russell 2000 Growth ETF	7.5	7.5	20.2	-2.8	7.3	7.9
iShares Russell 2000 Value ETF	2.6	2.6	18.3	1.9	7.9	6.7
International Equity						
iShares MSCI ACWI ex US ETF	4.6	4.6	12.8	1.7	5.8	4.1
iShares MSCI EAFE ETF	6.0	6.0	15.1	4.9	7.3	4.8
MSCI EAFE Index - in local 1	10.1	10.1	19.4	10.0	9.9	8.2
Vanguard FTSE Europe ETF	5.0	5.0	14.4	5.6	8.0	4.6
Vanguard FTSE Pacific ETF	6.0	6.0	15.9	0.7	5.9	5.4
iShares MSCI Emerging Mkts ETF	2.2	2.2	6.9	-6.2	1.4	2.2
Fixed Income						
Market Vectors Sh/Inter Muni ETF	-0.3	-0.3	2.3	-0.7	1.0	1.6
Barclays 5 Yr Muni Index ¹	-0.4	-0.4	2.0	-0.3	1.2	1.7
SPDR Nuveen Barclays Muni Bond	-0.6	-0.6	1.9	-1.5	0.9	2.2
Vanguard Total Bond Market ETF	-0.7	-0.7	1.6	-2.4	0.4	1.5
Gl FixedInc Investable Benchmark	-2.5	-2.5	0.4	-4.9	-1.5	-0.4
iShares BarclaysInt Govt/Credit	-0.2	-0.2	2.5	-1.2	0.9	1.4
Alternative						
SPDR Barclays High Yield Bond	1.6	1.6	9.6	1.2	3.1	3.1
Vanguard REIT Index Fund	-1.2	-1.2	8.5	1.7	3.7	6.2
Vanguard GI Ex-US Real Estate	-0.7	-0.7	7.6	-5.5	-2.9	1.5
HFRX Global Index	2.5	2.5	5.7	1.1	3.4	1.6
Invesco Senior Loan ETF	1.9	1.9	11.0	4.5	3.9	3.1
iPath Bloomberg Commodity ETN	2.3	2.3	-1.6	9.5	6.5	-2.4
CEF Blended Benchmark 1	7.2	7.2	12.3	1.2	4.8	5.0
Other Common Benchmarks						
SPDR Dow Jones Industrial Avg	6.0	6.0	21.9	8.4	11.1	11.6
Fidelity Nasdaq Comp. ETF	8.9	8.9	35.3	8.7	17.5	15.8
iShares MSCI ACWI ETF	8.2	8.2	23.2	6.9	10.9	8.8
SPDR Barclays 1-3 Month T-Bill	1.3	1.3	5.2	2.5	1.9	1.2
Inflation - CPI ¹	1.8	1.8	3.5	5.6	4.2	2.8

¹There is no investable equivalent for this index

Source: Financial Times Interactive Data (IDC) and Charles Schwab.

This table was prepared using investment performance and other information obtained from third-party sources, which we believe to be reliable; however, we have not audited the data from these sources and are not responsible for its accuracy.

Past performance is no guarantee of future results.

Disclosures

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The Closed-End Fund Blended Benchmark consists of 60% First Trust Equity Closed-End Fund TR USD Index, 20% Invesco CEF Income Composite ETF, and 20% VanEck Vectors CEF Municipal Income ETF.

The Securitized Credit Benchmark consists of 65% iShares MBS ETF and 35% iShares iBoxx \$ High Yield Corporate Bond ETF.

The U.S. Municipal Bonds Benchmark consists of 65% VanEck Short Muni ETF and 35% VanEck Intermediate Muni ETF.

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