

## Capital Market Overview

Capital markets rallied modestly in the 4th quarter as the S&P 500 Index gained 7.56%, the only positive quarter for 2022. Cooler inflation readings, resilient consumer spending, and better-than-expected corporate earnings buoyed markets during the first two months of the 4th quarter before pulling back in December. Much of the focus remains on the path of future interest rates, recession fears, and the economic and market impact those events may generate in 2023.

Despite the 4th quarter advance, the stock market recorded its worst calendar year since 2008, with a decline of -18.11% for the S&P 500 Index, and a loss of -32.54% for the growth-oriented and technology-heavy Nasdaq Composite Index. Large cap technology stocks and the more interest-rate sensitive assets suffered the most, while value stocks outperformed. In the end, nine of the S&P 500 Index's 11 economic sectors declined. Energy stocks were the bright spot, recording a gain of 65.72% for the sector while Utilities eked out a gain of 1.57% in 2022.

The damage wasn't isolated to the stock market as the investment-grade bond indices suffered double-digit losses for the year as well. In fact, a traditional balanced investment portfolio of 60% stocks and 40% bonds suffered the 4th worst drawdown in the past 100 years.

Recapping quarterly results, the broad-based Russell 3000 Index advanced 7.18% in the period. Value stocks significantly outperformed growth stocks to close out 2022, as the Russell 3000 Value Index returned 12.18% versus a return of just 2.31% for the Russell 3000 Growth Index. Relative performance was mixed going down in market cap size as small caps advanced less than large caps in the quarter, while mid cap stocks outperformed both large and small caps. Larger cap stocks returned 7.24%, as measured by the Russell 1000 Index, compared to the smaller cap Russell 2000 Index return of 6.23%, while the Russell Midcap Index produced a return of 9.18% in the quarter.

## Performance Commentary

The Buffalo Discovery Fund (BUFTX) produced a return of 6.09% for the quarter versus a 6.90% increase for the Russell Midcap Growth Index. Outperformance in the Industrials, Materials, and Health Care sectors was offset by underperformance in Financials and Technology. In sum, our focus on innovation was a broad headwind in 2022 with the Information Technology, Communication Services, and Health Care sectors represented three of the four worst performing sectors within the benchmark. Meanwhile Energy, Utilities, and Consumer Staples, where the secular growth outlook is lacking or where innovation is often tough to justify, were the three best performing sectors.

## Average Annualized Performance (%)

As of 12/31/22	1 YR	3 YR	5 YR	10 YR	15 YR	Since Inception
Investor Class - BUFTX	-28.67	2.22	5.61	10.76	9.48	8.49
Institutional Class - BUITX <sup>1</sup>	-28.57	2.37	5.77	10.93	9.64	8.65
Russell Midcap Growth Index	-26.72	3.85	7.64	11.41	8.61	8.51
Morningstar U.S. Mid Growth Index	-32.37	4.36	8.40	11.34	8.12	-
Morningstar Mid-Cap Growth Category	-27.79	4.14	7.09	10.67	7.81	6.69

<sup>1</sup>For performance prior to 7/1/19 (Inception Date of Institutional Class), performance of the Investor Class shares is used and includes expenses not applicable and lower than those of Institutional Class shares. Data represented reflects past performance and is no guarantee of future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original value. Current performance may be lower or higher than the performance quoted. Performance current to the most recent month end may be obtained by visiting the Funds' website at [buffalofunds.com](http://buffalofunds.com). Each Morningstar category average represents a universe of funds with similar objectives.

## Fund Facts

	Investor	Institutional
Ticker:	BUFTX	BUITX
Inception Date:	4/16/01	7/1/19
Expense Ratio:	1.00%	0.86%
Fund Assets:	\$882.20 Million	
Category:	Mid Cap Growth	
Benchmark:	Russell Midcap Growth Index	

## Management Team



**Dave Carlsen, CFA**

Co-Manager since 2004  
B.B.A. – Univ. of Wisconsin-Madison



**Jamie Cuellar, CFA**

Co-Manager since 2020  
M.B.A. – Southern Methodist  
B.B.A. – Univ. of San Diego

Our focus on high-quality and well-funded companies led to a positive stock selection effect, but the allocation to innovative companies was out of favor and too difficult to overcome. Additionally, shares of smaller companies – those with market capitalizations of \$5.5 billion or less – failed to keep up with their larger brethren, and this is an area where we are also overweight relative to our benchmark. Following the worst performance for equities in more than a decade and growing concerns about recession in 2023, we believe investors sought refuge in the larger index positions within the benchmark. End-of-year volatility spiked associated with sizable tax-loss selling impacting smaller companies and the Technology, Health Care, and Communications Services sector disproportionately.

The 4th quarter was the only quarter of 2022 where equity markets had positive returns, and the broader markets continue to be driven by the interest rate cycle and Federal Reserve (the “Fed”) efforts to tame inflation. The 10-year Treasury yield moved up just eight basis points in the quarter, putting the benchmark yield at 3.88%. That compares to a cumulative increase of 230 basis points through the first three quarters of the year. Cooler readings on inflation suggest the Fed’s interest rate hikes are having their intended impact on demand, and we suspect that future rate hikes will be more modest in size. Regardless of Fed policy, we remain focused on our mission to invest in innovative growth companies while maintaining a consistent discipline around valuation and risk.

## ↑ Top Contributors

**Horizon Therapeutics (HZNP)** was the largest contributor to performance during the quarter. Horizon is a biotech company focused on the development and commercialization of medicines used in the treatment of rare autoimmune diseases. The company received an all-cash offer to be acquired by Amgen for \$116.50/share on December 12. That is more than a 50% premium to where the shares traded just a month prior to the announcement. We do not anticipate other offers and recently sold our position.

**Schlumberger (SLB)** was another positive contributor for the quarter. Schlumberger is an oilfield services company that provides technology for reservoir characterization, drilling, production, and processing. The company generates attractive returns on capital and has a strong competitive position. We purchased the stock in the previous quarter, believing investors did not fully appreciate their growing digital assets and the need for the industry to invest in new production. While the stock has done well, estimates are likely to move even higher as the oil and gas industry stands to benefit from China reopening, Europe’s ban on Russian gas, and the U.S. government ultimately needing to refill the Strategic Petroleum Reserve.

## ↓ Top Detractors

**Varonis Systems (VRNS)** was the top detractor for the quarter. The company sells security solutions that allow enterprises to analyze data and user behavior to protect against breaches and cyberattacks. The company substantially reduced its guidance for revenue growth during the quarter owing to macro-related weakness in Europe, an elongating sales cycle, and foreign exchange headwinds. Further complicating the revenue outlook was the announcement of a subscription-based model, as the transition to this model could weigh on revenue growth for several years. We were surprised and disappointed by the magnitude of the guidance revision and subsequently eliminated our position.

**DoubleVerify (DV)** was also a detractor during the quarter. The company is a leading software platform for digital media measurement and analytics. Shares traded lower as investors grew increasingly concerned about advertising spending against the backdrop of a weakening consumer and tighter corporate budgets. For its part, the company reported strong quarterly results with revenues growing 26% and operating margins improving year-over-year. We recognize there are cyclical headwinds, but DoubleVerify appears well positioned to continue to gain share in digital advertising, and we believe the stock is attractively valued.

## Outlook

2022 is officially in the rear-view mirror, and for that investors can be thankful. Over the past year, markets have been forced to reckon with inflation, an aggressive Fed tightening cycle, war in Ukraine, supply chain disruption, the lapping of trillions of dollars in stimulus payments, and a sharply higher U.S. dollar. We believe most investors would agree that the Fed put too much stimulus into the system and the inflationary hangover proved more than a little transitory.

The good news is that inflation appears to be moderating, even with the economy at full employment. We have seen prices peak for gasoline, ocean freight, used cars, and various commodities. Growth in home prices and rents has slowed. The dollar has weakened. Small business hiring plans are waning. The Fed's work might not be complete, but they have done a lot and it appears to be working.

The bad news is that Fed policy works with a lag, and we have yet to feel the full impact of the tightening cycle. Consumers spending in 2022 was propped up by a historically low savings rate, and the Fed needs to keep rates higher for longer if it really wants to stomp out inflation. If this plays out, it will weigh on consumer spending and economic growth, and it could lead to job losses and recession. The backdrop remains uncertain as companies look to budget for hiring and capital spending into the new year.

All of this seems well anticipated by the markets and corporations with long term risk/reward much improved vs one year ago. During the 4th quarter, we stepped in and invested in some of our favorite companies knowing full well that 2023 could be a challenging operating environment. Time is a competitive advantage for long-term investors, and our strategy is to take a multi-year, risk-aware view and build positions in great innovative companies as the risk/reward compels. We remain focused on dominant companies with strong balance sheets generating attractive returns on capital investment. We believe investing in innovative, well-managed companies with durable competitive advantages trading at attractive valuations will continue to generate outsized multiyear returns. Thank you for your continued trust and support. ▀

## Interested in more info?

For questions or to speak with a relationship manager about adding any of the 10 Buffalo Funds to your portfolio, contact:

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*The Fund's investment objectives, risks, charges, and expenses must be considered carefully before investing. The summary and statutory prospectuses contain this and other important information about the investment company and can be obtained by calling (800) 49-BUFFALO or visiting [buffalofunds.com](http://buffalofunds.com). Read carefully before investing.*

**Earnings growth is not representative of the Fund's future performance. Investing in both actively and passively managed mutual funds involves risk and principal loss is possible. Mutual fund investing involves risk. Principal loss is possible. The Fund invests in small and mid-cap companies, which involve additional risks such as limited liquidity and greater volatility than large-cap companies. The Fund invests in foreign securities which involve greater volatility and political, economic, and currency risks as well as differences in accounting methods.**

As of 9/30/22 the Buffalo Discovery Fund top 10 equity holdings were Calix 2.66%, MSCI 2.53%, HealthEquity 2.10%, AMETEK 2.09%, CoStar Group 1.94%, Martin Marietta Materials 1.92%, Keysight Technologies 1.89%, GoDaddy 1.85%, Natera 1.84%, Copart 1.75%. Top 10 holdings for the quarter are not disclosed until 60 days after quarter end. The opinions expressed are those of the Portfolio Managers and are subject to change, are not guaranteed and should not be considered recommendations to buy or sell any security. Fund holdings and sector allocations are subject to change and are not recommendations to buy or sell any security. The S&P 500 Index is a capitalization weighted index of 500 large capitalization stocks which is designed to measure broad domestic securities markets. The Nasdaq Composite Index is a market capitalization-weighted index of more than 3,700 stocks listed on the Nasdaq stock exchange. The Russell 3000 Index measures the performance of the 3,000 largest publicly held companies incorporated in the U.S. based on market capitalization. The Russell 3000 Value Index is based on the Russell 3000 Index, of companies with lower price-to-book ratios and lower expected growth rates which measures how U.S. stocks in the equity value segment perform. The Russell 3000 Growth Index is a market-capitalization weighted index that measures the performance of those Russell 3000 Index companies with higher price-to-book ratios and higher forecasted growth rates. The Russell 1000 Index is a subset of the Russell 3000 Index and measures the performance of the 1,000 largest publicly-held companies incorporated in the U.S. based on market capitalization. The Russell 2000 Index is an unmanaged index that consists of the smallest 2,000 securities in the Russell 3000 Index, representing approximately 10% of the Russell 3000 total market capitalization. The Russell Microcap Index is a n unmanaged capitalization weighted index of 2,000 small cap and micro cap companies. The Russell Midcap Index measures performance of the 800 smallest companies in the Russell 1000 Index. The Morningstar U.S. Mid Growth Index measures the performance of U.S. mid-cap stocks that are expected to grow at a faster pace than the rest of the market as measured by forward earnings, historical earnings, book value, cash flow and sales. One cannot invest directly in an index. Cash flow is a measure of the cash produced by the firm in a given period on behalf of equity holders. The true measure of the value of a firm's equity is considered to be the present value of all free cash flows. A basis point is one hundredth of a percentage point (0.01%). Yield is the income return on an investment. Refers to the interest or dividends received from a security and is usually expressed annually as a percentage based on the investment's cost, its current market value or its face value. A drawdown is a peak-to-trough decline during a specific period for an investment, trading account, or fund.

Kornitzer Capital Management is the advisor to the Buffalo Funds, which are distributed by Quasar Distributors, LLC.

