

MICRO-CAP GROWTH STRATEGY

3Q 2019

The Quarter in Review

The Oberweis Micro-Cap Composite returned -9.10% in the third quarter versus -10.05% for the Russell Microcap Growth Index, an outperformance of 95 basis points. On a year-to-date basis, the Composite returned 13.24% compared to 4.79% for the Russell Microcap Growth Index, outperforming by 845 basis points.

We faced multiple headwinds during a challenging environment for our investment style in the third quarter. Micro-cap value stocks outperformed their growth cousins by more than 800 basis points during the quarter and are now nearly 500 basis points better year-to-date. During the quarter, investors shifted preference from innovative companies with the potential for exceptional earnings growth to value-oriented companies with more reliable near-term earnings and cash flow. Because of our focus on companies with the potential for largely misunderstood long-term earnings growth, our portfolio does carry positive exposure to what Barra calls its “Momentum” factor, which experienced a significant contraction beginning in August. In fact, the move was so significant that MSCI noted the momentum-value factor spread saw one of the largest corrections in history over the summer. Beyond style, bigger has been better throughout the year and capitalization continued to be a strong headwind when comparing micro-cap performance to small-cap and large-cap managers. We clearly witnessed a spike in risk-aversion during the quarter, with investors specifically shunning micro-cap stocks (along with other risky assets) amidst a continued uncertain and hazy economic climate.

Underlying macro concerns in the marketplace were surprisingly consistent, which unfortunately suggests that not much has improved. Trade tensions with China remain front-and-center, with the market reacting wildly at times to the latest Tweet, rumor, or unnamed source. All we know for certain at this point is the trade dispute with China has evolved into a quagmire with seemingly no end in sight, and it’s increasingly possible the Chinese will soon choose to wait out the 2020 U.S. election in the hope that a potential Democratic successor to President Trump will soften the American position.

We believe the uncertainty surrounding trade policy and the magnitude of tariffs now faced by American companies is impacting corporate profits, the economy, and investor risk appetite for small-cap and micro-cap stocks. Management teams we interact with routinely sight challenges in managing their business against a backdrop of the scattered and unpredictable “Trade Policy by Tweet” from the Trump administration. Pervasive uncertainty – exemplified by announced tariffs that are later delayed – is finally showing in slowing economic data. U.S. real GDP growth is projected to be a lackluster 1.8% in the third quarter, and the September ISM Manufacturing survey reading of 47.8 was the lowest since June of 2009 and implies manufacturing contracted for the second consecutive month. Sub-50 readings were also posted in Japan, Korea, Mexico, Russia, and throughout much of Europe, headlined by a distressing 41.7 measure in Germany.

Under the cover of controlled inflation, the Federal Reserve responded with more accommodative monetary policy, cutting rates twice during the quarter for the first time since 2008 and suspending its balance sheet reduction strategy. Fed funds futures project additional rate cuts as we conclude 2019 and move into 2020. U.S. 10-year yields declined from 2.00% to 1.68% during the quarter, and are now 100 basis points lower than where they finished 2018. Similar duration government bonds in Germany and Japan have negative yields.

Absent an imminent recession resulting in a sizable decline in corporate profits, equity valuations continue to look reasonable, particularly relative to historically low bond yields. We find it difficult and almost futile to predict if recessionary storm clouds are upon us, supported by the old adage that “economists have predicted nine out of the last five recessions.” While multiple economic readings have recently softened, the U.S. economy went through a similar soft-patch in 2016 that resulted in a “profits recession” before growth resumed again. The difference this time, of course, is trade. We fear any escalation of trade tensions between China and the U.S. could turn a reasonably healthy soft patch into a full-blown recession. However, the elevated risk aversion witnessed during the quarter – particularly in the micro-cap and small-cap portion of the U.S. equity market – means at least some of this heightened caution on the part of investors has been discounted.

Fortunately and despite a murkier macro picture, we continue to find a typical number of new investment ideas where a significant positive earnings surprise is supported by underlying company fundamentals that seem to be misunderstood or underestimated by other investors. Typically it is periods of heightened fear that represent the best times to invest in this strategy and offer the highest levels of appreciation potential. While sentiment and equity prices may oscillate wildly in the short-run in response to the latest macro headline, we believe our investment approach instead focuses on companies generating better-than-expected earnings power driven by transformational change. The P/E multiple investors are willing to pay for these companies may vary from quarter to quarter, but we believe a diversified portfolio of these investments is likely to yield enhanced returns over the long-term.

Portfolio Highlights

As of September 30, 2019, the portfolio was 97.5% invested in 75 different positions. The portfolio had its largest over-weightings in technology (26.3% average weighting during the quarter versus 15.1% for the Russell Microcap Growth Index), consumer discretionary (18.0% versus 8.4%), and producer durables (18.8% versus 13.4%). The portfolio was most underweight in health care (16.8% versus 41.1%), due mainly to our lack of biotech exposure, financial services (5.2% versus 11.3%), and utilities (0.0% versus 3.0%).

In the third quarter performance was positively impacted by stock selection in energy (where our holdings returned -4.10% versus a -19.38% return for the benchmark's energy holdings) and technology (-2.45% versus -4.23%). Performance was negatively impacted by stock selection in consumer staples (-44.19% versus -6.32%), materials (-15.36% versus -3.39%), and consumer discretionary (-9.92% versus -7.52%).

PORTFOLIO CHARACTERISTICS

(AS OF SEPTEMBER 30, 2019)

Number of Stocks	75
Weighted Market Capitalization (in millions)	\$975
Median Market Capitalization (in millions)	\$682
P/E Forward 4 Quarters (estimated)	11.9x
Long-Term Debt to Total Equity	8.7%
Return on Equity	6.2%
Cash Position	2.5%
Portfolio Turnover (2018)	119.0%

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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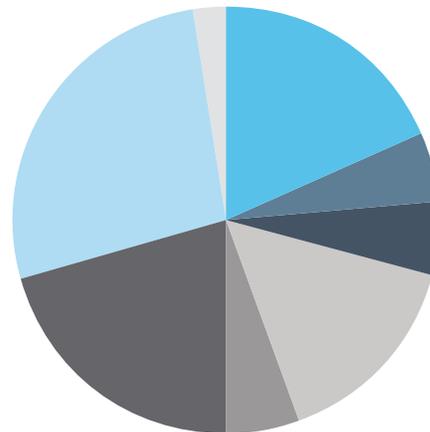
TOP TEN HOLDINGS (as of September 30, 2019)

Company		Line of Business
1 Tandem Diabetes Care, Inc.	2.8%	Develops pump systems for diabetes patients
2 Skywest, Inc.	2.6%	Operates a regional airline
3 DMC Global, Inc.	2.5%	Global technology company that offers collaboration, research, development, and other services
4 Mobileiron, Inc.	2.4%	Develops software platforms for mobile devices
5 Skyline Champion Corp.	2.4%	Manufacture of mobile home and truck campers
6 Vericel Corp.	2.3%	Develops cell therapy products for the treatment of patients in the sports medicine and burn care markets
7 Boot Barn Holdings, Inc.	2.2%	Owns and operates a lifestyle retail chain in the US
8 Century Communities, Inc.	2.2%	Operates a home building and construction company
9 MTS Systems Corp.	2.0%	Supplier of high performance test systems and sensors
10 Career Education Corp.	2.0%	Provides for-profit secondary education in the U.S.

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 September 30, 2019)

Consumer Discretionary	18.6%
Consumer Staples	0.0%
Energy	5.1%
Financial Services	5.7%
Health Care	15.1%
Materials & Processing	5.6%
Producer Durables	20.7%
Technology	26.7%
Utilities	0.0%
Cash	2.5%
Total	100.0%



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

AVERAGE ANNUAL TOTAL RETURNS (as of September 30, 2019)

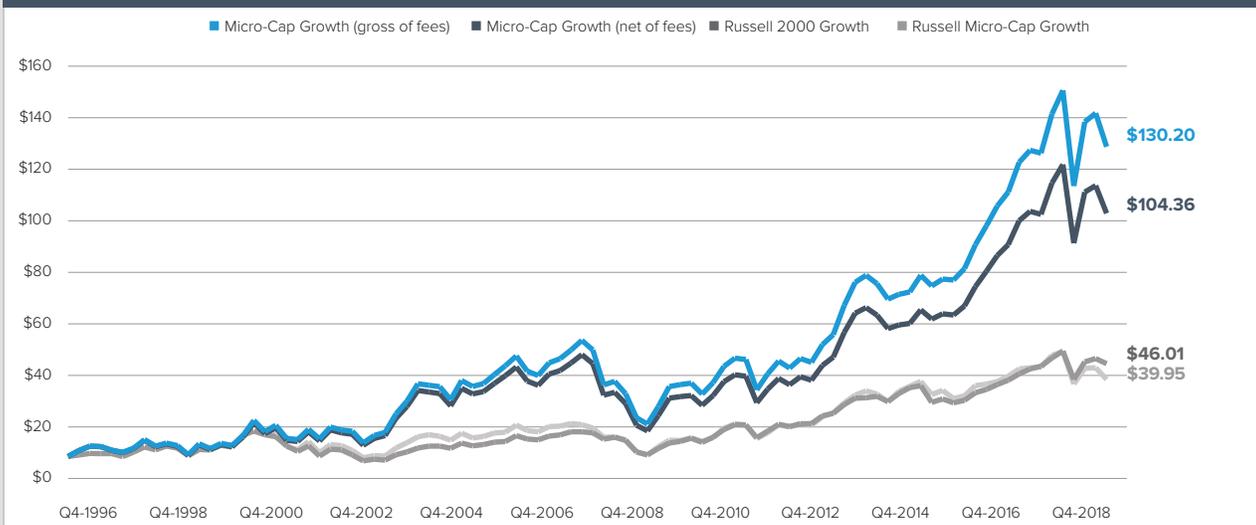
	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr	Since Inception 1/1/1996
Micro-Cap Growth (gross of fees)	-9.10%	13.24%	-14.38%	12.19%	12.87%	13.36%	11.43%
Micro-Cap Growth (net of fees)	-9.34%	12.49%	-15.37%	11.18%	11.85%	12.32%	10.39%
Russell Microcap Growth Index	-10.05%	4.79%	-21.34%	2.10%	4.01%	8.82%	N/A

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 – September 30, 2019)



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.

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