



QUARTERLY REVIEW

Mid-Cap Growth Fund – Multi-Class

As of September 30, 2019

PORTFOLIO HIGHLIGHTS

The portfolio performed in line with the Russell Midcap Growth Index for the three months ended September 30, 2019.

Relative Performance Drivers:

- The financials sector contributed the most to relative returns due to stock selection.
- The information technology (IT) sector helped relative performance owing to stock selection.
- The energy sector detracted from relative returns due to unfavorable stock selection and an overweight allocation.
- Real estate stocks weighed on relative performance chiefly due to an underweight allocation to the sector, the top performer in the index for the quarter.

Additional Highlights:

- IT, health care, and industrials and business services were the largest sector allocations on an absolute basis at quarter-end. Relative to the benchmark, health care, financials, and materials were the largest overweight sectors.
- We view the Fed's interest rate cuts in July and September-following its decision to shelve rate hikes earlier this year-as a continuation of the extraordinary monetary easing that has driven stocks higher in recent years. We believe that caution is warranted in the current environment, however, and that our fundamentals-based, valuation-sensitive approach to growth investing will reward investors over time.

PERFORMANCE

(NAV, total return)

	Inception Date	Three Months	Year-to-Date	One Year	Annualized			
					Three Years	Five Years	Ten Years	Fifteen Years
Mid-Cap Growth Fund	Jun 30 1992	-0.73%	23.36%	7.14%	14.88%	13.17%	14.87%	11.93%
Mid-Cap Growth Fund - Advisor Class	Mar 31 2000	-0.82	23.11	6.86	14.57	12.87	14.58	11.66
Mid-Cap Growth Fund - R Class	Sep 30 2002	-0.87	22.85	6.57	14.28	12.58	14.28	11.37
Mid-Cap Growth Fund - I Class	Aug 28 2015	-0.70	23.45	7.27	15.02	13.28	14.93	11.97
Russell Midcap Growth Index		-0.67	25.23	5.20	14.50	11.12	14.08	10.53

CALENDAR YEAR PERFORMANCE

(NAV, total return)

	Inception Date	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Mid-Cap Growth Fund	Jun 30 1992	45.44%	28.06%	-1.21%	13.91%	36.89%	13.16%	6.56%	6.30%	24.86%	-2.04%
Mid-Cap Growth Fund - Advisor Class	Mar 31 2000	45.15	27.77	-1.43	13.62	36.56	12.87	6.28	6.03	24.53	-2.30
Mid-Cap Growth Fund - R Class	Sep 30 2002	44.79	27.43	-1.72	13.31	36.22	12.58	6.03	5.76	24.20	-2.55
Mid-Cap Growth Fund - I Class	Aug 28 2015	45.44	28.06	-1.21	13.91	36.89	13.16	6.59	6.45	25.02	-1.91
Russell Midcap Growth Index		46.29	26.38	-1.65	15.81	35.74	11.90	-0.20	7.33	25.27	-4.75

Performance data quoted represents past performance and is not a reliable indicator of future performance. Investment return and principal value will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data quoted. To obtain the most recent month-end performance, visit troweprice.com. Consider the investment objectives, risks, and charges and expenses carefully before investing. For a prospectus or, if available, a summary prospectus containing this and other information, call 1-877-804-2315 or visit troweprice.com. Read it carefully. The Fund's total return figures reflect the reinvestment of dividends and capital gains, if any.

The T. Rowe Price Fund shares the portfolio of an existing fund (the original share class of the fund referred to as the "investor class"). The total return figures for the I Class shares have been calculated using the performance data of the investor class up to the inception date of the I Class (8/28/15) and the actual performance results of the I Class since that date. Because the I Classes are expected to have lower expenses than the Investor Classes, the I Class performance, had it existed over the periods shown, would have been higher.

The Fund is subject to the volatility inherent in common stock investing, and its share price may fluctuate more than a Fund investing in the stocks of larger companies.

The fund(s) may have other share classes available that offer different investment minimums and fees. See the prospectus for details.

FUND INFORMATION

Symbol	RPMGX
CUSIP	779556109
Inception Date of Fund	June 30, 1992
Benchmark	Russell Midcap Growth Index
Expense Information (as of the most recent Prospectus)	0.75%
Fiscal Year End	December 31
12B-1 Fee	-
Total Assets (all share classes)	\$33,247,214,140
Percent of Portfolio in Cash	6.3%

Please refer to the detailed Fund Information section, at the end of the report, for additional expense information and available share classes.

PERFORMANCE REVIEW

Trade and Fed Hopes Fade as Third Quarter Progresses

U.S. stocks were mixed in the third quarter. Optimism about a trade deal with China drove stocks higher early in the period, helped by news of a truce in the trade war at the G-20 summit on the last weekend of June. Hopes for a decisively "dovish" turn in Federal Reserve policy also boosted sentiment.

Disappointments on both the China and monetary policy fronts soon derailed the market's gains, however. On August 1, stocks suffered their biggest intraday plunge since May, after President Donald Trump announced that the U.S. would impose a new 10% tariff on Chinese imports. China retaliated with new tariffs of its own, although both sides made conciliatory gestures as the quarter came to an end. The Fed cut rates by a quarter point at each of its two meetings in the quarter, less than many had hoped, while officials suggested that further cuts might be on hold.

Financials Contributed Significantly to Relative Returns

- The financials sector contributed the most to relative returns chiefly due to strong stock selection. FNF, a title and mortgage services provider to the real estate industry, was a top contributor as its business benefited from a steady U.S. housing market and declining interest rates, which boosted homebuying and refinancing.
- Assurant contributed to relative performance. Shares of Assurant, which offers insurance for cars, appliances, mobile devices, and funerals, rose after it reported above-expected quarterly earnings on synergies from its 2017 acquisition of Warranty Group and affirmed its full-year outlook. We believe that Assurant has a long growth runway thanks to various idiosyncratic drivers underpinning its business and may help limit downside potential in the event of a downturn.

IT Stocks Helped Relative Performance

- The IT sector helped relative performance due to favorable stock selection. Microchip Technology was a top contributor as the semiconductor manufacturer reported fiscal first-quarter earnings above its guidance. While headwinds from U.S.-China trade tensions have recently weighed on revenue, the company continues to execute well and manage its inventory in anticipation of a global sales recovery. Microchip is a high-quality company led by a strong management team skilled at acquiring and improving undermanaged assets, and it remains a large holding.
- Corelogic was another large contributor. Shares of the housing and mortgage data company rose as the U.S. housing market remained on solid footing, aided by declining interest rates and a strong jobs market.

Energy Stocks Detracted from Relative Returns

- Energy stocks detracted from relative performance due to unfavorable stock selection, driven by our position in Concho Resources. Its shares sank 22% in July after the company reported below-consensus earnings and reduced production targets for the rest of 2019 after it revealed weak results from an experimental project of drilling wells close together. We have seen similar missteps as shale companies push the limits of known exploration techniques and believe that Concho is a top operator with some of the best assets in the Permian Basin.

- An overweight allocation to the energy sector, which posted a double-digit loss and was the quarter's worst-performing sector, further weighed on relative returns.

Real Estate Stocks Weighed on Relative Performance

- An underweight allocation to real estate, the top-performing sector for the quarter, weighed on relative returns. The portfolio has little exposure to real estate stocks, which have performed well this year amid falling interest rates and investor demand for yield.

PORTFOLIO POSITIONING AND ACTIVITY

IT, health care, and industrials and business services represented the largest sector allocations on an absolute basis at quarter-end. Relative to the Russell Midcap Growth Index, health care and financials comprised the biggest overweight sectors, while the IT sector was the largest underweight.

Industrials and Business Services

We favor companies with exposure to high-growth end markets and solid management teams skilled at deploying capital and integrating acquisitions. After decades of outsourcing to lower-cost countries, production in the U.S. has grown more attractive for domestic and foreign companies alike amid rising wage pressures in Asia and increasingly extended supply chains. We favor steadier-growth business services companies and less-cyclical names.

- We initiated a position in Clarivate Analytics, a leading provider of intellectual property and scientific information, analytical tools, and services for academia, businesses, and governments. The company owns a collection of quality data assets but was mismanaged by its previous owner. We believe that Clarivate has strong growth potential under a new chief executive who has a history of successful execution in the information services sector.
- We reduced our position in defense contractor L3Harris Technologies for risk management purposes after strong performance in its shares. The company, which resulted from the merger of Harris and L3 Technologies, remains a significant position.

Health Care

We closely monitor health care utilization rates, economic conditions, and the regulatory landscape to inform our stock selection process. Our outlook for health care is constructive based on several long-term growth drivers, including an aging U.S. population; consumers' willingness to spend more on health care to improve their daily lives; and the rapid pace of scientific advances leading to safer, more effective drugs. We believe that companies that can successfully develop innovative therapies or deliver high-quality, lower-cost services have strong upside potential.

- We initiated a position in Neurocrine Biosciences, a biotechnology company focused on developing drugs for neurological and endocrine disorders. The company has several promising drugs in development for Parkinson's disease, uterine fibroids, and congenital adrenal hyperplasia, a genetic disorder, which offer multiple paths to success.

- We trimmed our position in medical products company Teleflex for risk management purposes after its shares rose, but the company remains a top holding. Teleflex has a history of upgrading the quality of its portfolio through mergers and acquisitions and organic development, and its share price has climbed as investors rewarded the company's efforts.

Consumer Discretionary

Our consumer discretionary allocation has declined in recent years due to our cautious outlook for many companies in this sector. The retail environment remains challenging given Amazon's dominance and continued share gains from physical stores. Many management teams expect diminishing store traffic for the foreseeable future as online spending continues to grow. On the other hand, discount and off-price stores are thriving, reflecting the growing bifurcation of the retail industry. Our efforts are spent on identifying "category killers," or companies that have the potential to dominate their particular markets. These companies typically feature strong brands and innovative management teams capable of taking share from competitors.

- We eliminated our position in Aramark, a top food and uniforms supplier for stadiums and other facilities, following reports that an activist investor was exploring a leveraged buyout to acquire the company. Though the activist ultimately bought a large stake in Aramark instead of making a bid, the ensuing share gains allowed us to exit a company facing headwinds from a tight labor market and rising competition. We used proceeds to finance purchases in more compelling growth opportunities.
- We added to our position in Tiffany & Co. on weakness. Shares of the specialty jeweler have been pressured in recent months amid weaker spending by tourists visiting the U.S., trade tensions with China, unrest in Hong Kong, and slowing global growth. However, Tiffany has a strong brand and turnaround potential under new management who joined the company in recent years, and we believe it will perform better once macroeconomic headwinds abate.

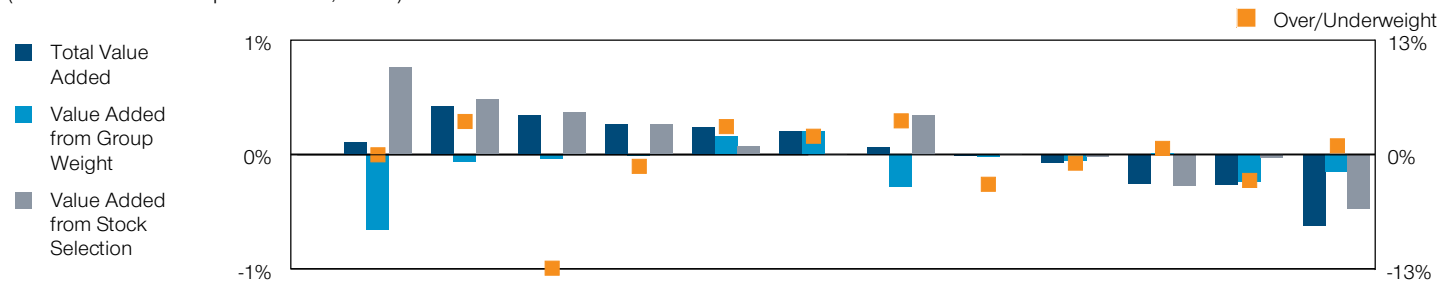
MANAGER'S OUTLOOK

Mid-cap growth stocks slightly declined in the third quarter after posting a double-digit gain in the first half of 2019. We view the Fed's interest rate cuts in July and September-following its decision to shelve rate hikes earlier this year-as a continuation of the extraordinary monetary easing that has afforded U.S. companies nearly cost-free financing for many years. As a result, many fast-growing companies with flawed business models or uncertain profitability have been rewarded by investors, staving off a market correction that we think is long overdue. The combination of subdued global growth, a submissive Fed, and risk-oblivious investors means that the market's exuberance may continue in the near term. We believe that caution is warranted in the current environment, however, and remain committed to our fundamentals-based, valuation-sensitive approach to growth investing. We are confident that our disciplined investment approach, risk awareness, and long-term focus will continue to reward investors over time.

QUARTERLY ATTRIBUTION

SECTOR ATTRIBUTION DATA VS. RUSSELL MIDCAP GROWTH INDEX

(3 months ended September 30, 2019)



	Total	Financials	Info Tech	Consumer Disc	Materials	Utilities	Health Care	Comm Svcs	Consumer Staples	Indust & Bus Svcs	Real Estate	Energy
Over/Underweight	0.00%	3.77%	-12.86%	-1.28%	3.19%	2.13%	3.88%	-3.37%	-0.92%	0.72%	-2.93%	1.03%
Fund Performance	-0.56	3.75	1.30	2.04	5.57	10.19	-6.57	0.20	6.94	1.11	-68.46	-26.28
Index Performance	-0.67	-2.22	-0.62	0.19	4.27	0.00	-8.27	-0.25	7.75	2.63	8.32	-10.41
Value Add - Group Weight	-0.66	-0.06	-0.03	-0.01	0.16	0.21	-0.28	-0.02	-0.05	0.01	-0.23	-0.15
Value Add - Stock Selection	0.77	0.48	0.37	0.27	0.08	0.00	0.34	0.01	-0.01	-0.27	-0.03	-0.47
Total Contribution	0.11	0.42	0.34	0.26	0.24	0.21	0.06	-0.01	-0.07	-0.25	-0.26	-0.62

TOP 5 RELATIVE CONTRIBUTORS VS. RUSSELL MIDCAP GROWTH INDEX

(3 months ended September 30, 2019)

Security	% of Equities	Net Contribution (Basis Points)
Align Technology, Inc.	0.0%	25
L3Harris Technologies, Inc.	1.7	17
J.B. Hunt Transport Services, Inc.	0.9	14
Spotify Technology Sa	0.0	13
Abiomed, Inc.	0.0	12

TOP 5 RELATIVE DETRACTORS VS. RUSSELL MIDCAP GROWTH INDEX

(3 months ended September 30, 2019)

Security	% of Equities	Net Contribution (Basis Points)
Concho Resources Inc.	1.0%	-43
Cooper Companies, Inc.	2.0	-25
Workday, Inc.	1.1	-24
Kla Corporation	0.0	-23
Gardner Denver Holdings, Inc.	1.0	-20

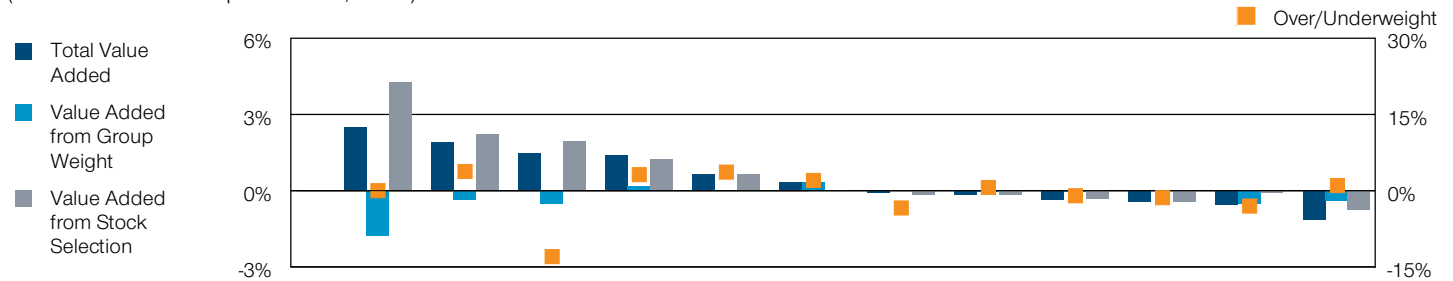
Net contribution is calculated versus a specific benchmark. It is the difference between the security's absolute contribution to the portfolio and the security's absolute contribution to the benchmark. This reflects the amount the security has impacted relative return.

Past performance is not a reliable indicator of future performance. Numbers may not total due to rounding; all other numbers are percentages. Analysis represents the total performance of the portfolio as calculated by the FactSet attribution model and is inclusive of other assets that will not receive a classification assignment in the detailed structure shown. Returns will not match official T. Rowe Price performance because FactSet uses different exchange rate sources and does not capture intra-day trading. Performance for each security is obtained in the local currency and, if necessary, is converted using an exchange rate determined by an independent third party. Figures are shown with gross dividends reinvested. Sources: Financial data and analytics provider FactSet. Copyright 2019 FactSet. All Rights Reserved. MSCI/S&P GICS Sectors; Analysis by T. Rowe Price Associates, Inc. T. Rowe Price uses the current MSCI/S&P Global Industry Classification Standard (GICS) for sector and industry reporting. T. Rowe Price will adhere to all updates to GICS for prospective reporting. Figures are shown gross of fees. Returns would be lower as a result of the deduction of such fees. Performance returns are in USD.

12-MONTH ATTRIBUTION

SECTOR ATTRIBUTION DATA VS. RUSSELL MIDCAP GROWTH INDEX

(12 months ended September 30, 2019)



	Total	Health Care	Info Tech	Materials	Financials	Utilities	Comm Svcs	Indust & Bus Svcs	Consumer Staples	Consumer Disc	Real Estate	Energy
Over/Underweight	0.00%	3.88%	-12.86%	3.19%	3.77%	2.13%	-3.37%	0.72%	-0.92%	-1.28%	-2.93%	1.03%
Fund Performance	7.71	3.19	21.22	37.23	15.03	32.37	-3.97	5.39	3.05	2.39	-74.09	-43.36
Index Performance	5.20	-9.68	9.52	10.40	5.94	0.00	3.35	6.50	16.33	6.36	31.48	-23.88
Value Add - Group Weight	-1.79	-0.33	-0.50	0.18	-0.02	0.34	0.05	-0.04	-0.04	0.02	-0.50	-0.39
Value Add - Stock Selection	4.29	2.23	1.98	1.24	0.68	0.00	-0.14	-0.14	-0.33	-0.44	-0.05	-0.73
Total Contribution	2.51	1.90	1.48	1.42	0.66	0.34	-0.09	-0.18	-0.36	-0.42	-0.55	-1.13

TOP 5 RELATIVE CONTRIBUTORS VS. RUSSELL MIDCAP GROWTH INDEX

(12 months ended September 30, 2019)

Security	% of Equities	Net Contribution (Basis Points)
Ball Corporation	2.0%	85
Teleflex Incorporated	2.4	59
Keysight Technologies, Inc.	1.5	58
Align Technology, Inc.	0.0	56
Willis Towers Watson Public Limited	1.4	45

TOP 5 RELATIVE DETRACTORS VS. RUSSELL MIDCAP GROWTH INDEX

(12 months ended September 30, 2019)

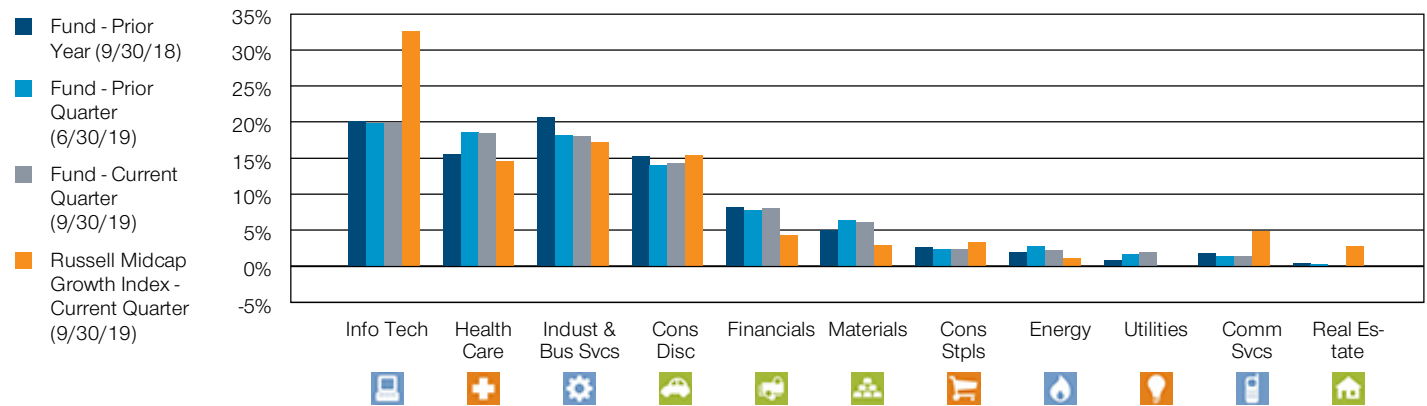
Security	% of Equities	Net Contribution (Basis Points)
Tapestry, Inc.	0.8%	-79
Concho Resources Inc.	1.0	-76
Textron Inc.	1.6	-69
Servicenow, Inc.	0.0	-46
Amneal Pharmaceuticals, Inc.	0.0	-42

Net contribution is calculated versus a specific benchmark. It is the difference between the security's absolute contribution to the portfolio and the security's absolute contribution to the benchmark. This reflects the amount the security has impacted relative return.

Past performance is not a reliable indicator of future performance. Numbers may not total due to rounding; all other numbers are percentages. Analysis represents the total performance of the portfolio as calculated by the FactSet attribution model and is inclusive of other assets that will not receive a classification assignment in the detailed structure shown. Returns will not match official T. Rowe Price performance because FactSet uses different exchange rate sources and does not capture intra-day trading. Performance for each security is obtained in the local currency and, if necessary, is converted using an exchange rate determined by an independent third party. Figures are shown with gross dividends reinvested. Sources: Financial data and analytics provider FactSet. Copyright 2019 FactSet. All Rights Reserved. MSCI/S&P GICS Sectors; Analysis by T. Rowe Price Associates, Inc. T. Rowe Price uses the current MSCI/S&P Global Industry Classification Standard (GICS) for sector and industry reporting. T. Rowe Price will adhere to all updates to GICS for prospective reporting. Figures are shown gross of fees. Returns would be lower as a result of the deduction of such fees. Performance returns are in USD.

PORTFOLIO POSITIONING

SECTOR DIVERSIFICATION – CHANGES OVER TIME



LARGEST PURCHASES

Issuer	Sector	% of Fund Current Quarter 9/30/19	% of Fund Prior Quarter 6/30/19
Gardner denver Holdings		1.0%	1.0%
Concho Resources		1.0	1.2
PRA Health Sciences		0.7	0.5
Splunk		0.7	0.6
Eversource Energy		0.6	0.4
National Instruments		0.6	0.3
Webster Financial		0.5	0.2
Neurocrine Biosciences (N)		0.4	0.0
Clarivate Analytics (N)		0.3	0.0
FLIR Systems (N)		0.3	0.0

LARGEST SALES

Issuer	Sector	% of Fund Current Quarter 9/30/19	% of Fund Prior Quarter 6/30/19
L3Harris Technologies		1.7%	1.7%
Roper Technologies		1.1	1.4
Fidelity National Information Services		1.0	0.4
Air Products & Chemicals		0.7	0.8
Franco-Nevada		0.1	0.5
Salesforce.com (NE)		0.0	0.0
Aramark (E)		0.0	0.3
Tableau Software (E)		0.0	0.6
KAR Auction Services (E)		0.0	0.2
IAA (E)		0.0	0.2

(N) New Position
 (E) Eliminated
 (NE) New Position Eliminated

HOLDINGS

TOP 10 ISSUERS

Issuer	Industry	% of Fund	% of Russell Midcap Growth Index
Teleflex	Health Care Equip & Supplies	2.4%	0.5%
Ball	Containers & Packaging	2.0	0.8
Cooper Companies	Health Care Equip & Supplies	2.0	0.1
Hologic	Health Care Equip & Supplies	1.9	0.4
L3Harris Technologies	Aerospace & Defense	1.7	0.8
Microchip Technology	Semicons & Semicon Equip	1.6	0.2
Textron	Aerospace & Defense	1.6	0.0
Agilent Technologies	Life Sciences Tools & Services	1.6	0.1
Dollar General	Multiline Retail	1.5	1.3
IAC/InterActiveCorp	Interactive Media & Services	1.5	0.3

TOP 5 OVER/UNDERWEIGHT POSITIONS VS. RUSSELL MIDCAP GROWTH INDEX

Issuer	Industry	% of Fund	% of Russell Midcap Growth Index	Over/Underweight
Cooper Companies	Health Care Equip & Supplies	2.0%	0.1%	1.9%
Teleflex	Health Care Equip & Supplies	2.4	0.5	1.9
Textron	Aerospace & Defense	1.6	0.0	1.6
Hologic	Health Care Equip & Supplies	1.9	0.4	1.6
Agilent Technologies	Life Sciences Tools & Services	1.6	0.1	1.5
Twitter	Interactive Media & Services	0.0	1.1	-1.1
Lam Research	Semicons & Semicon Equip	0.0	1.0	-1.0
Advanced Micro Devices	Semicons & Semicon Equip	0.0	1.0	-1.0
Amphenol	Electronic Equip, Instr & Cmpts	0.0	1.0	-1.0
Ingersoll-Rand	Machinery	0.0	0.9	-0.9

PORTFOLIO MANAGEMENT



Portfolio Manager:
Brian Berghuis

Managed Fund Since:
1992

Joined Firm:
1985

FUND INFORMATION

	Mid-Cap Growth Fund	Mid-Cap Growth Fund - Advisor Class	Mid-Cap Growth Fund - R Class	Mid-Cap Growth Fund - I Class
Symbol	RPMGX	PAMCX	RRMGX	RPTIX
Expense Information	0.75%	1.02%	1.28%	0.62%
Fiscal Year End Date	12/31/18	12/31/18	12/31/18	12/31/18
12B-1 Fee	-	0.25%	0.50%	-

The expense ratios shown are as of the most recent prospectus. The stated expense ratio for the Advisor and R Classes include the applicable 12b-1 fee.

Additional Disclosures

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Unless otherwise noted, index returns are shown with gross dividends reinvested.

The manager's views and portfolio holdings are historical and subject to change. This material should not be deemed a recommendation to buy or sell any of the securities mentioned. The specific securities identified and described do not represent all of the securities purchased, sold, or recommended for the Fund and no assumptions should be made that the securities identified and discussed were or will be profitable.

The information shown does not reflect any Exchange Traded Funds (ETFs) that may be held in the portfolio.

Source for Sector Diversification: T. Rowe Price uses the current MSCI/S&P Global Industry Classification Standard (GICS) for sector and industry reporting. T.

Rowe Price will adhere to all future updates to GICS for prospective reporting.

Diversification exhibits may not add to 100% due to exclusion or inclusion of cash.

Certain numbers in this report may not equal stated totals due to rounding. Unless otherwise stated, data is as of the report date.

Unless indicated otherwise the source of all data is T. Rowe Price.

Closed to new investors. Open to subsequent investments.

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2016-US-26873