Oberweis
Asset Management

MICRO-CAP GROWTH STRATEGY 2Q 2020

The Quarter in Review

The Oberweis Micro-Cap Composite returned 32.63% (32.38% net of fees) in the second quarter of 2020 compared to 38.84% for the Russell Microcap Growth Index, a shortfall of 621 basis points (646 basis points net of fees). Year-to-date, the Composite returned -9.81% (-10.31% net of fees) compared to 1.92% for the index, underperforming by 1,173 basis points (1,223 basis points net of fees).

The majority of the performance shortfall during the quarter is attributable to our consistent and significant underweight (8.2% versus a record weight of 39.5% for the benchmark) in biotech stocks. Biotechs returned 44% and are up nearly 67% off the bottom on March 18th, outpacing the market. We believe biotechs are prime beneficiaries of record levels of quantitative easing worldwide because easy monetary policy drives incremental capital to riskier investment opportunities in a low risk-free-rate environment. As we have noted in previous letters, micro-cap biotech companies largely tend to be unprofitable and are often driven by future events with binary outcomes, a profile that is inconsistent with our investment philosophy. While the group's leadership since last September has represented a powerful performance headwind, in our experience this works itself out over a full market cycle. Over that time period, we believe our unwavering focus on investing in companies boasting significant positive earnings surprises driven by misunderstood change leads to alpha generation for our clients. In fact, since we implemented our philosophy and process modification on January 1, 2015, our Micro-Cap Composite has outperformed the Russell Microcap Growth Index by 595 basis points annualized (495 basis points net of fees).

Last quarter we noted a historically meaningful opportunity to invest in micro-cap and small-cap companies based on valuation spreads, and we indeed saw a very significant move higher in stocks, although we are admittedly surprised by the magnitude given the continued risks and uncertainties related to COVID-19. The rally can be at least partially attributed to the massive monetary support provided by the Federal Reserve and other central banks. Just how extreme has the Fed been? The $2.9 trillion balance sheet increase over three months took nearly five years to accomplish following the Global Financial Crisis in 2008. Balance sheet expansion will continue for the foreseeable future and interest rates are expected to remain at current levels well into 2021. Even more, a second round of stimulus in the form of a sizable infrastructure bill is in the works at the White House, although it has to also make its way through Congress.

As a result, the market appears to be discounting quite a recovery from the COVID crisis with the S&P 500 forward P/E ratio now meaningfully above-average in the midst of the biggest expected decline in U.S. GDP since World War II. Sure, the market is a discounting mechanism and historically bottoms before we exit recession, but the speed and magnitude of the move leads us to wonder if the market is a bit over-optimistic given the unpredictability of the underlying healthcare emergency. Consensus estimates now project S&P 500 earnings per share will exceed the 2019 peak in 2021, which we view with a large degree of skepticism. Moreover, leadership has been narrow during the rally, with the five largest holdings in the S&P 500 accounting for record a 23% of the index, exceeding the previous peak in 2000.

The Quarter in Review (continued)

What's amazing to us is how quickly sentiment flipped and behavior changed from being fear-driven to greed-driven. Never before in our careers have we witnessed such a rapid shift in sentiment-based investor behavior. While we essentially lived through a slow-motion crash just four short months ago, today we see some areas of bubble-like activity that we last experienced in 1998-2000. The aforementioned biotechs are one slice of the market demonstrating bubblicious characteristics, but we see similar behavior with certain large-cap darlings (i.e. the "FAANG" stocks), a red-hot IPO market, blank-check SPAC's (special purpose acquisition companies), and e-commerce and cloud plays. Yes, some of these companies stand to benefit from the post-COVID world, but we believe herding in these stocks has pushed valuations to the point where expectations likely exceed economic reality. We've gone from the end of the world to pockets of irrational exuberance in the blink of an eye.

Fortunately, we don't see froth in our investment universe, as the outsized gains have come largely from these narrow bands. While in the short-run we are finding a below-average number of new investment ideas because earnings surprises are being dampened by the recession, the quality of the surprises we did see (for both current holdings and new ideas) during the recent earnings season were encouraging, particularly in more cyclical areas like consumer discretionary, housing, and automotive. Our experience tells us that we will soon be in a "target-rich" environment for earnings surprise as the economy starts to grow. Expectations for earnings are low exiting recession, setting up a meaningful opportunity as companies begin to see results that exceed those muted assumptions.

We continue to focus the portfolio on investments in businesses that are less severely impacted in the current environment, and on those companies we expect will emerge from the recession in a better competitive position. As we mentioned last quarter, historically the best opportunities to invest in our micro-cap strategy have followed recessionary periods where we see a bottom in corporate earnings. When the economy makes its turn, micro-cap investors benefit from accelerating earnings growth and multiple expansion as confidence returns. Historically, small-cap stocks (of which micro-cap is a subset) start to outperform large-cap stocks before a recession ends (see the table below from Jefferies small-cap strategist Steven DeSanctis), which happened this quarter.

Small-Cap and Large-Cap Performance Around Recessions*

	1st Half of Recession		2nd Half of Recession		1-Year After	
	Small	Large	Small	Large	Small	Large
Average	-12.6	-9.4	11.4	7.5	36.7	30.9
Median	-8.0	-5.8	16.6	11.0	25.4	15.6

*Source: Jefferies. Analysis of 15 recessions since 1926

While volatility is likely in the second half of the year if we experience setbacks related to the virus, we firmly believe that our strategy of investing in businesses with unique attributes driving better-than-expected growth adds value for our clients over the long-term. These companies are undergoing transformational change that we believe is misunderstood or under-appreciated by the market overall. While the multiples afforded such companies can fluctuate in the near-term, we believe that over longer periods of time a diversified portfolio of these investments is likely to outperform the broader market.

MICRO-CAP GROWTH

2Q 2020

Portfolio Highlights

As of June 30, 2020, the portfolio was 99.0% invested in 68 different positions. The portfolio had its largest over-weightings in technology (36.9% average weighting during the quarter versus 13.8% for the Russell Microcap Growth Index), producer durables (18.7% versus 11.8%), and consumer discretionary (10.2% versus 6.2%). The portfolio was most underweight healthcare (19.6% versus 51.7%), financial services (5.1% versus 9.1%) and utilities (0.0% versus 2.6%). Our underweighting in healthcare, primarily as a result of our limited biotech exposure, negatively impacted portfolio performance by 90 basis points.

Performance in the second quarter was positively impacted by stock selection in technology (where our holdings returned 53.05% versus a 46.90% return for the benchmark's technology holdings) and consumer discretionary (65.60% versus 58.90%), while performance was negatively impacted by stock selection in healthcare (14.51% versus 42.46%) and financial services (-8.32%% versus 23.70%).

PORTFOLIO CHARACTERISTICS

(AS OF JUNE 30, 2020

Number of Stocks	68
Weighted Market Capitalization (in millions)	$1,026
Median Market Capitalization (in millions)	$879
P/E Forward 4 Quarters (estimated)	16.7x
Long-Term Debt to Total Equity	11.2%
Return on Equity	6.7%
Cash Position	1.0%
Portfolio Turnover (2019)	112.0%

Source: Thomson Reuters Eikon

Key Benefits

The Micro-Cap Growth strategy seeks to capitalize on the exceptional growth potential of companies in the early stages of their life cycle. The strategy invests in very small companies which, at the time of purchase, have a market capitalization

less than $600 million or are within the range of companies represented in the Russell Micro-Cap Growth Index, whichever is greater. These companies often boast exciting products and/or services driving organic revenue and earnings growth. Our fundamental research process is specifically designed to uncover such opportunities.

The key benefits of the Micro-Cap Growth strategy are:

- Access to one of the least efficient segments of the equity market
- Potential for significant alpha over a full market cycle
- Combines empirically-proven Behavioral Finance principles with the very best of fundamental bottom-up research
- Disciplined and repeatable investment process managed by a passionate and experienced investment team
- Fundamental research process specifically designed to efficiently discover micro-cap companies that are misunderstood by traditional Wall Street research analysts
- Exposure to micro-cap companies offering the potential for earnings growth that differs from consensus expectations
- Diversified portfolio with a focus on risk management

Minimum Account Size: $5 million for Institutional Account Management

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MICRO-CAP GROWTH

2Q 2020

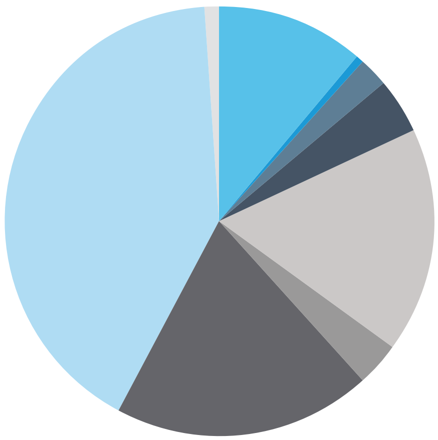
TOP TEN HOLDINGS *(as of June 30 2020)*

	Company		Line of Business
1	Channel Advisor Corporation	3.3%	Provides e-commerce channel management solutions
2	Limelight Networks, Inc.	3.3%	Operates a content delivery network
3	Magnite, Inc.	3.0%	Provides online advertising solutions
4	Bandwidth, Inc.	3.0%	Provides cloud-based communications services
5	Castle Biosciences, Inc.	2.9%	Provides components for the semiconductor industry
6	Perdoceo Education Corp.	2.8%	Provides post-secondary educational services
7	Digital Turbine, Inc.	2.7%	Provides an on-device media platform
8	Crocs, Inc.	2.4%	Designs and manufactures shoes
9	LiqTech International, Inc.	2.4%	Manufactures clean energy filters and exhaust solutions
10	Model N, Inc.	2.3%	Provides revenue management solutions

Top 10 holdings as a percentage of Total Net Assets. Portfolio Holdings are subject to change at any time. References to specific securities should not be construed as a recommendation to buy or sell and should not be assumed profitable. Source: Thomson Reuters Eikon

SECTOR WEIGHTINGS *(as of June 30, 2020)*

Consumer Discretionary	11.3%
Consumer Staples	0.6%
Energy	2.2%
Financial Services	4.1%
Health Care	17.0%
Materials & Processing	3.4%
Producer Durables	19.3%
Technology	41.1%
Utilities	0.0%
Cash	1.0%



Sector weightings as a percentage of Total Net Assets. Source: Thomson Reuters Eikon

Oberweis Asset Management

MICRO-CAP GROWTH

2Q 2020

AVERAGE ANNUAL TOTAL RETURNS ***(as of June 30, 2020)***

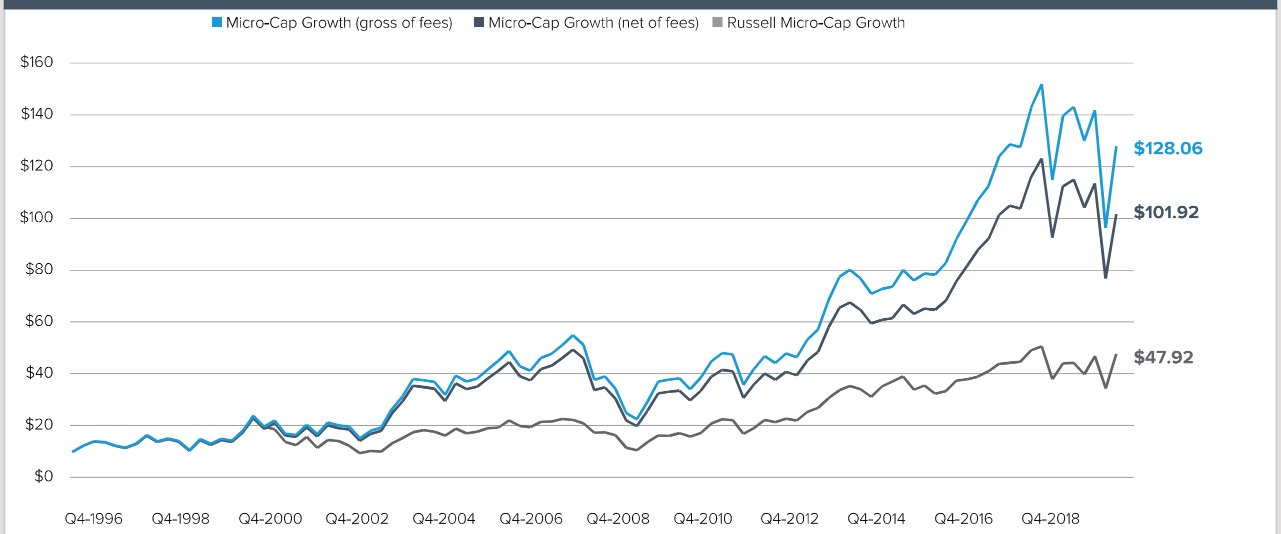
	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr	Since Inception 1/1/1996
Micro-Cap Growth (gross of fees)	**32.63%**	**-9.81%**	**-10.59%**	**4.38%**	**9.78%**	**14.11%**	**10.99%**
Micro-Cap Growth (net of fees)	**32.38%**	**-10.31%**	**-11.45%**	**3.40%**	**8.79%**	**13.07%**	**9.95%**
Russell Microcap Growth Index	38.84%	1.92%	7.89%	5.20%	3.10%	11.12%	N/A

Oberweis Asset Management, Inc. ("OAM") is an independent investment management firm that is not affiliated with any parent organization. The composite returns are comprised of all fully discretionary accounts with a minimum value of $5 million. Performance results, from 1-1-96 until 12-31-03 and 9-1-11 to present were derived solely from the performance of the Oberweis Micro-Cap Fund, a registered, open-end mutual fund, for which OAM serves as investment adviser. Prior to November 4, 2001, James D. Oberweis was the sole portfolio manager for the Micro-Cap Fund during the period of the performance results noted. Accounts are dollar-weighted within the composite and reported in U.S. dollars.

The Russell Microcap Growth Index measures the performance of those Russell Micro Cap companies with higher price-to-book ratios and higher forecasted growth values. The performance data includes reinvested dividends. The Russell Microcap Index is represented by the smallest 1,000 securities in the small cap Russell 2000 Index plus the next 1,000 securities. Each index is an unmanaged group of stocks, whose performance does not reflect the deduction of fees, expenses or taxes.

Advisory fees are disclosed in Part II of Form ADV. Performance is historical and includes the reinvestment of dividends and other income. Past performance is not necessarily indicative of future results.

GROWTH OF $10 MILLION — WITH INCOME INVESTED ***(January 1, 1996 – June 30, 2020)***



The Russell Microcap Growth Index began on 7/3/00, and the line graph for the Index begins at the same value as the Fund on that date.

Oberweis Asset Management, Inc.

Recognized as a leading small-cap stock specialist, Oberweis has been helping institutional investors manage their assets prudently and effectively for many years.

MEET THE TEAM