

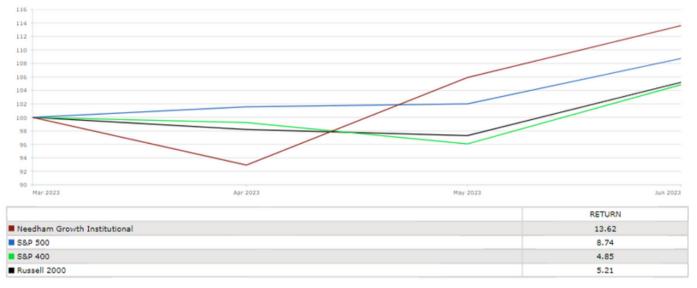
NEEDHAM GROWTH FUND

2Q23 Quarterly Commentary

Portfolio Managers: John O. Barr & Christopher J. Retzler Investment Style: Mid Cap Growth

MARKET REVIEW

- In 2Q23, the S&P 500 returned 8.74%, the S&P MidCap 400 returned 4.85%, and the Russell 2000 returned 5.21%.
- On May 3, the Federal Reserve raised interest rates by 25 bps to 5.00% 5.25% and then paused in June. Fed consensus calls for two more rate hikes in 2023.¹



Source: Zephyr Informais

MACRO OBSERVATIONS

- Economic and political results were less troublesome than in recent quarters.
- In late May, the House of Representatives passed a bipartisan bill to extend the debt ceiling and reduce growth in Federal spending.
- The economy continued to move forward with the Atlanta Fed's GDPNow Model, estimating 2Q23 growth of 2.0%, which would make the fourth successive growth quarter.²
- 1Q23 inflation was 4.1% year-over-year, with estimates near 3.0% for 2Q23. 2Q23 will likely be the fourth quarter of 3-4% consumer price index inflation, after 5-7% the preceding four quarters.³
- NVIDIA Corp. (NVDA) reported an epic quarter and guidance based on strong demand for its AI systems. Note that in March, we wrote Growth Factor 36, "Artificial Intelligence and Needham Funds' Investments".⁴

IMPACTS ON PORTFOLIO PERFORMANCE

• The Fund's Institutional (NEEIX) and Retail (NEEGX) classes returned 13.62% and 13.49%, respectively, in 2Q23, outperforming the S&P 500's 8.74%.



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IMPACTS ON PORTFOLIO PERFORMANCE (cont.)

- As in 4Q22 and 1Q23, Super Micro Computer, Inc. (SMCI) was one of the Fund's top contributors in 2Q23. Super Micro designs and manufactures servers. It reported strong 3Q results that were driven by its high growth Artificial Intelligence GPU (graphics processing units) and rack-scale solutions. Super Micro became the Fund's largest position with 9.33% of net assets as of June 30. The Fund has owned the stock since 2009.
- The second leading contributor was Entergris, Inc. (ENTG). Entegris supplies filters, specialty materials, chemicals, and delivery systems used primarily for semiconductor manufacturing. Entegris reported an in-line quarter and guidance despite a weakening environment for semiconductor equipment and technology. Entegris also announced an agreement to sell a division of the newly acquired CMP Materials for \$700 million. Revenue resilience and deleveraging progress led to Entegris' outperformance.
- The third leading contributor was Photronics, Inc. (PLAB), a long-time portfolio company that manufactures photomasks used to manufacture semiconductors and LCDs. Photronics reported strong results in May.
- The Fund's top detractor was long-time holding KVH Industries, Inc. (KVHI). After selling its inertial navigation and fiberoptic gyroscope business in 2022, KVH is focused on maritime communications. 1Q23 showed 13% year-over-year VSAT (very small aperture terminal) antenna airtime revenue growth and brought new service offerings. We also note that KVH's Board of Directors is evaluating strategic alternatives. Despite these positive developments, the stock price fell.
- The second largest detractor was our long-time holding Thermo Fisher Scientific, Inc. (TMO). Thermo Fisher is the bestin-class provider of services, equipment, and instruments for life sciences, pharma, healthcare, and some industrial markets. On its May conference call, Thermo Fisher spoke about a challenging macro environment and reiterated its 2023 guidance, albeit more back-end loaded than previously expected.
- With 10% turnover, the Fund does not rotate into or out of sectors but invests in companies we believe can outperform over the long term.

PORTFOLIO CHANGES

- The Fund added to a few existing holdings including Veeco Instruments, Inc. (VECO) and Unisys Corp. (UIS).
 - Veeco supplies advanced semiconductor manufacturing equipment used at the leading edge. It has opportunities with logic, memory, power devices, and silicon carbide.
 - Unisys is the renaissance of the old-line computer company with roots back to Sperry Corporation, Burroughs Corporation, and Remington Typewriter. Unisys provides digital workplace solutions, cloud & infrastructure, and enterprise computing. Just as last quarter, we believe ClearPath Forward, Unisys' high-volume transaction processing operating system, alone could be worth multiples of the current stock price.
- The Fund trimmed positions in several companies, including Super Micro, Photronics, Thermo Fisher Scientific, Entegris, and Comcast Corp. Class A (CMCSA).



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LOOKING AHEAD & OPPORTUNITIES

- We continue to see opportunities in the reshoring of manufacturing in the United States. We recommend reading <u>The</u> <u>Titanium Economy: How Industrial Technology Can Create a Better, Faster, Stronger America</u> by Asutosh Padhi, Gaurav Batra, and Nick Santhaman of McKinsey and Company.⁵ Portfolio holding Clean Harbors, Inc. (CLH) is featured in the book.
- Many of our largest portfolio holdings have made multi-year investments that we believe positions them to deliver growth and positive returns over the next few years. We believe if these investments succeed, they could provide a hedge against macroeconomic factors, such as inflation.

[1] https://www.cnbc.com/2023/06/14/the-fed-forecasts-two-more-hikes-this-year-taking-rates-as-high-as-5point6percent.html

[2] https://www.atlantafed.org/cqer/research/gdpnow

[3] https://www.bls.gov/news.release/pdf/cpi.pdf

 $[4] \ \underline{https://www.needhamfunds.com/wp-content/uploads/2023/03/GF-36-Artificial-Intelligence-and-Needham-Funds-Investments.pdf} \ \underline{https://www.needhamfunds.com/wp-content/uploads/2023/03/GF-36-Artificial-Intelligence-and-Needhamfunds-Investments.pdf} \ \underline{https://www.needhamfunds-Ne$

[5] Padhi, Asutosh, et al. The Titanium Economy How Industrial Technology Can Create a Better, Faster, Stronger America, PublicAffairs, 2022

	3 MO	YTD	1YR	3YR	5YR	10YR	SINCE INCEPT.
Needham Growth Fund Inst Class**	13.62%	23.86%	23.39%	12.24%	13.37%	10.95%	13.06%
After Taxes on Distributions	13.62%	23.86%	22.90%	11.00%	11.29%	9.24%	11.66%
After Taxes on Distributions & Redemptions	8.06%	14.12%	14.08%	9.55%	10.23%	8.54%	11.16%
Needham Growth Fund Retail Class	13.49%	23.61%	22.85%	11.76%	12.84%	10.44%	12.57%
After Taxes on Distributions	13.49%	23.61%	22.35%	10.50%	10.73%	8.72%	11.17%
After Taxes on Distributions and Redemptions	7.99%	13.98%	13.77%	9.18%	9.80%	8.11%	10.70%
S&P 500 Index	8.74%	16.89%	19.59%	14.60%	12.31%	12.86%	9.48%
S&P 400 Index	4.85%	8.84%	17.61%	15.44%	7.79%	10.21%	11.02%
Russell 2000 Index	5.21%	8.09%	12.31%	10.82%	4.21%	8.26%	8.15%

Average Annual Returns as of June 30, 2023. The Needham Growth Fund inception date is January 1, 1996.

**Performance for any periods prior to the inception date of Institutional Class Shares are based on the historical performance of the Retail Class Shares adjusted to assume the expenses associated with Institutional Class Shares.

Investment returns and principal value will fluctuate, and when redeemed, shares may be worth more or less than their original cost. Performance data quoted represents past performance and does not guarantee future results. Current performance may be higher or lower than these results. Performance current to the most recent month-end may be obtained by calling our transfer agent at 1-800-625-7071. Total return figures include reinvestment of all dividends and capital gains.

The Needham Growth Fund's Gross Expense Ratio is 1.86% for the Retail Class and 1.59% for the Institutional Class. The Needham Growth Fund's Net Expense Ratio is 1.86% for the Retail Class and 1.41% for the Institutional Class. The Net Expense Ratio reflects a contractual agreement by the Fund's investment adviser to waive its fee and/or reimburse the Fund through May 1, 2024 to the extent the Gross Expense Ratio exceeds 1.95% and 1.40% of the average daily net assets of Retail Class Shares and Institutional Class Shares (Expense Cap), respectively. The Expense Cap excludes taxes, interest, brokerage, dividends on short positions, fees and expenses of "acquired funds," extraordinary items and shareholder redemption fees but includes the management fee.

Needham Growth Fund Fact Sheet Link Prospectus Link

Definitions and Disclosures

The information presented in this commentary is not intended as personalized investment advice and does not constitute a recommendation to buy or sell a particular security or other investments. This message is not an offer of the Needham Growth Fund, the Needham Aggressive Growth Fund or the Needham Small Cap Growth Fund (each a "Fund" and collectively, the "Funds"). Shares are sold only through the currently effective prospectus, which must precede or accompany this report. Please read the prospectus or summary prospectus and carefully consider the investment objectives, risks and charges and expenses of the Funds before you invest. To obtain a copy of the Fund's current prospectus, please visit www.needhamfunds.com or contact the Fund's transfer agent, U.S. Bancorp Fund Services, LLC at 1-800-625-7071.

All three of the Needham Funds have substantial exposure to small and micro capitalized companies. Funds holding smaller capitalized companies are subject to greater price fluctuation than those of larger companies. Portfolio holdings are subject to change. Needham Growth Fund's ownership as a percentage of net assets in the stated securities as of June 30, 2023: NVDA: 0.00%, SMCI: 9.33%, ENTG: 7.43%, PLAB: 2.78%, KVHI: 3.23%, TMO: 5.99%, VECO: 1.63%, UIS: 1.17%, CMCSA: 2.05% and CLH: 1.39%.

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