

# Mid-Cap Growth

## QUARTERLY STRATEGY UPDATE

Fourth Quarter 2017

### COMPOSITE PERFORMANCE (%)

	COMPOSITE GROSS OF FEES	COMPOSITE NET OF FEES	RUSSELL MIDCAP® GROWTH INDEX®
3 MOS.	3.98	3.89	6.81
1 YR.	23.91	23.11	25.27
3 YR.	13.20	12.41	10.30
5 YR.	16.90	16.08	15.30
ITD (02/29/2012)	15.93	15.14	13.63

The composite performance shown above reflects the Brown Advisory Mid-Cap Growth Equity Composite, managed by Brown Advisory Institutional. Brown Advisory Institutional is a division of Brown Advisory LLC, and Brown Advisory Institutional is a GIPS compliant firm. Please see the end of this for a GIPS compliant presentation.

### REP. ACCOUNT CHARACTERISTICS

	MID-CAP GROWTH REP. ACCT.	RUSSELL MIDCAP® GROWTH INDEX
Weighted Avg. Market Cap.	\$13.6 B	\$15.8 B
Weighted Median Market Cap.	\$10.0 B	\$13.7 B
P/E Ratio (FY2 Est.)	24.5x	20.7x
Active Share	87.8%	--

### REP. ACCOUNT TOP 10 PORTFOLIO HOLDINGS

SECURITY	% PORTFOLIO
Cash & Equivalents	4.0
Waste Connections Inc	3.8
Marriott International, Inc.	2.7
Ecolab, Inc.	2.5
Catalent, Inc.	2.4
Cavium, Inc.	2.4
TransUnion	2.3
Broadridge Financial Solutions, Inc.	2.3
Ball Corp.	2.3
Edwards Lifesciences Corp.	2.2
<b>TOTAL</b>	<b>27.1</b>



**CHRISTOPHER A. BERRIER**  
Portfolio Manager



**GEORGE SAKELLARIS, CFA**  
Portfolio Manager

## Review & Outlook

The Mid-Cap Growth Strategy underperformed its benchmark, the Russell Midcap® Growth Index, during the fourth quarter. Stock selection in the producer durables, health care and consumer discretionary sectors eroded our year-to-date relative gains in a rising market. For the full year, the strategy modestly underperformed its benchmark largely due to a cash drag. The additional tens of basis points can be explained in numerous ways: not owning **NVIDIA** (NVDA) in first half of the year, any one of our largest detractors—including **TripAdvisor** (TRIP), **MACOM** (MTSI) or **Cotiviti Holdings** (COTV)—our conservative tilt in materials, our lower beta, etc.

While we hide from the bone-chilling cold-snap in the Northeast, longing for spring, it is hard not to compare our 2017 performance to the month of March—in like a lion and out like a lamb. After strong gains in the first half, two tough quarters left us short of the Index in 2017—a disappointing end for an otherwise fine year. At the very least, the strategy's consistency is comforting. In the long run, stock selection drives nearly all of our returns; that's why we usually write about stocks. In the fourth quarter, however, the environment provided a frigid gale—a headwind to our relative success—that has hurt us before (3Q12 and 2Q14, for instance) and likely will again if the same market conditions occur. To be fair, we had our fair share of successes and mistakes in 2017, and more of the mistakes occurred during the fourth quarter. We expand upon those in the pages that follow. Given the headwind, we thought it prudent to explain that in more detail here.

For context, we reiterate our approach: the Mid-Cap Growth strategy sprung from our Small-Cap Growth strategy. It is run by the same team, using the same philosophy and process. Our goal is to outperform over a multi-year period through stock selection and downside protection. We believe low turnover, high active share and prudent concentration are keys to long-term success. We are valuation-sensitive and not momentum investors. Our bottom-up, fundamental, 3G (durable growth, sound governance, scalable go-to-market strategy) approach leads us to higher-quality companies. That tilts us away from retail/apparel, commodity-oriented and cyclical firms. When put into practice, these tenets yield a strategy with lower volatility than its benchmark and more downside protection than upside capture.

So what happened in the fourth quarter? The Russell Midcap Growth Index climbed 6.8%. An up market, in and of itself, is not a good predictor of our relative returns. After all, we started the Mid-Cap Growth Strategy in early 2012. The market has only gone up since then, and we have outperformed over the period since inception. The difference in this past quarter was persistence. Volatility, measured by the CBOE Volatility Index® (VIX®), was historically low for the year. In the fourth quarter specifically, our benchmark's returns were negative only 21 days out of 63—the lowest quarterly sum in the history of our strategy. It is hard to exhibit “downside protection” when the benchmark quick-marches higher.

Taking a broader view of U.S. equities, large caps meaningfully outpaced small caps. In fact, the Russell 1000® Growth Index outstripped its small-cap counterpart by more than 3% in the fourth quarter. Due to its heritage, the Mid-Cap Growth Strategy sports a lower weighted average market cap than its benchmark (approximately \$13.6 billion vs. \$15.8 billion). While this effect washes out over longer periods, market cap is a clear factor in our relative performance during short periods. Put bluntly, on a day-to-day basis we tend to outperform when small caps beat large caps; the opposite happened in the fourth quarter.

What drove such consistent gains in the benchmark? The answer is industrials, materials, energy and consumer companies. Zooming in further, the top-three sub-sectors were mining (+16%), retail (+15%) and investment banks/brokers (+11%). As one might imagine (and can see in more detail on the next page), our benchmark is more heavily invested in those industries than we are. That provided a third (and perhaps the most significant) headwind in the fourth quarter.

Looking at the strategy's entire track record, despite having relatively low “factor exposure,” using two rules helps define our short-term performance (looking back, this holds true about 75% of the time). When small caps beat large caps, with returns driven by growth sectors, we tend to win. When large-caps outpace small caps driven by cyclical sectors, we usually lose.

For the full year, most of that washes out. Nonetheless, growth and momentum factors explained benchmark returns in 2017 while valuation detracted. This headwind to our “valuation-sensitive” approach is difficult to quantify. Certainly, if we had simply picked the fastest growers and ignored valuations, we may have done better in 2017. Valuations (measured by our benchmark's next 12-month forward price-to-earnings ratio) started the year above its historical average and actually extended two turns. Sell-side estimates for earnings growth in 2018 are more bullish than we have seen in a while—calling for mid-teens growth year over year. With a positive macroeconomic backdrop and tax reform, that could happen. If it does not, we suspect growth indices could see their first meaningful correction since 2015.

As always, we remain committed to achieving attractive risk-adjusted returns over a full market cycle by owning a diversified portfolio of companies that we believe could one day grow much larger. [B](#)

## Sector Diversification

- The strategy is underweight consumer discretionary. Within the sector, we have more exposure to travel and are underweight retail, apparel and auto parts. This tilt away from traditional consumer businesses boosted relative returns in the first half of 2017 and hurt in the second.
- While we have no direct investments in energy, the strategy is exposed to oil-price fluctuations through fuel-card operators **FLEETCOR** and **WEX** (in financial services). Nonetheless, our relative results generally face a headwind when energy and heavy cyclicals drive benchmark returns.
- The strategy is slightly overweight financial services. Within the sector, however, it leans towards consumer financials and data-services companies and away from REITs, insurance companies and brokerage firms. We do not believe the strategy expresses a bet for, or against, rising interest rates.
- Health care represents our largest overweight. Within the sector, we have broad exposure to services, devices and pharma/biotech.
- We are underweight materials and processing. Within the sector, our holdings are more conservative than those of the benchmark—they tilt larger-cap and less cyclical.
- The strategy's weights in producer durables and technology are slightly underweight to those of the benchmark. Given that Waste Connections represents nearly 4% of producer durables, one could describe our posture in that sector as less cyclical than that of the benchmark.
- Internet provider **Cogent** is our only position in utilities.

RUSSELL GLOBAL SECTORS	MID-CAP GROWTH REP. ACCOUNT (%)	RUSSELL MIDCAP® GROWTH INDEX (%)	DIFFERENCE (%)	MID-CAP GROWTH REP. ACCOUNT (%)	
	Q4 '17	Q4 '17	Q4 '17	Q3 '17	Q4 '16
Consumer Discretionary	15.25	18.41	-3.16	16.68	20.04
Consumer Staples	3.12	4.21	-1.09	3.32	4.23
Energy	--	2.52	-2.52	--	--
Financial Services	18.80	17.08	1.73	18.36	20.95
Health Care	15.97	12.23	3.74	16.53	13.64
Materials & Processing	6.66	8.14	-1.48	6.29	5.42
Producer Durables	13.62	16.63	-3.02	12.90	11.35
Technology	18.42	20.51	-2.09	17.60	14.77
Utilities	1.88	0.27	1.61	2.11	1.86
Unassigned	6.29	--	6.29	6.21	7.75

## Quarterly Attribution Detail by Sector

- Stock selection in the producer durables, health care and consumer discretionary sectors drove our underperformance during the fourth quarter.
- The shortfall in producer durables was broad-based, caused by our underweight to cyclical industrials rather than by any one holding. **Waste Connections** was the largest relative detractor; its stock price only rose 1.6% in the fourth quarter, underperforming the sector by almost 8%.
- Returns lagged in health care due to two holdings – Cotiviti and **Henry Schein**. Shares of Cotiviti remained under pressure as guidance modestly lagged expectations. Henry Schein's share price faltered as fears of Amazon's encroachment in the dental consumables distribution space burgeoned. We added to both positions on weakness.

RUSSELL GLOBAL SECTORS	MID-CAP GROWTH REP. ACCOUNT		RUSSELL MIDCAP® GROWTH INDEX		ATTRIBUTION ANALYSIS		
	AVERAGE WEIGHT (%)	RETURN (%)	AVERAGE WEIGHT (%)	RETURN (%)	ALLOCATION EFFECT (%)	SELECTION AND INTERACTION EFFECT (%)	TOTAL EFFECT (%)
Consumer Discretionary	15.71	4.23	17.98	7.35	-0.09	-0.43	-0.52
Consumer Staples	3.01	15.96	4.06	9.16	-0.05	0.18	0.13
Energy	--	--	2.45	5.45	0.04	--	0.04
Financial Services	18.52	12.32	16.89	8.29	0.02	0.67	0.69
Health Care	16.34	-0.60	13.04	3.38	-0.11	-0.68	-0.79
Materials & Processing	6.69	0.62	8.07	6.36	-0.00	-0.38	-0.38
Producer Durables	13.54	4.61	16.33	9.37	-0.07	-0.61	-0.68
Technology	18.05	3.26	20.86	5.20	-0.03	-0.34	-0.37
Utilities	2.01	-6.40	0.27	7.77	0.01	-0.29	-0.28
Unassigned	6.13	-0.88	0.04	1.31	-0.30	-0.17	-0.47
<b>Total</b>	<b>100.00</b>	<b>4.17</b>	<b>100.00</b>	<b>6.81</b>	<b>-0.60</b>	<b>-2.24</b>	<b>-2.64</b>

## Quarterly Contribution to Return

- Marvell Technology Group announced its intention to buy **Cavium**, sending shares higher in mid-November.
- **Marriott** continued to exhibit solid fundamentals with RevPAR growth outside the U.S. driving upside in the third quarter.
- FLEETCOR put up solid third quarter results in the face of skepticism; the stock also benefited from rising crude oil prices in fourth quarter.
- **Brown-Forman's** domestic growth accelerated for the second quarter in a row, bucking sluggish trends in U.S. spirits retail growth.
- Off-price retailer **Ross Stores** continued to post solid results (with 4% same-store sales growth last quarter). Its stock price also benefited as the mid-cap growth retail sub-sector snapped back nearly 15% in the fourth quarter.
- MACOM shares fell after the company posted its second consecutive subpar report due to weakness in China. Unlike the first miss in August, its Q3 report also showed signs of weakness in data center sales—the main growth driver—causing us to reassess the position.
- TripAdvisor struggled with a business-model transition in 2016 and 2017. Priceline reduced its advertising spend with TripAdvisor and more generally on hotel metasearch auctions which further hindered their results in the second half of 2017.
- Henry Schein's share price faltered as fears of Amazon's encroachment in the dental consumables distribution space burgeoned. We think investor concerns are overblown; we added to the position on weakness.
- Cotiviti—a leader in health care claims analysis for insurance companies—posted solid results through most of the year, but lowered fourth-quarter guidance modestly due to delayed implementation timelines, a slower ramp in its Medicare contract and overall modest cost-inflation and health care provider utilization in 2017. We added to the position on weakness.
- Shares of can maker **Ball Corp** have been weak since the company reduced its 2017 outlook. We think hits from weather incidents and can volume volatility in the Middle East will prove transient.

MID-CAP GROWTH REP.ACCOUNT TOP FIVE CONTRIBUTORS				
TICKER	NAME	AVG. WEIGHT (%)	RETURN (%)	CONTRIBUTION TO RETURN (%)
CAVM	Cavium, Inc.	2.36	27.13	0.57
MAR	Marriott International, Inc. Class A	2.60	23.42	0.56
FLT	FleetCor Technologies, Inc.	1.93	24.33	0.42
BF.B	Brown-Forman Corporation Class B	1.58	26.84	0.39
ROST	Ross Stores, Inc.	1.66	24.55	0.38
MID-CAP GROWTH REP.ACCOUNT BOTTOM FIVE CONTRIBUTORS				
MTSI	MACOM Technology Solutions Holdings, Inc.	1.32	-27.06	-0.48
TRIP	TripAdvisor, Inc.	2.02	-14.98	-0.32
HSIC	Henry Schein, Inc.	1.80	-14.77	-0.27
COTV	Cotiviti Holdings, Inc.	2.17	-10.48	-0.25
BLL	Ball Corporation	2.38	-8.12	-0.22

## Portfolio Activity

- **Cambrex** is a leading pharmaceutical contract manufacturer. We built a position for two reasons: 1) we think secular trends favor outsourcing; and 2) based on our secondary source due diligence, we believe investor concerns over Cambrex's revenue concentration with Gilead may be overblown, creating an attractive entry point.
- We think **GoDaddy** has developed a unique and enduring platform to sell IT products to small businesses. While its mainstay internet domain registration business drives modest but steady growth, we think the firm will continue to cross-sell website hosting and development services, Office 365 and telephony services at a faster pace, and benefit from scale outside the U.S. (following its acquisition of Host Europe Group).
- **Becton Dickinson** announced it would acquire C.R. Bard earlier in the year. We sold the position to fund other opportunities.
- We sold **Equifax** because we believe the firm's recovery from a massive data breach will be protracted and expensive. We still own a meaningful position in Equifax's competitor—TransUnion.
- We exited our position in **TreeHouse Foods** early in Q4 due to fundamental concerns thus avoiding further losses after the company reported soft Q3 results. We think TreeHouse will continue to struggle with the integration of ConAgra's private brands business, which it purchased in 2016.

MID-CAP GROWTH REP.ACCOUNT PORTFOLIO ACTIVITY		
ADDITIONS		SECTOR
CBM	Cambrex Corporation	Health Care
GDDY	GoDaddy, Inc. Class A	Information Technology
DELETIONS		SECTOR
BCR	C. R. Bard, Inc.	Health Care
EFX	Equifax Inc.	Industrials
THS	TreeHouse Foods, Inc.	Consumer Staples

## GLCS Sector Diversification

SECTOR	MID-CAP GROWTH REP. ACCOUNT (%)	RUSSELL MIDCAP® GROWTH INDEX (%)	DIFFERENCE (%)	MID-CAP GROWTH REP. ACCOUNT (%)	
	Q4 '17	Q4 '17	Q4 '17	Q3 '17	Q4 '16
Consumer Discretionary	11.82	17.48	-5.66	13.55	16.83
Consumer Staples	4.97	4.21	0.76	5.07	7.03
Energy	--	2.52	-2.52	--	--
Financials	2.61	7.27	-4.66	2.60	2.06
Health Care	15.97	13.21	2.75	16.53	13.64
Industrials	19.16	17.38	1.78	19.55	19.81
Information Technology	34.34	27.91	6.43	31.56	31.96
Materials	5.01	6.40	-1.39	4.70	2.90
Real Estate	2.82	3.33	-0.51	3.02	2.84
Telecommunication Services	3.30	0.22	3.07	3.41	2.92
Utilities	--	0.05	-0.05	--	--

## GLCS Quarterly Attribution Detail by Sector

SECTOR	MID-CAP GROWTH REP. ACCOUNT		RUSSELL MIDCAP® GROWTH INDEX		ATTRIBUTION ANALYSIS		
	AVERAGE WEIGHT (%)	RETURN (%)	AVERAGE WEIGHT (%)	RETURN (%)	ALLOCATION EFFECT (%)	SELECTION AND INTERACTION EFFECT (%)	TOTAL EFFECT (%)
Consumer Discretionary	12.38	2.02	17.02	8.66	-0.16	-0.76	-0.92
Consumer Staples	4.81	13.57	4.05	9.17	-0.01	0.19	0.18
Energy	--	--	2.49	5.37	0.04	--	0.04
Financials	2.57	6.74	7.13	9.22	-0.11	-0.07	-0.17
Health Care	16.34	-0.61	14.07	3.35	-0.08	-0.68	-0.75
Industrials	19.34	5.76	16.94	9.51	0.05	-0.68	-0.63
Information Technology	33.21	6.87	28.29	5.38	-0.14	0.47	0.34
Materials	5.04	-1.67	6.39	5.49	0.01	-0.36	-0.35
Real Estate	2.87	12.83	3.34	5.99	--	0.17	0.17
Telecommunication Services	3.44	-7.64	0.22	6.91	--	-0.53	-0.52
Utilities	--	--	0.05	11.43	-0.01	--	-0.01
<b>Total</b>	<b>100.00</b>	<b>4.17</b>	<b>100.00</b>	<b>6.81</b>	<b>-0.40</b>	<b>-2.24</b>	<b>-2.64</b>

# Mid-Cap Growth Equity Composite

Year	Composite Total Gross Returns (%)	Composite Total Net Returns (%)	Benchmark Returns (%)	Composite 3-Yr Annualized Standard Deviation (%)	Benchmark 3-Yr Annualized Standard Deviation (%)	Portfolios in Composite at End of Year	Composite Dispersion (%)	Composite Assets (\$USD Millions)	GIPS Firm Assets (\$USD Millions)
2016	9.3	8.6	7.3	11	12.2	Five or Fewer	N/A	2	30,417
2015	7.1	6.3	-0.2	10.7	11.3	Five or Fewer	N/A	1	43,746
2014	8.8	8	11.9	N/A	N/A	Five or Fewer	N/A	2	44,772
2013	38.3	37.3	35.7	N/A	N/A	Five or Fewer	N/A	1	40,739
2012*	8.5	8	3.4	N/A	N/A	Five or Fewer	N/A	1	26,794

\*Return is for period May 1, 2012 through December 31, 2012.

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3. This composite was created in 2015.
4. The benchmark is the Russell Global Large-Cap Net Index. This index offers investors access to the large-cap segment of the entire global equity universe. The index is constructed to provide a comprehensive and unbiased barometer for the large-cap segment and is completely reconstituted annually to accurately reflect the changes in the market over time. Russell® is a trademark/service mark of the London Stock Exchange Group companies. One cannot invest directly in an index.
5. Benchmark returns are not covered by the report of the independent verifiers.
6. The dispersion of annual returns is measured by the equal weighted standard deviation of portfolio returns. The composite dispersion is not applicable (N/A) for periods where there were five or fewer accounts in the composite for the entire period.  
Gross-of-fees performance returns are presented before management fees but after all trading commissions, and gross of foreign withholding taxes (if applicable). Net-of-fee performance returns reflect the deduction of actual management fees and all trading commissions. Other expenses can reduce returns to investors. The standard management fee schedule is as follows: 0.80% on the first \$25 million; 0.70% on the next \$25 million; 0.65% on the next \$50 million; and 0.50% on the balance over \$100 million. Further information regarding investment advisory fees is described in Part II A of the firm's form ADV. Actual fees paid by accounts in the composite may differ from the current fee schedule.
8. The three-year annualized ex-post standard deviation measures the variability of the composite (using gross returns) and the benchmark for the 36-month period ended on December 31. The 3-year annualized standard deviation is not presented as of December 31, 2015, because 36 monthly returns for the composite were not available (NA) and the composite did not exist.
9. Valuations and performance returns are computed and stated in U.S. Dollars. All returns reflect the reinvestment of income and other earnings.
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