## MID-CAP GROWTH REVIEW AND OUTLOOK

The Mid-Cap Growth strategy outpaced the 35\% return of its benchmark, the Russell Midcap® Growth Index, in 2019 thanks to the team's strong stock selection. We were especially pleased with that feat given our lower volatility profile and our underweight to the booming technology sector. Nonetheless, the strategy lagged in the fourth quarter. Investors favored cyclicals, banks and semiconductor companies the last three months, providing a headwind to our "quality" bent. To be fair, stock selection benefited returns more in the first nine months of the year, and it best explains our shortfall in the fourth quarter.

The more things change, the more they stay the same. While a few market dynamics shifted in the fourth quarter, many 2019 themes persisted: stocks went up, growth beat value and the technology sector rallied. There was some variety, however. Health care, which lagged earlier in the year, outperformed largely due to biotechnology. The 10-year U.S. Treasury yield jumped 24 basis points, reversing some of its year-to-date slide. Bank stocks caught a bid. Cyclicals rallied. Semiconductor companies and their associated capital equipment providers enjoyed large gains. That was not a change. The "electronics" subsector (which includes both) was our benchmark's bestperforming industry in the fourth quarter (+20\%) and for the year (+69\%).

Our stock selection for the full year trumped our underweight to semiconductors and semi capital equipment. Success was spread across sectors and positions. We had one large "total effect" contributor (Catalent), and nearly 20 other investments chipped in 30 to 50 basis points apiece. We built Catalent to one of our largest positions entering 2019 following its disproportionate drawdown in 2018. The company's solid results, M\&A in the biologics space and accelerating growth expectations helped boost its stock price $81 \%$ this year. SiteOne and Genpact followed similar paths. We added on weakness last year, results improved, and its share prices climbed $64 \%$ and 58\%, respectively. Eli Lilly bought Loxo, Pfizer purchased Array BioPharma and FIS snatched Worldpay in the payments industry M\&A frenzy of 2019. Match Group continued to post solid results. Edwards Lifesciences' growth accelerated when it received approval for its transcatheter aortic valve replacement system for a larger patient set. The list could go on.

Covetrus, which we've detailed in prior letters and no longer own, was our only large detractor in 2019. In another nod to the team's positive stock selection, the next two largest "total effect" detractors were benchmark-only holdings in the semiconductor industry—Advanced Micro Devices and Lam Research.

Those two benchmark winners hurt our relative comparison during the fourth quarter as well. Regardless, our holdings better explain the strategy's lag. Ball Corp and Waste Connections weighed on our fourth-quarter-returns, likely due to the shift in interest rates (and their large portfolio weights) rather than for fundamental reasons. Dollar Tree, Pinterest and KAR Auction Services-which had been year-to-date contributors-turned down in the fourth quarter for company-specific reasons.

Investors rewarded Dollar Tree earlier in the year as Family Dollar's samestore sales growth accelerated and management discussed "breaking the buck" (offering items at price points above \$1) at Dollar Tree-branded stores. Investors suffered a setback after the company reported its third-quarter results. Family Dollar's growth, it seems, might be coming at the expense of gross margin. As always, our primary- and secondary-source due diligence is ongoing. We have not added to the position on weakness.

Pinterest's share price dropped 29\% in the fourth quarter, largely after its thirdquarter earnings report. Following a "beat" in the second quarter, the company's in-line year-over-year revenue growth of $47 \%$ was not enough to sate investors' appetites. User growth outperformed, and profitability was well beyond most onlookers' hopes. Nonetheless, sales growth is paramount at this stage. After conversations with management and customers, we believe product introductions in the second half of 2018 are simply creating a tough comparison in the second half of 2019. We still believe Pinterest is in the early stages of monetizing a large opportunity on its differentiated platform. We added on weakness.

KAR Auction Services contributed early in the year and it gave us Insurance Auto Auctions, Inc. in a spin-off in June (part of our original KAR thesis). However, it missed profit expectations two quarters in a row and underperformed late in the year. Importantly, gross profit per vehicle (a key metric to our thesis) deteriorated two quarters in a row due to a mix-shift and perhaps timing reasons. This leant evidence to the bear thesis that the firm's physical auction model might be supplanted by less-profitable online modes. As with Dollar Tree, our diligence is ongoing and we have not added to the position on weakness.

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. We are grateful for your support and look forward to updating you at the conclusion of the first quarter.

## SECTOR DIVERSIFICATION

The Mid-Cap Growth strategy employs a bottom-up, fundamental approach. Thus, our sector weights result from our opportunity set and research effort. Over the long run, stock selection has driven our results. Nonetheless, we believe this analysis helps describe when the strategy's returns might experience a headwind or a tailwind relative to its benchmark over short periods.

- Technology is the strategy's largest underweight. Lower exposure to the semiconductor equipment and payments subsectors comprise most of the difference. Our weight in software and internet companies is close to that of our benchmark. However, we believe our software holdings exhibit a lower volatility profile than those in our benchmark.
- The strategy is underweight financials. Within the sector, we tilt away from investment banks and insurance companies.
- We are overweight health care, with broad exposure to services, devices and pharmaceuticals/biotechnology. Our weight in the sector increased sequentially in the fourth quarter due to the new purchases of Bruker Corp. and HealthEquity, as well as additions to one existing holding, Cooper Companies.
- We are overweight industrials according to the ICB sector classification system. However, we believe our industrial holdings are less cyclical than those of our benchmark.
- While we have no direct investments in oil and gas, the strategy is exposed to oil price fluctuations through fuel card operator WEX in industrials.
- With the addition in the third quarter of FMC, an agricultural chemical maker, we are mildly overweight basic materials.

| ICB SECTOR | REPRESENTATIVE MID-CAP GROWTH ACCOUNT <br> (\%) | RUSSELL MIDCAP® GROWTH INDEX <br> (\%) | DIFFERENCE <br> (\%) | REPRESENTATIVE MID-CAP GROWTH Account <br> (\%) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q4'19 | Q4'19 | Q4'19 | Q3'19 | Q4'18 |
| Basic Materials | 3.05 | 0.93 | 2.12 | 2.88 | 1.80 |
| Consumer Goods | 6.31 | 7.13 | -0.82 | 7.03 | 7.81 |
| Consumer Services | 18.55 | 17.26 | 1.30 | 18.03 | 15.10 |
| Financials | 4.72 | 7.69 | -2.97 | 4.78 | 6.50 |
| Health Care | 16.57 | 12.40 | 4.17 | 13.85 | 18.05 |
| Industrials | 31.43 | 27.53 | 3.91 | 33.12 | 34.07 |
| Oil \& Gas | -- | 1.23 | -1.23 | -- | -- |
| Technology | 19.35 | 25.37 | -6.02 | 20.31 | 16.67 |
| Telecommunications | -- | 0.25 | -0.25 | -- | -- |
| Unassigned | -- | 0.21 | -0.21 | -- | -- |

[^0]|  | REPRESENTATIVE <br> MID-CAP GROWTH ACCOUNT |  | RUSSELL MIDCAP GROWTH INDEX |  | ATTRIBUTION ANALYSIS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICB SECTOR | average WEIGHT (\%) | RETURN (\%) | average WEIGHT (\%) | RETURN (\%) | ALLOCATION EFFECT (\%) | SELECTION \& INTERACTION EFFECT (\%) | TOTAL EFFECT (\%) |
| Basic Materials | 3.02 | 4.88 | 0.94 | 7.90 | -- | -0.09 | -0.09 |
| Consumer Goods | 6.47 | 7.10 | 7.21 | 3.54 | 0.04 | 0.21 | 0.25 |
| Consumer Services | 18.24 | 5.50 | 17.51 | 6.06 | -0.01 | -0.13 | -0.14 |
| Financials | 4.71 | 5.52 | 7.80 | 6.19 | 0.06 | -0.03 | 0.03 |
| Health Care | 14.79 | 15.41 | 11.97 | 16.76 | 0.19 | -0.15 | 0.04 |
| Industrials | 32.66 | 4.15 | 27.77 | 7.17 | -0.03 | -1.00 | -1.03 |
| Oil \& Gas | -- | -- | 1.22 | 6.35 | 0.03 | -- | 0.03 |
| Technology | 20.11 | 6.96 | 25.00 | 9.20 | -0.06 | -0.45 | -0.52 |
| Telecommunications | -- | -- | 0.25 | 2.21 | 0.02 | -- | 0.02 |
| Unassigned | -- | -- | 0.34 | -5.63 | 0.04 | -- | 0.04 |
| Total | 100.00 | 6.80 | 100.00 | 8.17 | 0.26 | -1.64 | -1.38 |

- Negative stock selection in industrials and technology overpowered a relative gain in the consumer goods sector during the quarter.
- Meaningful position weights in long-tenured portfolio contributors Ball Corp and Waste Connections detracted from our industrial sector results during the last three months as investors favored more cyclical holdings. Pinterest's drawdown following disappointing fourth-quarter guidance hurt our technology sector returns during the period. Nonetheless, not owning Advanced Micro Devices accounted for most of our relative shortfall in technology during the fourth quarter.
- Solid results from Electronic Arts and Aptiv in the face of tame expectations boosted returns in the consumer goods sector during the fourth quarter.





 information and for a complete list of terms and definitions.


## YEAR-TO-DATE ATTRIBUTION DETAIL BY SECTOR

|  | REPRESENTATIVE <br> MID-CAP GROWTH ACCOUNT |  | RUSSELL MIDCAP GROWTH INDEX |  | ATTRIBUTION ANALYSIS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICB SECTOR | average WEIGHT (\%) | RETURN (\%) | average WEIGHT (\%) | RETURN (\%) | ALLOCATION EFFECT (\%) | SELECTION \& INTERACTION EFFECT (\%) | TOTAL EFFECT (\%) |
| Basic Materials | 2.19 | 46.37 | 1.49 | 32.34 | 0.09 | 0.19 | 0.28 |
| Consumer Goods | 7.07 | 43.80 | 7.94 | 32.98 | 0.08 | 0.88 | 0.96 |
| Consumer Services | 15.96 | 21.54 | 16.30 | 26.55 | 0.14 | -0.56 | -0.42 |
| Financials | 6.49 | 39.90 | 8.61 | 40.54 | -0.03 | -0.00 | -0.04 |
| Health Care | 15.62 | 56.60 | 11.73 | 27.56 | -0.25 | 3.61 | 3.36 |
| Industrials | 33.26 | 46.53 | 26.78 | 40.75 | 0.38 | 1.45 | 1.84 |
| Oil \& Gas | -- | -- | 1.35 | 7.96 | 0.38 | -- | 0.38 |
| Technology | 16.95 | 42.22 | 25.27 | 40.80 | -0.38 | 0.35 | -0.03 |
| Telecommunications | -- | -- | 0.23 | 51.71 | 0.02 | -- | 0.02 |
| Unassigned | 2.47 | -31.09 | 0.29 | -44.40 | -1.27 | -0.01 | -1.28 |
| Total | 100.00 | 40.53 | 100.00 | 35.47 | -0.84 | 5.90 | 5.07 |

- Positive stock selection across most sectors drove our outperformance in 2019, with particular success in health care and industrials.
- Catalent's stock price jumped $81 \%$ in 2019, generating one-third of the outperformance in health care shown above. Loxo Oncology, Array BioPharma, Dexcom and Edwards Lifesciences helped as well. SiteOne, Genpact, Fair Isaac, Worldpay and Woodward boosted returns in the industrial sector during 2019.
- Covetrus, unassigned above, was our only meaningful detractor for the full year.





 of terms and definitions. CONTRIBUTORS TO RETURN
Representative Mid-Cap Growth Account Top Five Contributors

|  | NAME | DESCRIPTION | AVERAGE WEIGHT (\%) | RETURN (\%) | CONTRIBUTION TO RETURN (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EYE | National Vision Holdings Inc. | Operates retail locations offering eye exams, eyeglasses and contact lenses | 2.04 | 34.66 | 0.64 |
| DXCM | Dexcom Inc. | Manufactures and markets medical devices and glucose monitoring systems | 1.37 | 46.69 | 0.53 |
| SITE | SiteOne Landscape Supply Inc. | Distributes commercial and residential landscape supplies | 2.34 | 22.40 | 0.50 |
| MAR | Marriott International Inc. Class A | Operates and franchises hotels and related lodging facilities | 2.25 | 22.17 | 0.47 |
| ADSK | Autodesk Inc. | Designs and develops multimedia software products | 2.08 | 24.20 | 0.47 |

- National Vision reported strong third-quarter results with better-than-expected same-store sales and profitability.
- Dexcom reported strong third-quarter earnings. The company's U.S. business posted its highest growth rate in nearly three years as it benefits from increased demand for CGM, improving market access, industry-leading technology and increased manufacturing capacity.
- SiteOne reported strong third-quarter results on better-than-expected organic sales growth, continued accretive M\&A with improving profitability.
- Marriott International's share price climbed 22\% in fourth-quarter thanks to evidence of stabilized market share and investor hopes of a cyclical inflection in RevPAR.
- Autodesk reported strong third-quarter results and gave positive initial commentary on 2020, while investors had heightened concerns about ADSK's cyclicality after second-quarter earnings.


## YEAR-TO-DATE TOP FIVE CONTRIBUTORS TO RETURN

Representative Mid-Cap Growth Account Top Five Contributors

|  | NAME | DESCRIPTION | AVERAGE WEIGHT (\%) | RETURN (\%) | CONTRIBUTION TO RETURN (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CTLT | Catalent Inc. | Provides delivery technologies and development solutions | 2.73 | 80.87 | 2.16 |
| G | Genpact Limited | Engages in business process management, outsourcing, shared services and information outsourcing | 2.71 | 57.68 | 1.40 |
| BLL | Ball Corporation | Supplies metal and plastic packaging to the beverage and food industries | 3.46 | 41.92 | 1.36 |
| SITE | SiteOne Landscape Supply Inc. | Distributes commercial and residential landscape supplies | 1.93 | 64.22 | 1.11 |
| EW | Edwards Lifesciences Corporation | Designs, develops, manufactures and markets products to treat late-stage cardiovascular disease | 2.23 | 52.13 | 1.11 |

- Catalent's share price snapped back after it was disproportionately hit in the fourth-quarter 2018 drawdown. During 2019, the company made a bold move into the high-growth area of cell and gene therapy with the acquisition Paragon Bioservices, a leading contract development and manufacturing organization in the space. While the number of these types of potential therapies is huge, the manufacturing ability required for these complex therapeutics is extremely limited. The addition of Paragon and several other capacity enhancements allowed management to increase its long-term growth view by 200 basis points to $+8-10 \%$.
- Genpact announced several material incremental client relationships at the end of 2018 and beginning of 2019, including Walmart, Bridgewater, Cardinal Health and a new large GE deal, which drove significant revenue growth in 2019. More broadly, Genpact's market position has been validated, and the company continues to see more inbound, large-deal opportunities as well as more Transformation Service consulting-led engagements.
- Increased expectations for future growth of Ball's main product (aluminum beverage cans) and improved profitability drove strong performance for Ball shares. In particular, aluminum cans are taking share from other substrates for single-serving beverages (against plastic and cans), and we believe Ball is uniquely positioned to benefit from that trend.
- SiteOne's stock price significantly outpaced the benchmark in 2019 after underperforming the previous year as investor pessimism regarding U.S. housing shifted to optimism in 2019 and the company continued to post solid organic daily sales growth, margin improvement and M\&A activity.
- Edwards Lifesciences, which makes products to treat late-stage cardiovascular disease, reported solid results through the year due to increased global demand for transcatheter aortic valve replacement therapy. Growth accelerated after the company received FDA approval for its SAPIEN3 transcatheter heart valves for low-risk patients in August.

[^1]Representative Mid-Cap Growth Account Bottom Five Contributors

|  | NAME | DESCRIPTION | AVERAGE <br> WEICHT (\%) | RETURN (\%) | CONTRIBUTION <br> TO RETURN (\%) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BLL | Ball Corporation | Supplies metal and plastic packaging to the beverage and <br> food industries | 3.49 | -10.94 | -0.44 |
| DLTR | Dollar Tree Inc. | Owns and operates discount variety stores | 2.17 | -17.66 | -0.42 |
| PINS | Pinterest Inc. Class A | Operates a pinboard-style photo-sharing website | 0.93 | -29.48 | -0.33 |
| ETSY | Etsy Inc. | Operates an online marketplace for buying and selling of <br> handmade and vintage goods | 1.23 | -21.58 | -0.26 |
| KAR | KAR Auction Services Inc. | Operates whole car and salvage, financing, remarketing, <br> technology, inspection, repair and auction services | 1.82 | -10.53 | -0.22 |

- After strong year-to-date gains, Ball Corp's stock price pulled back in the fourth quarter after investor expectations for near-term growth were tamed by the company's ability to increase capacity.
- Dollar Tree's fourth-quarter gross margin fell short of investors' hopes due to an unfavorable product mix and higher freight costs in both divisions, Dollar Tree and Family Dollar. We think consumable growth, which hurts margins in the short term, could increase frequency, allowing the company to recapture margin in the future. Moreover, management's tone regarding the Dollar Tree multiprice test was interpreted as lukewarm, suggesting that a full rollout will take longer than expected. Both topics are critical to our investment thesis.
- After a strong second quarter (its first quarter as a public company), Pinterest reported slower-than-expected revenue growth in the third quarter as year-over-year product introductions drove underappreciated growth rate variability. We also saw weakness in recent IPOs as well as in some Smid-cap consumer internet stocks, potentially exacerbating the drawdown for Pinterest's shares. We added to the position on weakness.
- Etsy's share price fell after third-quarter earnings as the company's free shipping initiative and a new ad platform temporarily impacted gross merchandise sales growth and margins. We believe these are the right long-term investments for the company and view the issues as transitory in nature. We added to the position on weakness.
- KAR Auction Services posted disappointing third-quarter profitability, flaming investors' fears that slowing off-lease vehicle growth at its auction sites, coupled with disruption from an online platform for low-value dealer-consignment vehicles, would hurt returns. Both topics are critical to our investment thesis.

[^2]
## YEAR-TO-DATE BOTTOM FIVE CONTRIBUTORS TO RETURN

Representative Mid-Cap Growth Account Bottom Five Contributors

|  | NAME | DESCRIPTION | AVERAGE <br> WEICHT (\%) | RETURN (\%) | CONTRIBUTION <br> TO RETURN (\%) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CVET | Covetrus Inc. | Develops software and technologies for the animal health <br> industry | 0.80 | -79.52 | -1.62 |
| FTCH | Farfetch Limited Class A | Operates as a global technology platform for luxury fashion, <br> connecting creators, curators and consumers | 0.19 | -59.75 | -0.41 |
| PINS | Pinterest Inc. Class A | Operates a pinboard-style photo-sharing website | 0.53 | -16.48 | -0.23 |
| DLTR | Dollar Tree Inc. | Owns and operates discount variety stores | 1.32 | -11.85 | -0.21 |
| AOS | A. O. Smith Corporation | Manufactures and markets residential and commercial water <br> heaters and boilers | 0.26 | -8.13 | -0.14 |

- Covetrus, an animal health technology and services company, was our largest detractor during the year. The company was forced to lower its previously anticipated cash flow guidance for 2019 due to a "slowing end market." Unfortunately, this increased the company's post-spin leverage profile beyond our comfort zone. We subsequently sold the position at a loss.
- After reporting disappointing guidance on its second-quarter report and news of an unexpected merger, Farfetch saw its share price fall significantly. We sold this small position after our thesis was violated.
- After a strong second quarter (its first quarter as a public company), Pinterest reported slower-than-expected revenue growth in the third quarter as year-over-year product introductions drove underappreciated growth rate variability. We also saw weakness in recent IPOs as well as in some Smid-cap consumer internet stocks, potentially exacerbating the drawdown for Pinterest's shares. We added to the position on weakness.
- Dollar Tree detracted during the year-to-date period because higher tariffs, a greater consumable mix, clearance sales and other unanticipated costs/expenses pressured the firm's gross margin, stunting what seemed to be a promising turnaround in its Family Dollar division.
- A. O. Smith's water heater sales in China deteriorated throughout the year. We sold the position at a small loss after our thesis was violated.

[^3]- We started a position in Bruker Corp, a diversified science tools company with leading market share in $70 \%$ of its products. The company is in the midst of multiple product cycles-including its timsTOF Pro, an alternative to Thermo's Orbitrap mass spectrometry platform-that should help lift organic growth into the mid-single digits more consistently. Aided by management's margin improvement initiative, we think Bruker could surprisingly double per-share earnings in three to five years.
- We rebuilt a position in HealthEquity, a leader in the HSA industry, in the fourth quarter. We sold the stock in 2018 due to valuation; it subsequently pulled back to a more palatable level. Since we owned shares previously, HealthEquity purchased a competitor, WageWorks (a former holding of our Small-Cap Growth strategy). We think HealthEquity can not only benefit from continued positive trends in the HSA industry (a keystone of our original investment thesis) but also from ample merger synergies and the ability to bundle solutions in new channels.
- We sold Calavo Growers and Covetrus due to our concerns over each firm's respective fundamentals.
- We exited our position in J.B. Hunt to fund other opportunities.

|  | ADDITIONS | GICS SECTOR |
| :--- | :--- | :--- |
| BRKR | Bruker Corporation | Health Care |
| HQY | HealthEquity Inc. | Health Care |
|  |  |  |
|  | DELETIONS | GICS SECTOR |
| CVGW | Calavo Growers Inc. | Consumer Staples |
| CVET | Covetrus Inc. | Health Care |
| JBHT | J.B. Hunt Transport Services Inc. | Industrials |

## YEAR-TO-DATE ADDITIONS/DELETIONS

## Representative Mid-Cap Growth Account Portfolio Activity

- Blueprint Medicines has a few promising drugs in its pipeline, most notably a therapy targeting RET-mutant tumors.
- We believe Bruker's product cycles and margin improvement could double pershare earnings in three to five years.
- We participated in the Datadog IPO and currently hold a small position. The company monitors cloud-scale application performance and is growing rapidly.
- We see multiple ways for Dollar Tree to win in an attractive, noncyclical market. The company could reinvigorate Family Dollar with a new renovation program and/or it might accelerate same-store sales and expand gross margin at its Dollar Tree business by introducing price points above $\$ 1$.
- We think insecticides acquired from DuPont (the diamides) could drive persistent growth and margin improvement for FMC.
- We think HealthEquity can not only benefit from continued positive trends in the HSA industry but also from its merger with WageWorks.
- KAR Auction Services (whole-car auctions) spun off its salvage auction segment (IAA) midyear. We like both businesses and added to our positions in both stocks.
- We built a position in Match.com early in the year. We believe Tinder can drive sustained revenue growth and margin expansion for years.
- We participated in Pinterest's IPO and added to our position during the year. Pinterest is at the beginning of its monetization trajectory, and we see a long runway.
- We sold Agios, Cogent, Henry Schein, J.B. Hunt, Liberty SiriusXM and Sensata to fund other opportunities.
- Three of our positions were acquired this year-Eli Lilly bought Loxo Oncology, Pfizer bought Array BioPharma and FIS purchased Worldpay.
- We sold Calavo Growers, Six Flags and Welbilt due to thesis violations.

| sYMBOL | ADDITIONS | GIcs sEcTOR |
| :--- | :--- | :--- |
| BPMC | Blueprint Medicines Corp. | Health Care |
| BRKR | Bruker Corporation | Health Care |
| DDOG | Datadog Inc. Class A | Information Technology |
| DLTR | Dollar Tree Inc. | Consumer Discretionary |
| FMC | FMC Corporation | Materials |
| HQY | HealthEquity Inc. | Health Care |
| IAA | IAA Inc. | Industrials |
| KAR | KAR Auction Services, Inc. | Industrials |
| LFUS | Littelfuse Inc. | Information Technology |
| MTCH | Match Group Inc. | Communication Services |
| PINS | Pinterest Inc. Class A | Communication Services |
| sYMBOL | DELETIONS | GIcs sECTOR |
| AGIO | Agios Pharmaceuticals Inc. | Health Care |
| CVGW | Calavo Growers Inc. | Consumer Staples |
| CCOI | Cogent Communications Holdings Inc. | Communication Services |
| HSIC | Henry Schein Inc. | Health Care |
| JBHT | J.B. Hunt Transport Services Inc. | Industrials |
| LSXMA | Liberty Media Corp. Series A Liberty SiriusXM | Communication Services |
| LOXO | Loxo Oncology Inc. | Health Care |
| ST | Sensata Technologies Holding PLC | Industrials |
| SIX | Six Flags Entertainment Corporation | Consumer Discretionary |
| WBT | Welbilt Inc. | Industrials |
| WP | Worldpay Inc. Class A | Information Technology |

[^4] of this presentation for additional information and for a complete list of terms and definitions.

## YEAR-TO-DATE ADDITIONS/DELETIONS

Thoughtful Investing.

Representative Mid-Cap Growth Account Portfolio Activity

| SYMBOL | PURCHASED \& SOLD | GICS SECTOR |
| :--- | :--- | :--- |
| AOS | A. O. Smith Corporation | Industrials |
| ARRY | Array BioPharma Inc. | Health Care |
| CVET | Covetrus Inc. | Health Care |
| FTCH | Farfetch Limited Class A | Communication Services |
| TW | Tradeweb Markets Inc. Class A | Financials |

## PORTFOLIO CHARACTERISTICS

Thoughtful Investing.

|  | REPRESENTATIVE MID-CAP GROWTH ACCOUNT | RUSSELL MIDCAP GROWTH INDEX |
| :---: | :---: | :---: |
| Number of Holdings | 65 | 403 |
| Dividend Yield (\%) | 0.6 | 0.7 |
| P/E Ratio FY2 Est. | 27.0 | 23.3 |
| Top 10 Equity Holdings (\%) | 27.1 | 12.4 |
| Active Share | 87.9 |  |
| Market Capitalization (\$ B) |  |  |
| Weighted Average | 19.0 | 20.2 |
| Maximum | 68.2 | 78.7 |
| Minimum | 2.6 | 1.2 |

Fourth Quarter 2019

## COMPOSITE PERFORMANCE

B Brownadvisory
Thoughtful Investing.
As of 12/31/2019

-Brown Advisory Mid-Cap Growth Composite Gross Returns ■Brown Advisory Mid-Cap Growth Composite Net Returns $\square$ Russell Midcap® Growth Index

## TOP 10 PORTFOLIO HOLDINGS

## Top 10 Portfolio Holdings

| TOP 10 HOLDINGS | \% OF PORTFOLIO |
| :--- | :---: |
| Cash \& Equivalents | 3.7 |
| Waste Connections Inc. | 3.2 |
| Ball Corp. | 3.1 |
| Electronic Arts, Inc. | 2.8 |
| Genpact Ltd. | 2.7 |
| Teleflex, Inc. | 2.6 |
| GoDaddy, Inc. CI A | 2.5 |
| Marriott International, Inc. | 2.4 |
| SiteOne Landscape Supply, Inc. | 2.3 |
| SBA Communications Corp. | 2.3 |


| GICS SECTORS | REPRESENTATIVE MID-CAP GROWTH ACCOUNT <br> (\%) | RUSSELL MIDCAP® GROWTH INDEX (\%) | DIFFERENCE <br> (\%) | REPRESENTATIVE MID-CAP GROWTH ACCOUNT <br> (\%) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q4'19 | Q4'19 | Q4'19 | Q3'19 | Q4'18 |
| Communication Services | 7.17 | 4.58 | 2.60 | 6.15 | 5.95 |
| Consumer Discretionary | 15.29 | 15.05 | 0.23 | 15.01 | 14.72 |
| Consumer Staples | 1.23 | 3.16 | -1.93 | 2.08 | 2.14 |
| Energy | -- | 1.23 | -1.23 | -- | -- |
| Financials | 2.34 | 4.45 | -2.11 | 2.24 | 2.50 |
| Health Care | 16.57 | 15.20 | 1.37 | 14.54 | 18.05 |
| Industrials | 21.59 | 16.93 | 4.66 | 22.54 | 21.63 |
| Information Technology | 27.18 | 33.77 | -6.60 | 28.19 | 27.96 |
| Materials | 6.25 | 2.88 | 3.37 | 6.71 | 4.88 |
| Real Estate | 2.39 | 2.75 | -0.36 | 2.54 | 2.16 |
| Utilities | -- | -- | -- | -- | -- |

Fourth Quarter 2019

## QUARTER-TO-DATE ATTRIBUTION DETAIL BY SECTOR

|  | REPRESENTATIVE <br> MID-CAP GROWTH ACCOUNT |  | RUSSELL MIDCAP GROWTH INDEX |  | ATTRIBUTION ANALYSIS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GICS SECTORS | AVERAGE WEIGHT (\%) | RETURN (\%) | AVERAGE WEIGHT (\%) | RETURN (\%) | allocation EFFECT (\%) | SELECTION \& INTERACTION EFFECT (\%) | TOTAL EFFECT <br> (\%) |
| Communication Services | 6.50 | 6.43 | 4.61 | 1.48 | -0.08 | 0.32 | 0.24 |
| Consumer Discretionary | 15.10 | 5.56 | 15.30 | 5.10 | 0.02 | 0.07 | 0.08 |
| Consumer Staples | 1.52 | -0.13 | 3.24 | 1.79 | 0.11 | -0.05 | 0.07 |
| Energy | -- | -- | 1.22 | 6.35 | 0.03 | -- | 0.03 |
| Financials | 2.28 | 11.63 | 4.49 | 8.97 | -0.02 | 0.06 | 0.04 |
| Health Care | 14.95 | 14.22 | 14.91 | 13.99 | -0.03 | 0.05 | 0.02 |
| Industrials | 22.51 | 5.16 | 17.18 | 6.34 | -0.08 | -0.28 | -0.37 |
| Information Technology | 28.20 | 8.27 | 33.27 | 11.06 | -0.14 | -0.78 | -0.92 |
| Materials | 6.51 | -3.85 | 2.96 | 0.28 | -0.29 | -0.29 | -0.58 |
| Real Estate | 2.43 | 0.14 | 2.83 | 1.03 | 0.03 | -0.02 | 0.01 |
| Total | 100.00 | 6.80 | 100.00 | 8.17 | -0.47 | -0.91 | -1.38 |

 income, and exclude cash. Performance figures may vary from actual portfolio performance, as calculations are based on end-of-day security prices and do not incorporate the actual cost basis or sale price of individual

 complete list of terms and definitions.

## YEAR-TO-DATE ATTRIBUTION DETAIL BY SECTOR

|  | REPRESENTATIVE <br> MID-CAP GROWTH ACCOUNT |  | RUSSELL MIDCAP GROWTH INDEX |  | ATTRIBUTION ANALYSIS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GICS SECTORS | AVERAGE WEIGHT (\%) | RETURN (\%) | AVERAGE WEIGHT (\%) | RETURN (\%) | ALLOCATION EFFECT (\%) | SELECTION \& INTERACTION EFFECT (\%) | TOTAL EFFECT <br> (\%) |
| Communication Services | 6.07 | 29.37 | 4.39 | 20.09 | -0.17 | 0.68 | 0.51 |
| Consumer Discretionary | 14.72 | 27.09 | 15.78 | 31.75 | 0.06 | -0.44 | -0.38 |
| Consumer Staples | 2.34 | 25.03 | 3.15 | 20.89 | 0.29 | 0.14 | 0.44 |
| Energy | -- | -- | 1.35 | 7.96 | 0.38 | -- | 0.38 |
| Financials | 2.35 | 34.49 | 5.56 | 38.05 | -0.06 | -0.05 | -0.11 |
| Health Care | 16.42 | 40.71 | 14.6 | 28.34 | -0.15 | 1.80 | 1.66 |
| Industrials | 21.53 | 47.88 | 16.41 | 37.86 | 0.13 | 1.62 | 1.75 |
| Information Technology | 28.58 | 44.5 | 32.96 | 44.24 | -0.23 | 0.22 | -0.01 |
| Materials | 5.64 | 47.54 | 3.25 | 29.14 | -0.14 | 0.69 | 0.55 |
| Real Estate | 2.35 | 49.40 | 2.56 | 39.06 | 0.04 | 0.23 | 0.27 |
| Total | 100.00 | 40.53 | 100.00 | 35.47 | 0.16 | 4.90 | 5.06 |




 complete list of terms and definitions.


## SECTOR DIVERSIFICATION

GICS Sectors as of 12/31/2019


Representative Mid-Cap Growth Account
Russell Midcap Growth Index

## DISCLOSURES, TERMS \& DEFINITIONS

Past performance is not a guarantee of future performance and you may not get back the amount invested.

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All financial statistics and ratios are calculated using information from FactSet as of the report date unless otherwise noted.
The Average Weight of a position or sector refers to the daily average for the period covered in this report of a stock's value as a percentage of the portfolio.
The Total Return of an equity security is the sum of the return from price movement and the return due to dividend payments or other sources of income. The portfolio and benchmark returns provided reflect the sum of the returns of the equity holdings in the portfolio and the benchmark, respectively. The returns exclude cash.
Allocation Effect measures the impact of the decision to allocate assets differently than those in the benchmark.
Selection and Interaction Effect reflects the combination of selection effect and interaction effect. Selection effect measures the effect of choosing securities that may or may not outperform those of the benchmark. Interaction effect measures the effect of allocation and selection decisions (i.e., did we overweight the sectors in which we underperformed). Total Effect reflects the combination of allocation, selection and interaction effects. Totals may not equal due to rounding.
Contribution To Return is calculated by multiplying a security's beginning weight as a percentage of a portfolio by that security's return for the period covered in the report.
Dividend Yield is the ratio of a stock's projected annual dividend payment per share for the fiscal year currently in progress, divided by the stock's price.
Price-Earnings Ratio (P/E Ratio) is the ratio of the share of a company's stock compared to its per-share earnings. P/E calculations presented use FY2 earnings estimates; FY1 estimates refer to the next unreported fiscal year, and FY2 estimates refer to the fiscal year following FY1.
Active Share measures the percentage of holdings in a manager's portfolio that differ from those in the benchmark index. An active share of $0 \%$ means that the portfolio is identical to the benchmark, while an active share of $100 \%$ means that the portfolio has no common holdings with the benchmark.
Market Capitalization refers to the aggregate value of a company's publicly traded stock. Statistics are calculated as follows: Weighted Average: the average of each holding's market cap, weighted by its relative position size in the portfolio (in such a weighting scheme, larger positions have a greater influence on the calculation); Maximum and Minimum: the market caps of the largest and smallest companies, respectively, in the portfolio
All of the above ratios for a portfolio are expressed as a weighted average of the relevant ratios of each portfolio's holding, EXCEPT for P/E ratios, which are expressed as a weighted harmonic average.

| Year | Composite <br> Total Gross <br> Returns (\%) | Composite <br> Total Net Returns (\%) | Benchmark <br> 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)* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | -0.7 | -1.2 | -4.8 | 11.5 | 12.8 | 25 | 0.2 | 164 | 30,529 |
| 2017 | 23.9 | 23.1 | 25.3 | 9.8 | 10.9 | Five or fewer | N/A | 48 | 33,155 |
| 2016 | 9.3 | 8.6 | 7.3 | 11.0 | 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 | 8.0 | 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 | 8.0 | 3.4 | N/A | N/A | Five or fewer | N/A | 1 | 26,794 |

**Return is for period 3/1/2012 through 12/31/2012.

Brown Advisory Institutional claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Brown Advisory Institutional has been independently verified for the periods from January 1, 1993 through December 31, 2018. The Verification reports are available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation. GIPS® is a registered trademark owned by CFA Institute.
 July 1, 2016, the firm was redefined to exclude the Brown Advisory Private Client division, due to an evolution of the three distinct business lines.

 composite inclusion.

 percentage is calculated using beginning market value
4. Prior to September 1, 2016 the composite was named Mid Cap Composite, there was no change in investment strategy.
5. This composite was created in 2014.



 into an index. Benchmark returns are not covered by the report of the independent verifiers.
 not applicable (N/A) for periods where there were five or fewer accounts in the composite for the entire period.


 ADV. Actual fees paid by accounts in the composite may differ from the current fee schedule.
 annualized standard deviation is not presented as of December 31, 2014, and prior, because 36 month returns for the composite were not available (N/A.)
10. Valuations and performance returns are computed and stated in U.S. Dollars. All returns reflect the reinvestment of income and other earnings.
11. A complete list of composite descriptions, policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.
12. Past performance does not indicate future results.

 Advisory.


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