Oberweis
Asset Management

SMALL-CAP OPPORTUNITIES STRATEGY

1Q 2019

The Quarter in Review

The Oberweis Small-Cap Opportunities Composite returned 17.38% (17.18% net of fees) during the March quarter versus a 17.14% return for the benchmark Russell 2000 Growth Index, an outperformance of 24 basis points (4 basis points net of fees).

Factor-level conditions were mixed during the quarter. We faced a modest headwind as lower-quality, low-ROE companies (specifically the bottom two ROE quintiles within the Russell 2000 Growth) significantly outperformed during the quarter, a cohort we are underweight. Helping our cause was a strong style bias toward growth in the quarter[1], as investors gravitated to companies that are capable of generating sales and earnings growth in the face of an anticipated small-cap "earnings recession" (based on consensus estimates) in the first half of 2019.

The strength follows the extreme volatility and weakness endured during the fourth quarter of 2018, when small-cap stocks fell so precipitously they technically entered a bear market[2]. We noted in our year-end commentary that fear was palpable as we exited 2018 and that the resulting decline in equity valuations represented the most compelling investment opportunity in our market segment since late 2011. Interestingly, that was the last time markets discounted an "earnings recession," and it was also the last time cyclical stocks were as cheap relative to defensive-oriented issues.

A lot can change in the course of a quarter. As stocks and Santa simultaneously tumbled down the chimney on Christmas Eve, the laundry list of concerns that led to extreme negative sentiment readings was quite long. One of the biggest centered on U.S. monetary policy, as the Federal Reserve under new Chairman Jerome Powell had moved to a hawkish stance. While Fed Funds futures in early December predicted four rate hikes in 2019 (on top of four hikes in 2018), a mere three months hence they signal better than even odds of a rate cut late this year or early in 2020, a pretty dramatic reversal. This policy shift by the Fed includes the suspension of its balance sheet reduction strategy – at least for the time being. Muted and persistent inflation readings below its 2% target appear to provide the Fed with appropriate cover.

Investors were also worried the stock market decline itself could portend a recession, a connection we noted wasn't necessarily supported by the data[3]. Admittedly, economic readings globally have softened a bit to start the year, likely driven in part by uncertainty related to continued trade negotiations and tensions between the U.S. and China. U.S. real GDP growth decelerated to 2.2% in the fourth quarter and the Atlanta Fed projects similarly tepid growth of 2.3% in the first quarter of 2019. In March, the Manufacturing Purchasing Managers Index fell below 50 in Germany, France, Italy, Japan, Korea, and Taiwan, but was countered by expansionary readings in the U.S., China, the UK, and Brazil. Despite the lackluster economic data, we continue to find a typical number of new investment ideas where companies have reported significant positive earnings surprises driven by transformative changes that appear to be misunderstood or under-estimated by the consensus.

Much has also been made since last fall in the financial media about a yield curve inversion as a predictor of economic recession and stock market turbulence. Again, we believe the historical data are mixed. While it's true that parts of the yield curve are currently inverted, we consider the 10-year/2-year yield spread to be more meaningful, and that reading remains above zero. Certainly a flattening yield curve flashes a yellow caution sign in terms of future economic growth prospects, but we believe the leap to gloom and doom is likely overstated.

Despite the first quarter equity surge, the consensus hasn't really jumped on the bandwagon and seems biased toward skepticism. In our experience, market tops tend to occur when valuations are high and sentiment is over-flowing with optimism. While there are real risks to consider, we wonder if investors are again being too cautious, letting short-term focus and risk asymmetry distract from long-term compounding returns in equities. Certainly since the financial crisis, many investors have consistently been too fearful, missing out on above-average opportunities (like late 2018) to invest in stocks. Equity outflows in the fourth quarter were the worst experienced since the housing market imploded, and that trend continued throughout the first quarter of 2019. As of today, bearish views on equities still have much to prove given a more dovish Fed. Nonetheless, the current State Street North American Investor Confidence Index (which measures investor confidence or risk appetite by analyzing the actual buying and selling patterns of institutional investors in North America) hit an all-time low in a dataset that dates to 1998 and includes two bubbles. Such pessimism suggests muted investor expectations, a positive for our relative-to-expectations approach. While our asset class and strategy-level valuations are not as cheap as they were at the beginning of the year, many individual secular growth ideas continue to be attractive.

[1] The Russell 2000 Growth Index returned 17.14% during the quarter, 521 basis points better than the Russell 2000 Value Index.
[2] Using the commonly accepted definition that a bear market occurs when stocks decline 20%. During 4Q18, the Russell 2000 Growth Index declined 21.65%.
[3] Small-cap bear market declines in excess of 20% in 1998, 2010, 2011, and 2015-2016 all occurred during non-recessionary economic environ-

Quarter in Review (continued)

Looking forward, we think the inflection point is linked to the U.S.-China trade issue. We believe recent economic weakness and the resulting impact on corporate earnings in early 2019 is tied to the uncertainty regarding the path forward with trade. Discussions we've had with management teams suggest caution pending more trade clarity and, hopefully, a favorable outcome. A "win-win" deal between the two countries should result in a re-acceleration in economic growth, boosted by some pent-up demand as tentative management teams reverse course. A negative outcome that leads to additional protectionist measures could very well tip the global economy into recession and throw a wet blanket on equities until the smoke clears. We still believe there is ample motivation for both countries to take the high road.

While the winds of change can swirl in the near-term, our bottom-up investment strategy focuses specifically on investing in companies demonstrating better-than-expected earnings prospects driven by transformative change in the underlying business. While the P/E multiple afforded such opportunities by investors can oscillate from quarter to quarter, we believe that a diversified portfolio of such investments is likely to outperform the market over the intermediate- to long-term.

Portfolio Highlights

As of March 31, 2019, the portfolio was 98.4% invested in 84 different positions. The portfolio had its largest weightings in technology (25.6% average weighting during the quarter versus 17.1% for the Russell 2000 Growth Index), producer durables (21.5% versus 15.4%), and healthcare (20.5% versus 25.6%). In addition to healthcare, the portfolio was most underweight consumer discretionary (13.5% versus 18.1%) and consumer staples (0.6% versus 2.5%).

Performance in the first quarter was positively impacted by stock selection in producer durables (where our holdings returned 18.54% versus a 13.87% return for the benchmark's producer durables holdings) and materials (30.69% versus 15.91%). Our performance was negatively impacted by stock selection in healthcare (9.64% versus 18.72%).

PORTFOLIO CHARACTERISTICS
(AS OF MARCH 31, 2019)

Number of Stocks	84
Weighted Market Capitalization (in millions)	$2,880
Median Market Capitalization (in millions)	$2,477
P/E Forward 4 Quarters (estimated)	15.7x
Long-Term Future EPS Group Rate (estimated)	10.4%
Long-Term Debt to Total Equity	12.6%
Return on Equity	8.5%
Cash Position	1.6%
Portfolio Turnover (2018)	95.7%

Source: Thomson Reuters Eikon

Key Benefits

The Small-Cap Opportunities strategy seeks to capitalize on the exceptional growth potential of smaller companies that are often misunderstood by traditional Wall Street research analysts. The Small-Cap Opportunities strategy generally invests in companies (with market capitalizations under $5.0 billion at the time of purchase) where our expectations for earnings growth differ from consensus expectations. These companies often boast exciting products and/or services, a strong and sustainable competitive position, and the potential for upward revisions in earnings expectations in the future. Our fundamental research process is specifically designed to efficiently identify such opportunities.

The key benefits of the Small-Cap Opportunities strategy are:

- 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 smaller cap companies that are misunderstood by traditional Wall Street research analysts
- Exposure to smaller 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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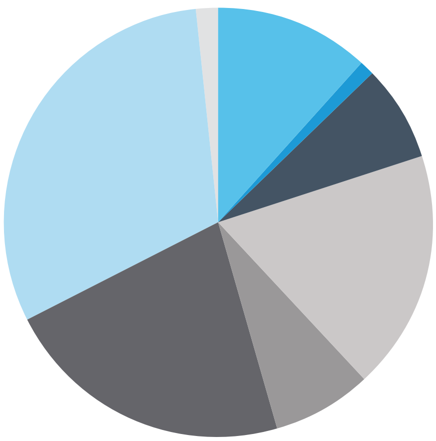
TOP TEN HOLDINGS *(as of March 31, 2019)*

	Company		Line of Business
1	Mellanox Technologies Ltd.	5.6%	Designs and develops high-performance interconnect products
2	DMC Global, Inc.	2.7%	Global technology company that offers collaboration, research, development, and other services
3	HMS Holdings Corp.	2.5%	Provides cost containment services for commercial and government healthcare payors
4	Skywest, Inc.	2.3%	Operates a regional airline
5	Clean Harbors, Inc.	2.2%	Provides environmental remediation and waste services
6	Cabot Microelectronics Corp.	2.1%	Supplies slurries used in the manufacture of integrated circuit devices
7	Vericel Corp.	2.0%	Develops cell therapy products for the treatment of patients in the sports medicine and burn care markets
8	Tandem Diabetes Care, Inc.	1.9%	Develops pump systems for diabetes patients
9	Altair Engineering, Inc.	1.9%	Provides simulation technologies and services
10	Verint Sys, Inc.	1.8%	Provides automation solutions for call centers and security and intelligence datamining software

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 March 31, 2019)*

Consumer Discretionary	11.7%
Consumer Staples	1.1%
Energy	0.0%
Financial Services	7.4%
Health Care	18.1%
Materials & Processing	7.4%
Producer Durables	21.9%
Technology	30.8%
Utilities	0.0%
Cash	1.6%
Total	100.0%



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

SMALL-CAP OPPORTUNITIES

1Q 2019

AVERAGE ANNUAL TOTAL RETURNS *(as of March 31, 2019)*

	QTD	1 Yr	3 Yr	5 Yr	10 Yr	Since Inception (9/15/1996)
Small-Cap Opportunities (gross of fees)	**17.38%**	**10.12%**	**16.85%**	**9.72%**	**18.90%**	**9.04%**
Small-Cap Opportunities (net of fees)	**17.18%**	**9.22%**	**16.07%**	**9.05%**	**18.16%**	**8.25%**
Russell 2000 Growth Index	17.14%	3.85%	14.87%	8.41%	16.52%	6.95%

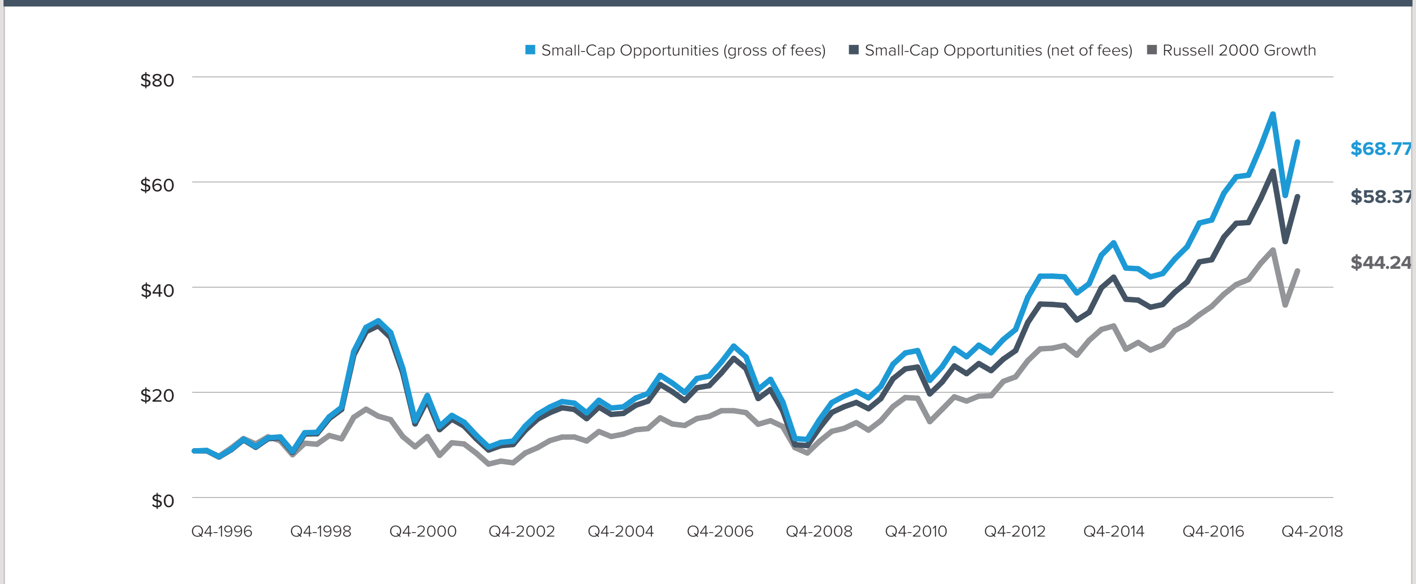
Oberweis Asset Management, Inc. ("OAM") is an independent investment management firm that is not affiliated with any parent organization. The composite returns are comprised of all fully discretionary accounts with a minimum value of $2.5 million. Performance results, from 1-1-97 to 12-31-03 and from 7-1-08 to present, are derived solely from the performance of the Oberweis Small-Cap Opportunities Fund (formerly known as the Oberweis Mid-Cap Fund), a registered open-end mutual fund, for which OAM serves as investment adviser. Accounts are dollar-weighted within the composite and reported in U.S. dollars.

The Russell 2000 Growth Index measures the performance of those Russell 2000 companies with higher price-to-book ratios and higher forecasted earnings growth rates. The 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.

Before investing, consider the fund's investment objectives, risks, charges, and expenses. To obtain a copy of the prospectus or summary prospectus containing this and other information, please visit our website at oberweisfunds.com or call 800-323-6166. Read it carefully before investing. The Oberweis Funds invest in rapidly growing smaller and medium sized companies which may offer greater return potential. However, these investments often involve greater risks and volatility. There is no guarantee that the portfolios can achieve their objectives. The Oberweis Funds are distributed by Oberweis Securities, Inc. Member: FINRA & SIPC.

GROWTH OF $10 MILLION — WITH INCOME INVESTED *(September 15, 1996– March 31, 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.

MEET THE TEAM