Buffalo Large Cap Fund

QUARTERLY
COMMENTARY

June 30, 2023

The Buffalo Large Cap Fund produced a return of 12.67% during the quarter versus a gain of 12.81% for the Russell 1000 Large Cap Growth Index. While we essentially performed in-line with the index it's worth pointing out we continue to have below peer group and benchmark weightings in both Tesla (TSLA) and Apple (AAPL), two companies with dramatic share price appreciation in the June quarter. We are able to add more Tesla shares to the portfolio, if we choose, but we are effectively capped in our weighting to Apple by the U.S. Securities and Exchange Commission (SEC) rule that in some situations, govern the concentration of the five largest holdings in your mutual fund portfolio.

While the Buffalo Large Cap Fund is not directly measured against the S&P 500 Index we do highlight its performance as a natural comparator for overall U.S. equity returns. As you know, the core difference between Buffalo Large Cap Fund and the S&P 500 Index is the latter has much larger weightings in more cyclical sectors of the U.S. economy, namely energy, financials and industrials. Given our focus on more secular growth companies, the Buffalo Large Cap Fund outperformed the S&P 500 Index return of 8.74% during the quarter.

Second Quarter 2023 Key Takeaways

1. **Tech is Back** – Financial markets surged across the board in the second quarter of 2023. The S&P 500 Index jumped 8.74%, our large cap growth benchmark (Russell 1000 Growth) rose a more impressive 12.81%, while our Buffalo Large Cap Growth portfolio increased essentially in-line with our benchmark at 12.67%. The IT sector and specifically, the six large mega-cap tech-centric stocks generated 72% of the overall S&P gains, in the quarter.
2. **AI, the Market's New Regime** – The strong performance across all larger cap equity indexes was largely driven by the inflection point of Generative AI (Artificial Intelligence) adoption and the raging enthusiasm of investors positioning ahead of what will likely be a new secular growth period for technology and related sectors. Mega-cap tech companies have been the big early share price beneficiaries, but it will take more time to sort out other winners and losers. The uncertainty and need for patience, however, hasn't curtailed speculation.
3. **Inflation has loosened its Stubborn Grip** – Beyond the fury of a new transformative technology like AI, the strong quarterly performance was spurred by more conclusive evidence that inflation appears to be loosening its tight grip on the U.S. economy. Short of an unexpected reacceleration in price levels, which remains plausible, the Fed is likely at or very near a more durable pause in its rate hiking/disinflation aspirations.

Average Annualized Performance (%)

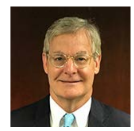
As of 6/30/23	1 YR	3 YR	5 YR	10 YR	15 YR	Since Inception
Investor Class - *BUFEX*	25.80	12.11	12.67	13.91	11.85	10.21
Institutional Class - *BUIEX*[1]	25.97	12.27	12.84	14.08	12.01	10.37
Russell 1000 Growth Index	27.11	13.73	15.14	15.74	12.92	10.35
Morningstar U.S. Large Growth Index	30.33	5.99	10.34	13.97	11.21	–
S&P 500 Index	19.59	14.60	12.31	12.86	10.88	–
Morningstar Large Growth Category	22.89	9.53	11.37	13.02	10.74	8.95

[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.

Fund Facts

	Investor	*Institutional*
Ticker:	BUFEX	BUIEX
Inception Date:	5/19/95	7/1/19
Expense Ratio:	0.93%	0.78%
Fund Assets:	$104.18 Million	
Category:	Large Cap Growth	
Benchmark:	Russell 1000 Growth Index	

Management Team



Ken Laudan

Manager since 2021
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4. **Many Investors Still Cautious** – Notwithstanding the big move in equities YTD, there remains approximately $5.4 trillion residing in U.S. money market funds, which could add further rocket fuel to drive equity prices higher. Some are even stating we could achieve all-time highs in the S&P 500 Index before year-end.
5. **Our Optimism About Multiple Secular Tail Winds Remain, But Risks Haven't Diminished** – We have partially (not fully) moderated our defensive posture from the past 18 months as we embrace the myriad of secular growth opportunities stemming from AI coupled with the ongoing shift to the cloud and digital economies. Notwithstanding, we continue to see several cautious macro-economic signals from leading economic indicators including a stubbornly inverted yield curve and an ongoing, deep contraction in the U.S. money supply. Historically, this combination of factors would point to a pending recession of some level.
6. **Current Risk Reward of the Market Seems Spurious** – At current elevated S&P 500 valuation levels of nearly 19x 2024 estimated earnings per share (EPS) within a backdrop of elevated rates and some uncertainty, the market will need to grow into this valuation. It will be critical for the leaders of this sharp market rally to confirm investor's expectations with a boost to revenue and earnings guidance throughout this earnings season.

Performance Commentary

As noted in our commentary last quarter, Portfolio Manager Ken Laudan has a reminder pinned to his office wall called "The Shock Cycle". As a quick review, a shock cycle occurs when investors become either overly optimistic or overly pessimistic about the future prospects of a particular stock or stock market in general.

During one phase of the "shock cycle" investors will tend to assume all good news is permanent, while ignoring bad news or assuming that bad news is positive. This typically leads to a period of rapid stock market appreciation as human emotions and confirmation bias rebukes the present reality. In the opposite phase of the cycle, investors will tend to deny good news and overreact to so-called bad events until their beliefs once again come full circle reflecting all good news is permanent while searching for the next big thing in the stock market.

The positive long term secular trends of AI-based innovation and productivity have clearly shifted sentiment, in our opinion, towards the overly optimistic phase of the shock cycle where despite economic headwinds and elevated interest rates, investors are assuming secular growth will be from AI and will be growth unabated over the near to intermediate term.

A recently released Chief Information Officer (CIO) survey from Morgan Stanley stated that 58% of U.S. CIOs are planning on new incremental investments in AI in 2023 but only 4% of those surveyed characterized their AI investment as material.

We resolutely believe the rapid adoption of generative AI is and will be transformative, perhaps the most signification innovation we've seen in our lifetime. However, AI opportunities and risks will play out and evolve over the next decade and most likely in ways that can't be foreseen looking through today's aperture. Furthermore, broad-based change, even in tech, doesn't happen quickly.

So, while the portfolio is leveraged to a handful of the most prominent AI beneficiaries (Microsoft, Google, Nvidia, Amazon and Meta) we're reminded from similar touchstone moments that large, bodacious transitions don't occur in a predictable logarithmic line. The key is to stay patient and ahead of any inflection change or changes in evolving AI business models and adoption cycles while mitigating being under-exposed or over-exposed to a large-scale directional change in the AI eco-system. Those directional shifts will absolutely occur in AI as they have other large secular technology innovations.

The Technology sector represents 40% of fund assets and the top five largest holdings represent 36% of the net asset value of the fund. This is relative to our benchmark where technology-related stocks are nearly 44% of the Russell 1000 Growth index and its top five holdings now represent a much more concentrated 42% of total net asset value (NAV). The Russell 1000 Growth index has never had this level of concentration.

Top Contributors

The top contributors to fund results for the quarter were Microsoft, Nvidia, and Apple.

Nvidia is the leader in accelerated compute and is a critical enabler for deploying AI across a number of vertical industries. The company's next generation datacenter accelerator graphics processing unit the H100 is ramping at the ideal time as generative AI becomes mainstream driving accelerating investments for both enterprises and public cloud providers in the leading AI chip and software company. Nvidia shares have led the investor enthusiasm into the AI launch cycle. After its shares advanced 90% in the first quarter, the shares appreciated another 52% this quarter on the back of a jumbo 50% raise in sequential revenue growth in the earnings call. The share's valuation reflect a large pull-forward of expected revenue and earnings growth but being at the center of the AI and cloud eco-system, valuation tends to be a secondary consideration to the thematic story stock aspect of company like Nvidia.

Despite a mixed earnings message, **Microsoft** shares outperformed the market (+20.5%) owing to the security and shelter of owning one of the primer growth companies in the world. The company's share price was further buttressed by the rapid engagement of people around the world to OpenAI's ChatGPT generative search engine (MSFT owns 49% of OpenAI) and the prospects of integrating ChatGPT into the company's Bing search engine. The belief being that Microsoft will be able to benefit from accelerating share gains in the large web-based search and eComm marketplace currently, dominated by Google (GOOGL).

We consider **Apple** as the best positioned company in the technology hardware category. We believe its key advantage is the company's vertically integrated platform of leading consumer technology products with strong brands and recurring revenue. Like other mega-cap tech companies, which advanced in the second quarter, shares moved up nearly 18%, as investors believe in the long-term secular drivers (iPhone, Mac and wearables) of Apple along with their ability to leverage their scale into further margin benefits.

Top Detractors

Top detractors for the quarter were Universal Music Corp, Arista Networks, and MSCI.

Universal Music Group is arguably one of the best content stories in media with a 30% share of the musical artists catalogs. With the ongoing growth in music streaming, the increased use of music in user generated content within social media and the use of streaming music in gaming, the company seems well positioned to benefit from the digital use of content. The shares declined 22% in the second quarter on a slow-down streaming subscription growth as well as questions about the impact AI may have on copyright of artists if their music and likeness is copied within AI models. It seems like it may take some time for the courts to opine and set precedent on copyright laws and how it may apply to AI generated content.

Arista Networks is one of the leading cloud centric providers of network switches to US hyperscalers for their datacenters. The company has consistently been a market share gainer in the ongoing growth and demand for higher bandwidth, faster speed and less latency associated with cloud and enterprise-oriented workloads. Arista shares fell 3% during the quarter owing to concerns about a lower level of bookings visibility as the company has worked through much of its backlog related to supply disruptions. The six month of visibility (down from 12 months previously) is really just normalization, not a negative change in the fundamentals of the business. Moreover, Arista should eventually be a beneficiary of AI when the "inference" phase of AI becomes more pronounced, a logical step from the initial phase of building AI, large language models referred to as "training" when building a large network with scale isn't as important.

Finally, we view **MSCI** as an earnings "compounder" with multiple growth levers, namely the leading market Index business where the company is the clear market leader within international and thematic indices such as sustainable or environmental, social, and corporate governance (ESG) centric funds. MSCI also has what is perceived to be the leading data analytics platform to help investors better capture risk management insights while building better portfolios. MSCI shares declined 16% in the quarter on elongated sales cycles and tightening budgets around ESG (key area of growth) coupled with a stock that had relatively high expectations coming into 2Q23. Despite the slightly worse than expected financial results we still believe the company is well positioned with its subscription-based revenue model along with the high switching costs that are tied to the index business that lead to best in class operating leverage and margins.

Outlook

After a strong equity market performance largely driven by the big gains in the mega cap tech related names, we now turn our attention to the second half of 2023. There are logical perspectives for why both the broader equity markets should continue to grind higher, perhaps to all time highs in the S&P 500 (4,850 previous high) but also, based on historical precedence, why investors should be watching very closely the health of the jobs market, the consumer and the industrial economy.

Current consensus earnings estimates for the second half of 2023 and 2024 presume an acceleration in revenue, margins and EPS relative to the first half of 2023. If inflation really is decelerating, that often means less pricing power for companies creating a headwind to revenue and margins. If there is one specific factor, we will pay particular attention to it will be the ability of companies to increase margin within a backdrop of decelerating inflation and slowing GDP growth occurring at the same time. There is no shortage of issues and opportunities to consider today both when risk managing and investing for growth opportunities. Never a dull moment as the old saying goes.

As always, we appreciate your continued confidence in our investment strategy and approach. It's one that has historically delivered compelling results through various market challenges and opportunities.

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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