Buffalo Large Cap Fund

QUARTERLY
COMMENTARY

March 31, 2024

Capital Market Review

Equity markets continued to move higher in the first quarter of the year as the S&P 500 Index gained 10.56% and closed at an all-time high. The stock market has been quite strong despite dramatic changes in expectations about the timing and size of interest rate cuts since the start of the year. Back in January the market was expecting an interest rate cut in March and perhaps six cuts in total for 2024. However, because of continuing economic strength and stickier inflation, that outlook has now shifted to a June or July rate cut start and maybe only two or three 0.25% cuts for the year. The yield of the 10-year U.S. Treasury note rose to 4.20% at quarter-end, an increase from 3.88% to start the year. The shift in interest rate expectations weighed on bonds during the period and the Bloomberg Aggregate Bond Index declined 0.80%.

Recapping broad-based index results, the Russell 3000 Index gained 10.02% during the period. Growth stocks outperformed value stocks as the Russell 3000 Growth Index advanced 11.23% compared to a gain of 8.62% for the Russell 3000 Value Index. Relative performance improved going up in market capitalization (size) during the quarter as large caps advanced more than small caps. Larger cap stocks produced a return of 10.30%, as measured by the Russell 1000 Index, compared to the smaller cap Russell 2000 Index return of 5.18%. The smaller market cap Russell Microcap Index followed with an advance of 4.68% in the quarter.

Performance Commentary

The Buffalo Large Cap Fund produced a total return of 12.56% for the period, a result that outpaced the Russell 1000 Large Cap Growth Index return of 11.41% and the S&P 500 Index return of 10.56%.

The portfolio performed much as we expected as we had previously reduced our cash weighting while also adding more technology exposure early in the quarter. A large portfolio weighting in Nvidia (6% of assets) and large weighting in Microsoft (12% of assets) helped drive strong returns in the quarter.

Our objective in managing the fund is to produce better than benchmark and peer group risk adjusted returns while also generating more consistent, less volatile returns, characteristics we believe we will continue to produce.

Average Annualized Performance (%)

As of 3/31/24	1 YR	3 YR	5 YR	10 YR	15 YR	Since Inception
Investor Class - *BUFEX*	39.04	11.28	15.85	14.35	16.31	10.73
Institutional Class - *BUIEX*[1]	39.19	11.43	16.02	14.52	16.48	10.90
Russell 1000 Growth Index	39.00	12.50	18.52	15.98	17.85	10.87
S&P 500 Index	29.88	11.49	15.05	12.96	15.63	–
Morningstar Large Growth Category	36.45	7.95	14.89	13.24	15.69	9.49

[1]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 Investor 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. Each Morningstar category average represents a universe of funds with similar objectives.

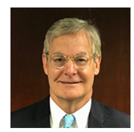
↑ Top Contributors

The top absolute contributors to fund results for the quarter were **Nvidia, Microsoft** and **Amazon.** Nvidia shares continued their prodigious rise that started in January of 2023 with an "eye-popping" return of 82.5% during the quarter as the company significantly raised its guidance and outlook for data center artificial intelligence (AI) chip (GPUs)

Fund Facts

	Investor	*Institutional*
Ticker:	BUFEX	BUIEX
Inception Date:	5/19/95	7/1/19
Expense Ratio:	0.95%	0.80%
Fund Assets:	$129.52 Million	
Category:	Large Cap Growth	
Benchmark:	Russell 1000 Growth Index	

Management Team



Ken Laudan

Manager since 2021
B.S. – Kansas State Univ.

Top 10 Holdings*

Microsoft Corporation	11.39%
Apple Inc.	8.95%
Amazon.com, Inc.	5.98%
Alphabet Inc. Class A	5.75%
NVIDIA Corporation	4.46%
Visa Inc. Class A	2.60%
Meta Platforms Inc Class A	2.46%
Costco Wholesale Corporation	2.00%
Eli Lilly and Company	1.47%
UnitedHealth Group Inc.	1.34%
Top 10 Holdings Total	**46.40%**

shipments in February. The company has absolutely mastered the AI microprocessor opportunity and have created the third most valuable company in the world doing so. Some have suggested Nvidia will eventually take the pole position and possess the largest global market cap of any company. We wouldn't bet against that. To accomplish this, the company realizes it needs to become less of a cyclical semi-conductor chip developer. Accordingly, Nvidia is working to commercialize, at scale, a full AI compute product platform (not just chips) dedicated to enterprises to run their entire AI workloads. This platform includes Nvidia GPUs and CPUs sitting in Nvidia designed server boxes sitting on Nvidia server racks all connected by Nvidia networking switches and links all of which, will be powered by Nvidia's software called CUDA. This promise is what has also driven the stock price recently.

What this new business model describes is Nvidia becoming more vertically integrated into a full AI technology platform that will directly compete with other leading cloud hosting hyperscaler companies. Hyperscalers, who also happen to be large purchasers of Nvidia GPUs and CUDA software. Competing with customers is always a bit of a risky biz model but as long as Nvidia continues to be simply better than everyone else at running AI workloads they are highly likely to succeed in expanding outside of offering just powerful processors and into a fully integrated product and services platform. This broader product strategy will also mean Nvidia must continue to be two to three steps ahead on the innovation front to maintain their lead in AI compute. Given how strong the demand for Nvidia AI's GPUs has been over the last year, it's becoming more likely that the company will inevitably hit a supply and demand "air-pocket" sometime over the next year or so. A situation that seems more likely in 2025 than 2024, unless we see some sudden macro or geopolitical shock that would sharply curtail business confidence. We would also stress that comps for Nvidia start to get tougher in the second quarter of 2024 and get progressively more difficult as we move throughout the year. These tough comps would magnify any sort of supply and demand hiccup.

Lastly, we continue to believe Nvidia will remain the dominant AI GPU provider to data centers around the world despite periodic hiccups or lumpy bookings. Their 90% plus market share in AI processors currently will indeed compress over time but we don't see that share level falling below 70% over the next 7 to 10 years just given how much better the company is at generating compute and networking connection that enable AI workloads.

Shares of Microsoft also added to the strong performance posted in the quarter. The company remains a unique beneficiary of AI as both an enabler and adopter of the technology. An important enabler via its Azure Cloud hosting segment and an adopter of AI from the company's important Office365 suite of productivity products, which have an AI tool now embedded in this core product (called O365 Co-Pilot) but an adopter from its native cloud software tech stack (storage, database management, security etc.) as well.

Azure continues to be the number two player in cloud hosting at a 24% global share, but it continues to gain ground on Amazon Web Services and Google Cloud Platform at 31% and 10%, respectively. Overall demand for cloud native workloads from enterprises continues to grow in the mid to high teens and AI should accelerate Azure cloud growth above 20% as more AI workloads shift to production starting later this year and into 2025. The take-home thought on Microsoft is that we continue to expect solid double-digit top and bottom-line growth over the next 3 to 5 years with upside from increased AI.

Amazon shares appreciated 19% in the first quarter on the back of improving eCommerce operating leverage while demonstrating strong growth in adverting related revenues, which should continue to be a big growth driver in the future.

Unlike many of the other Magnificent 7 or Fab 4, the Amazon story does not revolve around AI traction. It is part of our long-term investment thesis for sure, but not core to the investment story today. Our punchline on Amazon is that we are finally seeing strong, durable leverage from Amazon's significant eComm logistics and infrastructure build-out from 2019-2022. This build-out is now generating positive operating margins allowing the overall enterprise to grow operating margins something close to 150 bps annually over the next five years. You combine that level of margin expansion with low double-digit revenue growth you are getting the best earnings per share (EPS) growth and free cash flow (FCF) margin story within the mega-cap growth category with shares trading at an acceptable multiple.

↓ Top Detractors

Partially offsetting contributions from above, the top detractors from results for the quarter were **Apple, Tesla,** and **Adobe.**

Shares of Apple declined 10.8% during the quarter mainly owing to what has become a string of revenue and earnings guide-downs over the last five quarters. Weak iPhone shipments, regulatory overhangs with both the Department of Justice (DOJ) and European regulators regarding the Apple App store's 30% take-rate and separately, an investigation into the traffic acquisition fees Apple receives from Google for being the default browser for Safari. Google pays Apple close to $20 billion a year in traffic acquisition fees (TAC) associated with Safari searches.

There also seems to be a lack of clarity by investors on the role Apple will play in being either an enabler or adopter of AI. The alleged discussions in the press during the quarter between Apple and Google on allowing Apple to license, in some form, Google's AI Gemini 1.5 large language answer model has only added to the opaqueness of Apple's AI strategy.

We hope to gain more clarity and context in early June at their developers conference in San Francisco. While recent data surrounding iPhone shipments and sell-through data, particularly from China, have continued to be somewhat weak for the March quarter is possible, all other things equal, that the company may need to tweak guidance lower in their upcoming earnings release.

We continue to hold Apple shares. The confusion and uncertainty on Apple's AI strategy isn't really confounding to us. Consider that the company has rarely been a first mover in any of the key dominant categories from mobile phone to notebook (iPad) to smart watch. Our prevailing bias is that Apple is essentially doing what they always do during a significant technology transition. Quietly (and secretly) developing a unique strategy, in this case an AI strategy, to leverage its two billion user iPhone and laptop ecosystem, to possibly create a dominant so called "killer AI app". An app that will result in selling a lot more iPhones and other devices.

Meanwhile shares of Tesla declined 29% in quarter owing to two primary factors: 1) a reduction in deliveries of its battery electric vehicles (BEV) and 2) ongoing uncertainty of what electric vehicle manufacturers in China may do by exporting their low -cost electric vehicles into western markets, where Tesla currently has leading BEV market shares.

The reduction in auto deliveries is not unique to Tesla. The overall vehicle market around the world has been hampered by either weak economies or an elevated interest rate environment (as in the U.S). Inflation and the higher for longer theme is making a bias for a series of interest rate cuts in 2024 much more unlikely. This has made the already poor sentiment even worse for Tesla's shares.

We continue to hold a small position in the company owing to its large lead in full self-driving technology, which has made a dramatic breakthrough recently with version 12.3 that utilized Tesla's AI super computer (DOJO) to train the AI self-driving algorithm. Training that was uniquely based on video uploaded daily from 9 cameras installed on the vehicles of Tesla highest rated 5M drivers. This is arguably the largest AI use case, to date, on how AI will be able to augment and enhance human performance. We also believe the company continues to have the best electric battery and storage technology and should be able to leverage with either their own vehicles or within a robo-taxi model, which creates an entirely new market opportunity. We will continue to watch Tesla's progress closely but with a small position (less than ½ of 1% weighting) we feel the risk/reward remains interesting long term.

Finally, shares of Adobe fell 15% during the quarter as concerns about competition emerging from new AI-powered video and advertising tools. Tools that could be easier to use, or cheaper than Adobe's offerings ultimately leading to Adobe losing market share.

While we expect Adobe's own AI tool, FireFly, to be a strong and competitive product for the company strongly entrenched and loyal user base, it is possible the company could lose some share to the emergence of the multi-modality large language models such as GPT 4, Gemini 1.5 or any of the other emerging AI generative models. We see the biggest risk at the consumer rather than the enterprise level as larger enterprises are unlikely to completely switch to an unknown creative and editing software that may have copyright issues or may not accurately portray the correct photo/video image or background.

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:

Christopher Crawford
ccrawford@buffalofunds.com
(913) 647-2321

Scott Johnson
sjohnson@buffalofunds.com
(913) 754-1537

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. Read carefully before investing.

Earnings growth is not representative of the Fund's future performance.

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 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 1000 Growth Index is an unmanaged index that measures the performance of those Russell 1000 Index companies with higher price-to-book ratios and higher forecasted growth values. 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 Micro Cap Index is an unmanaged capitalization weighted index of 2,000 small cap and micro cap companies. The Bloomberg US Aggregate Bond Index is a broad base, market capitalization weighted bond market index representing intermediate term investment grade bonds traded in the United States. The Russell 3000 Value Index is an unmanaged index with a market-capitalization weighted equity based on the Russell 3000 Index, which measures how U.S. stocks in the equity value segment perform.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 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. One cannot invest directly in an index. A basis point (bps) is one hundredth of a percentage point (0.01%). 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. Earnings per share (EPS) is the portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serves as an indicator of a company's profitability. The yield curve is a graph which depicts how the yields on debt instruments such as bonds vary as a function of their years remaining to maturity. EBITDA stands for earnings before interest, taxes, depreciation and amortization. EBITDA is one indicator of a company's financial performance and is used as a proxy for a company's current operating profitability. The Magnificent Seven is a term used to describe the technology oriented, highly influential companies of Alphabet, Amazon, Apple, Meta, Microsoft, Nvidia and Tesla. The Fab 4 refers to four technology stocks including Nvidia, Amazon, Meta Platforms and Microsoft. Free 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.

Mutual fund investing involves risk. Principal loss is possible. The Fund invests in U.S. based companies with substantial interests outside of the U.S. which may involve additional risk such as greater volatility and political, economic and/or currency risks. This risk is greater in emerging markets.

*Top Ten Holdings for the quarter are not disclosed until 60 days after quarter end. Those listed are as of 12/31/23. Fund holdings and sector allocations are subject to change and are not recommendations to buy or sell any securities.

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