

Data through May 31, 2019 FINRA members: For internal or institutional use only.

T. Rowe Price Mid-Cap Growth

Ticker RPMGX **Yield** 0.1% **Total Assets** \$31,664 mil **Mstar Category** Mid-Cap Growth

Benchmark 1: Russell Mid Cap Growth TR USD
Benchmark 2: S&P 500 TR USD

Morningstar Analyst Rating 05-28-19



Morningstar Pillars

- Process + Positive
- Performance + Positive
- People + Positive
- Parent + Positive
- Price + Positive

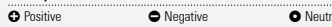
Morningstar Analyst Rating

Morningstar evaluates mutual funds based on five key pillars, which its analysts believe lead to funds that are more likely to outperform over the long term on a risk-adjusted basis.

Analyst Rating Spectrum



Pillar Spectrum



Performance 05-31-19

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
2015	6.52	1.29	-6.08	5.16	6.56
2016	-0.42	1.94	4.22	0.48	6.30
2017	8.16	5.97	4.31	4.43	24.86
2018	4.06	0.91	7.42	-13.15	-2.04
2019	16.21	—	—	—	—

Trailing

	Total	+/- Bmark	+/- Bmark	%Rank	Growth of \$10,000
Return%	1	2	2	Cat	\$10,000
3 Mo	-0.25	-0.06	0.42	52	9,975
6 Mo	4.94	-2.18	4.21	58	10,494
1 Yr	7.43	0.56	3.65	26	10,743
3 Yr Avg	13.31	-0.57	1.59	41	14,549
5 Yr Avg	11.90	1.62	2.24	16	17,542
10 Yr Avg	16.04	0.75	2.10	10	44,282
15 Yr Avg	11.44	1.57	3.05	5	50,789

Tax Analysis

	Tax Adj Rtn%	%Rank	Tax-Cost Rat	%Rank
3 Yr (estimated)	11.26	44	1.81	63
5 Yr (estimated)	9.72	21	1.95	57
10 Yr (estimated)	14.36	17	1.45	60

Potential Capital Gain Exposure: 24% of assets

Morningstar's Take by Katie Rushkewicz Reichart 05-28-19

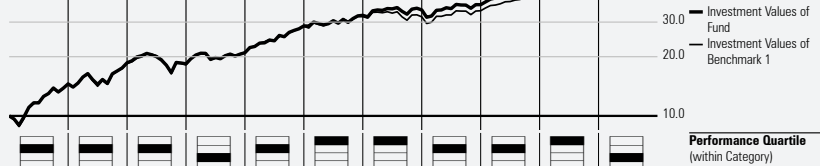
T. Rowe Price Mid-Cap Growth remains one of the most consistent funds around and earns a Morningstar Analyst Rating of Gold.

As this closed strategy's only manager since its 1992 inception, Brian Berghuis is a beacon of stability. But beyond experience, his level-headedness and patience have helped avoid major performance pitfalls along the way while also setting the tone for what investors should expect from this moderate-growth portfolio.

Amid a 10-year bull market, Berghuis is wary of valuations, as he was during the late-1990s tech bubble. Much like then, he's stuck to his valuation-sensitive approach, limiting technology exposure relative to the Russell Midcap Growth Index and holding 6% in cash as of March 2019, as he's unwilling to pile into companies whose prices don't justify their prospects. The Morningstar Risk Model supports the portfolio's temperate stance: It has less exposure to momentum, volatility, and growth than the benchmark and is more valuation-conscious, a profile he's stuck

Historical Profile

Return Above Avg
Risk Below Avg
Rating ★★★★★ Highest



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	05-19	History
47.49	58.53	52.73	56.47	72.78	75.44	73.32	75.37	87.02	76.38	87.68	87.68	NAV
45.44	28.06	-1.21	13.91	36.89	13.16	6.56	6.30	24.86	-2.04	14.79	14.79	Total Return %
-0.85	1.68	0.44	-1.89	1.15	1.25	6.76	-1.03	-0.41	2.71	-3.01	-3.01	+/- Bmark 1
18.98	13.00	-3.32	-2.09	4.50	-0.53	5.18	-5.66	3.02	2.35	4.06	4.06	+/- Bmark 2
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	Income Return %
45.44	28.06	-1.21	13.91	36.89	13.16	6.56	6.30	24.86	-2.18	14.79	14.79	Capital Return %
28	27	30	53	32	6	3	44	42	18	71	71	Total Rtn % Rank Cat
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	Income \$
0.03	2.27	4.89	3.54	4.34	6.67	6.97	2.60	7.00	9.14	0.00	0.00	Capital Gains \$
0.83	0.80	0.80	0.80	0.78	0.77	0.77	0.77	0.76	0.75	—	—	Expense Ratio %
-0.26	-0.12	-0.34	0.02	-0.23	-0.18	-0.09	-0.03	-0.03	0.15	—	—	Income Ratio %
31	30	31	30	26	27	27	29	26	25	—	—	Turnover Rate %
14,664	18,951	16,308	16,860	21,698	22,677	22,834	21,468	24,810	21,085	23,653	23,653	Net Assets \$mil

Rating and Risk

Time Period	Load-Adj Return %	Morningstar Rtn vs Cat	Morningstar Risk vs Cat	Morningstar Risk-Adj Rating
1 Yr	7.43			
3 Yr	13.31	Avg	Low	★★★★
5 Yr	11.90	+Avg	-Avg	★★★★
10 Yr	16.04	High	-Avg	★★★★★
Incept	13.55			

Other Measures

	Standard Index	Best Fit Index
Alpha	1.5	3.2
Beta	1.00	0.91
R-Squared	90	93
Standard Deviation	12.33	
Mean	13.31	
Sharpe Ratio	0.96	

Portfolio Analysis 03-31-19

Total Stocks: 135
Share change since 12-31-18: + Reserve Invnt Fds

Company	Sector	YTD Ret %	% Assets
Teleflex Inc	Hlth Care	11.80	2.50
The Cooper Companies Inc	Hlth Care	17.02	2.12
Microchip Technology Inc	Technology	12.29	1.98
Hologic Inc	Hlth Care	7.08	1.96
Agilent Technologies Inc	Hlth Care	-0.36	1.79
Harris Corp	Technology	40.04	1.78
Ball Corp	Cnsmr Cyc	34.06	1.70
Textron Inc	Industrl	-1.46	1.66
Keysight Technologies Inc	Technology	21.02	1.60
IAC/InterActiveCorp	Technology	20.66	1.54
Norwegian Cruise Line Hol	Cnsmr Cyc	29.06	1.49
Workday Inc Class A	Technology	27.83	1.47
Willis Towers Watson PLC	Finan Svcs	16.00	1.40
Roper Technologies Inc	Industrl	29.39	1.36
Worldpay Inc Class A	Industrl	59.15	1.35
IDEX Corp	Industrl	21.69	1.33
TD Ameritrade Holding Cor	Finan Svcs	2.84	1.31
Verisk Analytics Inc	Industrl	28.62	1.27
Air Products & Chemicals	Basic Mat	27.93	1.22

Current Investment Style

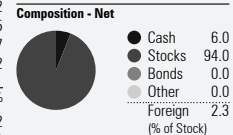
Value Blend Growth	Market Cap	%	Sector Weightings	% of Stocks	Rel Bmark 1
Large	Giant	0.0	Cyclical	26.17	0.83
Mid	Large	41.4	BasicMat	3.15	1.11
Small	Mid	55.7	CnsmrCyc	13.91	0.79
	Small	3.0	FinanSvcs	8.18	1.06
	Micro	0.0	Real Est	0.93	0.29
	Avg \$mil:	14,087	Sensitive	47.67	0.94
			CommSvcs	0.00	0.00

Value Measures

Value Measures	Rel Category
Price/Earnings	19.60 0.81
Price/Book	3.00 0.75
Price/Sales	2.13 0.79
Price/Cash Flow	7.39 0.47
Dividend Yield %	0.91 1.24
Growth Measures	% Rel Category
Long-Term Erngs	13.35 0.98
Book Value	9.93 0.82
Sales	7.23 0.75
Cash Flow	14.71 1.17
Historical Erngs	18.02 0.82

Profitability

Profitability	%
Return on Equity	15.32
Return on Assets	5.12
Net Margin	10.19



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Web Address: www.troweprice.com
Inception: 06-30-92
Advisor: T. Rowe Price Associates, Inc.
Subadvisor: None

Minimum Purchase: \$2500 **Add:** \$100 **IRA:** \$1000
Min Auto Inv Plan: — **Add:** \$100
Sales Fees: No-load
Management Fee: 0.35% mx./0.30% mn., 0.15%A
Actual Fees: Mgt:0.61% Dist:—
Expense Projections: 3Yr:\$240 5Yr:\$417 10Yr:\$930
Income Distribution: Annually

Introducing 2 New Bond Categories

Morningstar Research | Sarah Bush

At the end of April 2019, Morningstar retired the intermediate-term bond Morningstar Category and split that group's constituents into two new categories: intermediate core bond and intermediate core-plus bond. Morningstar Ratings (often known as "star ratings") have been recalculated relative to the new categories. We have not made any changes to Morningstar Analyst Ratings, although we regularly review these and will continue to assess the ability of funds to beat relevant benchmarks and category norms on a risk-adjusted basis across a full market cycle.

The Rationale

The intermediate-term bond category long ranked as the largest of the fixed-income categories. It was home to funds that invested primarily in investment-grade fixed-income debt and had durations (a measure of interest-rate sensitivity) that ranged from 75% to 125% of the three-year average effective duration of the Morningstar Core Bond Index.

Despite those commonalities, the category included a mix of portfolios that tended to cluster in one of two subgroups. The first contained funds that stuck to U.S.-dollar investment-grade debt with very little exposure to below-investment-grade fare. The second included funds with more-flexible mandates; these typically took more credit risk, holding larger positions in below-investment-grade debt, with many venturing into emerging-markets and non-U.S.-dollar bonds and currencies. Funds in these two subgroups tend to behave differently in different market environments and offer investors moderately different risk/reward trade-offs. We made the change to provide investors with clearer expectations for risk and performance and to create more homogeneous categories.

The New Categories

Following the split, the intermediate core bond and intermediate core-plus bond categories remain two of the largest U.S. category groups, with core spanning 136 open-end and exchange-traded funds and totaling \$860 billion in assets, and core-plus spanning 183 funds totaling \$690 billion. The definitions for the two categories are provided below.

Intermediate core bond funds typically hold:

- Investment-grade U.S. government, corporate, and securitized debt.
- Less than 5% in below-investment-grade debt.
- Durations between 75% and 125% of the Morningstar Core Bond Index's three-year average effective duration.

Intermediate core-plus bond funds typically hold:

- Investment-grade U.S. government, corporate, and securitized debt.
- Some noncore sectors like corporate high-yield, bank-loan, and emerging-markets debt, and non-U.S. currency exposures.
- Durations between 75% and 125% of the Morningstar Core Bond Index's three-year average effective duration.

A Deeper Look

By definition, funds in the intermediate core bond category can't hold more than 5% in below-investment-grade debt, and these funds tend to have credit-quality profiles that skew more heavily to the higher-rated tiers of the market. So, for example, the median allocation to below-investment-grade debt as of the most recently available survey date stood at close to 0% for core bond funds, while the median allocation for intermediate core-plus bond funds was a little over 8%. Meanwhile, core bond funds tended to hold larger allocations to AAA rated debt (61% median); core-plus bond funds held less in the highest rated tier of the market (48%). From a sector perspective, core bond funds tended to hold more government-backed debt, while core-plus bond funds were more heavily invested in corporate bonds.

The categories look more similar when it comes to duration and interest-rate sensitivity. The median

Intermediate Core Bond	Ticker	Average Eff Duration	% Invstmnt Grade	% Below-Invst-Grade	% Not Rated/NA
Baird Aggregate Bond	BAGIX	5.8	100	0	0
Fidelity Intermediate Bond	FTHRX	3.8	98	2	0
Fidelity Investment Grade Bond	FBNDX	5.6	95	6	-1
Fidelity Mortgage Securities	FMSFX	3.7	109	0	-9
Fidelity U.S. Bond Index	FXNAX	5.7	100	0	0
T. Rowe Price New Income	PRCIX	6.1	93	7	0
Vanguard Core Bond	VCOBX	6.0	94	2	4
Vanguard Interm-Term Bond Index	VBILX	6.1	100	0	0
Vanguard Total Bond Market Index	VBTLX	6.0	100	0	0
Western Asset Core Bond	WATFX	5.6	101	0	-2

Intermediate Core-Plus Bond	Ticker	Average Eff Duration	% Invstmnt Grade	% Below-Invst-Grade	% Not Rated/NA
AMG Managers Loomis Sayles Bond	MGFIX	4.5	92	8	0
Carillon Reams Core Plus Bond	SCPYX	6.5	100	0	0
Dodge & Cox Income	DODIX	4.4	94	6	0
DoubleLine Total Return Bond	DBLTX	3.8	75	10	16
Fidelity Total Bond	FTBFX	5.3	87	15	-2
Harbor Bond	HABDX	3.6	NA	NA	NA
Loomis Sayles Investment Grade Bond	LIGRX	3.0	79	9	12
Metropolitan West Total Return Bond	MWTRX	5.9	94	6	0
PGIM Total Return Bond	PDBAX	6.4	83	11	6
PIMCO Total Return	PTTRX	3.8	NA	NA	NA
TCW Total Return Bond	TGLMX	5.9	89	11	0
USAA Income	USAIX	5.9	93	5	1
Western Asset Core Plus Bond	WACPX	6.1	89	11	0

Note: All data as of most recent survey and/or fact sheet available.

duration for the core bond category was about 5.7 years; that's roughly in line with the 5.5-year metric for the core-plus bond category.

Performance Profile

Differences between intermediate core bond and intermediate core-plus bond portfolios are clear in their performance profiles. Low- and midrated bonds have outperformed for most of the trailing 10-year period, which began right as credit markets started rebounding off their financial-crisis lows. The 5.1% median annualized return for core-plus bond funds (based on the returns of the cheapest available share class) over that period through April 2019 topped the 4.0% median annualized return for core bond funds; the core-plus bond category also sported a higher median Sharpe ratio.

Meanwhile, although the reported durations for both groups are similar, core bond funds have historically been more sensitive to moves in bond yields than core-plus bond funds, posting bigger gains when yields decline and bigger losses when yields rise. So, as long-term Treasury yields spiked between August and December 2016, both groups saw losses, but the 2.9% median loss for the core category was more severe than the 2.2% decline for core-plus funds.

Core bond funds tend to hold up better than core-plus bond funds when corporate credit comes under pressure. As oil prices plunged and high-yield suffered between June 2015 and February 2016, core funds held up reasonably well with a median 1.2% gain; core-plus funds suffered a median 0.1% loss.

These differences also show in historical correlations. Core bond funds feature somewhat higher correlations to the Bloomberg Barclays U.S. Aggregate Bond Index than core-plus bond funds over the past decade and a small negative correlation to the S&P 500; core-plus bond funds tend to be more heavily correlated to broad high-yield indexes and have a modest positive correlation to equities.

What Do These New Categories Tell Investors?

Because they have more-limited exposure to credit risk and typically hold up better when risk markets struggle, core bond funds might be best for investors looking for diversification from an equity-heavy portfolio. Investors who already have exposure to high-yield and/or emerging-markets bonds might also want to stick with core funds. Meanwhile, core-plus bond funds offer a one-stop shop for bond exposure and typically offer higher yields and more total return potential, albeit with more credit risk.

Impact on M500 funds

Of the 23 funds in the Morningstar 500 that previously were in the intermediate-term bond category, 10, including the passive behemoth **Vanguard Total Bond Market Index** VBILX, land in core bond. The remaining 13, which include the largest actively managed funds in the old intermediate-term bond category, moved to core-plus bond. ■■

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