



Fairfax County Public Schools | Second Quarter 2018

Presentation Materials

Visit the **Aon Retirement and Investment Blog** (<http://retirementandinvestmentblog.aon.com>); sharing our best thinking.

Contact Information

Gregory J. Fox, CFA

Senior Consultant

Aon Hewitt Investment Consulting, Inc.

201 Merritt 7, STE 2

Norwalk, CT 06850

t +1 (203) 523-8780

f +1 (847) 953-2192

gregory.fox@aon.com

Matthew C. Stone

Consultant

Aon Hewitt Investment Consulting, Inc.

201 Merritt 7, STE 2

Norwalk, CT 06850

t +1 (203) 523-8929

f +1 (203) 523-6750

matthew.stone.2@aon.com

Connor Keenan

Investment Analyst

Aon Hewitt Investment Consulting, Inc.

201 Merritt 7, STE 2

Norwalk, CT 06850

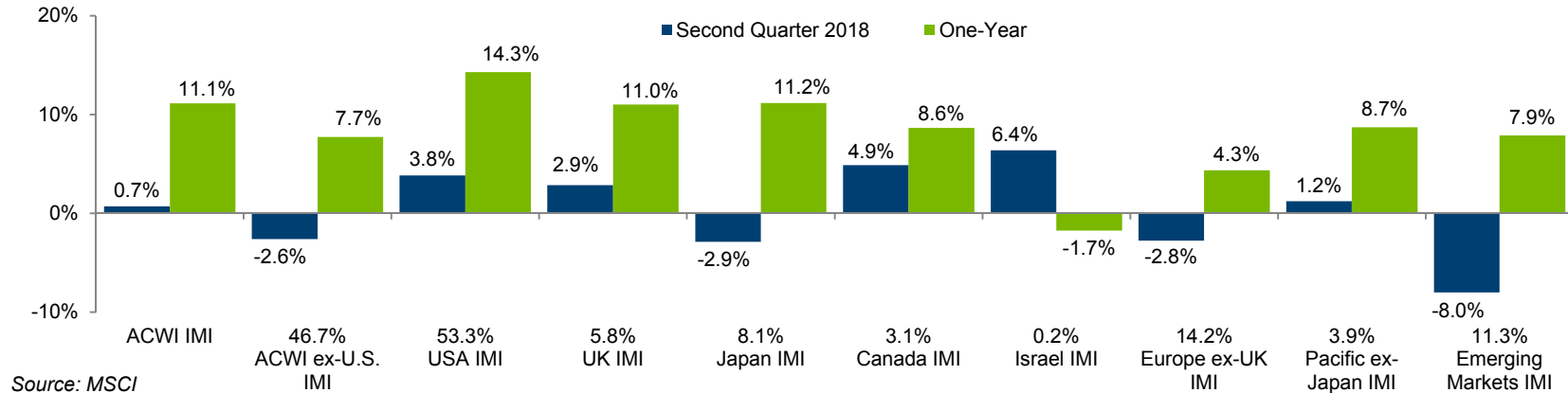
t +1 (203) 523-6195

f +1 (203) 853-2224

connor.keenan@aon.com

Global Equity Markets

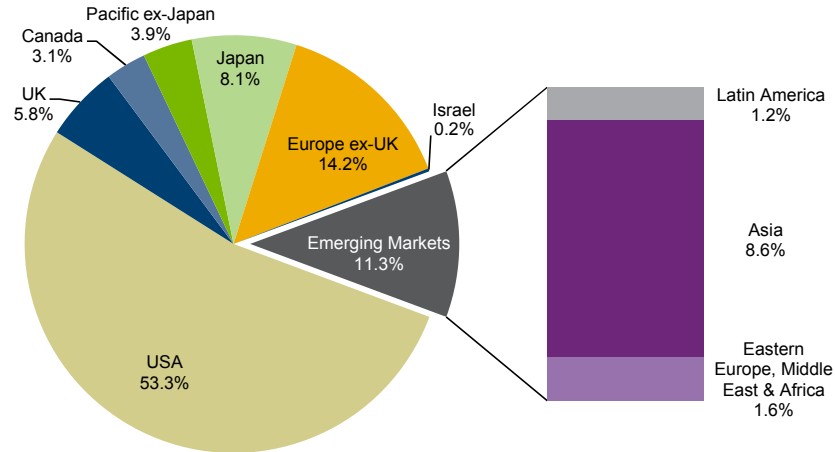
GLOBAL MSCI IMI INDEX RETURNS (USD) AS OF 06/30/2018



- Global equities rebounded in Q2 2018, supported by resilient earnings and higher energy prices. However, equity market momentum faltered toward the end of the quarter as trade tensions increased and global growth slowed. Global equity markets returned 3.1% in local currency terms. However, the strengthening of the U.S. dollar (5.6% in trade-weighted terms) pushed down returns to 0.7% in U.S. dollar terms.
- Emerging Markets (EM) equities were the hardest hit due to rising trade protectionism and a stronger U.S. dollar. Over the quarter, EM equities fell 7.9% in U.S. dollar terms. Fears over the impact of looser Chinese monetary policy alongside rising U.S. rates also dampened returns.
- European equity performance was dragged down by political uncertainties, with an openly anti-EU government taking power in Italy. Fears of a possible imposition of tariffs on German carmakers by the U.S. and softer European economic data also detracted from performance.
- UK equities were bolstered by higher energy prices and sterling weakness. However, the latter did lead to a far lower 2.9% return in U.S. dollar terms.

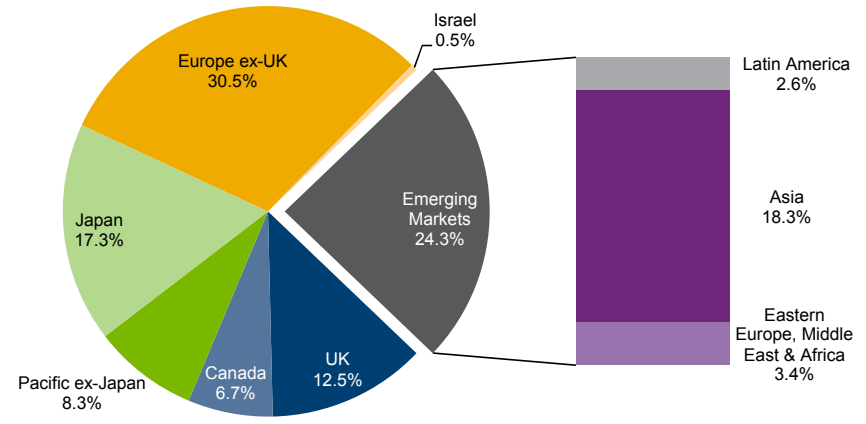
Global Equity Markets

**MSCI ALL COUNTRY WORLD IMI INDEX
GEOGRAPHIC ALLOCATION AS OF 06/30/2018**



Source: MSCI

**MSCI ALL COUNTRY WORLD EX-U.S. IMI INDEX
GEOGRAPHIC ALLOCATION AS OF 06/30/2018**

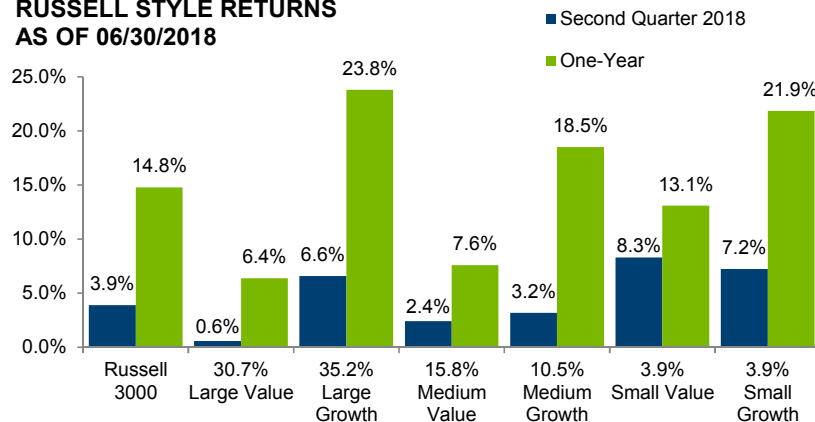


Source: MSCI

- The two exhibits on this slide illustrate the percentage that each country/region represents of the global and international equity markets as measured by the MSCI All Country World IMI Index and the MSCI All Country World ex-U.S. IMI Index, respectively.

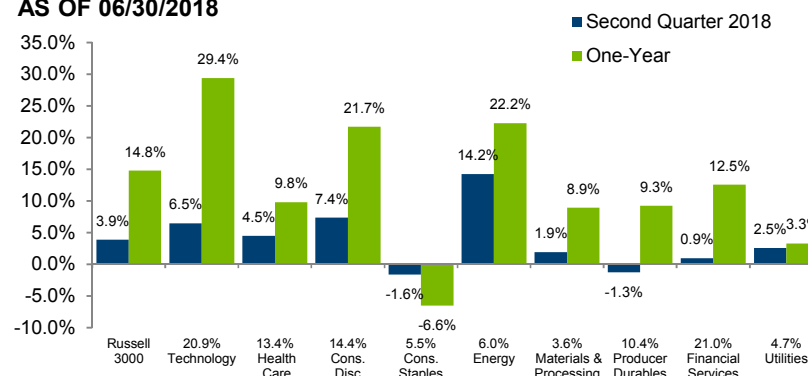
U.S. Equity Markets

**RUSSELL STYLE RETURNS
AS OF 06/30/2018**



Source: Russell Indexes

**RUSSELL GICS SECTOR RETURNS
AS OF 06/30/2018**

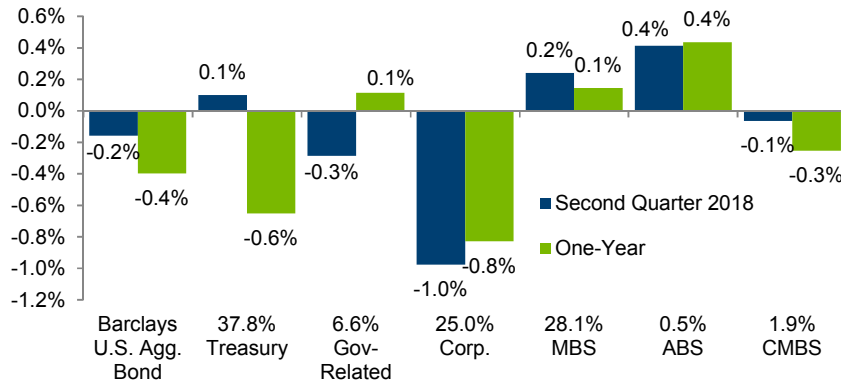


Source: Russell Indexes

- The Russell 3000 Index returned 3.9% during the second quarter and 14.8% over the one-year period.
- With the exception of Consumer Staples (-1.6%) and Producer Durables (-1.3%), all sectors generated positive returns over the quarter. Energy was the strongest sector posting a return of 14.2% in Q2 2018, as crude oil prices continued to increase. The second best performer was Consumer Discretionary (7.4%), which benefited from a strong U.S. economy and healthy consumer sentiment.
- Performance was positive across the market capitalization spectrum over the quarter. In general, small cap stocks outperformed both medium and large cap stocks over the quarter benefiting from strong U.S. growth, as the majority of their revenue is generated domestically. Over the last 12 months, Value stocks continued to lag their Growth stock equivalents significantly. The underperformance of Value stocks can be partly attributed to the lower exposure to Technology stocks, which have performed strongly over the last year.

U.S. Fixed Income Markets

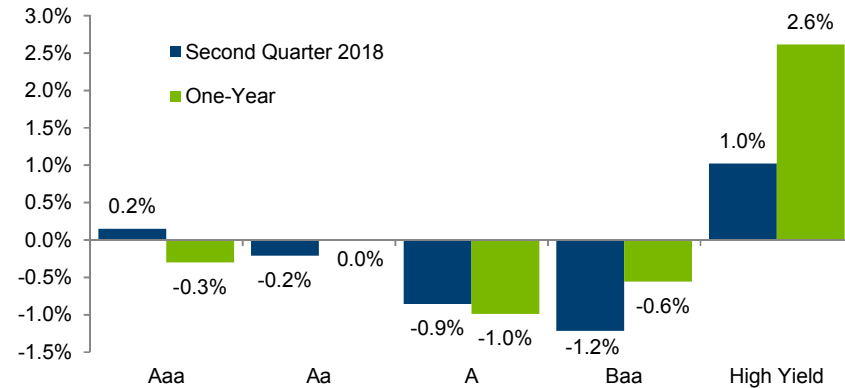
**BLOOMBERG BARCLAYS AGGREGATE RETURNS BY SECTOR
AS OF 06/30/2018**



Source: FactSet

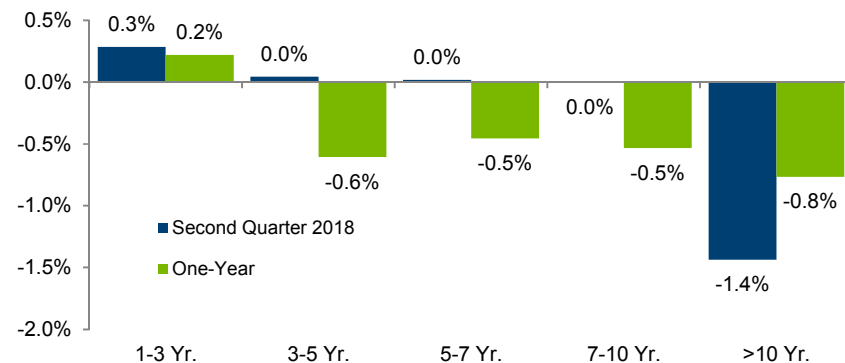
- The Bloomberg Barclays U.S. Aggregate Bond Index returned -0.2% in the second quarter. For a second successive quarter, investment grade corporate bonds fell the most, falling 1.0%. ABS was the best performer, returning 0.4% over the quarter and offsetting the first quarter decline.
- Credit spreads widened over the quarter, with low-quality investment grade credit the worst affected, posting a -1.2% return. Conversely, higher quality investment grade credit outperformed, albeit with a modest 0.2% return.
- High yield bonds were more resilient to the flight from credit and posted a return of 1.0% as strong income return offset capital losses.

**BLOOMBERG BARCLAYS U.S. AGGREGATE RETURNS
BY QUALITY AND HIGH YIELD RETURNS AS OF 06/30/2018**



Source: FactSet

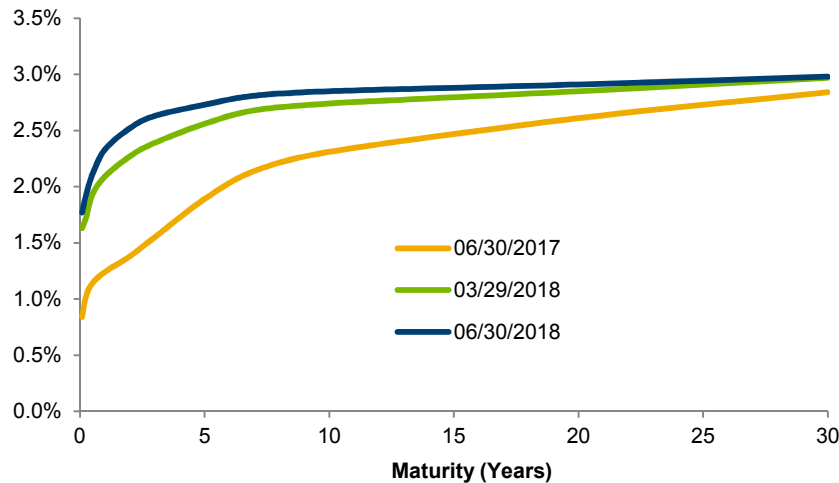
**BLOOMBERG BARCLAYS AGGREGATE RETURNS BY MATURITY
AS OF 06/30/2018**



Source: FactSet

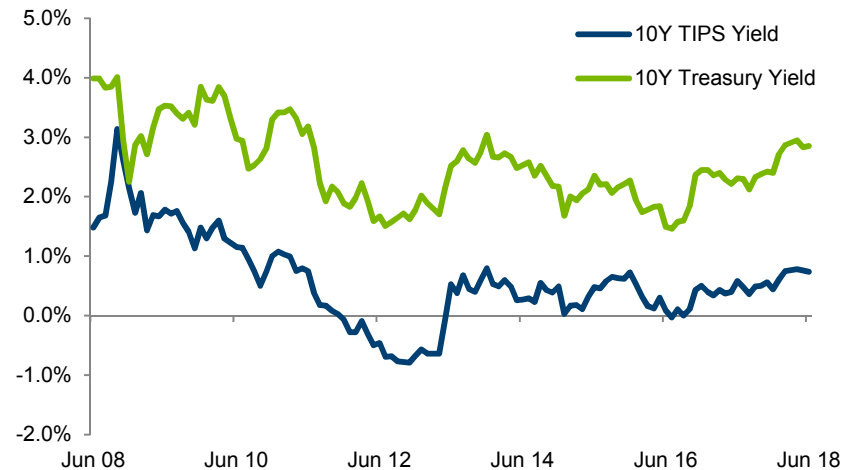
U.S. Fixed Income Markets

U.S. TREASURY YIELD CURVE



Source: U.S. Department of Treasury

U.S. 10-YEAR TREASURY AND TIPS YIELDS

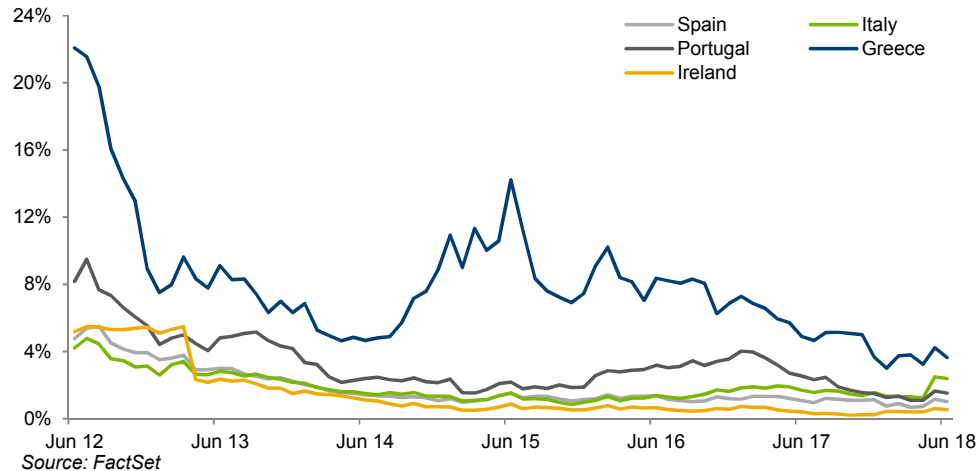


Source: U.S. Department of Treasury

- The U.S. Treasury yield curve flattened over the quarter with yields rising across maturities, but to a greater extent in short to medium maturities. The spread between the 10-year and 2-year U.S. Treasury yield touched its lowest level since 2007 during the quarter. The additional 25bps hike by the Fed in June and upward revision to their expected future rate hikes led the policy-sensitive 2-year Treasury 26bps higher to 2.52%.
- The 10-year U.S. Treasury yield ended the quarter at 2.85%, 11bps higher than at the start of the quarter. Higher risk aversion stemming from trade war uncertainty countered the impact of the tighter monetary policy stance adopted by the Fed.
- The 10-year TIPS yield rose by 5bps over the quarter and ended the period at 0.74%.

European Fixed Income Markets

**EUROZONE PERIPHERAL BOND SPREADS
(10-YEAR SPREADS OVER GERMAN BUNDS)**



- Bond spreads over 10-year German bunds increased across the eurozone with the exception of Greece. The European Central Bank (ECB) announced a reduction in its asset purchases from €30bn to €15bn starting from October this year—with a view to halt purchases altogether by the end of 2018. However, the ECB also indicated that interest rates are likely to remain unchanged until at least the middle of 2019. Spanish government bond yields rose by 16bps to 1.32% over the quarter as the (now former) prime minister Mariano Rajoy was ousted after facing a no confidence vote.
- Italian bond yields rose sharply by 90bps to 2.68%, driven by concerns over the impact of the new populist coalition government's policies to reverse reforms and their confrontational stance toward the EU. The spread between Italian 10-year government bonds and German bunds reached its highest level since the 2013 eurozone debt crisis.
- Greek government bond yields fell by 35bps to 3.94% as the government negotiated a debt relief deal to postpone the repayment deadline on its €100bn bailout loan and to provide a liquidity injection to support the Greek economy.

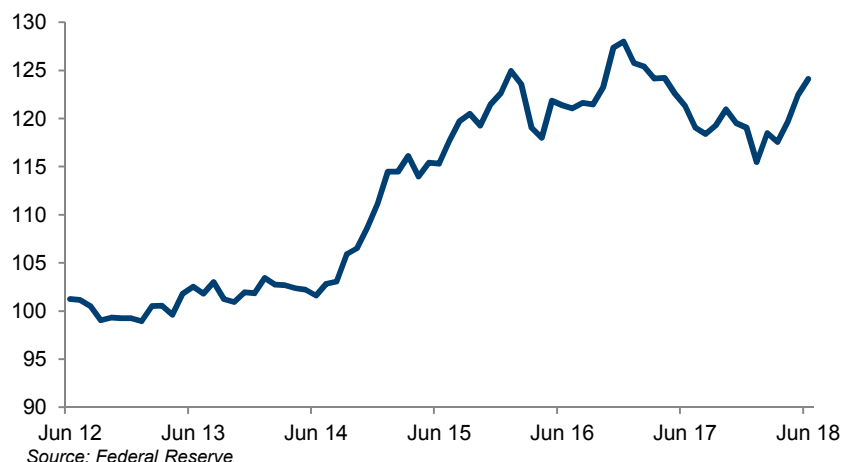
Credit Spreads

Spread (bps)	06/30/2018	03/31/2018	06/30/2017	Quarterly Change (bps)	1-Year Change (bps)
U.S. Aggregate	44	41	43	3	1
Long Gov't	1	1	2	0	-1
Long Credit	174	148	157	26	17
Long Gov't/Credit	101	88	94	13	7
MBS	28	29	32	-1	-4
CMBS	70	67	74	3	-4
ABS	47	48	46	-1	1
U.S. Corporate	123	109	109	14	14
U.S. High Yield	363	354	364	9	-1
Global Emerging Markets	288	230	255	58	33

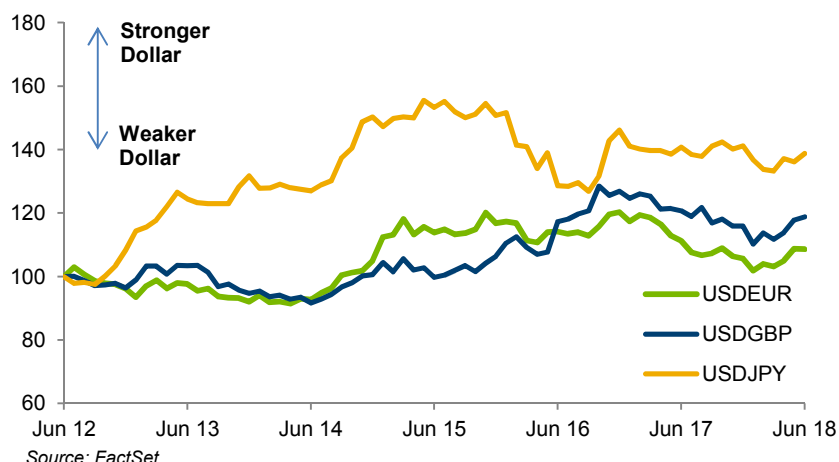
Source: FactSet

- In general, investment-grade credit underperformed during the second quarter as spreads over U.S. Treasuries widened across all maturities.
- Long Credit bond spreads were also affected by credit weakness widening by 26bps—the largest quarterly move since Q4 2016 and the largest increase since Q3 2015. A combination of deteriorating investor risk sentiment, a rising U.S. dollar, and fears over China drove Global Emerging Markets yields higher over the quarter with spreads widening by 58bps.
- U.S. Corporate bond spreads and Long Government/Credit bond spreads also widened by 14bps and 13bps, respectively. The increase in yields on U.S. Treasuries increased the total debt burden on U.S. companies causing spreads to widen.
- Movements in securitized credit spreads were far more muted with ABS and MBS bond spreads falling by 1bp each.

**TRADE WEIGHTED U.S. DOLLAR INDEX
(1973=100)**



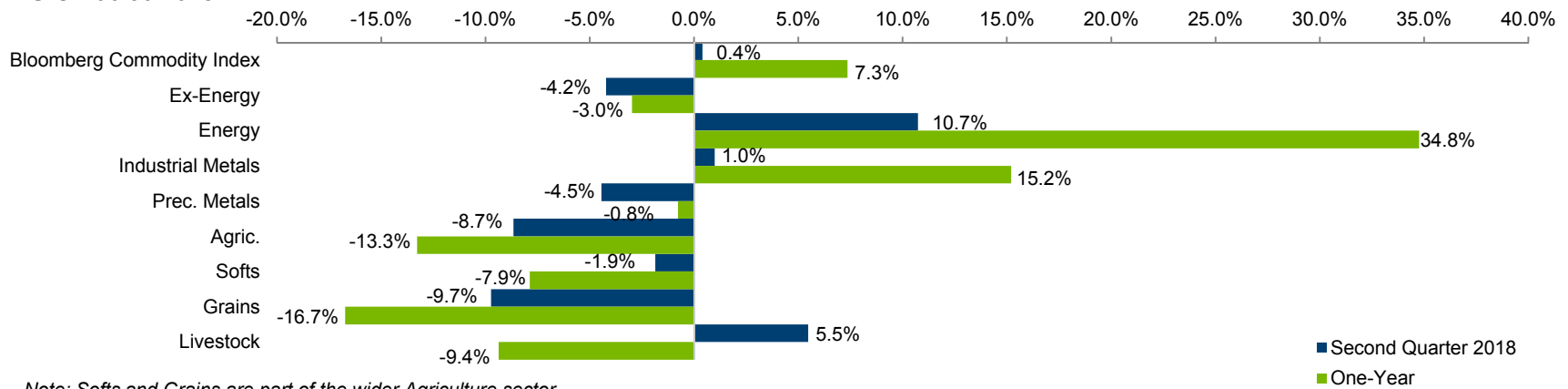
**U.S. DOLLAR RELATIVE TO EUR, GBP, AND JPY
REBASED TO 100 AT 06/29/2012**



- The U.S. dollar posted its best quarterly performance since 2016 as it rose 5.6% on a trade-weighted basis over the quarter. A combination of wider interest rate differentials and global trade turmoil led the U.S. dollar higher.
- The U.S. dollar appreciated against all the major currencies over the quarter. Political uncertainty in both the UK and eurozone and reduced safe haven flows into Japanese yen—following the resolution of tensions in the Korean Peninsula—contributed to the strong U.S. dollar performance.
- Both the Bank of England (BoE) and the ECB left their respective policy rates unchanged at 0.5% and 0.0%, although it was widely expected that the BoE would increase rates at its May meeting. There is, however, an increased chance the BoE will raise rates by 25bps in August after an additional BoE policymaker voted to increase rates at the meeting taking the vote to 6–3 against raising rates.

Commodities

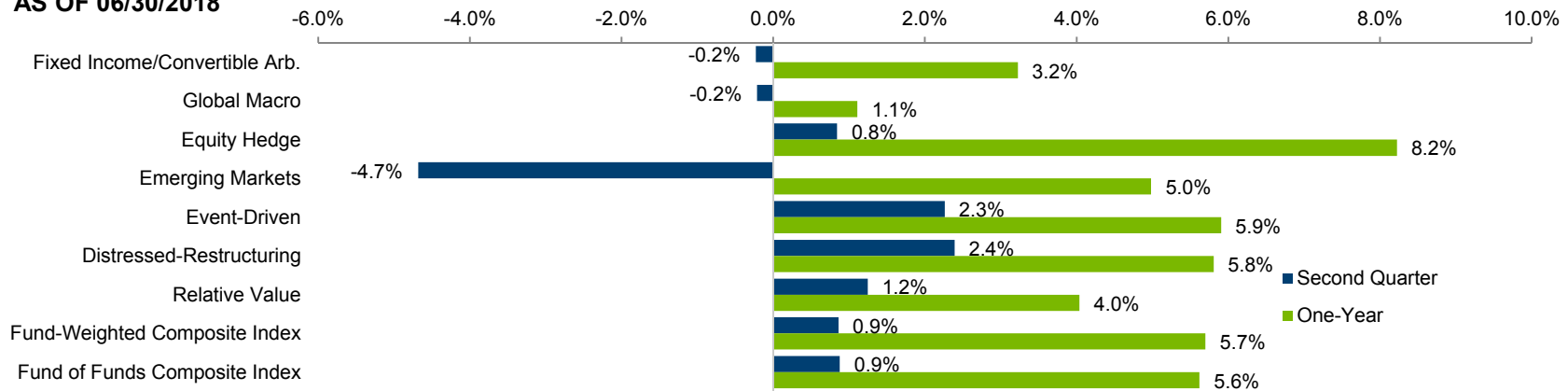
COMMODITY RETURNS AS OF 06/30/2018



- Commodities had a mixed quarter with the Bloomberg Commodity Index returning 0.4%.
- Energy was once again the best-performing sector over the quarter with a return of 10.7%. Crude oil prices rose sharply after the U.S. reintroduced sanctions in Iran and urged its allies to stop importing crude oil from Iran. The U.S. also imposed additional sanctions on Venezuela. The price of WTI crude oil rose sharply by 14.2% to \$74/bbl.
- Other than Energy, the other notable increase was Livestock, which rose by 5.5% in Q2 2018.
- The worst-performing segment over the quarter was Agriculture with a return of -8.7%, followed by Precious Metals, which returned -4.5%. Within the Agriculture sector, Grains was the worst performer with a return of -9.7%.
- The detrimental impact of a stronger U.S. dollar on commodities was noticeable in other markets with declines in Softs, Grains, and Precious Metals.

Hedge Fund Markets Overview

HEDGE FUND PERFORMANCE AS OF 06/30/2018



Note: Latest five months of HFR data are estimated by HFR and may change in the future.

Source: HFR

- Hedge fund performance was mixed across all strategies over the second quarter. Distressed-Restructuring and Event-Driven were the best performers with a return of 2.4% and 2.3%, respectively. The Emerging Markets hedge funds were the worst performer with a return of -4.7%.
- Fixed income-based Relative Value and Equity Hedge strategies led the index higher in April as U.S. yields rose sharply and equities rebounded after a poor first quarter. Event-Driven funds led in May supported by strong corporate earnings. However, hedge fund performance was more mixed in June as trade tensions increased with Emerging Markets hedge funds the worst hit, falling by 3.0% over the month.
- Both the HFRI Fund-Weighted Composite Index and the HFRI Fund of Funds Composite Index produced returns of 0.9%.

Fairfax County Public Schools – Summary

This report has been prepared by Aon Hewitt Investment Consulting (AHIC) to provide Fairfax County Public Schools with an objective, third party review of the historical investment results of the 457(b) Plan.

Asset Allocation

The Fairfax County Public Schools 457(b) Plan currently offers 8 investment options and a series of lifecycle funds. As of June 30, 2018, the Plan had 1 guaranteed interest fund, 1 fixed income fund, 1 inflation-sensitive solution, 2 passively-managed domestic equity funds, 2 actively-managed domestic equity funds, 1 actively-managed foreign equity fund and a series of actively managed target date funds. The two passively-managed domestic equity funds cover the following asset classes: large cap core and mid cap core. The two actively-managed domestic equity funds cover the following asset classes: large cap core and mid cap growth. Participants may allocate their investments among the funds in accordance with their own personal tolerance for risk. As of June 30, 2018, the assets of the Plan totaled \$225.5 million. The Plan held 14.4% of assets in the guaranteed interest product, 8.6% in fixed income, 56.6% in domestic equity, 8.7% in foreign equity and 10.8% in target date funds. The Plan's asset allocation by fund is detailed later in this report.

Plan Performance

During the second quarter of 2018, global equity markets rebounded driven by strong earnings and rising energy prices, but momentum slowed at quarter-end due to the increase in trade tensions. Domestically, the Russell 3000 Index returned 3.9% during the quarter and generated a 14.8% return over the trailing one-year period. All sectors except Consumer Staples and Producer Durables experienced positive returns, with the Energy (14.2%) and Consumer Discretionary (7.4%) sectors leading the way. Performance was positive across all market capitalization spectrums, with small cap outperforming large cap. Value stocks continued to lag growth, which can be partly attributed to their lower exposure to tech stocks, which have performed well over the last year. However, small cap value stocks generated the highest absolute returns within domestic equities during the second quarter (+8.3%). Developed non-US equity markets experienced negative results again this quarter with the MSCI EAFE Index returning -1.2%. Emerging markets lagged developed non-U.S. markets as well; the MSCI Emerging Markets Index returned -8.0%. The domestic fixed income market, as represented by Bloomberg Barclays US Aggregate Bond Index, posted a return of -0.2% for the quarter, with ABS as the strongest absolute performer (+0.4%). Investment grade corporate bonds fell the most (-1.0%). Longer duration bonds underperformed short duration bonds as the yield curve flattened towards short and medium term maturities. Overall, the global fixed income market significantly underperformed the domestic fixed income market, as measured by the Citigroup Non-U.S. WGBI, which returned -7.3% for the quarter.

Fairfax County Public Schools – Summary

Plan Performance (continued)

Against this backdrop the plan's options generated mostly positive returns and most target date funds outperformed their benchmarks.

Longer-term relative performance of most of the Plan's active investments also had mixed results for the ten-year period ending June 30, 2018. Allowing for the expense ratios of the funds, both of the Plan's index options successfully tracked their target Indices during the quarter as well as for longer periods.

Quarterly Fund Attribution

- PIMCO Total Return Fund underperformed during the quarter
 - Exposure to select high carry emerging market currencies
 - Tactical exposure to select developed market currencies
 - Local rate exposure in select emerging market countries

- PIMCO Inflation Response Multi-Asset Fund performed in line with its benchmark during the quarter
 - + Exposure to TIPS
 - + Active commodity strategies
 - Exposure to emerging market currencies

Fairfax County Public Schools – Summary

Quarterly Fund Attribution (continued)

- Dodge & Cox Stock Fund underperformed during the quarter
 - Stock selection in the information technology sector
 - Overweight to the financials sector
 - Specific holdings Hewlett Packard Enterprise and Goldman Sachs

- Baron Growth Fund outperformed during the quarter
 - + Overweight and stock selection within the consumer discretionary and financial sectors
 - + Stock selection within information technology sector
 - + Specific holdings Vail Resorts, Inc., CoStar Group, Inc., and Iridium Communications Inc.

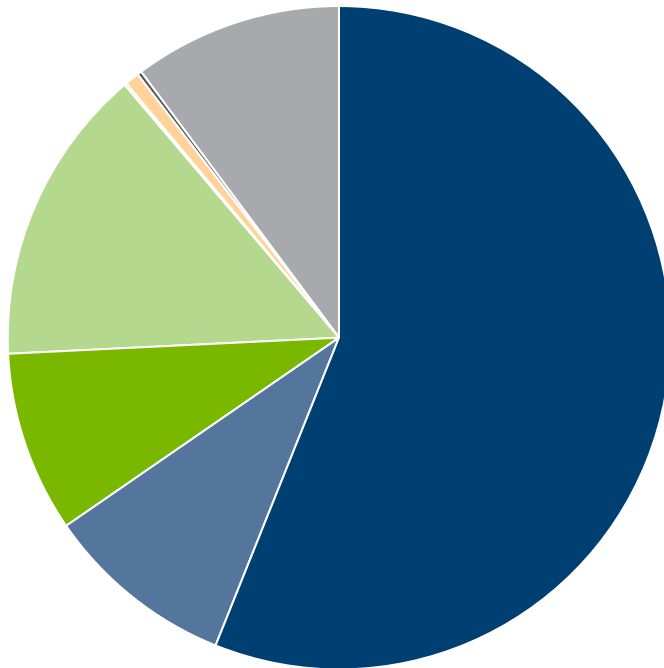
- Artisan International Fund underperformed during the quarter
 - Underweight and stock selection in the energy sector

Financial Reconciliation

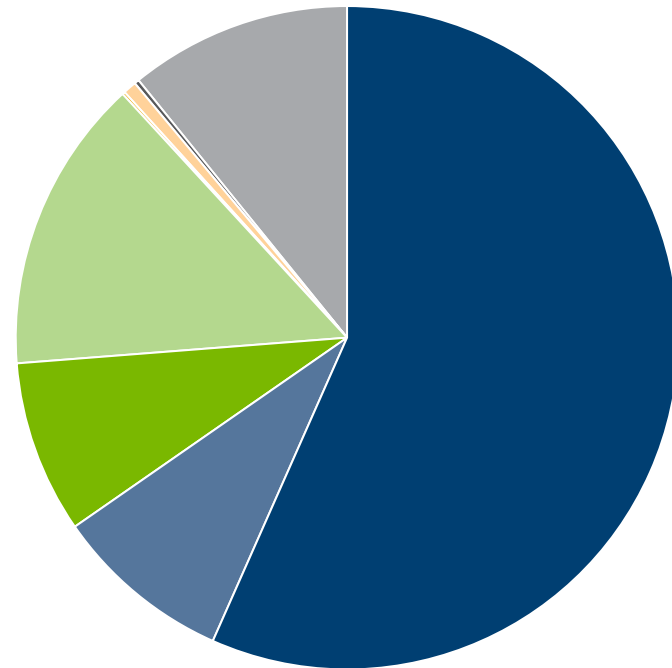
	Market Value As of 3/31/2018	Net Transfers	Contributions	Distributions	Capital Apprec./ Deprec.	Market Value As of 6/30/2018
U.S. FIXED INCOME						
Great West Portfolio Fund	\$ 31,772,363.93	192,773.50	588,930.75	277,711.24	153,573.12	\$ 32,429,930.16
PIMCO Total Return Adm	\$ 19,256,375.44	-207,181.86	273,804.33	247,413.34	-96,730.15	\$ 18,978,854.42
PIMCO Inflation Response MultiAsst Inst	\$ 237,540.90	9,695.20	46,434.18	-	-232.43	\$ 293,437.85
TARGET DATE						\$ -
T. Rowe Price Retirement I 2005 I	\$ 401,444.54	149,626.57	21,471.60	-	986.99	\$ 573,529.70
T. Rowe Price Retirement I 2010 I	\$ 513,736.87	-320,658.05	434.12	-	-329.90	\$ 193,183.04
T. Rowe Price Retirement I 2015 I	\$ 2,101,184.44	-203,640.52	21,764.64	220,210.06	8,547.32	\$ 1,707,645.82
T. Rowe Price Retirement I 2020 I	\$ 5,164,836.04	278,632.66	723,425.77	5,667.43	29,697.16	\$ 6,190,924.20
T. Rowe Price Retirement I 2025 I	\$ 4,035,263.99	2,193.38	183,995.15	-	22,638.13	\$ 4,244,090.65
T. Rowe Price Retirement I 2030 I	\$ 2,622,492.76	109,163.69	121,686.01	-	17,904.89	\$ 2,871,247.35
T. Rowe Price Retirement I 2035 I	\$ 3,226,913.10	218,244.68	185,589.12	2,630.78	30,233.37	\$ 3,658,349.49
T. Rowe Price Retirement I 2040 I	\$ 1,531,795.37	445,511.20	103,367.36	-	21,993.92	\$ 2,102,667.85
T. Rowe Price Retirement I 2045 I	\$ 1,022,636.11	24,581.99	74,766.86	-	10,644.77	\$ 1,132,629.73
T. Rowe Price Retirement I 2050 I	\$ 657,035.88	-3,586.96	26,593.07	-	6,392.20	\$ 686,434.19
T. Rowe Price Retirement I 2055 I	\$ 947,016.83	63,914.50	81,486.59	4,077.90	9,239.32	\$ 1,097,579.34
U.S. EQUITY						\$ -
iShares S&P 500 Index	\$ 32,245,169.64	-311,313.94	966,665.59	437,856.35	1,097,439.18	\$ 33,560,104.12
Dodge & Cox Stock	\$ 27,661,353.62	55,000.17	366,983.43	328,762.58	768,045.67	\$ 28,522,620.31
Vanguard Mid Cap Index	\$ 33,852,131.95	-95,907.67	588,145.78	240,566.47	868,237.50	\$ 34,972,040.99
Baron Growth Inst	\$ 28,559,532.29	-270,802.87	394,043.81	267,516.08	2,277,009.91	\$ 30,692,267.06
INTERNATIONAL EQUITY						
Artisan International Inv	\$ 20,340,653.06	-136,245.67	325,525.73	366,647.44	-519,203.42	\$ 19,644,082.26
OTHER						
Loan Fund	\$ 1,519,830.78					\$ 1,466,116.98
Forfeiture Account	\$ 462,735.82					\$ 516,912.55
Total 457(b) Plan	218,132,043.36	-	5,095,113.89	2,399,059.67	4,706,087.55	225,534,648.06

457(b) Plan

March 31, 2018 : \$218,132,043



June 30, 2018 : \$225,534,648

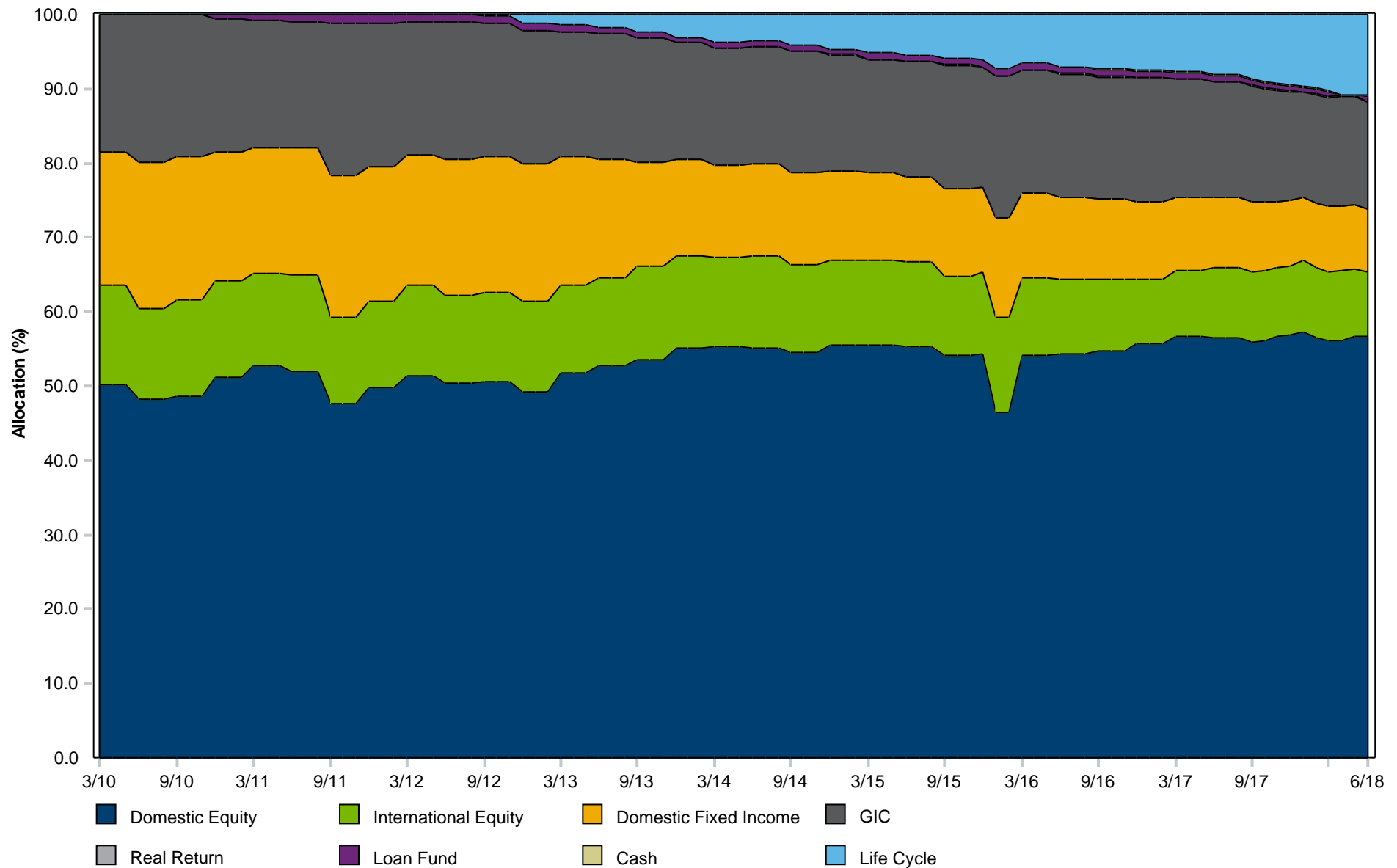


Segments	Market Value (\$)	Allocation (%)
Domestic Equity	122,318,187.50	56.08
International Equity	20,340,653.06	9.32
Domestic Fixed Income	19,256,375.44	8.83
GIC	31,772,363.93	14.57
Real Return	237,540.90	0.11
Loan Fund	1,519,830.78	0.70
Cash	462,735.82	0.21
Life Cycle	22,224,355.93	10.19

Segments	Market Value (\$)	Allocation (%)
Domestic Equity	127,747,032.48	56.64
International Equity	19,644,082.26	8.71
Domestic Fixed Income	18,978,854.42	8.42
GIC	32,429,930.16	14.38
Real Return	293,437.85	0.13
Loan Fund	1,466,116.98	0.65
Cash	516,912.55	0.23
Life Cycle	24,458,281.36	10.84

Historical Asset Allocation by Segment

Total 457(b) Plan



Asset Allocation & Performance

	Allocation		Performance(%)							
	Market Value (\$000)	%	1 Quarter	Year To Date	1 Year	3 Years	5 Years	7 Years	10 Years	
Total 457(b) Plan	225,534.65	100.00								
U.S. Fixed Income	51,702.22	22.92								
Great West Portfolio Fund	32,429.93	14.38	0.48	0.97	1.95	1.97	1.91	1.96	2.27	
50% B Bar Int. Agg/50% 90 day T-Bill			0.27	-0.08	0.52	0.96	1.12	1.17	1.81	
90 Day U.S. Treasury Bill			0.45	0.81	1.36	0.64	0.40	0.30	0.33	
PIMCO Total Return Adm	18,978.85	8.42	-0.50 (90)	-1.83 (69)	-0.36 (39)	1.84 (44)	2.23 (56)	2.67 (51)	4.58 (14)	
Blmbg. Barc. U.S. Aggregate			-0.16 (33)	-1.62 (41)	-0.40 (41)	1.72 (51)	2.27 (53)	2.57 (60)	3.72 (68)	
PIMCO Inflation Response MultiAsst Inst	293.44	0.13	-0.06 (59)	-0.18 (37)	5.90 (40)	3.56 (72)	2.48 (86)	-	-	
PIMCO IRMA Benchmark			-0.03 (58)	-0.72 (52)	3.04 (68)	1.30 (92)	0.37 (97)	-0.04 (99)	0.98 (100)	
Target Date	24,458.28	10.84								
T. Rowe Price Retirement I 2005 I	573.53	0.25	0.09 (73)	-0.26 (33)	4.38 (26)	-	-	-	-	
T. Rowe Price Retirement 2005*			0.15 (68)	-0.29 (35)	4.34 (26)	4.85 (13)	5.61 (15)	5.48 (24)	5.63 (30)	
T. Rowe Price Retirement 2005 Index			0.75 (21)	-0.11 (25)	4.73 (22)	4.72 (15)	5.60 (16)	5.51 (24)	5.17 (40)	
T. Rowe Price Retirement I 2010 I	193.18	0.09	0.26 (71)	-0.17 (49)	5.01 (24)	-	-	-	-	
T. Rowe Price Retirement 2010*			0.22 (72)	-0.16 (49)	4.94 (26)	5.27 (10)	6.20 (9)	6.02 (14)	5.92 (1)	
T. Rowe Price Retirement 2010 Index			0.85 (3)	0.00 (13)	5.38 (11)	5.16 (16)	6.18 (12)	6.07 (13)	5.54 (12)	
T. Rowe Price Retirement I 2015 I	1,707.65	0.76	0.42 (73)	0.17 (9)	6.01 (18)	-	-	-	-	
T. Rowe Price Retirement 2015*			0.40 (74)	0.13 (11)	5.88 (20)	5.88 (9)	7.10 (1)	6.85 (5)	6.47 (1)	
T. Rowe Price Retirement 2015 Index			0.99 (1)	0.13 (11)	6.33 (11)	5.83 (10)	7.05 (1)	6.88 (2)	6.10 (3)	
T. Rowe Price Retirement I 2020 I	6,190.92	2.74	0.49 (69)	0.40 (7)	7.19 (7)	-	-	-	-	
T. Rowe Price Retirement 2020*			0.44 (70)	0.35 (8)	7.02 (10)	6.64 (1)	8.06 (1)	7.68 (1)	6.98 (1)	
T. Rowe Price Retirement 2020 Index			1.18 (3)	0.31 (12)	7.57 (1)	6.66 (1)	7.94 (1)	7.67 (1)	6.61 (1)	

*Alternate share class shown to illustrate performance history.

Asset Allocation & Performance

	Allocation		Performance(%)							
	Market Value (\$000)	%	1 Quarter	Year To Date	1 Year	3 Years	5 Years	7 Years	10 Years	
T. Rowe Price Retirement I 2025 I	4,244.09	1.88	0.55 (67)	0.63 (7)	8.10 (7)	-	-	-	-	
T. Rowe Price Retirement 2025*			0.57 (67)	0.63 (7)	8.04 (11)	7.27 (1)	8.89 (1)	8.38 (3)	7.38 (1)	
T. Rowe Price Retirement 2025 Index			1.33 (2)	0.45 (20)	8.57 (2)	7.32 (1)	8.70 (1)	8.34 (3)	7.02 (4)	
T. Rowe Price Retirement I 2030 I	2,871.25	1.27	0.70 (68)	0.93 (8)	9.06 (17)	-	-	-	-	
T. Rowe Price Retirement 2030*			0.73 (66)	0.89 (9)	8.99 (20)	7.88 (3)	9.61 (2)	9.00 (3)	7.76 (1)	
T. Rowe Price Retirement 2030 Index			1.48 (4)	0.62 (25)	9.56 (7)	7.95 (2)	9.38 (3)	8.93 (3)	7.38 (2)	
T. Rowe Price Retirement I 2035 I	3,658.35	1.62	0.84 (61)	1.14 (8)	9.92 (21)	-	-	-	-	
T. Rowe Price Retirement 2035*			0.84 (61)	1.11 (10)	9.75 (31)	8.29 (13)	10.14 (3)	9.42 (4)	8.02 (1)	
T. Rowe Price Retirement 2035 Index			1.61 (7)	0.75 (34)	10.37 (17)	8.43 (11)	9.88 (4)	9.35 (4)	7.66 (7)	
T. Rowe Price Retirement I 2040 I	2,102.67	0.93	0.97 (67)	1.35 (9)	10.56 (25)	-	-	-	-	
T. Rowe Price Retirement 2040*			0.88 (73)	1.25 (10)	10.37 (31)	8.62 (12)	10.52 (3)	9.74 (4)	8.26 (1)	
T. Rowe Price Retirement 2040 Index			1.72 (6)	0.87 (27)	11.02 (11)	8.81 (5)	10.26 (5)	9.68 (4)	7.89 (5)	
T. Rowe Price Retirement I 2045 I	1,132.63	0.50	0.97 (60)	1.42 (11)	10.77 (34)	-	-	-	-	
T. Rowe Price Retirement 2045*			0.97 (60)	1.41 (11)	10.67 (36)	8.81 (11)	10.64 (4)	9.84 (5)	8.32 (1)	
T. Rowe Price Retirement 2045 Index			1.78 (5)	0.93 (30)	11.32 (13)	9.01 (7)	10.38 (6)	9.76 (6)	7.95 (1)	
T. Rowe Price Retirement I 2050 I	686.43	0.30	0.97 (66)	1.42 (10)	10.77 (42)	-	-	-	-	
T. Rowe Price Retirement 2050*			0.90 (73)	1.35 (10)	10.64 (46)	8.82 (12)	10.63 (4)	9.83 (5)	8.31 (1)	
T. Rowe Price Retirement 2050 Index			1.78 (6)	0.93 (30)	11.32 (17)	9.01 (9)	10.38 (7)	9.76 (9)	7.95 (5)	
T. Rowe Price Retirement I 2055 I	1,097.58	0.49	1.04 (58)	1.42 (10)	10.78 (42)	-	-	-	-	
T. Rowe Price Retirement 2055*			0.96 (67)	1.35 (10)	10.62 (47)	8.79 (12)	10.63 (4)	9.83 (5)	8.30 (1)	
T. Rowe Price Retirement 2055 Index			1.78 (6)	0.93 (30)	11.32 (17)	9.01 (9)	10.38 (7)	9.76 (9)	7.95 (5)	

*Alternate share class shown to illustrate performance history.

Asset Allocation & Performance

	Allocation		Performance(%)									
	Market Value (\$000)	%	1 Quarter	Year To Date	1 Year	3 Years	5 Years	7 Years	10 Years			
U.S. Equity	127,747.03	56.64										
iShares S&P 500 Index	33,560.10	14.88	3.42 (28)	2.64 (16)	14.35 (16)	11.88 (22)	13.36 (13)	13.15 (24)	10.10 (18)			
S&P 500 Index			3.43 (10)	2.65 (10)	14.37 (6)	11.93 (3)	13.42 (1)	13.23 (3)	10.17 (3)			
Dodge & Cox Stock	28,522.62	12.65	2.76 (56)	0.96 (70)	11.85 (67)	10.95 (44)	12.81 (39)	13.08 (23)	9.70 (40)			
S&P 500 Index			3.43 (33)	2.65 (35)	14.37 (37)	11.93 (20)	13.42 (19)	13.23 (18)	10.17 (25)			
Vanguard Mid Cap Index	34,972.04	15.51	2.57 (61)	2.56 (55)	12.10 (62)	9.22 (51)	12.31 (38)	11.72 (34)	10.11 (42)			
Vanguard Spliced Mid Cap Index			2.58 (60)	2.60 (55)	12.12 (62)	9.25 (50)	12.35 (37)	11.76 (31)	10.14 (41)			
Baron Growth Inst	30,692.27	13.61	8.01 (9)	10.68 (21)	20.37 (39)	11.54 (31)	12.55 (57)	12.26 (31)	-			
Baron Growth Rtl*			7.94 (9)	10.54 (22)	20.08 (40)	11.26 (36)	12.26 (71)	11.97 (40)	10.45 (32)			
Russell Midcap Growth Index			3.16 (66)	5.40 (68)	18.52 (49)	10.73 (42)	13.37 (36)	12.16 (34)	10.45 (32)			
International Equity	19,644.08	8.71										
Artisan International Inv	19,644.08	8.71	-2.60 (63)	-2.31 (32)	7.23 (31)	2.32 (90)	5.39 (71)	6.03 (11)	3.71 (33)			
MSCI EAFE Index (Net)			-1.24 (25)	-2.75 (38)	6.84 (35)	4.90 (34)	6.44 (34)	4.89 (35)	2.84 (54)			
MSCI AC World ex USA Index (Net)			-2.61 (63)	-3.77 (59)	7.28 (30)	5.07 (33)	5.99 (40)	3.81 (76)	2.54 (64)			

*Alternate share class shown to illustrate performance history.

Calendar Year Performance

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
U.S. Fixed Income										
Great West Portfolio Fund	1.95	1.98	2.00	1.86	1.53	2.11	2.55	2.67	3.37	3.42
50% B Bar Int. Agg/50% 90 day T-Bill	1.56	1.12	0.62	2.06	-0.48	1.80	2.99	3.11	3.28	3.50
90 Day U.S. Treasury Bill	0.86	0.25	0.03	0.04	0.05	0.08	0.08	0.13	0.17	2.10
PIMCO Total Return Adm	4.87 (7)	2.34 (79)	0.47 (37)	4.43 (81)	-2.16 (72)	10.10 (3)	3.91 (95)	8.57 (17)	13.53 (31)	4.56 (23)
Blmbg. Barc. U.S. Aggregate	3.54 (61)	2.65 (62)	0.55 (27)	5.97 (32)	-2.02 (64)	4.21 (77)	7.84 (15)	6.54 (69)	5.93 (84)	5.24 (19)
PIMCO Inflation Response MultiAsst Inst	8.59 (75)	10.53 (19)	-6.77 (77)	1.57 (73)	-9.29 (100)	9.56 (64)	-	-	-	-
PIMCO IRMA Benchmark	5.08 (91)	6.76 (45)	-7.47 (81)	-0.34 (82)	-8.89 (100)	6.58 (84)	4.56 (11)	12.98 (45)	17.17 (90)	-12.37 (13)
Target Date										
T. Rowe Price Retirement I 2005 I	10.74 (19)	6.69 (27)	-	-	-	-	-	-	-	-
T. Rowe Price Retirement 2005*	10.67 (19)	6.72 (27)	-0.75 (36)	4.72 (40)	9.74 (24)	11.35 (16)	1.43 (66)	11.51 (18)	24.55 (18)	-22.24 (80)
T. Rowe Price Retirement 2005 Index	10.12 (26)	5.84 (42)	-0.10 (18)	5.48 (25)	9.86 (23)	9.52 (41)	2.38 (44)	10.22 (42)	16.91 (64)	-19.10 (67)
T. Rowe Price Retirement I 2010 I	11.82 (12)	7.18 (9)	-	-	-	-	-	-	-	-
T. Rowe Price Retirement 2010*	11.66 (13)	7.11 (9)	-0.76 (59)	4.99 (23)	11.93 (8)	12.44 (6)	0.54 (55)	12.70 (4)	27.95 (4)	-26.71 (80)
T. Rowe Price Retirement 2010 Index	11.20 (17)	6.27 (44)	-0.17 (14)	5.77 (12)	12.00 (7)	10.61 (26)	1.81 (25)	11.42 (30)	19.64 (67)	-23.19 (34)
T. Rowe Price Retirement I 2015 I	13.52 (11)	7.25 (14)	-	-	-	-	-	-	-	-
T. Rowe Price Retirement 2015*	13.34 (12)	7.31 (13)	-0.58 (31)	5.37 (32)	15.18 (2)	13.81 (1)	-0.32 (81)	13.79 (4)	31.35 (1)	-30.22 (86)
T. Rowe Price Retirement 2015 Index	12.87 (16)	6.91 (33)	-0.28 (14)	6.30 (16)	14.97 (3)	11.94 (25)	1.09 (42)	12.57 (27)	22.08 (65)	-26.61 (33)
T. Rowe Price Retirement I 2020 I	15.90 (1)	7.57 (12)	-	-	-	-	-	-	-	-
T. Rowe Price Retirement 2020*	15.74 (1)	7.41 (18)	-0.31 (25)	5.63 (37)	18.05 (2)	15.01 (1)	-1.20 (84)	14.74 (3)	34.19 (1)	-33.48 (82)
T. Rowe Price Retirement 2020 Index	14.95 (13)	7.62 (10)	-0.41 (32)	6.70 (5)	17.56 (3)	13.04 (20)	0.48 (45)	13.47 (22)	24.20 (58)	-29.72 (62)
T. Rowe Price Retirement I 2025 I	17.82 (1)	7.56 (20)	-	-	-	-	-	-	-	-
T. Rowe Price Retirement 2025*	17.68 (1)	7.55 (20)	-0.17 (13)	5.84 (38)	20.78 (3)	16.00 (1)	-2.06 (71)	15.37 (1)	36.29 (1)	-35.90 (87)
T. Rowe Price Retirement 2025 Index	16.68 (11)	8.21 (9)	-0.56 (31)	7.06 (9)	20.01 (4)	14.00 (22)	-0.22 (25)	14.12 (26)	26.15 (66)	-32.24 (36)
T. Rowe Price Retirement I 2030 I	19.52 (2)	7.77 (46)	-	-	-	-	-	-	-	-
T. Rowe Price Retirement 2030*	19.45 (2)	7.69 (47)	-0.02 (6)	6.05 (36)	23.09 (4)	16.82 (1)	-2.70 (70)	16.01 (3)	37.99 (1)	-37.79 (74)
T. Rowe Price Retirement 2030 Index	18.28 (25)	8.80 (10)	-0.73 (40)	7.29 (7)	22.13 (8)	14.85 (20)	-0.79 (21)	14.72 (32)	27.43 (70)	-34.16 (45)
T. Rowe Price Retirement I 2035 I	21.03 (8)	7.68 (67)	-	-	-	-	-	-	-	-
T. Rowe Price Retirement 2035*	20.88 (9)	7.64 (67)	0.13 (4)	6.07 (38)	24.86 (3)	17.35 (1)	-3.26 (61)	16.34 (1)	39.04 (1)	-38.88 (71)
T. Rowe Price Retirement 2035 Index	19.58 (34)	9.21 (14)	-0.87 (35)	7.37 (5)	23.76 (12)	15.45 (39)	-1.37 (10)	15.10 (42)	28.59 (70)	-35.35 (28)

Returns for periods greater than one year are annualized.

Returns are expressed as percentages.

*Alternate share class shown to illustrate performance history.

Calendar Year Performance

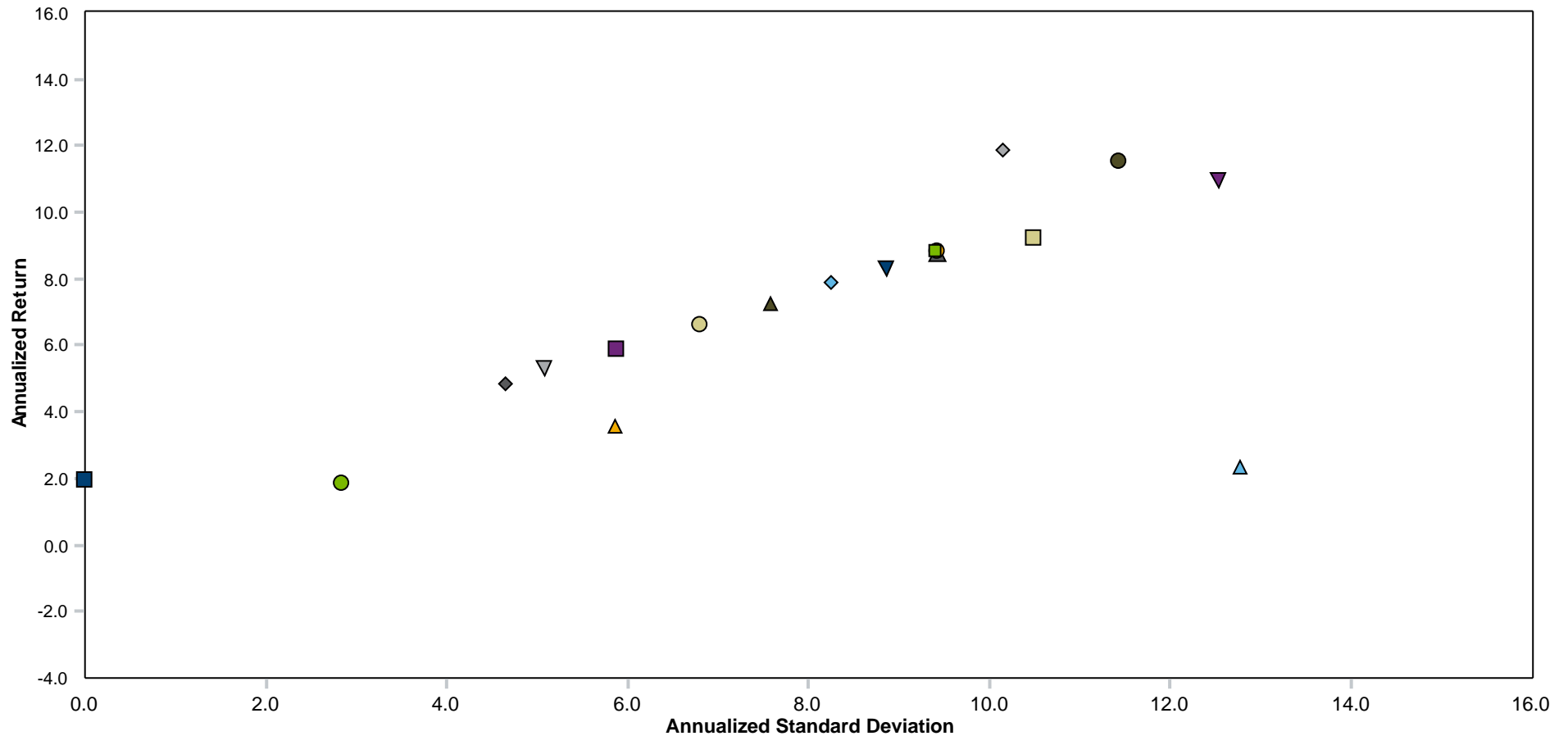
	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
T. Rowe Price Retirement I 2040 I	22.11 (4)	7.75 (66)	-	-	-	-	-	-	-	-
T. Rowe Price Retirement 2040*	22.02 (5)	7.63 (67)	0.17 (3)	6.18 (38)	25.93 (8)	17.55 (1)	-3.49 (43)	16.51 (9)	39.07 (1)	-38.85 (72)
<i>T. Rowe Price Retirement 2040 Index</i>	20.62 (38)	9.58 (15)	-1.01 (40)	7.43 (7)	24.73 (20)	15.66 (40)	-1.46 (9)	15.17 (38)	28.59 (84)	-35.35 (14)
T. Rowe Price Retirement I 2045 I	22.55 (6)	7.75 (71)	-	-	-	-	-	-	-	-
T. Rowe Price Retirement 2045*	22.41 (9)	7.69 (71)	0.17 (3)	6.14 (35)	25.93 (5)	17.62 (1)	-3.47 (31)	16.44 (10)	39.10 (1)	-38.83 (53)
<i>T. Rowe Price Retirement 2045 Index</i>	21.02 (47)	9.70 (13)	-0.98 (36)	7.43 (7)	24.73 (22)	15.66 (53)	-1.46 (1)	15.17 (44)	28.59 (91)	-35.35 (18)
T. Rowe Price Retirement I 2050 I	22.55 (11)	7.75 (69)	-	-	-	-	-	-	-	-
T. Rowe Price Retirement 2050*	22.38 (12)	7.71 (69)	0.19 (4)	6.19 (36)	25.90 (12)	17.55 (4)	-3.36 (26)	16.41 (15)	38.92 (1)	-38.80 (58)
<i>T. Rowe Price Retirement 2050 Index</i>	21.02 (55)	9.70 (17)	-0.98 (40)	7.43 (8)	24.73 (28)	15.66 (40)	-1.46 (5)	15.17 (39)	28.59 (85)	-35.35 (6)
T. Rowe Price Retirement I 2055 I	22.57 (11)	7.65 (70)	-	-	-	-	-	-	-	-
T. Rowe Price Retirement 2055*	22.33 (13)	7.73 (69)	0.18 (5)	6.18 (37)	25.86 (12)	17.60 (3)	-3.35 (26)	16.41 (15)	38.97 (1)	-38.89 (62)
<i>T. Rowe Price Retirement 2055 Index</i>	21.02 (55)	9.70 (17)	-0.98 (40)	7.43 (8)	24.73 (28)	15.66 (40)	-1.46 (5)	15.17 (39)	28.59 (85)	-35.35 (6)
U.S. Equity										
iShares S&P 500 Index	21.77 (18)	11.92 (17)	1.35 (19)	13.61 (14)	32.21 (28)	15.84 (33)	1.98 (41)	14.92 (36)	26.49 (18)	-37.01 (30)
<i>S&P 500 Index</i>	21.83 (3)	11.96 (7)	1.38 (9)	13.69 (1)	32.39 (3)	16.00 (3)	2.11 (8)	15.06 (1)	26.46 (23)	-37.00 (29)
Dodge & Cox Stock	18.33 (79)	21.28 (1)	-4.49 (93)	10.40 (72)	40.55 (1)	22.01 (2)	-4.08 (89)	13.49 (55)	31.27 (25)	-43.31 (91)
<i>S&P 500 Index</i>	21.83 (39)	11.96 (27)	1.38 (33)	13.69 (20)	32.39 (46)	16.00 (43)	2.11 (28)	15.06 (33)	26.46 (58)	-37.00 (52)
Vanguard Mid Cap Index	19.29 (48)	11.23 (56)	-1.33 (37)	13.78 (9)	35.17 (48)	16.01 (46)	-1.96 (43)	25.67 (33)	40.51 (34)	-41.76 (70)
<i>Vanguard Spliced Mid Cap Index</i>	19.30 (48)	11.25 (56)	-1.28 (37)	13.83 (9)	35.21 (48)	16.04 (45)	-1.91 (41)	25.69 (33)	40.49 (34)	-41.80 (70)
Baron Growth Inst	27.35 (29)	6.31 (45)	-4.06 (79)	4.66 (77)	38.69 (23)	16.74 (23)	1.51 (13)	24.32 (55)	-	-
Baron Growth Rtl*	27.04 (30)	6.04 (49)	-4.31 (81)	4.40 (78)	38.32 (26)	16.43 (27)	1.24 (15)	24.01 (57)	34.24 (68)	-39.18 (24)
<i>Russell Midcap Growth Index</i>	25.27 (44)	7.33 (35)	-0.20 (44)	11.90 (11)	35.74 (45)	15.81 (37)	-1.65 (36)	26.38 (41)	46.29 (26)	-44.32 (66)
International Equity										
Artisan International Inv	31.02 (14)	-9.66 (100)	-3.85 (80)	-0.97 (10)	25.18 (9)	25.39 (4)	-7.26 (19)	5.91 (67)	39.77 (10)	-46.96 (98)
<i>MSCI EAFE Index (Net)</i>	25.03 (55)	1.00 (49)	-0.81 (44)	-4.90 (45)	22.78 (16)	17.32 (69)	-12.14 (52)	7.75 (52)	31.78 (51)	-43.38 (68)
<i>MSCI AC World ex USA Index (Net)</i>	27.19 (35)	4.50 (15)	-5.66 (87)	-3.87 (27)	15.29 (82)	16.83 (72)	-13.71 (74)	11.15 (24)	41.45 (5)	-45.53 (88)

Returns for periods greater than one year are annualized.

Returns are expressed as percentages.

*Alternate share class shown to illustrate performance history.

Risk Profile



Great West Portfolio Fund

PIMCO Total Return Adm

PIMCO Inflation Response MultiAsst Inst

T. Rowe Price Ret 2005*

T. Rowe Price Ret 2010*

T. Rowe Price Ret 2015*

T. Rowe Price Ret 2020*

T. Rowe Price Ret 2025*

T. Rowe Price Ret 2030*

T. Rowe Price Ret 2035*

T. Rowe Price Ret 2045*

T. Rowe Price Ret 2050*

T. Rowe Price Ret 2055*

iShares S&P 500 Index

Dodge & Cox Stock

Vanguard Mid Cap Index

Baron Growth Inst

Artisan International Inv

*Alternate share class shown to illustrate performance history.

Fairfax County Public Schools – Watch List Review

Current Quarter:	2nd									
Current Year:	2018									
	Organization/Staff		Process	Performance		Overall Manager Research Rating	Watch List Status			
	Significant Organizational Change	Adverse Change in Portfolio Manager	Diverged from Strategy and/or Portfolio Characteristics	Underperformed / Adverse Tracking During Trailing 5-Years	Underperformed / Adverse Tracking in 3 of 4 Trailing Calendar Quarters		2nd Quarter 2018	1st Quarter 2018	4th Quarter 2017	3rd Quarter 2017
U.S. FIXED INCOME										
Great West Portfolio Fund	No	No	No	No	No	N/R				
PIMCO Total Return Adm	No	No	No	Yes	No	Buy				
PIMCO Inflation Response MultiAsst Inst	No	No	No	No	No	Buy				
TARGET DATE										
T. Rowe Price Retirement Series	No	No	No	No	No	Buy				
U.S. EQUITY										
iShares S&P 500 Index	No	No	No	No	No	Buy				
Dodge & Cox Stock Fund	No	No	No	Yes	Yes	Buy				
Vanguard Mid Cap Index	No	No	No	No	No	Buy				
Baron Growth Instl	No	No	No	Yes	No	Qualified				
INTERNATIONAL EQUITY										
Artisan International Inv	No	No	No	Yes	No	Buy				
Status	Number of Criteria Met					Suggested Action				
Green	1 or less affirmatives					Active – No action required				
Yellow	2 to 3 affirmatives					Active – On “closely monitored list”				
Red	4 or more affirmatives or “Yellow” for 4 consecutive quarters					Full fund review and recommendation for action will be made				
Changes in Watch List designations from the previous quarter are highlighted in bold.										
Passively managed index funds are expected to track their benchmark within a reasonable margin.										

Watch List Guidelines

AHIC Investment Option Review Criteria

1. If the Fund has underperformed its benchmark over the most recent trailing five-year period
 - If passively managed, the fund's return must be no more than 0.5 percentage points above or below the return of the benchmark
2. If the fund has underperformed its benchmark in three of the most recent four calendar quarters
3. If the Fund diverged from its strategy and / or portfolio characteristics
4. Adverse change in portfolio manager
5. Merger with another fund
6. Significant organizational change

Suggested Action Triggers

1. When an investment fund is placed on the Red Watch List, a formal fund retention meeting may be conducted. At this meeting, the fund's representative would be asked to address all relevant issues and explain why the fund should be retained. After this retention meeting, the Investment Committee may elect to either terminate the fund or grant it a one-year extension.
2. If a fund is granted the one-year extension described above and remains on the Watch List for this period, the fund may be terminated unless the Committee determines that an alternate course of action is appropriate.

Special Circumstances

1. In the event of a major change to the fund (e.g., investments, ownership, and staffing), the Committee retains the right to immediately terminate any fund without invoking the Watch List criteria in any fashion.

Demographic Information

Participants per Investment Option	
Investment Option	Participants
Great West Portfolio	958
PIMCO Total Return	1,033
PIMCO Inflation Response MultiAsst	49
T. Rowe Price Retirement I 2005 I	37
T. Rowe Price Retirement I 2010 I	19
T. Rowe Price Retirement I 2015 I	39
T. Rowe Price Retirement I 2020 I	90
T. Rowe Price Retirement I 2025 I	118
T. Rowe Price Retirement I 2030 I	91
T. Rowe Price Retirement I 2035 I	125
T. Rowe Price Retirement I 2040 I	98
T. Rowe Price Retirement I 2045 I	78
T. Rowe Price Retirement I 2050 I	46
T. Rowe Price Retirement I 2055 I	76
iShares S&P 500 Index	954
Dodge & Cox Stock	943
Vanguard Mid Cap Index	1,145
Baron Growth	1,021
Artisan International	1,024

Participants with Balance in One Investment Option	
Investment Option	Participants
Great-West Portfolio Fund	70
PIMCO Total Return Admin	82
PIMCO Inflation Response MultiAsst	7
T. Rowe Price Retirement I 2005 I	3
T. Rowe Price Retirement I 2010 I	1
T. Rowe Price Retirement I 2015 I	3
T. Rowe Price Retirement I 2020 I	5
T. Rowe Price Retirement I 2025 I	11
T. Rowe Price Retirement I 2030 I	3
T. Rowe Price Retirement I 2035 I	10
T. Rowe Price Retirement I 2040 I	4
T. Rowe Price Retirement I 2045 I	6
T. Rowe Price Retirement I 2050 I	5
T. Rowe Price Retirement I 2055 I	5
iShares S&P 500 Index	62
Dodge & Cox Stock	73
Vanguard Mid Cap Index Ins	97
Baron Growth Instl	66
Artisan International Inv	83

Investment Options per Participant	
Investment Options	Participants
One	596
Two	373
Three	266
Four	300
Five	269
Six	241
Seven	168
Eight	23
More than Eight	36

Other Demographics	
Item	Result
Participation Rate	54.45%
Number of Participants with Account Balances	2,272
Average Deferral Rate	17.12%
Average Number of Funds per Participant	3.50
Average Account Balance	\$98,394.20

* Information directly provided by Empower Retirement.

457(b) Plan Statistics

	<u>457(b)</u>	<u>403(b)</u>
Contributions June 2016	\$ 1,367,000	\$ 3.6 million
Contributions June 2017	\$ 1,575,000	\$ 3.9 million
Contributions June 2018	\$ 1,503,000	\$ 4.1 million
Contributions July 2018	\$ 683,000	\$ 1.1 million

Assets June 30, 2016	\$172.6 million
Assets June 30, 2017	\$201.5 million
Assets June 30, 2018	\$224.1 million
Assets July 31, 2018	\$225.7 million

Number of Participants June 2016	2335	13,104
Number of Participants June 2017	2255	13,165
Number of Participants June 2018	2276	13,221

Average Contribution/Month - June 2016	\$ 952/mo; \$224/biweek
Average Contribution/Month - June 2017	\$1086/mo; \$236/biweek
Average Contribution/Month - June 2018	\$1088/mo; \$263/biweek

	<u>403(b)</u>
Average Contribution/Month - June 2018	\$ 768/mo; \$200/biweek

Number of Employees Currently Contributing to 457(b): 1246/mo; 54/biweek

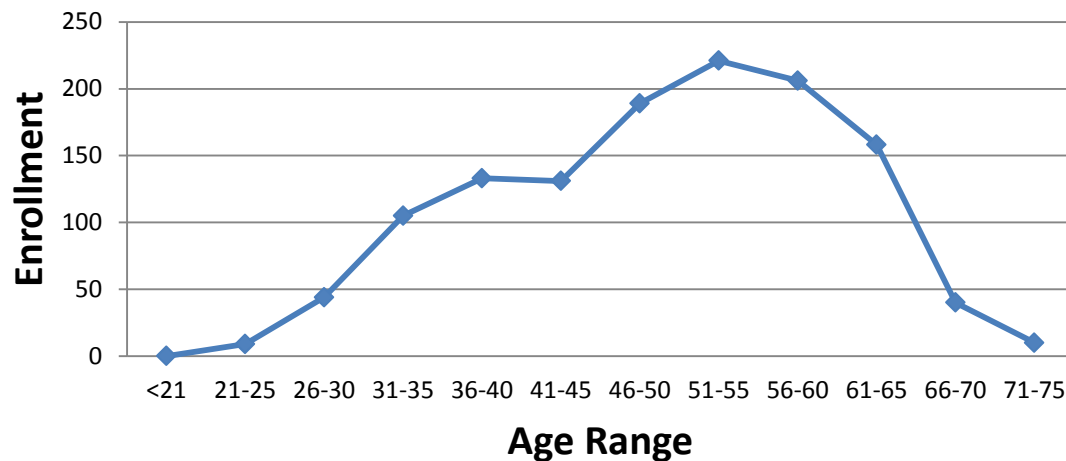
Number of Employees Currently Contributing to 403(b): 5246/mo; 633/biweek

Number of Employees Currently Contributing to both 457 & 403(b): 411 total

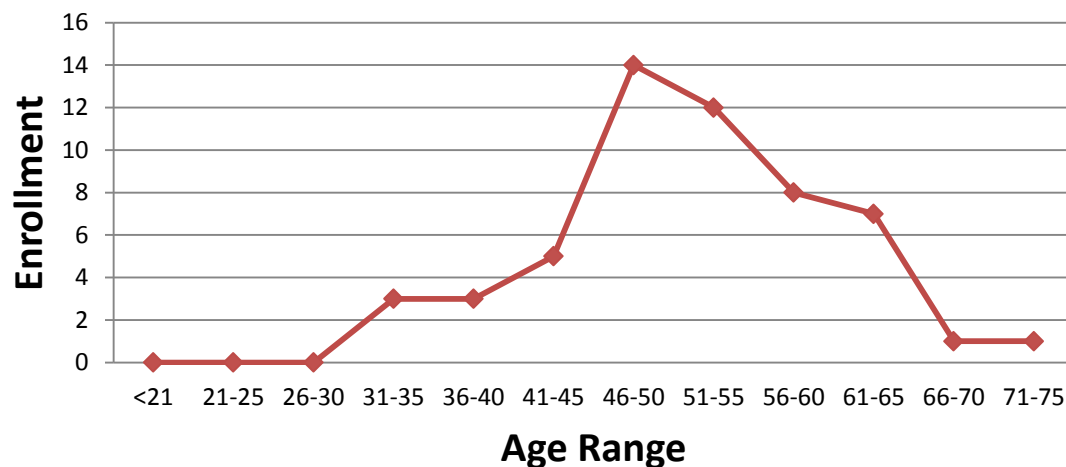
457 Plan Participants

Age	Monthly	Bi-Weekly
<21	0	0
21-25	9	0
26-30	44	0
31-35	105	3
36-40	133	3
41-45	131	5
46-50	189	14
51-55	221	12
56-60	206	8
61-65	158	7
66-70	40	1
71-75	10	1
Total	1246	54

457 Monthly Plan Participants



457 Bi-Weekly Plan Participants

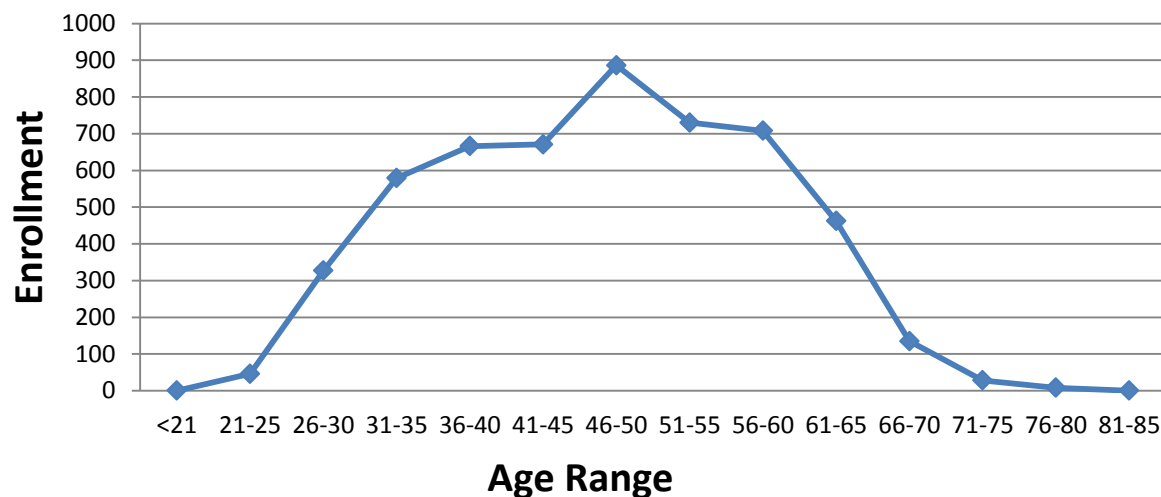


403(b) Plan Participants

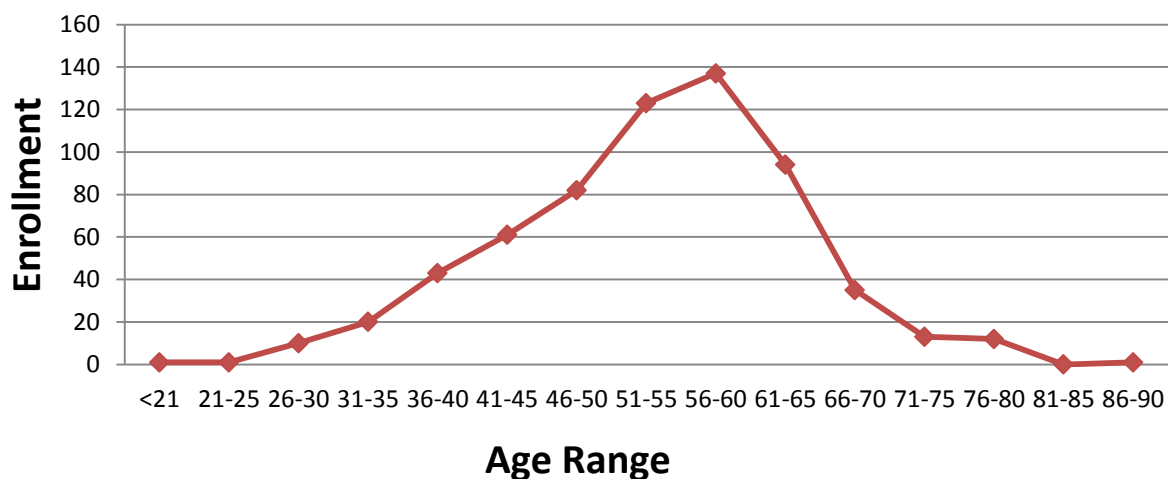
Age	Monthly	Bi-Weekly
<21	0	1
21-25	46	1
26-30	327	10
31-35	579	20
36-40	666	43
41-45	671	61
46-50	886	82
51-55	730	123
56-60	708	137
61-65	462	94
66-70	135	35
71-75	28	13
76-80	8	12
81-85	0	0
86-90	0	1

Total	5246	633
--------------	-------------	------------

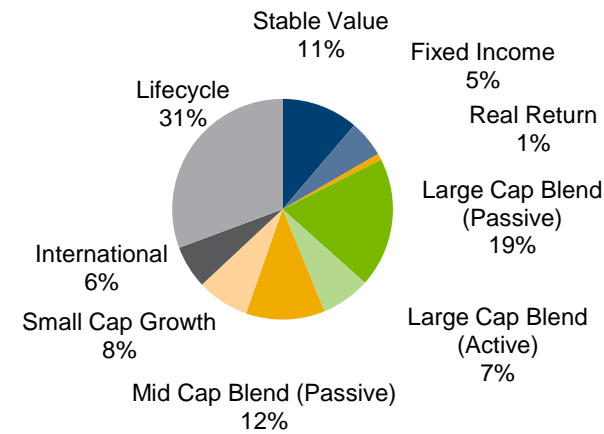
403(b) Monthly Plan Participants



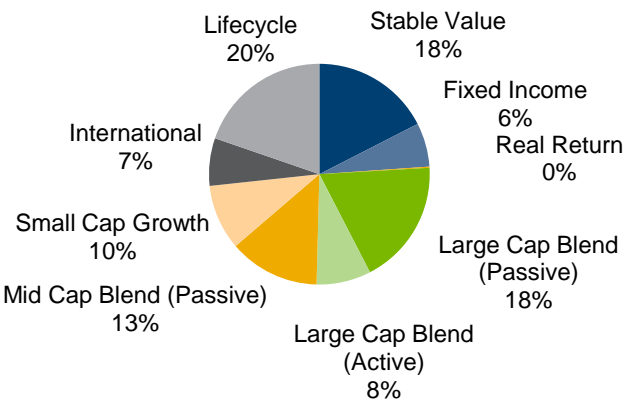
403(b) Bi-Weekly Plan Participants



2nd Quarter 2018 Contribution Allocation

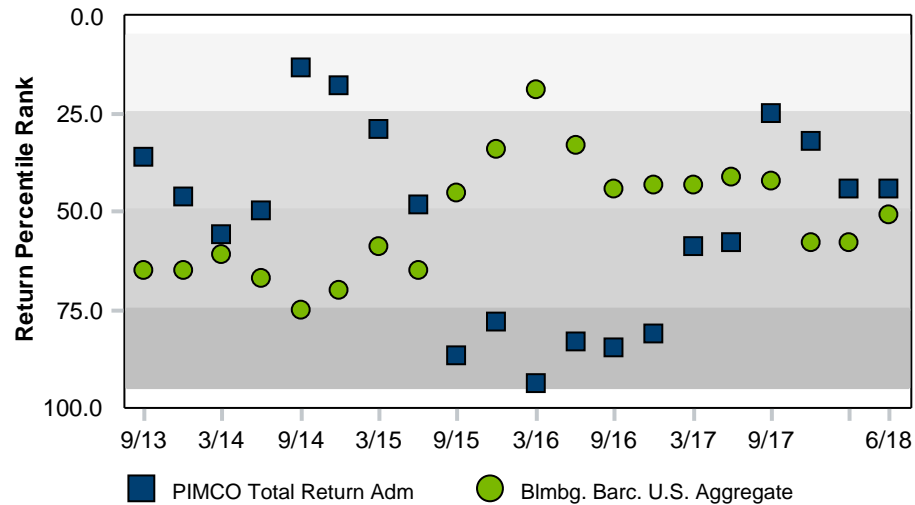


1st Quarter 2018 Contribution Allocation

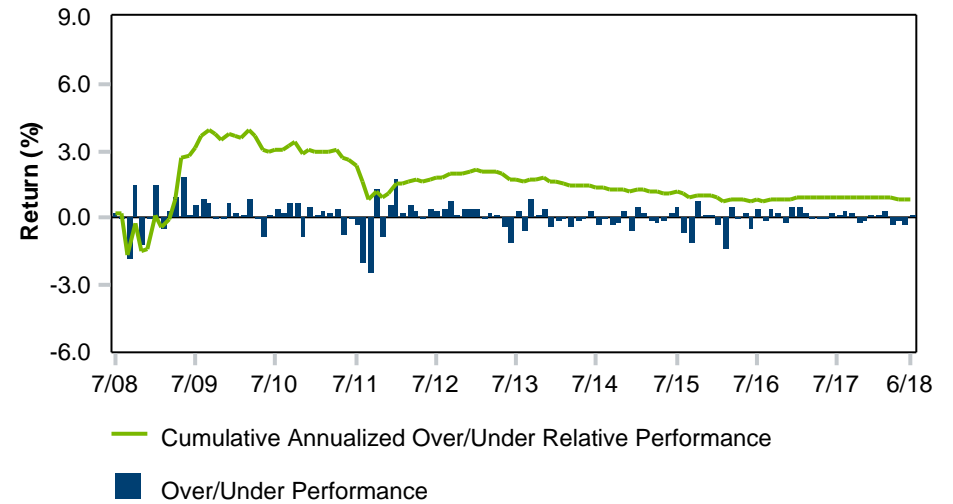


PIMCO Total Return Adm 06/30/18

Relative Ranking (3 Years Rolling)



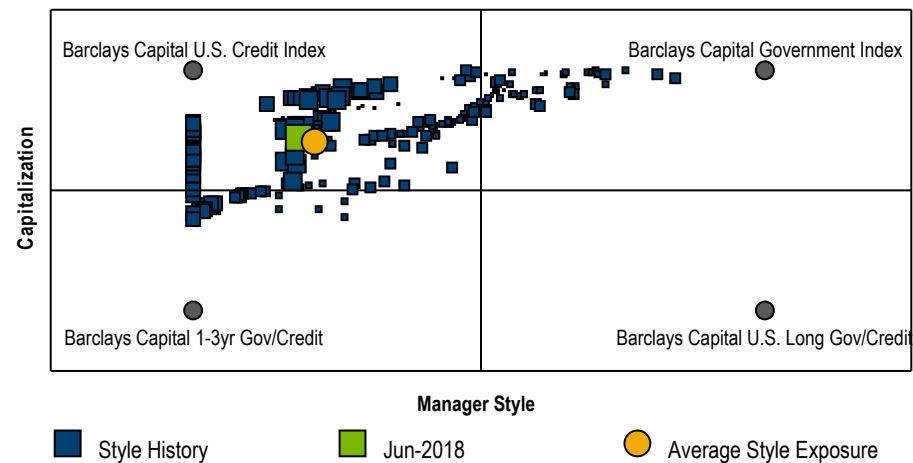
Relative Performance (07/01/08 to 06/30/18)



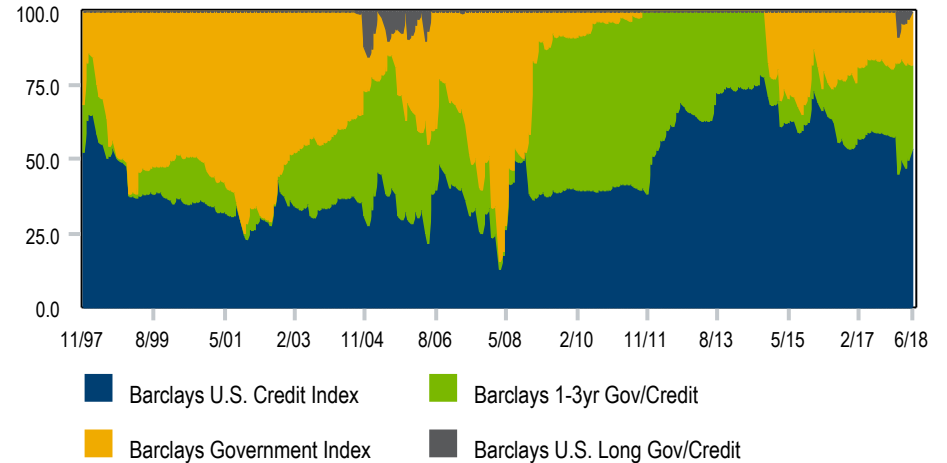
Relative Ranking vs. Peers (3 Years Rolling)

	Number of Observations	>=Median	Top Quartile	Bottom Quartile	>PIMCO Total Return Adm	>Blmbg. Barc. U.S. Aggregate
PIMCO Total Return Adm	20	11	3	6	N/A	12
Blmbg. Barc. U.S. Aggregate	20	9	1	0	8	N/A

Style Map (Since Inception - 36 Months Rolling)

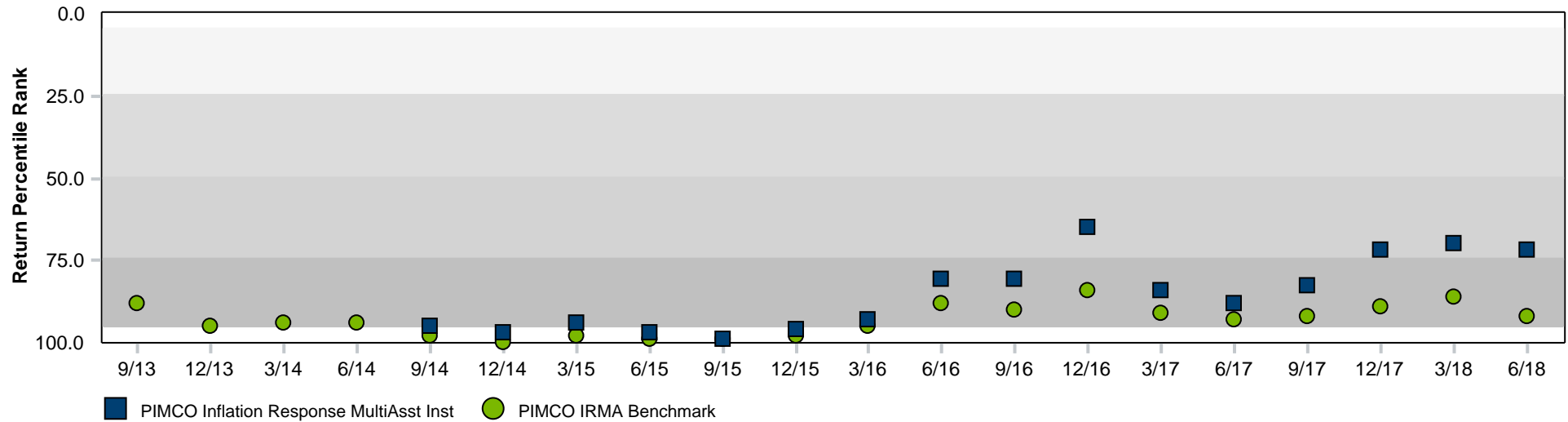


Style History (Since Inception - 36 Months Rolling)



PIMCO Inflation Response MultiAsst Inst 06/30/18

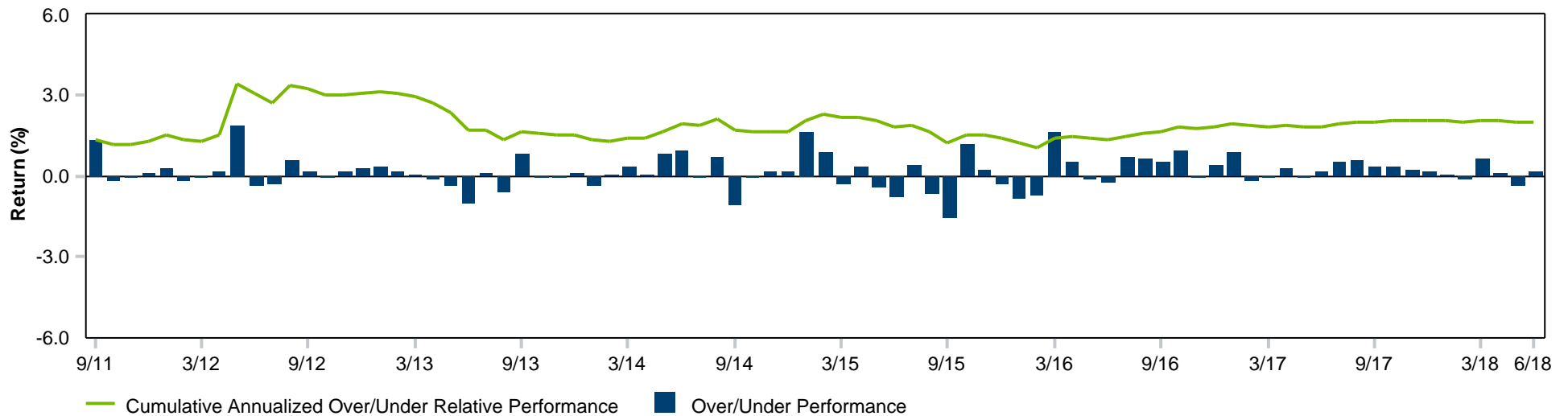
Relative Ranking (3 Years Rolling)



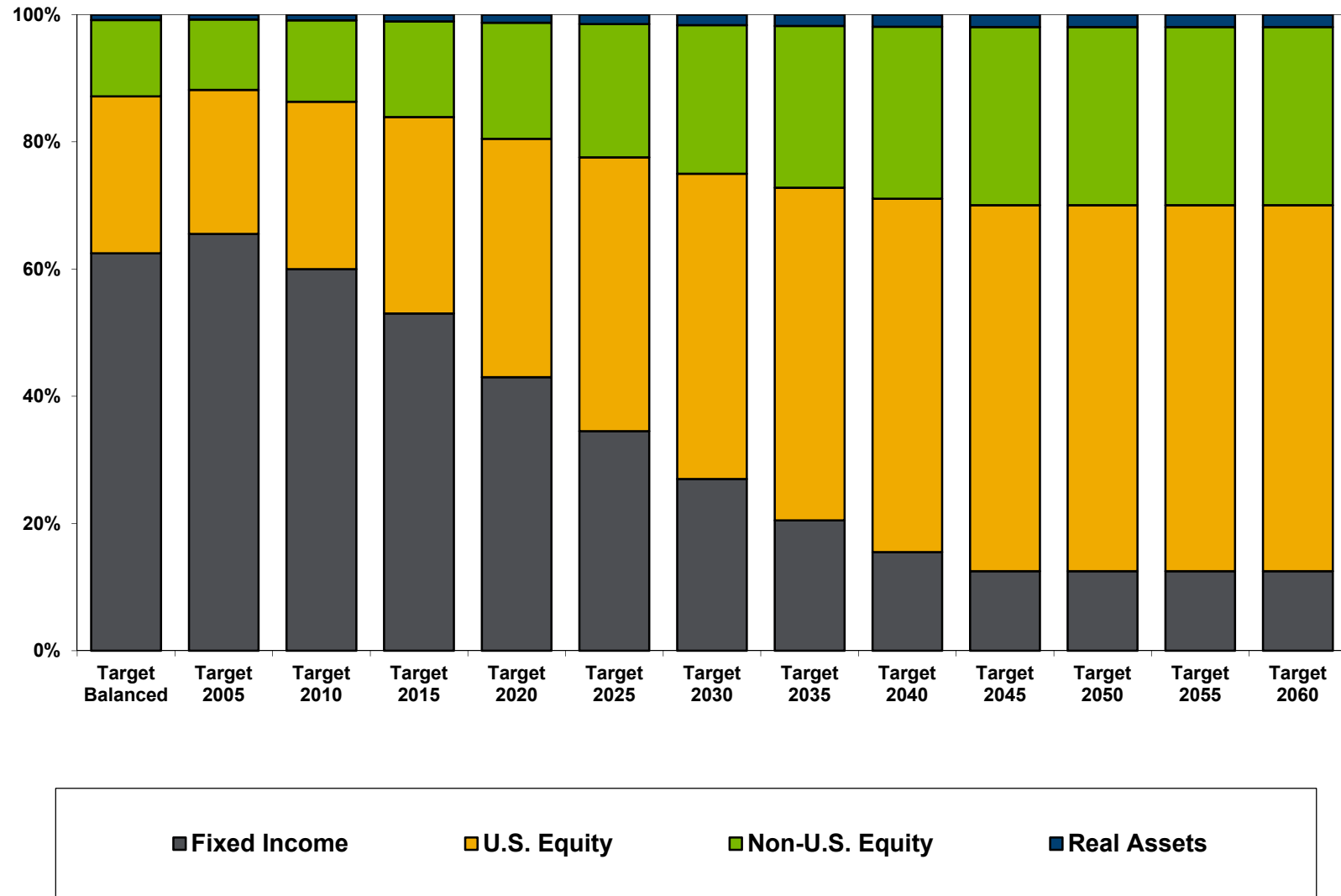
Relative Ranking vs. Peers (3 Years Rolling)

	Number of Observations	>=Median	Top Quartile	Bottom Quartile	>PIMCO Inflation Response MultiAsst Inst	>PIMCO IRMA Benchmark
PIMCO Inflation Response MultiAsst Inst	16	0	0	12	N/A	16
PIMCO IRMA Benchmark	16	0	0	16	0	N/A

Relative Performance (09/01/11 to 06/30/18)



Target Allocation: T. Rowe Price Retirement Funds

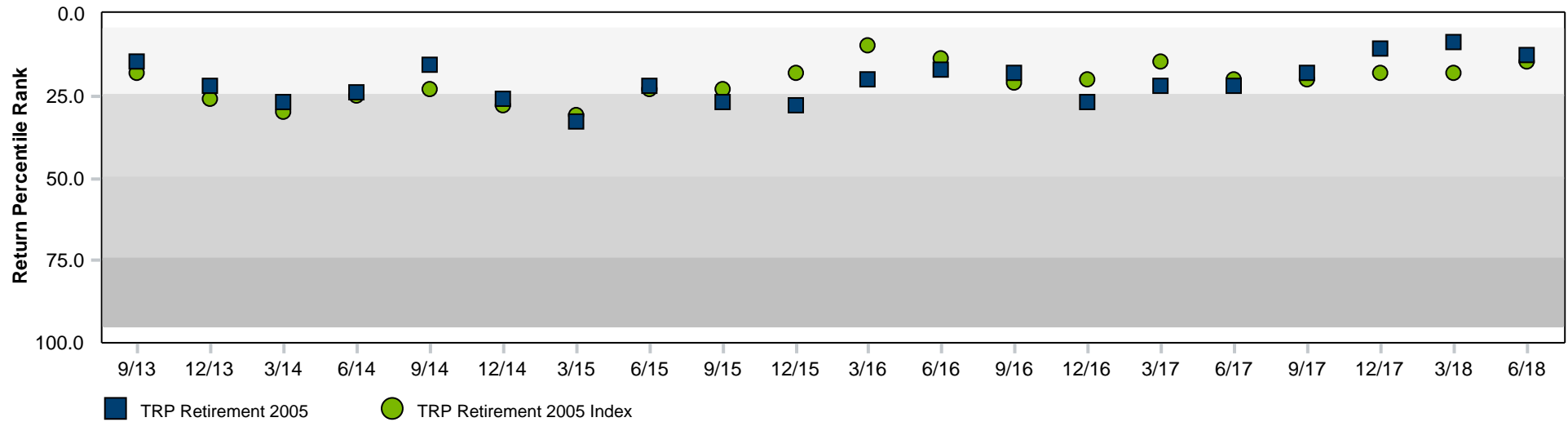


Target Allocation: T. Rowe Price Retirement Funds

	Balanced	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
Fixed Income	62.5%	65.5%	60.0%	53.0%	43.0%	34.5%	27.0%	20.5%	15.5%	12.5%	12.5%	12.5%	12.5%
T. Rowe Price Dynamic Global Bond Fund	3.2%	4.6%	4.3%	3.9%	3.5%	3.0%	2.4%	2.0%	1.5%	1.2%	1.2%	1.2%	1.2%
T. Rowe Price EM Bond Fund	3.3%	4.8%	4.4%	3.8%	3.2%	2.5%	1.9%	1.3%	0.8%	0.5%	0.5%	0.5%	0.5%
T. Rowe Price Float Rate Fund	1.0%	1.5%	1.3%	1.2%	1.0%	0.8%	0.7%	0.5%	0.3%	0.2%	0.2%	0.2%	0.2%
T. Rowe Price High Yield Fund	2.0%	3.0%	2.7%	2.3%	1.9%	1.5%	1.1%	0.7%	0.4%	0.2%	0.2%	0.2%	0.2%
T. Rowe Price Intl Bond Fund	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
T. Rowe Price Intl Bond Fund (USD Hedged)	4.4%	6.5%	6.0%	5.5%	4.8%	4.1%	3.4%	2.7%	2.0%	1.6%	1.6%	1.6%	1.6%
T. Rowe Price Lim Dur Infl Foc Bond Fund	30.0%	18.5%	16.0%	13.0%	7.5%	4.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
T. Rowe Price New Income Fund	15.0%	22.0%	20.5%	18.6%	16.5%	14.1%	11.4%	9.3%	6.9%	5.5%	5.5%	5.5%	5.5%
T. Rowe Price U.S. Treas Long-Term Fund	2.6%	3.7%	3.7%	3.7%	3.6%	3.5%	3.2%	3.0%	2.6%	2.3%	2.3%	2.3%	2.3%
T. Rowe Price U.S. Treas Money Fund	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
U.S. Equity	24.7%	22.7%	26.3%	30.9%	37.5%	43.1%	48.0%	52.3%	55.6%	57.5%	57.5%	57.5%	57.5%
T. Rowe Price Equity Index 500 Fund	18.3%	16.8%	19.5%	17.2%	16.3%	13.6%	11.4%	9.3%	7.3%	6.4%	6.4%	6.4%	6.4%
T. Rowe Price Growth Stock Fund	0.0%	0.0%	0.0%	2.8%	5.7%	9.1%	12.0%	14.6%	16.8%	18.0%	18.0%	18.0%	18.0%
T. Rowe Price Mid-Cap Growth Fund	1.7%	1.5%	1.8%	2.1%	2.6%	2.9%	3.3%	3.6%	3.8%	3.9%	3.9%	3.9%	3.9%
T. Rowe Price Mid-Cap Value Fund	1.6%	1.5%	1.7%	2.0%	2.4%	2.8%	3.1%	3.4%	3.6%	3.7%	3.7%	3.7%	3.7%
T. Rowe Price New Horizons Fund	1.1%	1.0%	1.1%	1.3%	1.6%	1.9%	2.1%	2.3%	2.4%	2.5%	2.5%	2.5%	2.5%
T. Rowe Price Small-Cap Stock Fund	1.0%	1.0%	1.1%	1.3%	1.6%	1.8%	2.0%	2.2%	2.3%	2.4%	2.4%	2.4%	2.4%
T. Rowe Price Small-Cap Value Fund	1.0%	0.9%	1.1%	1.2%	1.5%	1.7%	1.9%	2.1%	2.2%	2.3%	2.3%	2.3%	2.3%
T. Rowe Price Value Fund	0.0%	0.0%	0.0%	2.9%	5.8%	9.3%	12.2%	14.9%	17.2%	18.3%	18.3%	18.3%	18.3%
Non-U.S. Equity	12.0%	11.0%	12.8%	15.1%	18.3%	21.0%	23.4%	25.4%	27.0%	28.0%	28.0%	28.0%	28.0%
T. Rowe Price EM Stock Fund	1.7%	1.6%	1.8%	2.1%	2.6%	2.9%	3.3%	3.6%	3.8%	3.9%	3.9%	3.9%	3.9%
T. Rowe Price Intl Stock Fund	3.1%	2.9%	3.3%	3.9%	4.8%	5.4%	6.1%	6.6%	7.0%	7.3%	7.3%	7.3%	7.3%
T. Rowe Price Intl Value Equity Fund	3.6%	3.3%	3.8%	4.5%	5.5%	6.3%	7.0%	7.6%	8.1%	8.4%	8.4%	8.4%	8.4%
T. Rowe Price Overseas Stock Fund	3.6%	3.3%	3.9%	4.5%	5.5%	6.3%	7.0%	7.7%	8.2%	8.4%	8.4%	8.4%	8.4%
Real Assets	0.8%	0.8%	0.9%	1.1%	1.3%	1.5%	1.6%	1.8%	1.9%	2.0%	2.0%	2.0%	2.0%
T. Rowe Price Real Assets Fund	0.8%	0.8%	0.9%	1.1%	1.3%	1.5%	1.6%	1.8%	1.9%	2.0%	2.0%	2.0%	2.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TRP Retirement 2005 06/30/18

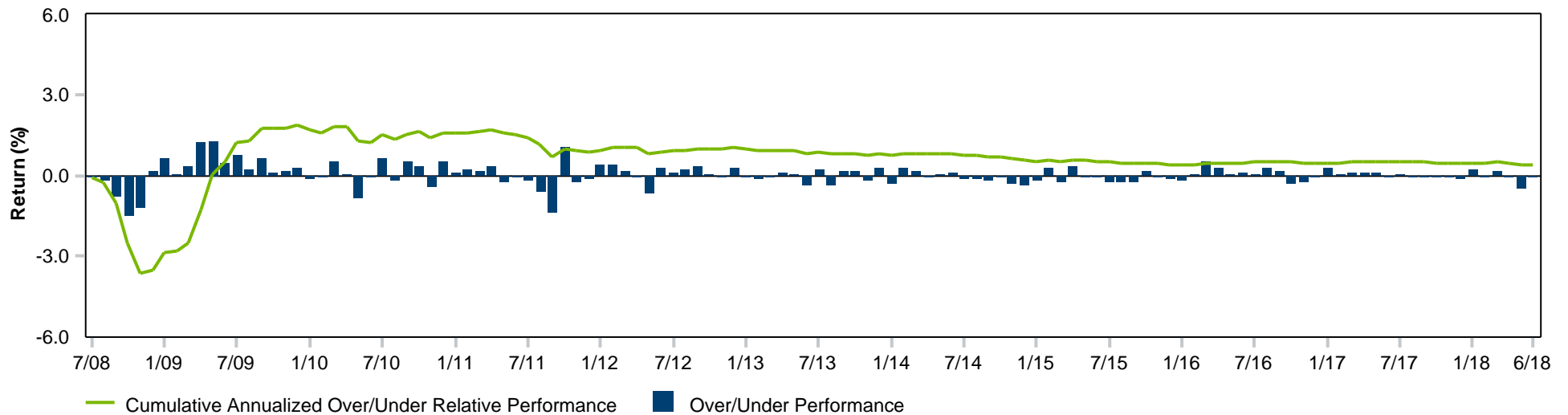
Relative Ranking (3 Years Rolling)



Relative Ranking vs. Peers (3 Years Rolling)

	Number of Observations	>=Median	Top Quartile	Bottom Quartile	>TRP Retirement 2005	>TRP Retirement 2005 Index
TRP Retirement 2005	20	20	14	0	N/A	12
TRP Retirement 2005 Index	20	20	16	0	8	N/A

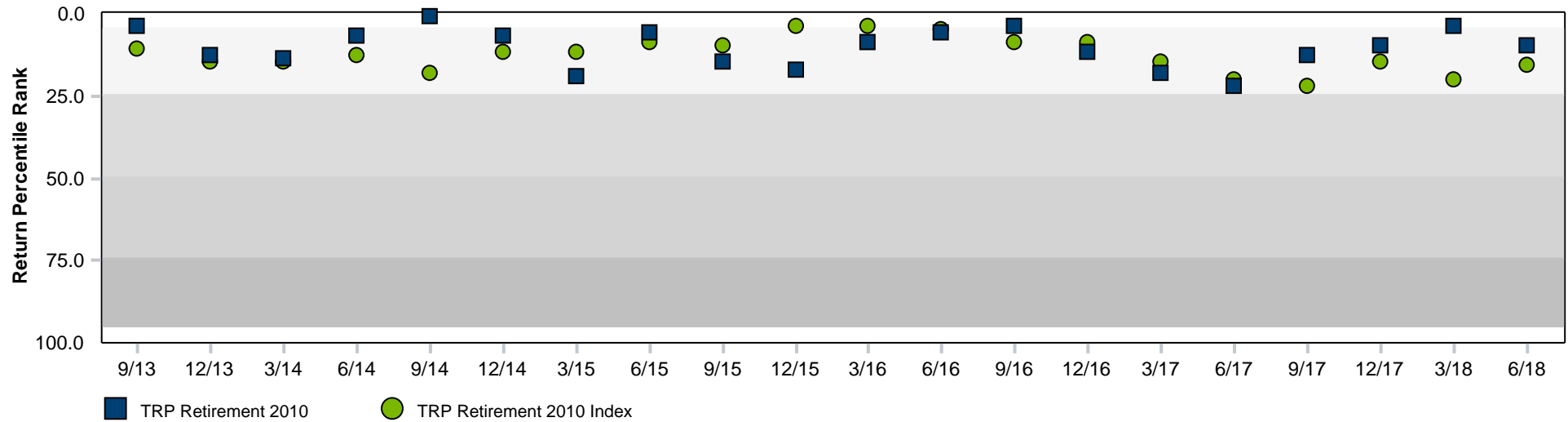
Relative Performance (07/01/08 to 06/30/18)



Alternate share class shown to illustrate performance history.

TRP Retirement 2010 06/30/18

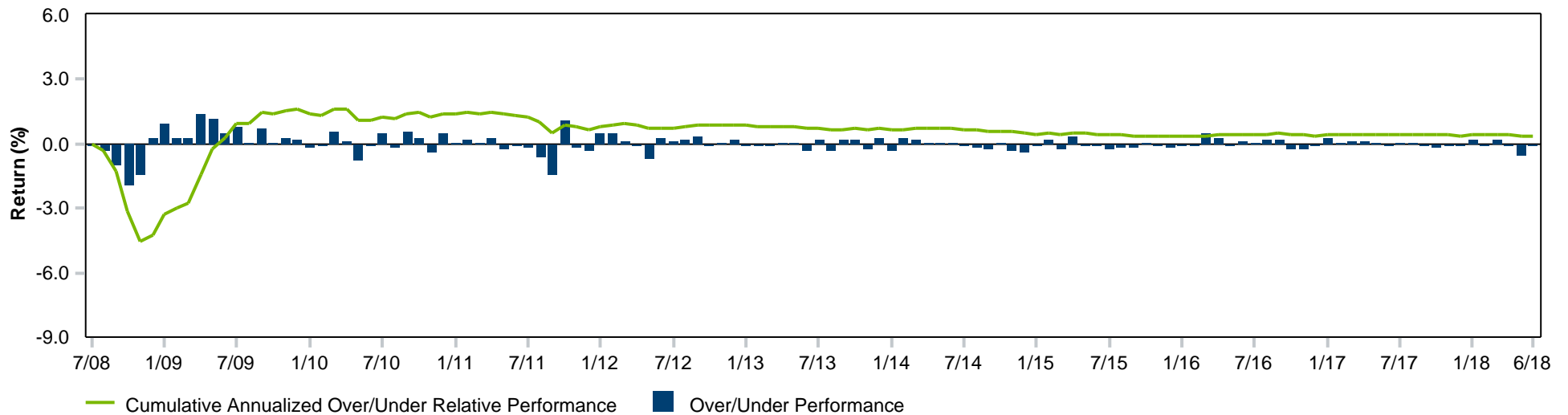
Relative Ranking (3 Years Rolling)



Relative Ranking vs. Peers (3 Years Rolling)

	Number of Observations	>=Median	Top Quartile	Bottom Quartile	>TRP Retirement 2010	>TRP Retirement 2010 Index
TRP Retirement 2010	20	20	20	0	N/A	12
TRP Retirement 2010 Index	20	20	20	0	8	N/A

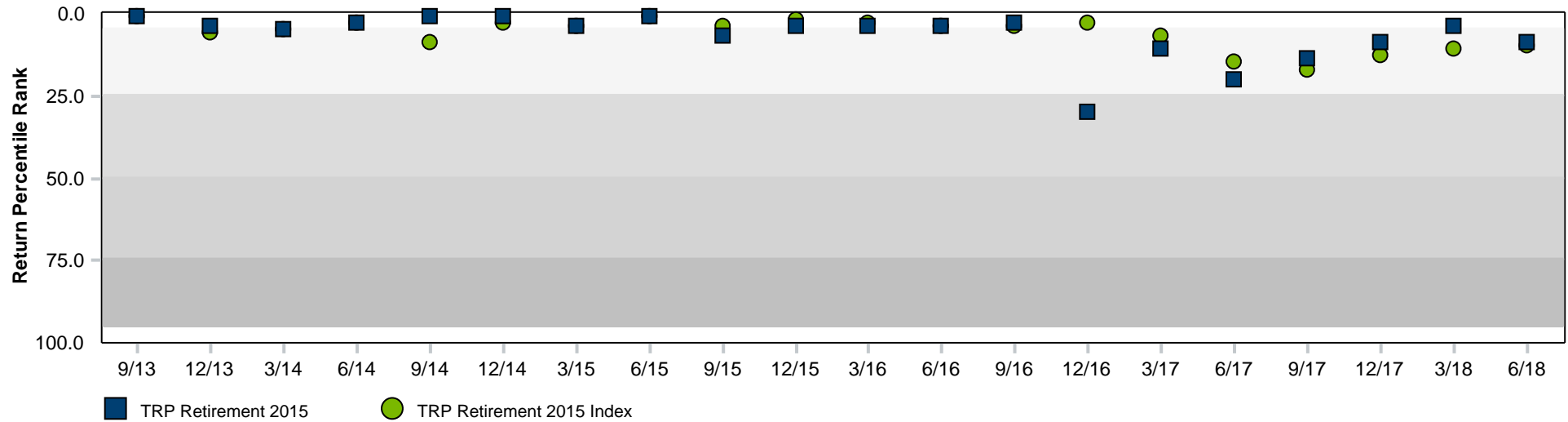
Relative Performance (07/01/08 to 06/30/18)



Alternate share class shown to illustrate performance history.

TRP Retirement 2015 06/30/18

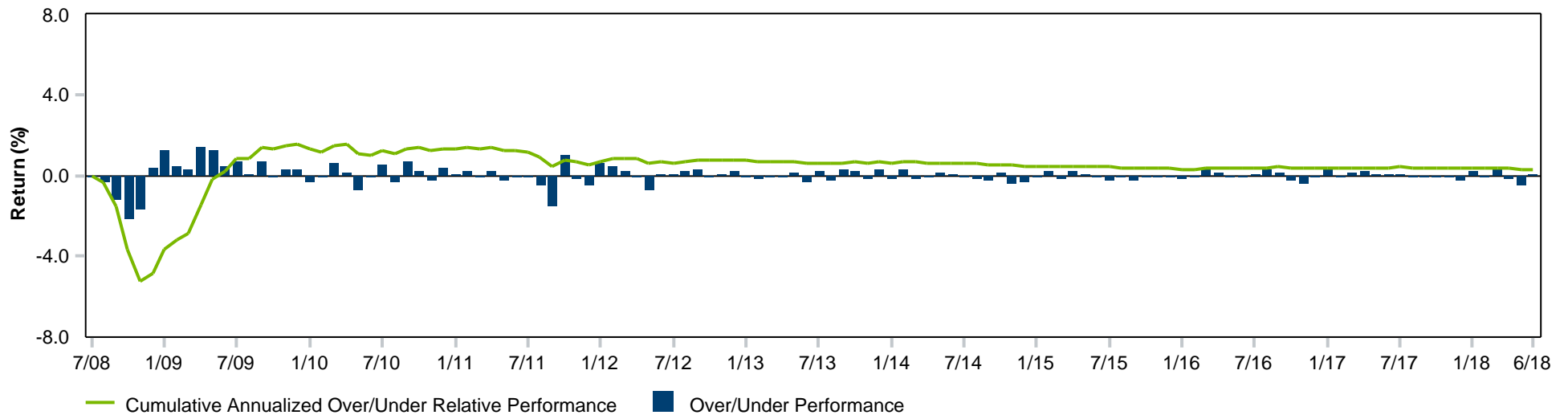
Relative Ranking (3 Years Rolling)



Relative Ranking vs. Peers (3 Years Rolling)

	Number of Observations	>=Median	Top Quartile	Bottom Quartile	>TRP Retirement 2015	>TRP Retirement 2015 Index
TRP Retirement 2015	20	20	19	0	N/A	12
TRP Retirement 2015 Index	20	20	20	0	8	N/A

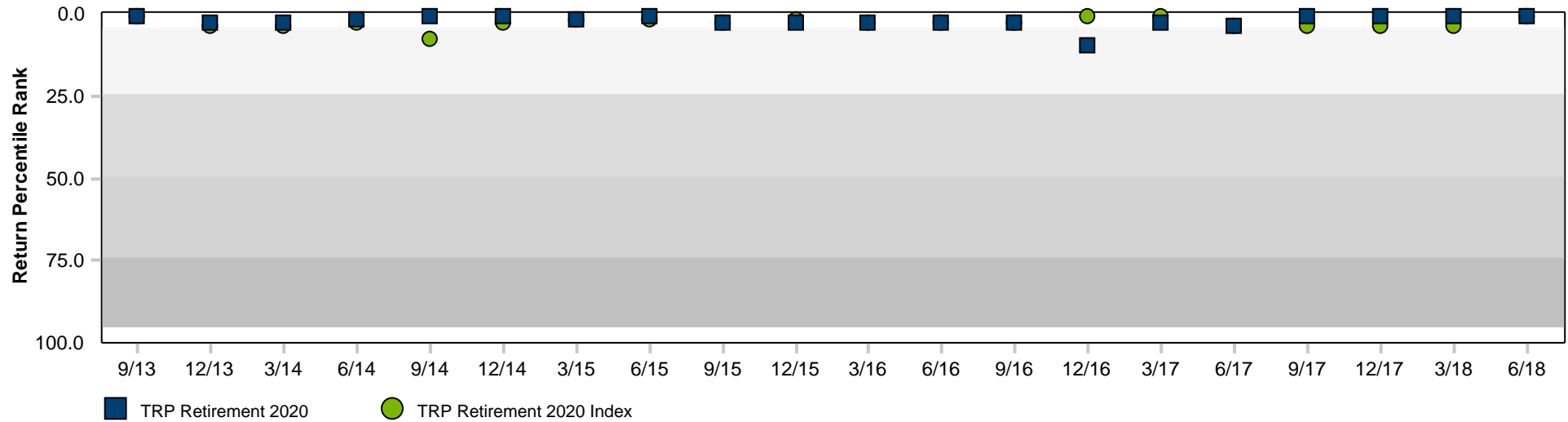
Relative Performance (07/01/08 to 06/30/18)



Alternate share class shown to illustrate performance history.

TRP Retirement 2020 06/30/18

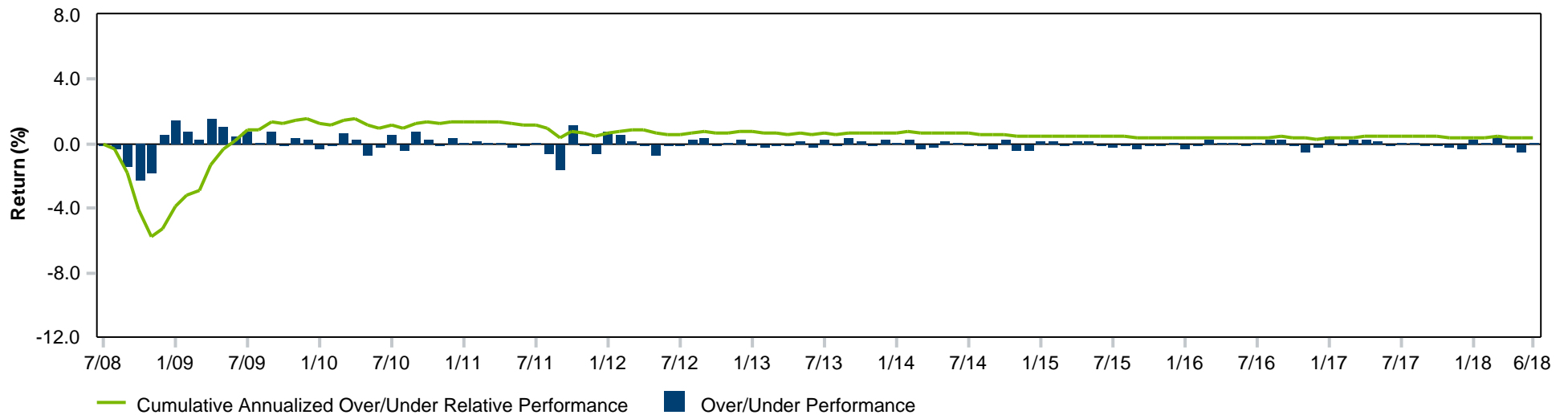
Relative Ranking (3 Years Rolling)



Relative Ranking vs. Peers (3 Years Rolling)

	Number of Observations	>=Median	Top Quartile	Bottom Quartile	>TRP Retirement 2020	>TRP Retirement 2020 Index
TRP Retirement 2020	20	20	20	0	N/A	14
TRP Retirement 2020 Index	20	20	20	0	6	N/A

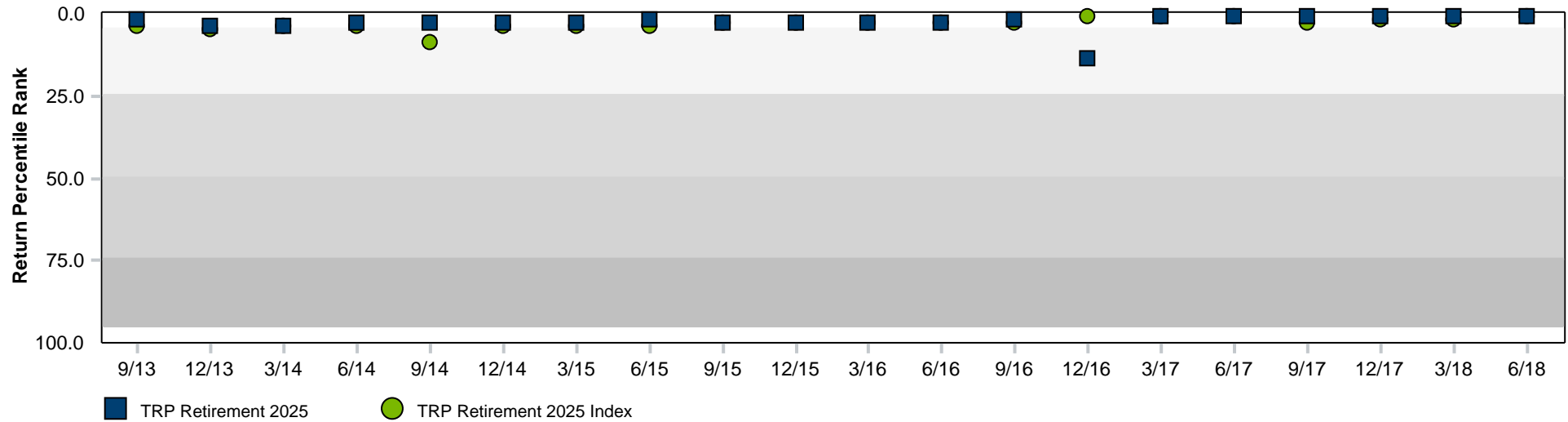
Relative Performance (07/01/08 to 06/30/18)



Alternate share class shown to illustrate performance history.

TRP Retirement 2025 06/30/18

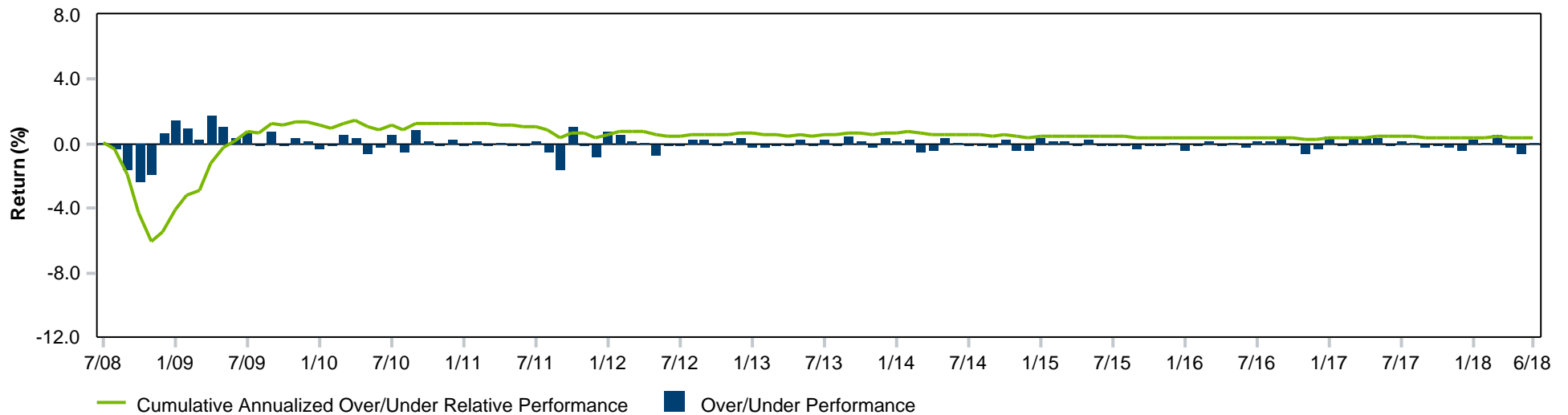
Relative Ranking (3 Years Rolling)



Relative Ranking vs. Peers (3 Years Rolling)

	Number of Observations	>=Median	Top Quartile	Bottom Quartile	>TRP Retirement 2025	>TRP Retirement 2025 Index
TRP Retirement 2025	20	20	20	0	N/A	16
TRP Retirement 2025 Index	20	20	20	0	4	N/A

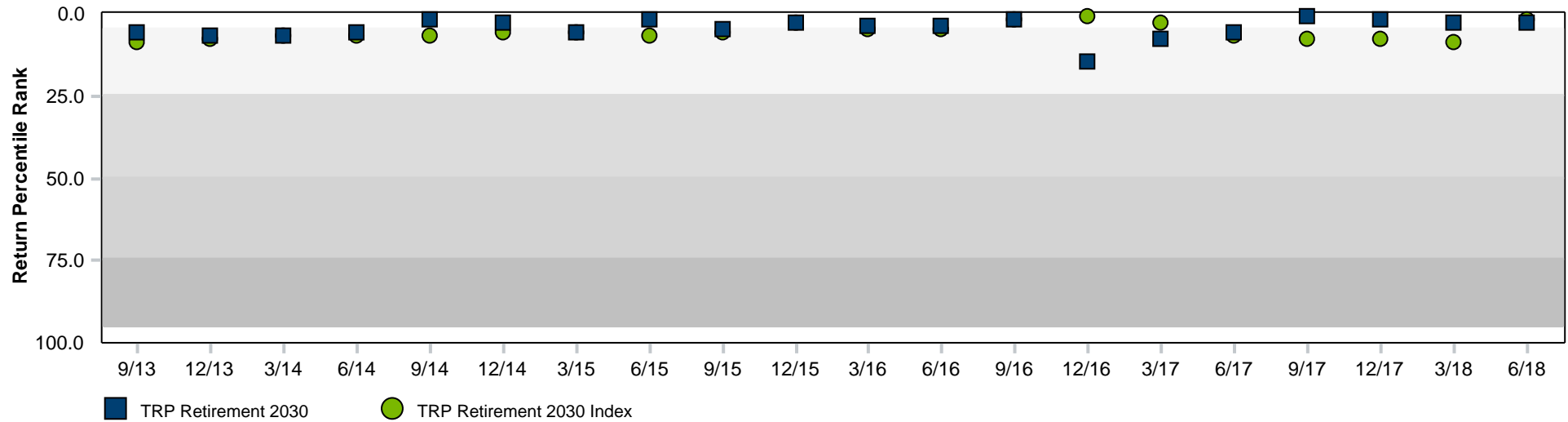
Relative Performance (07/01/08 to 06/30/18)



Alternate share class shown to illustrate performance history.

TRP Retirement 2030 06/30/18

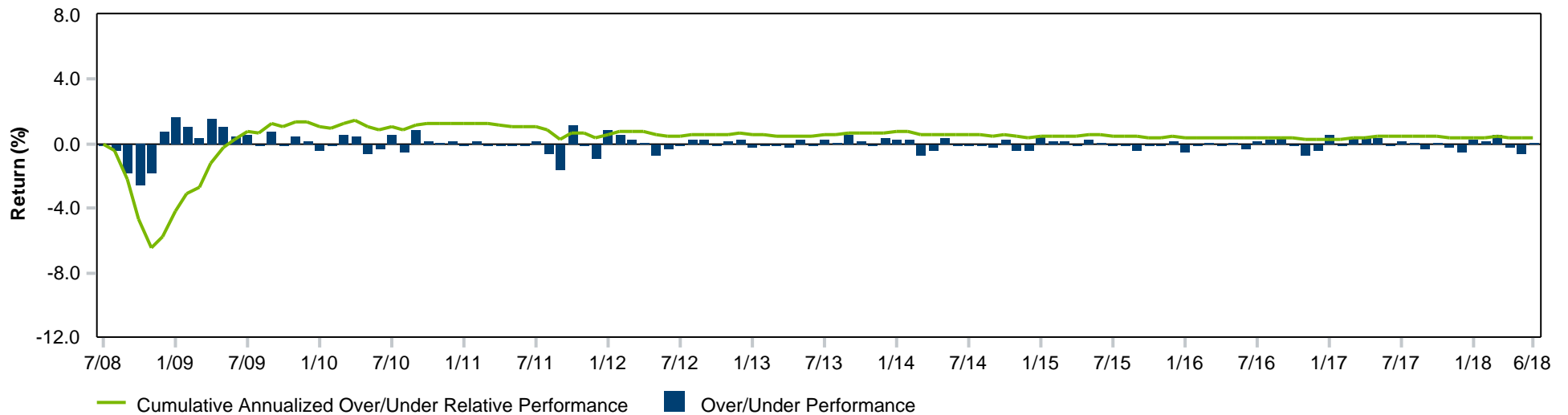
Relative Ranking (3 Years Rolling)



Relative Ranking vs. Peers (3 Years Rolling)

	Number of Observations	>=Median	Top Quartile	Bottom Quartile	>TRP Retirement 2030	>TRP Retirement 2030 Index
TRP Retirement 2030	20	20	20	0	N/A	17
TRP Retirement 2030 Index	20	20	20	0	3	N/A

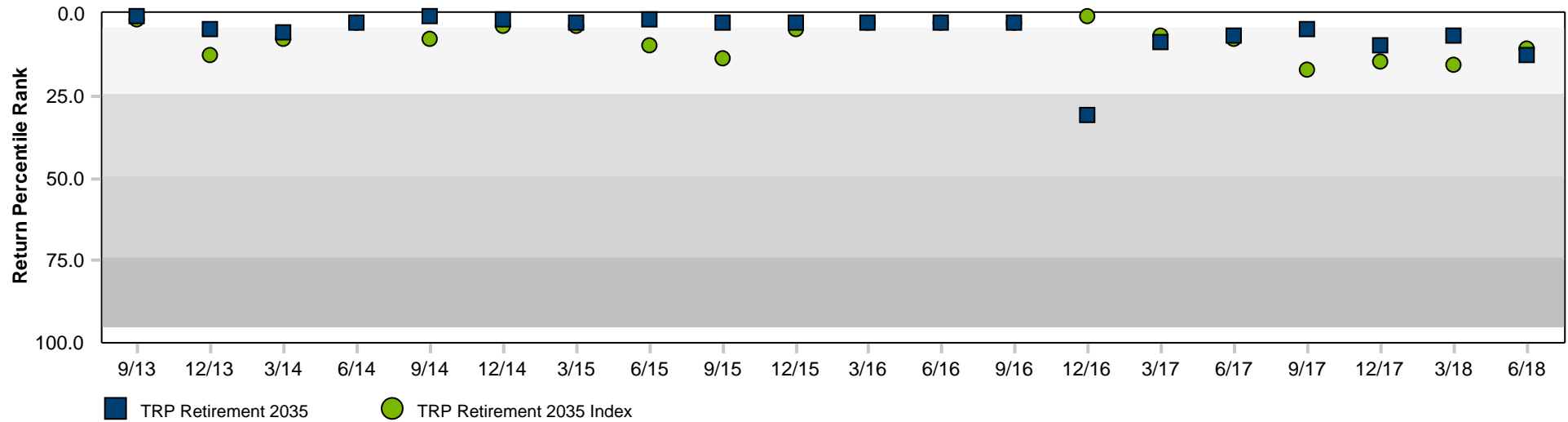
Relative Performance (07/01/08 to 06/30/18)



Alternate share class shown to illustrate performance history.

TRP Retirement 2035 06/30/18

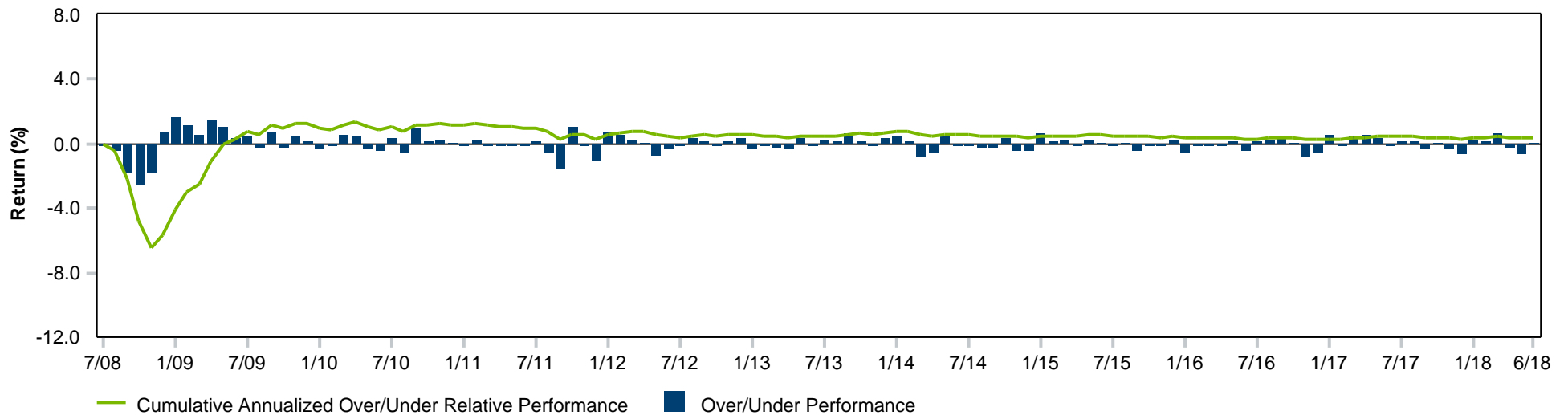
Relative Ranking (3 Years Rolling)



Relative Ranking vs. Peers (3 Years Rolling)

	Number of Observations	>=Median	Top Quartile	Bottom Quartile	>TRP Retirement 2035	>TRP Retirement 2035 Index
TRP Retirement 2035	20	20	19	0	N/A	16
TRP Retirement 2035 Index	20	20	20	0	4	N/A

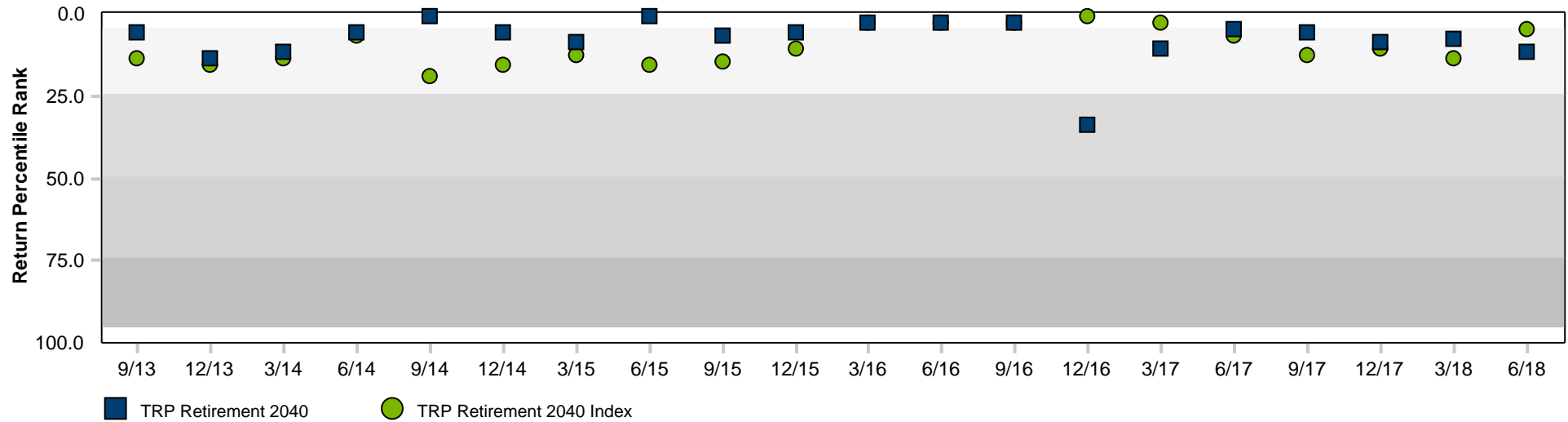
Relative Performance (07/01/08 to 06/30/18)



Alternate share class shown to illustrate performance history.

TRP Retirement 2040 06/30/18

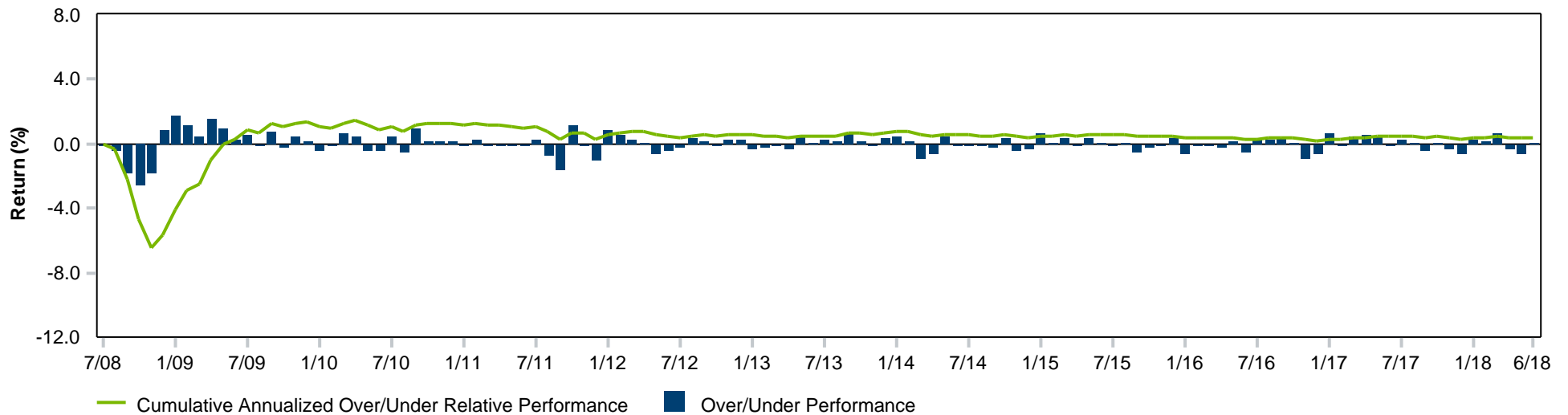
Relative Ranking (3 Years Rolling)



Relative Ranking vs. Peers (3 Years Rolling)

	Number of Observations	>=Median	Top Quartile	Bottom Quartile	>TRP Retirement 2040	>TRP Retirement 2040 Index
TRP Retirement 2040	20	20	19	0	N/A	16
TRP Retirement 2040 Index	20	20	20	0	4	N/A

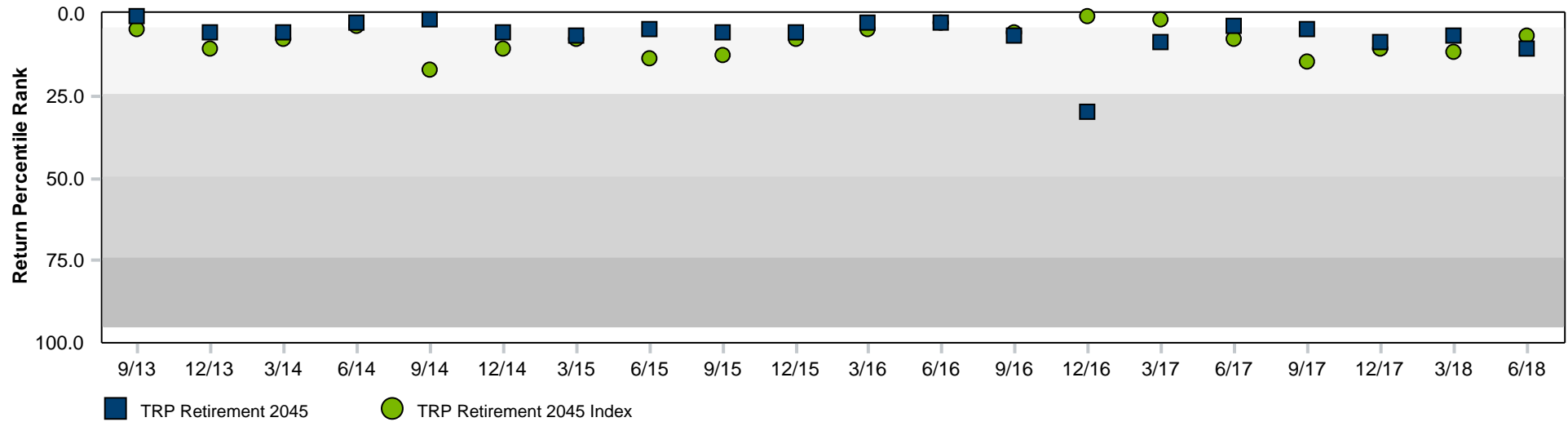
Relative Performance (07/01/08 to 06/30/18)



Alternate share class shown to illustrate performance history.

TRP Retirement 2045 06/30/18

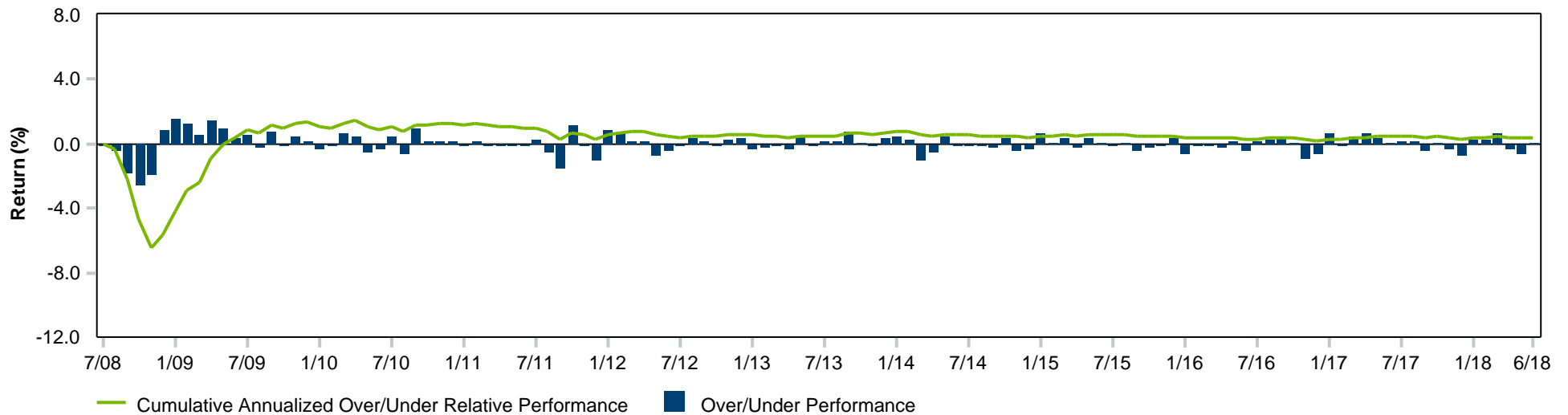
Relative Ranking (3 Years Rolling)



Relative Ranking vs. Peers (3 Years Rolling)

	Number of Observations	>=Median	Top Quartile	Bottom Quartile	>TRP Retirement 2045	>TRP Retirement 2045 Index
TRP Retirement 2045	20	20	19	0	N/A	16
TRP Retirement 2045 Index	20	20	20	0	4	N/A

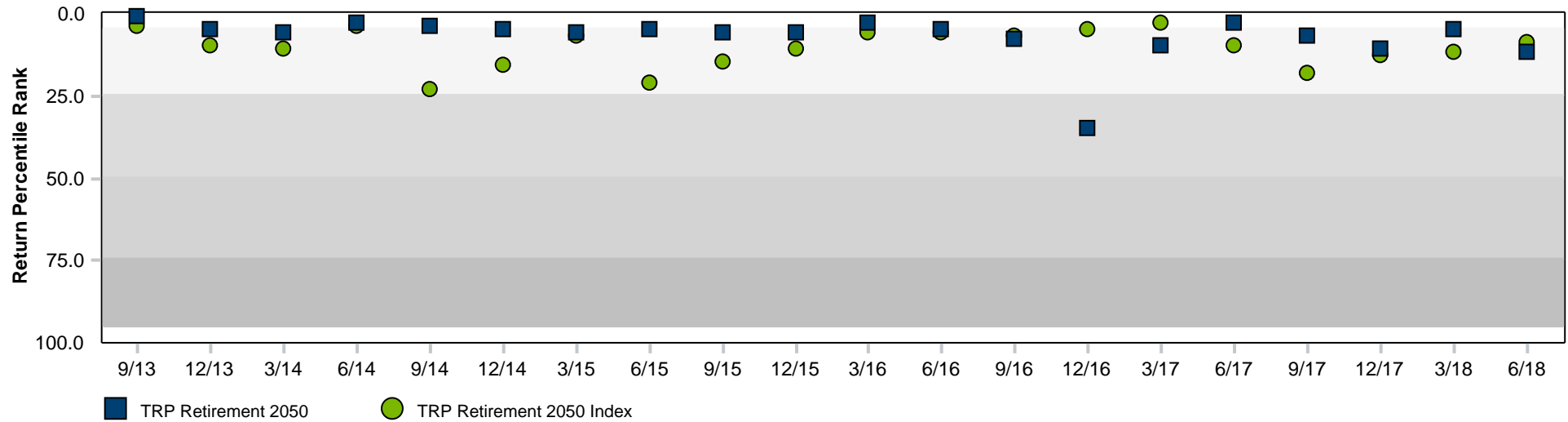
Relative Performance (07/01/08 to 06/30/18)



Alternate share class shown to illustrate performance history.

TRP Retirement 2050 06/30/18

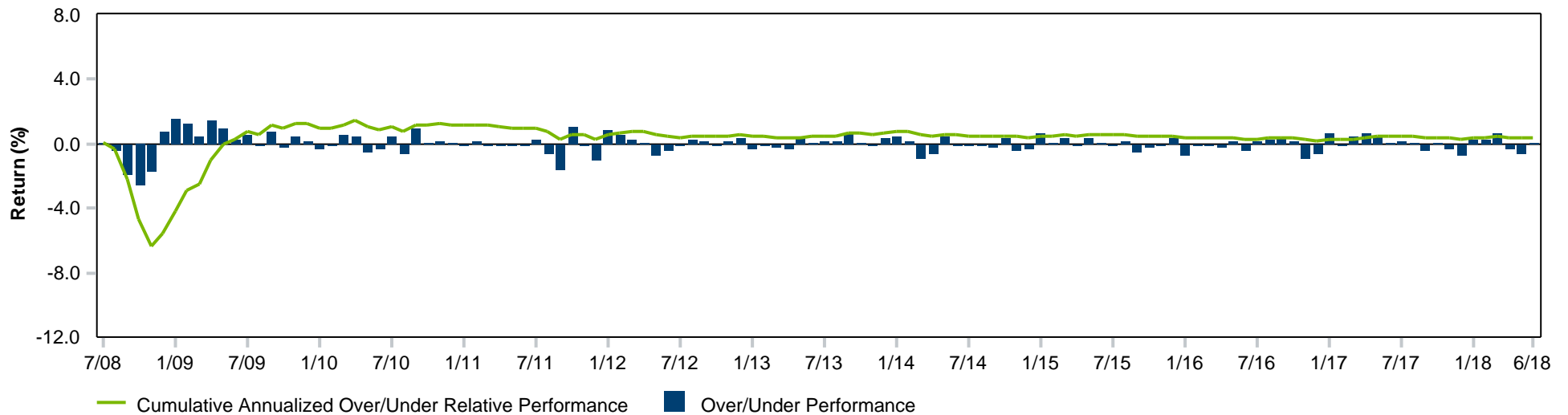
Relative Ranking (3 Years Rolling)



Relative Ranking vs. Peers (3 Years Rolling)

	Number of Observations	>=Median	Top Quartile	Bottom Quartile	>TRP Retirement 2050	>TRP Retirement 2050 Index
TRP Retirement 2050	20	20	19	0	N/A	16
TRP Retirement 2050 Index	20	20	20	0	4	N/A

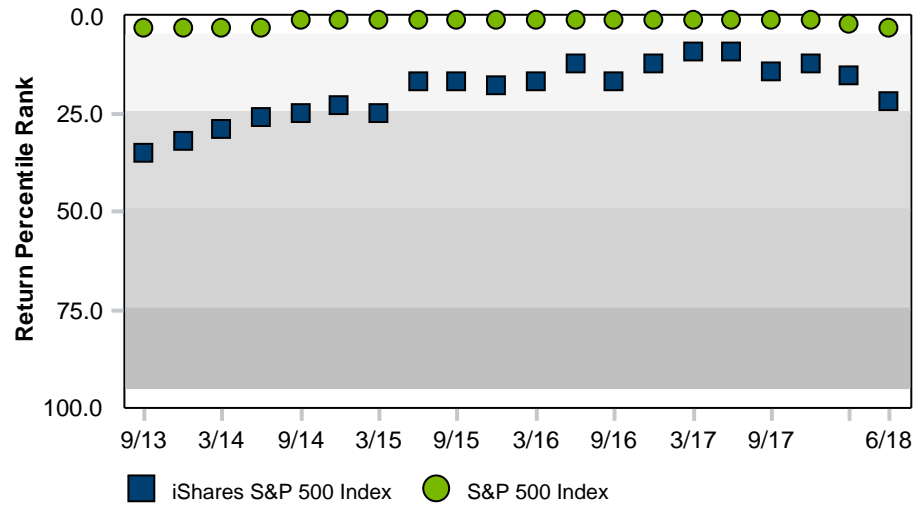
Relative Performance (07/01/08 to 06/30/18)



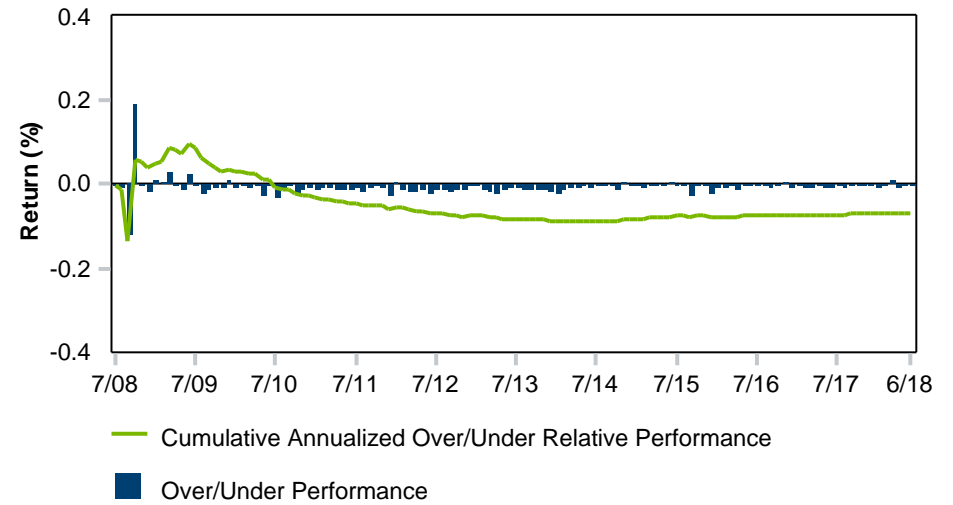
Alternate share class shown to illustrate performance history.

iShares S&P 500 Index 06/30/18

Relative Ranking (3 Years Rolling)



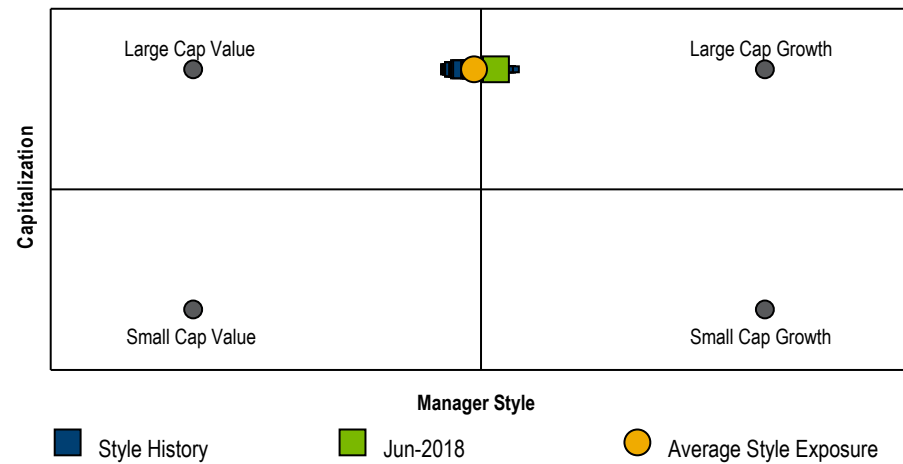
Relative Performance (07/01/08 to 06/30/18)



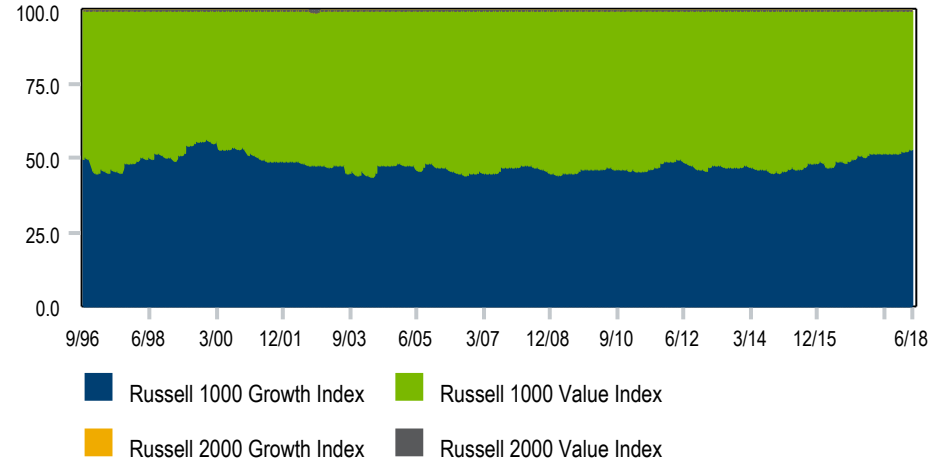
Relative Ranking vs. Peers (3 Years Rolling)

	Number of Observations	>=Median	Top Quartile	Bottom Quartile	>iShares S&P 500 Index	>S&P 500 Index
iShares S&P 500 Index	20	20	17	0	N/A	0
S&P 500 Index	20	20	20	0	20	N/A

Style Map (Since Inception - 36 Months Rolling)

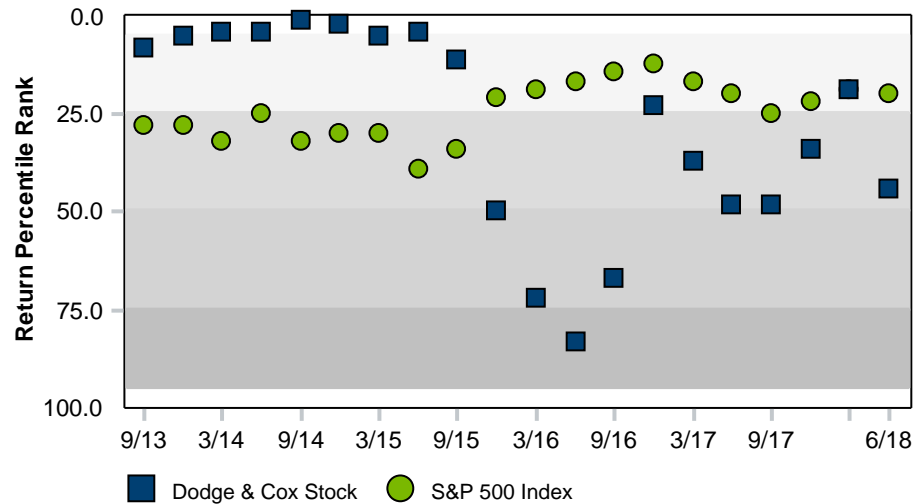


Style History (Since Inception - 36 Months Rolling)

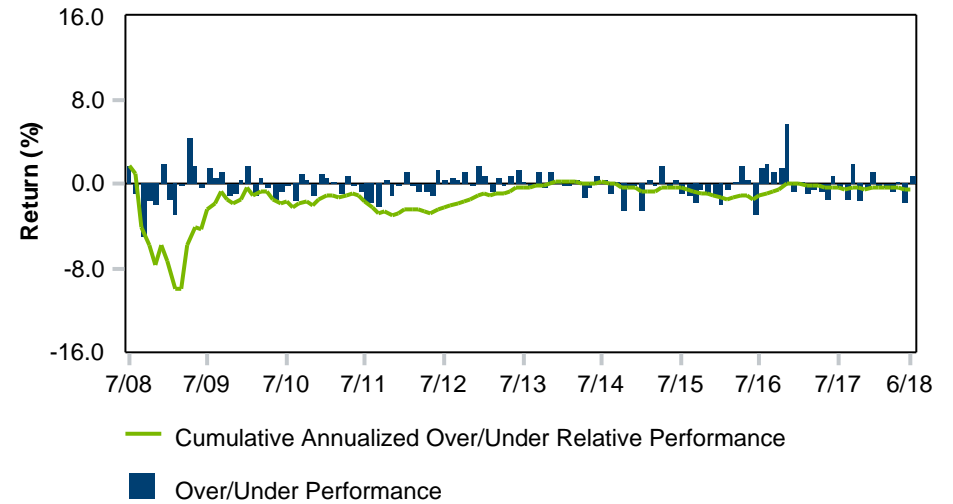


Dodge & Cox Stock 06/30/18

Relative Ranking (3 Years Rolling)



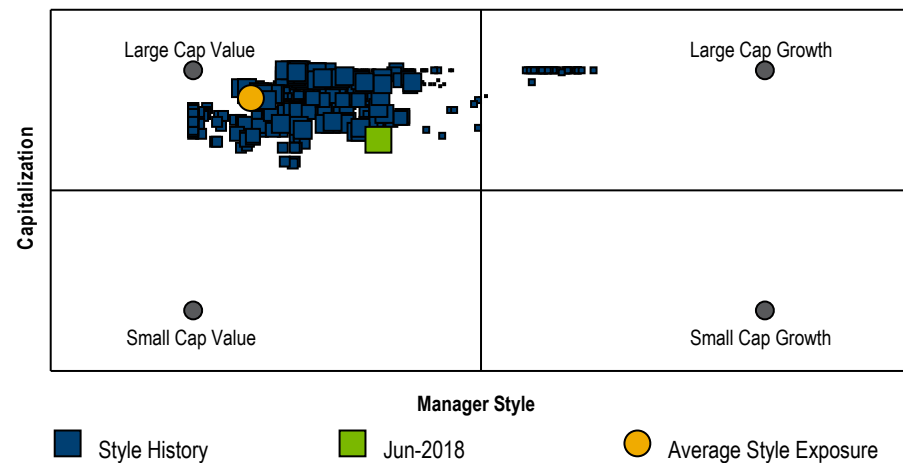
Relative Performance (07/01/08 to 06/30/18)



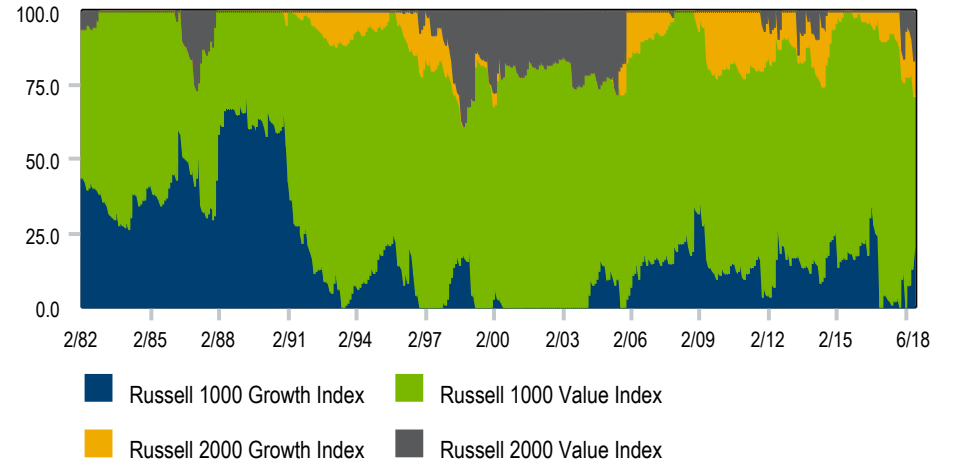
Relative Ranking vs. Peers (3 Years Rolling)

	Number of Observations	>=Median	Top Quartile	Bottom Quartile	>Dodge & Cox Stock	>S&P 500 Index
Dodge & Cox Stock	20	17	11	1	N/A	10
S&P 500 Index	20	20	12	0	10	N/A

Style Map (Since Inception - 36 Months Rolling)

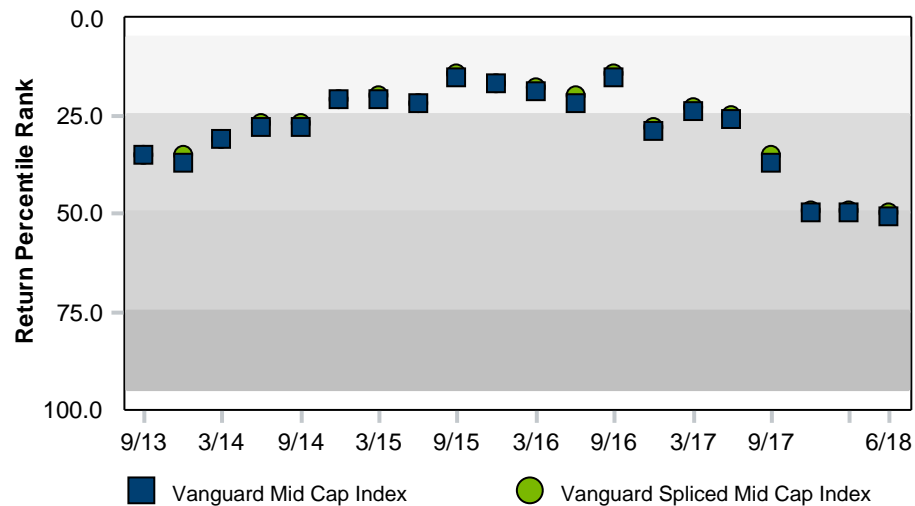


Style History (Since Inception - 36 Months Rolling)

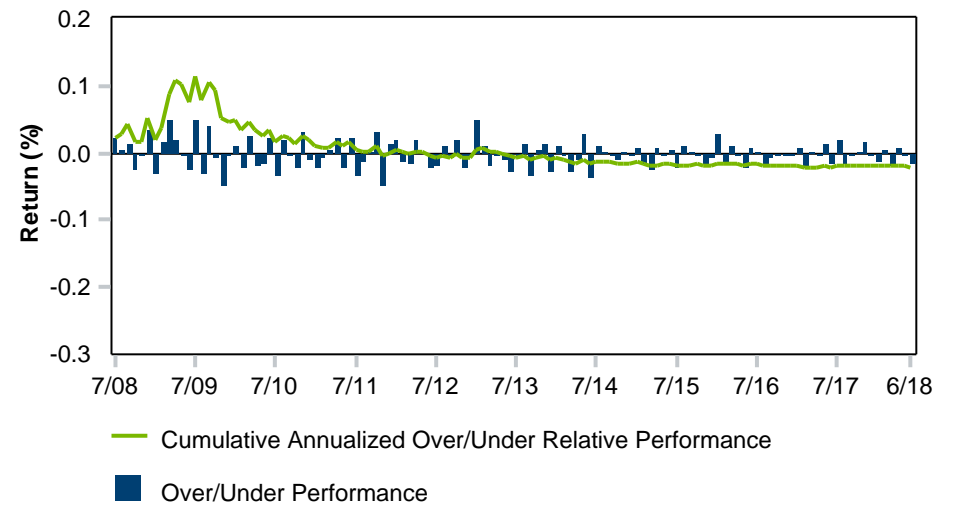


Vanquard Mid Cap Index 06/30/18

Relative Ranking (3 Years Rolling)



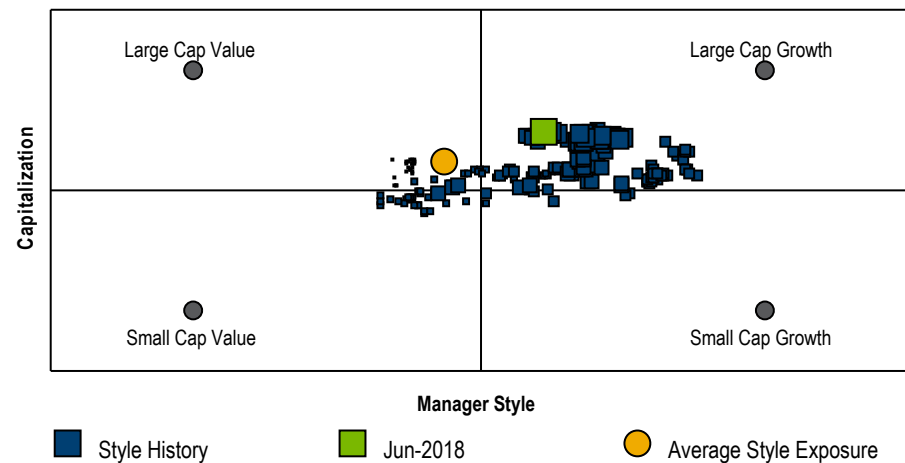
Relative Performance (07/01/08 to 06/30/18)



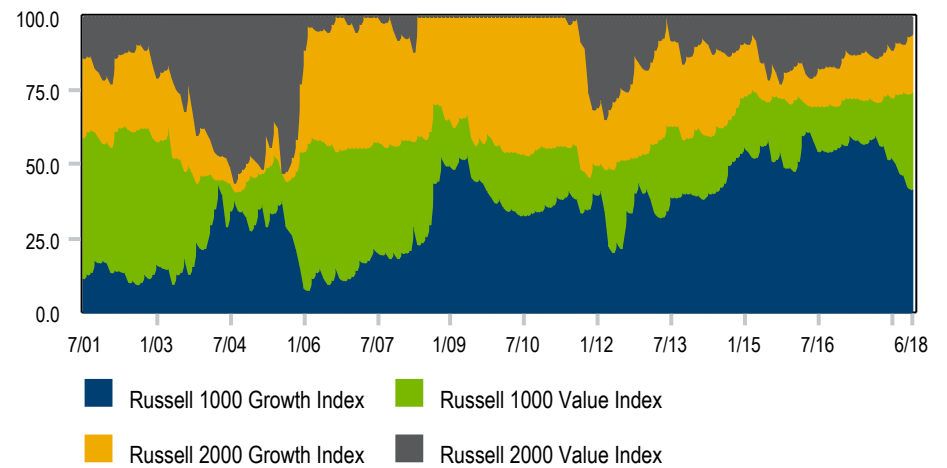
Relative Ranking vs. Peers (3 Years Rolling)

	Number of Observations	>=Median	Top Quartile	Bottom Quartile	>Vanguard Mid Cap Index	>Vanguard Spliced Mid Cap Index
Vanguard Mid Cap Index	20	19	9	0	N/A	0
Vanguard Spliced Mid Cap Index	20	20	10	0	20	N/A

Style Map (Since Inception - 36 Months Rolling)

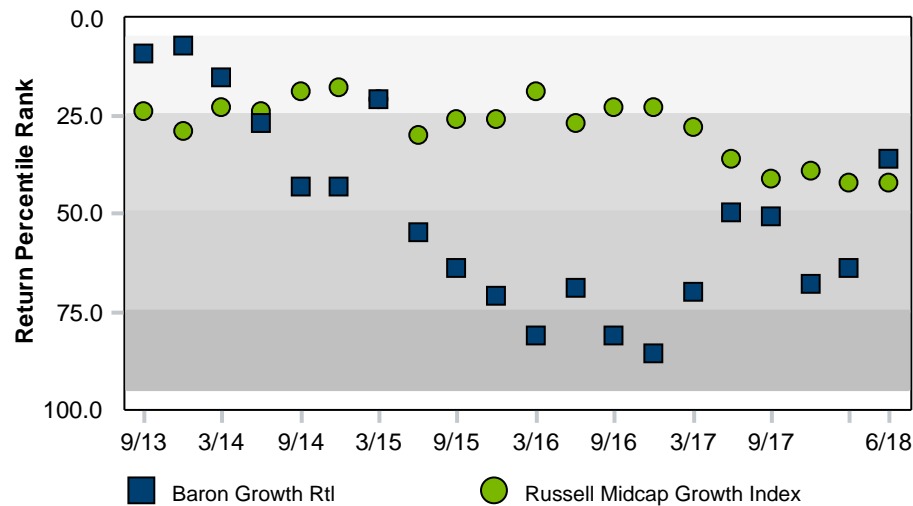


Style History (Since Inception - 36 Months Rolling)

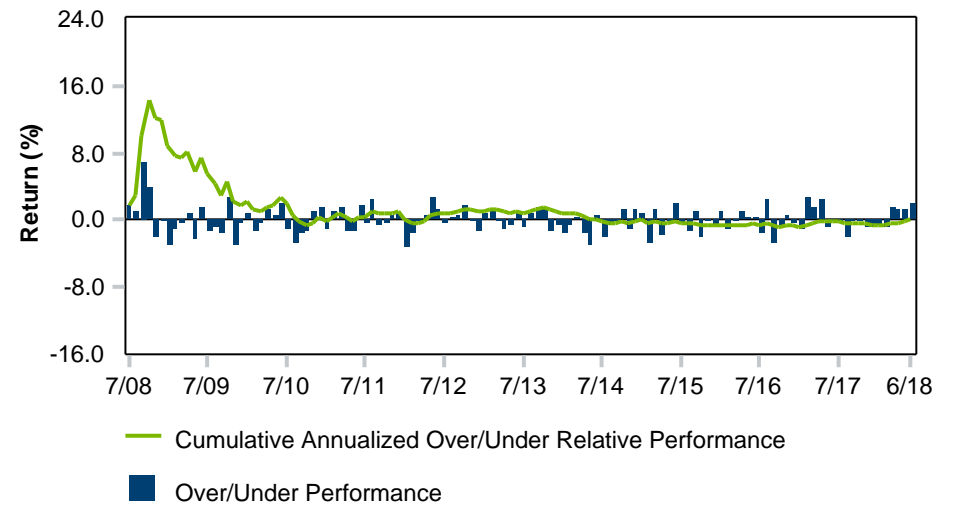


Baron Growth Rtl 06/30/18

Relative Ranking (3 Years Rolling)



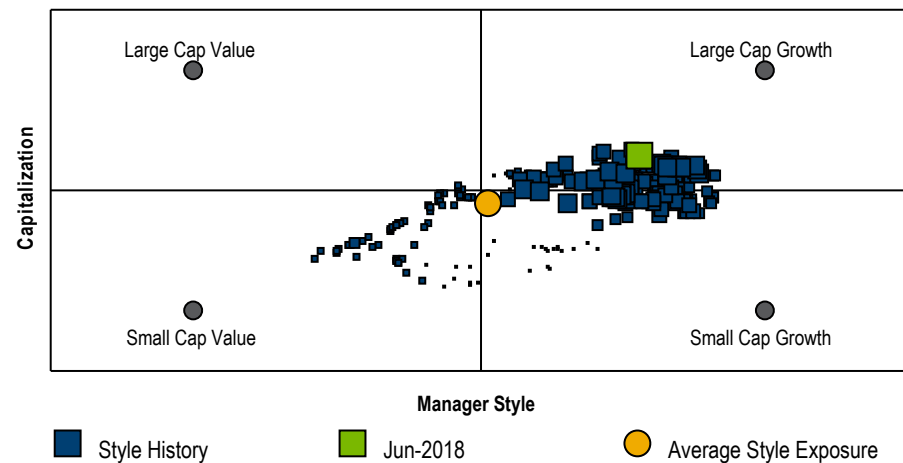
Relative Performance (07/01/08 to 06/30/18)



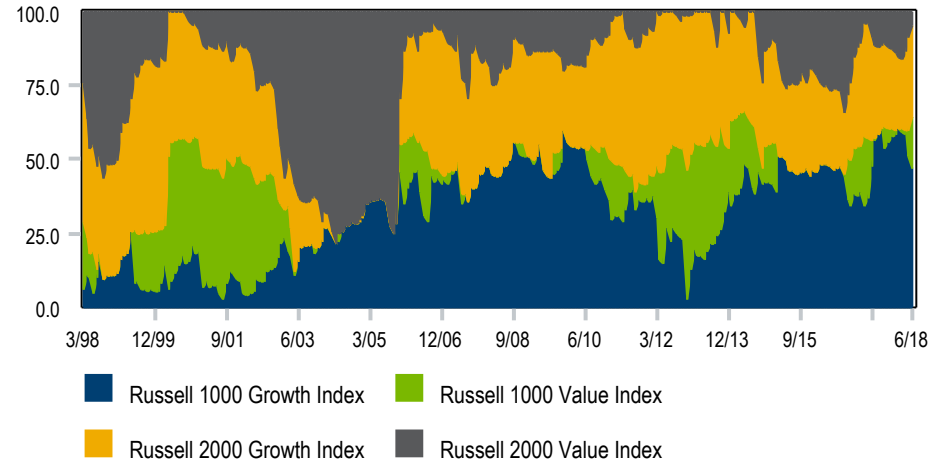
Relative Ranking vs. Peers (3 Years Rolling)

	Number of Observations	>=Median	Top Quartile	Bottom Quartile	>Baron Growth Rtl	>Russell Midcap Growth Index
Baron Growth Rtl	20	9	4	3	N/A	4
Russell Midcap Growth Index	20	20	9	0	16	N/A

Style Map (Since Inception - 36 Months Rolling)



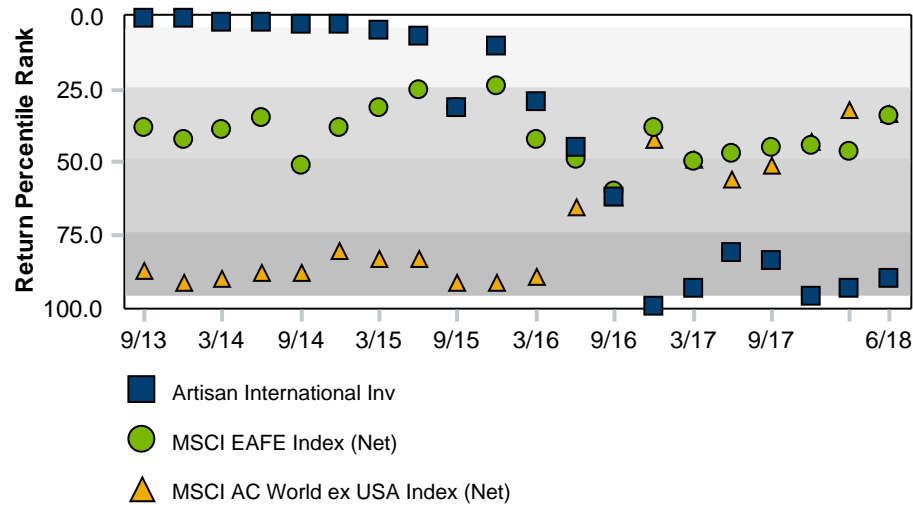
Style History (Since Inception - 36 Months Rolling)



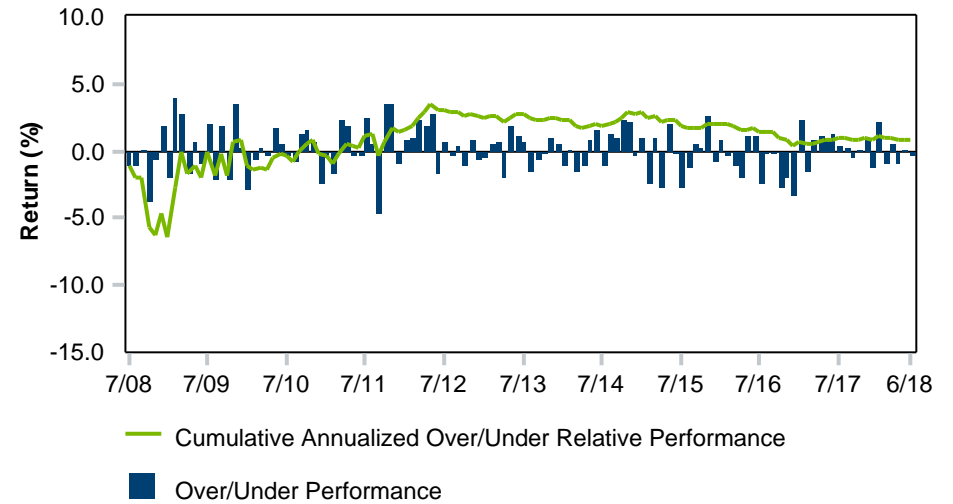
Alternate share class shown to illustrate performance history.

Artisan International Inv 06/30/18

Relative Ranking (3 Years Rolling)



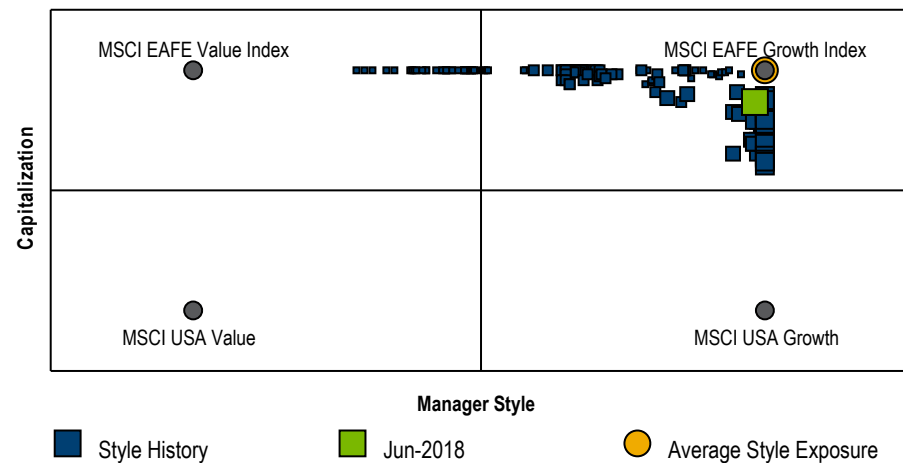
Relative Performance (07/01/08 to 06/30/18)



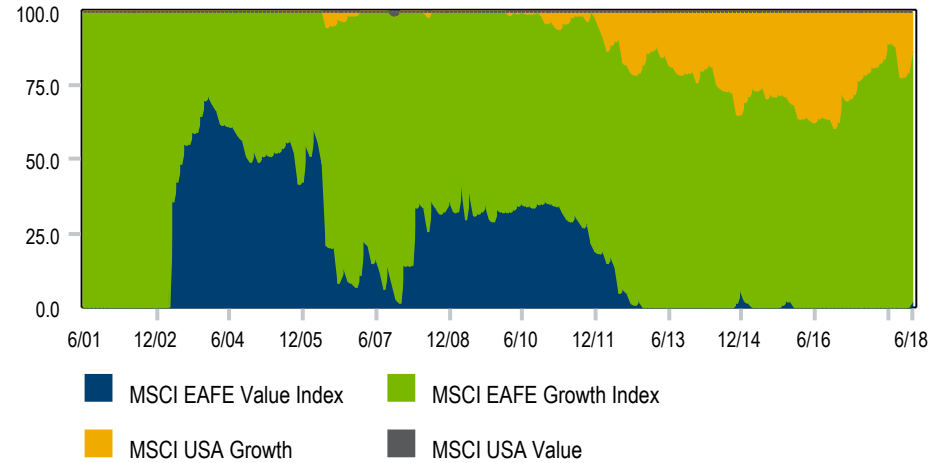
Relative Ranking vs. Peers (3 Years Rolling)

	Number of Observations	>=Median	Top Quartile	Bottom Quartile	>Artisan International Inv	>MSCI EAFE Index (Net)	>MSCI AC World ex U
Artisan International Inv	20	12	9	7	N/A	12	13
MSCI EAFE Index (Net)	20	18	2	0	8	N/A	16
MSCI AC World ex USA Index (Net)	20	5	0	11	7	4	N/A

Style Map (Since Inception - 36 Months Rolling)



Style History (Since Inception - 36 Months Rolling)



Cost Analysis

Fund Name	Peer Group	Fund's Expense Ratio	Expense Ratio Peer Group Data ¹				
			Median	\$ Weighted Median	Average	\$ Weighted Average	Difference ²
U.S FIXED INCOME							
Great West Portfolio Fund	Stable Value	0.89% ³	0.50%	N/A	0.50% ⁴	N/A	N/A
PIMCO Total Return Adm	US Broad Market Core Fixed	0.76%	0.49%	0.42%	0.52%	0.36%	0.24%
PIMCO Inflation Response MultiAsst Inst	Flexible Portfolio	0.83%	1.00%	0.84%	1.08%	0.92%	-0.25%
TARGET DATE							
T. Rowe Price Retirement I 2005 I	Mixed Asset Target Today ⁵	0.43%	0.52%	0.56%	0.49%	0.54%	-0.06%
T. Rowe Price Retirement I 2010 I	Mixed Asset Target 2010 ⁵	0.42%	0.43%	0.57%	0.46%	0.53%	-0.04%
T. Rowe Price Retirement I 2015 I	Mixed Asset Target 2015 ⁵	0.45%	0.47%	0.59%	0.48%	0.53%	-0.03%
T. Rowe Price Retirement I 2020 I	Mixed Asset Target 2020 ⁵	0.49%	0.54%	0.63%	0.54%	0.56%	-0.05%
T. Rowe Price Retirement I 2025 I	Mixed Asset Target 2025 ⁵	0.52%	0.54%	0.67%	0.54%	0.57%	-0.02%
T. Rowe Price Retirement I 2030 I	Mixed Asset Target 2030 ⁵	0.55%	0.57%	0.69%	0.58%	0.61%	-0.03%
T. Rowe Price Retirement I 2035 I	Mixed Asset Target 2035 ⁵	0.58%	0.59%	0.72%	0.57%	0.60%	0.01%
T. Rowe Price Retirement I 2040 I	Mixed Asset Target 2040 ⁵	0.59%	0.60%	0.74%	0.60%	0.64%	-0.01%
T. Rowe Price Retirement I 2045 I	Mixed Asset Target 2045 ⁵	0.60%	0.60%	0.74%	0.59%	0.62%	0.01%
T. Rowe Price Retirement I 2050 I	Mixed Asset Target 2050 ⁵	0.60%	0.60%	0.74%	0.61%	0.64%	-0.01%
T. Rowe Price Retirement I 2055 I	Mixed Asset Target 2055+ ⁵	0.60%	0.59%	0.74%	0.59%	0.63%	0.01%
U.S. EQUITY							
iShares S&P 500 Index	S&P 500 Index Funds (Passive)	0.04%	0.20%	0.04%	0.26%	0.06%	-0.22%
Dodge & Cox Stock	U.S. Large Cap Core Equity	0.52%	0.75%	0.32%	0.81%	0.46%	-0.29%
Vanguard Mid Cap Index	U.S. Mid Cap Core Equity (Passive)	0.04%	0.11%	0.05%	0.25%	0.06%	-0.21%
Baron Growth Inst	U.S. Mid Cap Growth Equity	1.04%	1.43%	1.43%	1.42%	1.35%	-0.38%
INTERNATIONAL EQUITY							
Artisan International Inv	International Equity All ⁶	1.18%	0.94%	0.92%	0.97%	0.69%	0.21%

¹ All information, unless noted otherwise, was created using Morningstar audited expense ratio data as of December 31, 2017. Since mutual fund expense ratios do not change frequently, AHIC believes this study to be a relevant comparison for up to a year, at which time the data will be updated. For complete information on AHIC methodologies and additional information on the expense ratio distributions, contact your AHIC consultant. Mutual fund expense peer groups were constructed by Investment Metrics, and are consistent with the peer groups shown in other exhibits comparing performance, risk-metrics and a multitude of other characteristics.

² Difference column represents the difference between the fund's expense ratio and the Peer Group's average expense ratio.

³ In lieu of an expense ratio, Great West assumes a margin of 89 basis points on the Portfolio Fund. This reflects the gross investment yield of the assets minus the crediting rate and cost of maintaining regulatory capital requirements.

⁴ Stable value fund average calculated using Hueler Universe data for a mandate size of \$1 million in assets.

⁵ Mixed Asset peer groups utilize prospectus net expense ratio information due to the nature of the asset class and common use of a Fund of Fund structure.

⁶ Combines multiple Investment Metrics peer groups.



Manager Research

Flash Report

Bill De Leon Resigns as Head of Risk Management at PIMCO

Recommendation

Bill De Leon has resigned as PIMCO's Head of Risk Management. Sudi Mariappa has been named the new Head of Risk Management. As such, Mr. Mariappa will relinquish all of his current portfolio management responsibilities. He had been named portfolio manager on the Moderate Duration Fund and StocksPLUS Fund, in addition to a select number of separate accounts. Mike Cudzil and Mohsen Fahmi have been named his replacement on the funds, respectively. We are not making any changes in recommendation with this announcement and maintain a positive view on PIMCO's risk management capabilities.

Background

Bill De Leon had been employed by PIMCO since 2007. He had served as a portfolio manager focusing on derivative and absolute return strategies before being named as Head of Risk Management in 2009. He was named Managing Director in 2012. He resigned from PIMCO on 20 July 2018. His departure is unrelated to the performance of the strategies.

Sudi Mariappa has been named the new Head of Risk Management. He had been a generalist portfolio manager, and he will be relinquishing those responsibilities with this appointment. He was rehired by PIMCO in 2014 as a Managing Director and is a well-respected member of PIMCO's Portfolio Management Group. The risk management team and process otherwise remain unchanged with his appointment.

The Risk Management Group is integrated into the broader Portfolio Management Group with team members located in the major trading centers. The group is responsible for implementing and enhancing portfolio risk reporting and investment risk oversight process. In addition, they are responsible for ensuring timely escalation of any potential concerns.

Mike Cudzil has been named co-Portfolio Manager on the Moderate Duration Fund. Scott Mather will continue to be co-Portfolio Manager on this strategy. There is no change to the portfolio management process of this strategy as a result of this change. This strategy remains Buy rated.

Mohsen Fahmi has been named Portfolio Manager for the StocksPLUS Fund. He is currently the named portfolio manager for a number of PLUS and absolute return mandates, and he is a logical choice to lead this strategy. There is no change to the investment process of this strategy as a result of the change in portfolio manager.

Full biographies of select PIMCO employees are below:

Sudi N. Mariappa

Mr. Mariappa is a managing director and generalist portfolio manager in the Newport Beach office. He rejoined PIMCO in 2014 from GLG, a London-based hedge fund, where he was a managing director, developing and managing fixed income funds. Previously at PIMCO, Mr. Mariappa was a managing director and head of global

portfolio management. He also served as a senior advisor to PIMCO's portfolio management group from 2009-2011. Prior to joining PIMCO in 2000, he was a managing director for Merrill Lynch in Tokyo, overseeing Japanese government bond and swap derivative trading. He has 31 years of investment experience and holds an MBA, as well as a bachelor's degree in chemical engineering, from Cornell University.

Mike Cudzil

Mr. Cudzil is a managing director in the Newport Beach office and a senior member of the liability driven investment portfolio management team. He has served as chair of the Americas Portfolio Committee, as a rotating member on the PIMCO Investment Committee and his portfolio expertise spans co-head of the agency MBS portfolio management team. Prior to joining PIMCO in 2012, he worked as a managing director and head of pass-through trading at Nomura. Mr. Cudzil previously held similar roles at Bank of America and Lehman Brothers, as well as a senior trading position at Salomon Brothers. He has 21 years of investment experience and holds a bachelor's degree in political science from the University of Pennsylvania.

Mohsen Fami

Mr. Fahmi is a managing director in the Newport Beach office, a generalist portfolio manager focusing on global fixed income assets and a member of PIMCO's Investment Committee. Prior to joining PIMCO in 2014, he was with Moore Capital Management, most recently as a senior portfolio manager and previously as chief operating officer. In London earlier in his career, he was co-head of bond and currency proprietary trading at Tokai Bank Europe, head of the leveraged investment group at Salomon Brothers and executive director of proprietary trading at Goldman Sachs. Prior to this, he was a proprietary trader for J.P. Morgan in both New York and London, and he also spent seven years as an investment officer at the World Bank in Washington, DC. He has 33 years of investment experience and holds an MBA from Stanford University. He received a master's degree in civil engineering from the Ohio State University and an undergraduate degree from Ain Shams University, Cairo.

Disclaimer

This document has been produced by Aon's manager research team and is appropriate solely for institutional investors. Nothing in this document should be treated as an authoritative statement of the law on any particular aspect or in any specific case. It should not be taken as financial advice and action should not be taken as a result of this document alone. Consultants will be pleased to answer questions on its contents but cannot give individual financial advice. Individuals are recommended to seek independent financial advice in respect of their own personal circumstances. The information contained herein is given as of the date hereof and does not purport to give information as of any other date. The delivery at any time shall not, under any circumstances, create any implication that there has been a change in the information set forth herein since the date hereof or any obligation to update or provide amendments hereto. The information contained herein is derived from proprietary and non-proprietary sources deemed by Aon to be reliable and are not necessarily all inclusive. Aon does not guarantee the accuracy or completeness of this information and cannot be held accountable for inaccurate data provided by third parties. Reliance upon information in this material is at the sole discretion of the reader.

This document does not constitute an offer of securities or solicitation of any kind and may not be treated as such, i) in any jurisdiction where such an offer or solicitation is against the law; ii) to anyone to whom it is unlawful to make such an offer or solicitation; or iii) if the person making the offer or solicitation is not qualified to do so. If you are unsure as to whether the investment products and services described within this document are suitable for you, we strongly recommend that you seek professional advice from a financial adviser registered in the jurisdiction in which you reside. We have not considered the suitability and/or appropriateness of any investment you may wish to make with us. It is your responsibility to be aware of and to observe all applicable laws and regulations of any relevant jurisdiction, including the one in which you reside.

Aon Hewitt Limited is authorized and regulated by the Financial Conduct Authority. Registered in England & Wales No. 4396810. When distributed in the US, Aon Hewitt Investment Consulting, Inc. ("AHIC") is a registered investment adviser with the Securities and Exchange Commission ("SEC"). AHIC is a wholly owned, indirect subsidiary of Aon plc. In Canada, Aon Hewitt Inc. and Aon Hewitt Investment Management Inc. ("AHIM") are indirect subsidiaries of Aon plc, a public company trading on the NYSE. Investment advice to Canadian investors is provided through AHIM, a portfolio manager, investment fund manager and exempt market dealer registered under applicable Canadian securities laws. Regional distribution and contact information is provided below.

Aon plc/Aon Hewitt Limited
Registered office
The Aon Centre
The Leadenhall Building
122 Leadenhall Street
London
EC3V 4AN

Aon Hewitt Investment Consulting, Inc.
200 E. Randolph Street
Suite 1500
Chicago, IL 60601
USA

Aon Hewitt Inc./Aon Hewitt Investment
Management Inc.
225 King Street West, Suite 1600
Toronto, ON
M5V 3M2
Canada

Copyright © 2018 Aon plc

InBrief: T. Rowe Price

T. Rowe Price Retirement Funds and Trusts

Review Date	Overall Rating	Previous Overall Rating
April 2018	Buy	No Change

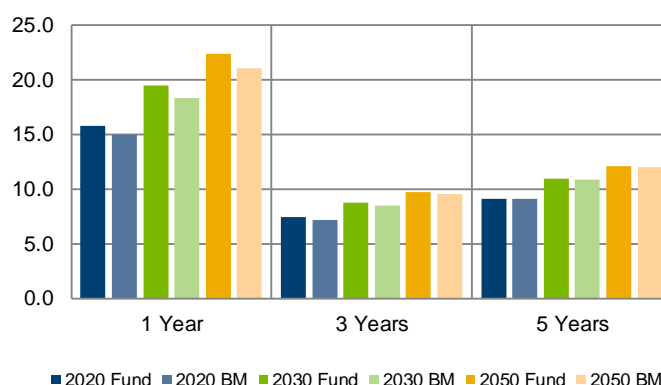
Overall Rating

The T. Rowe Price Retirement Funds are Buy rated by Aon GIM. Our positive view of the product suite is informed by the well-diversified asset allocation mix, our belief in the high-quality underlying fund management, and confidence in the investment team's capabilities to make tactical shifts. We believe that this actively managed strategy suite is most appropriate for plan sponsors who have a population well-suited for a higher-than-average equity allocation near retirement, such as those with a defined benefit plan.

Component Ratings

	Rating	Previous Rating
Business	3	No Change
Staff	4	3
Process	3	No Change
Risk	3	2
ODD	Pass	No Change
Performance	3	2
T&C	3	No Change

Absolute Performance as of December 31, 2017



T. Rowe Price Retirement Funds Investor share class performance shown is net of fees relative to custom benchmark. Past performance is no guarantee of future results
Source: eVestment

Firm Summary

Head Office Location	Baltimore, MD	Parent Name	T. Rowe Price
Firm AUM	\$991.1 billion	Target Date Fund AUM	\$232.3 billion

Portfolio Strategy Characteristics

Team Location	Baltimore, MD	Team Head	Jerome Clark & Wyatt Lee
Strategy Inception	October 2015	Strategy Size	\$150.1 billion*
Strategy Vehicle	Mutual Fund	Underlying Holdings	22
Active / Passive	Active	To / Through	Through
Benchmark	Custom benchmark	Fees	0.42% - 0.60%

Data as of December 31, 2017

* This refers to the T. Rowe Price Retirement Funds total AUM

Investment Manager Evaluation

Rating Sheet			
Factor	Rating	Previous Rating	Comments
Business	3	<i>No Change</i>	<p>T. Rowe Price is a strong, stable organization which places a prominent value on culture and continuity across the firm. In recent years, the firm has methodically expanded its presence across various regions to strengthen its research coverage of local markets as well as to provide clients with greater access to the firm. The firm continues to attract reputable investment talent that has deepened its fundamental research efforts and impact on the long-term success of its strategies across the board. T. Rowe Price target date fund (TDF) assets represent a large and growing percentage of T. Rowe Price's total assets under management and it's apparent that the TDF business is a key part of the firm's business model going forward.</p>
Investment Staff	4	3	<p>The Portfolio Management team is co-led by Jerome Clark and Wyatt Lee with assistance from Kim DeDominicis. The Research and Development team, which is responsible for strategic asset allocation research, quantitative support for tactical asset allocation, and asset allocation product development is strong, with impressive credentials.</p> <p>The upgrade in this category reflects the quality of the current staff as well as the firm's demonstrated commitment to adding high-caliber resources to this important part of their business. In the past two years alone, they have added three Ph.D. researchers to the research team.</p>
Investment Process	3	<i>No Change</i>	<p>Glide Path</p> <p>T. Rowe's glide path is designed to maximize the utility or satisfaction of participant outcomes by incorporating both an Economic Scenario Model (ESM) and a Behavioral Scenario Model (BSM) in the design of the glide path. The glide path maintains significant equity allocations throughout the lifecycle approaching a target retirement age of 65, and it continues to roll down for approximately 30 years beyond the retirement date.</p> <p>Asset Class Diversification</p> <p>The glide path includes allocations to a well-diversified mix of asset classes including multiple non-traditional asset classes such as REITs, high yield, inflation-focused equities, and emerging market debt.</p>

Rating Sheet			
Factor	Rating	Previous Rating	Comments
			<p>Implementation</p> <p>T. Rowe incorporates tactical asset allocation shifts, within +/- 5% of each asset class' strategic allocation, in an attempt to take advantage of what they believe to be market dislocations and inefficiencies.</p> <p>Investment Selection</p> <p>Although there is the potential for a higher level of volatility realized near retirement relative to competitors and the exclusive use of T. Rowe's proprietary funds is not in line with our best thinking in glide path construction, we believe T. Rowe Price has sufficient capabilities in enough asset classes for this to be a viable approach.</p>
Risk Management	3	2	<p>T. Rowe Price employs various risk models including the Barra equity risk model and an internally developed fixed income risk model to assess risk in the portfolio. The portfolios and underlying portfolios are monitored by the Multi-Asset Steering Committee, Equity, International, and Fixed Income Steering Committees, the Brokerage Control Committee, and the Compliance Committee on a regular basis.</p> <p>The upgrade in this sub-category reflects our confidence in the incorporation of risk analysis throughout the construction and monitoring process for these funds. In following these funds, it's become clear to us that every change to glide path, tactical allocations, or asset class shifts have been well thought out, and we consider their risk implementation a step above the majority of the competitors.</p>
Operational Due Diligence	Pass	No Change	All systems, policies, and procedures are adequate.
Performance Analysis	3	2	Historical performance has been strong as the portfolios have benefitted from the higher equity/return-seeking exposure and strong security selection within underlying portfolios.
Terms & Conditions	3	2	The expense ratios of the T. Rowe Price Retirement Funds have decreased in recent years and currently range from 0.42% to 0.60% across their TDF vintages.

Rating Sheet			
Factor	Rating	Previous Rating	Comments
Overall Rating	Buy	No Change	The T. Rowe Price Retirement Funds are Buy rated by Aon GIM. Our positive view of the product suite is informed by the well-diversified asset allocation mix, our belief in the high-quality underlying fund management, and confidence in the investment team's capabilities to make tactical shifts. We believe that this actively managed strategy suite is most appropriate for plan sponsors who have a population well-suited for a higher-than-average equity allocation near retirement, such as those with a defined benefit plan.

Ratings Explanation

Below we describe the criteria which we use to rate fund management organizations and their specific investment products. With the exception of Operational Due Diligence ("ODD"), each component is assessed as follows:

Qualitative Outcome

1 = Weak

2 = Average

3 = Above Average

4 = Strong

The ODD factor is assigned a rating and can be interpreted as follows:

Overall ODD Rating	What does this mean?
A1	No material operational concerns – the firm's operations largely align with a well-controlled operating environment.
A2	The firm's operations largely align with a well-controlled operating environment, with limited exceptions – managers may be rated within this category due to resource limitations or where isolated areas do not align with best practice.
Conditional Pass ("CP")	Specific operational concerns noted that the firm has agreed to address in a reasonable timeframe; upon resolution, we will review the firm's rating.
F	Material operational concerns that introduce the potential for economic or reputational exposure exist – we recommend investors do not invest and/or divest current holdings.

Aon Hewitt previously assigned ODD ratings of pass, conditional pass, or fail for the ODD factor. We are in the process of refreshing all ODD ratings to the new terminology. During the transition period, the prior ratings, as follows, may persist in some deliverables until the ODD factor rating is converted to the above noted letter ratings.

- **Pass** – Our research indicates that the manager has acceptable operational controls and procedures in place.
- **Conditional Pass** – We have specific concerns that the manager needs to address within a reasonable established timeframe.
- **Fail** – Our research indicates that the manager has critical operational weaknesses and we recommend that clients formally review the appointment.

An overall rating is then derived taking into account both the above outcomes for the product. The overall rating can be interpreted as follows:

Overall Rating	What does this mean?
Buy	We recommend clients invest with or maintain their existing allocation to our Buy rated high conviction products
Buy (Closed)	We recommend clients invest with or maintain their existing allocation to our Buy rated high conviction products, however it is closed to new investors
Qualified	A number of criteria have been met and we consider the investment manager to be qualified to manage client assets
Sell	We recommend termination of client investments in this product
In Review	The rating is under review as we evaluate factors that may cause us to change the current rating

The comments and assertions reflect our views of the specific investment product and our opinion of its quality.

Disclaimer

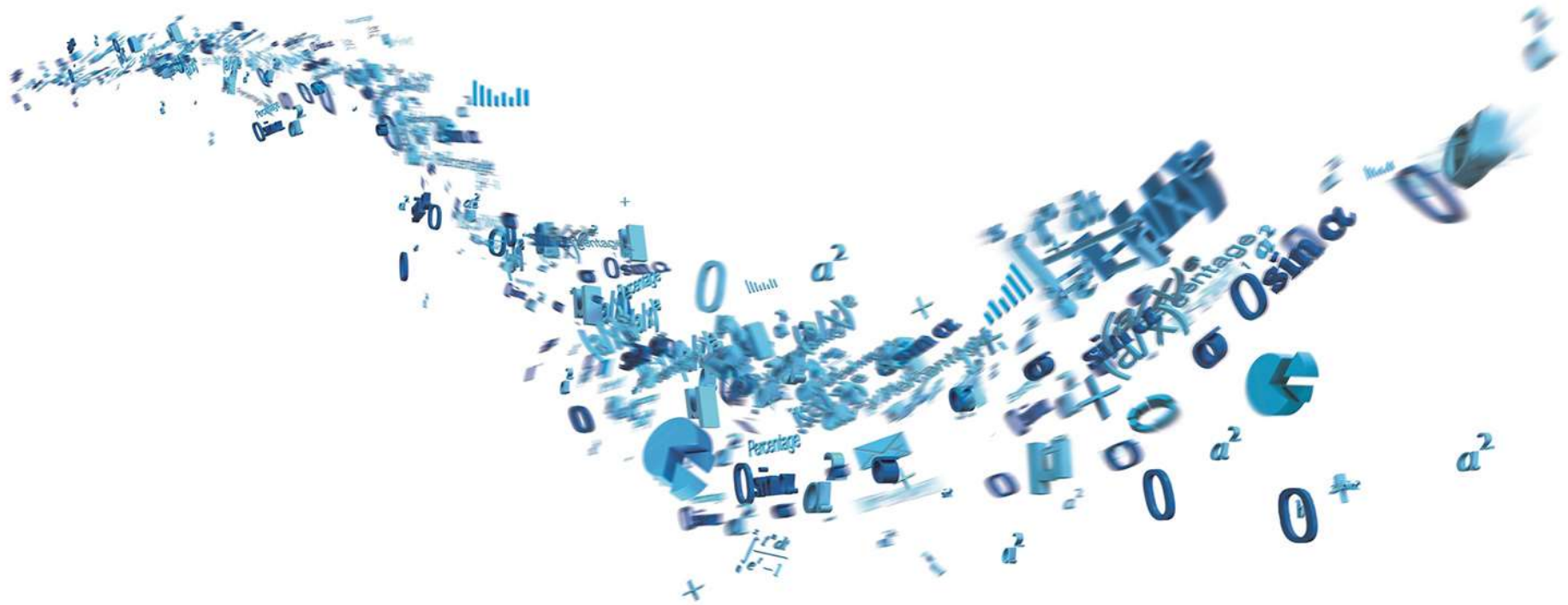
This document has been produced by Aon's Global Investment Management (GIM) Research Team, a division of Aon plc and is appropriate solely for institutional investors. Nothing in this document should be treated as an authoritative statement of the law on any particular aspect or in any specific case. It should not be taken as financial advice and action should not be taken as a result of this document alone. Consultants will be pleased to answer questions on its contents but cannot give individual financial advice. Individuals are recommended to seek independent financial advice in respect of their own personal circumstances. The information contained herein is given as of the date hereof and does not purport to give information as of any other date. The delivery at any time shall not, under any circumstances, create any implication that there has been a change in the information set forth herein since the date hereof or any obligation to update or provide amendments hereto. The information contained herein is derived from proprietary and non-proprietary sources deemed by Aon to be reliable and are not necessarily all inclusive. Aon does not guarantee the accuracy or completeness of this information and cannot be held accountable for inaccurate data provided by third parties. Reliance upon information in this material is at the sole discretion of the reader.

This document does not constitute an offer of securities or solicitation of any kind and may not be treated as such, i) in any jurisdiction where such an offer or solicitation is against the law; ii) to anyone to whom it is unlawful to make such an offer or solicitation; or iii) if the person making the offer or solicitation is not qualified to do so. If you are unsure as to whether the investment products and services described within this document are suitable for you, we strongly recommend that you seek professional advice from a financial adviser registered in the jurisdiction in which you reside. We have not considered the suitability and/or appropriateness of any investment you may wish to make with us. It is your responsibility to be aware of and to observe all applicable laws and regulations of any relevant jurisdiction, including the one in which you reside.

Aon Hewitt Limited is authorized and regulated by the Financial Conduct Authority. Registered in England & Wales No. 4396810. When distributed in the US, Aon Hewitt Investment Consulting, Inc. ("AHIC") is a registered investment adviser with the Securities and Exchange Commission ("SEC"). AHIC is a wholly owned, indirect subsidiary of Aon plc. In Canada, Aon Hewitt Inc. and Aon Hewitt Investment Management Inc. ("AHIM") are indirect subsidiaries of Aon plc, a public company trading on the NYSE. Investment advice to Canadian investors is provided through AHIM, a portfolio manager, investment fund manager and exempt market dealer registered under applicable Canadian securities laws. Regional distribution and contact information is provided below. Contact your local Aon representative for contact information relevant to your local country if not included below.

Aon plc/Aon Hewitt Limited Registered office The Aon Centre The Leadenhall Building 122 Leadenhall Street London EC3V 4AN	Aon Hewitt Investment Consulting, Inc. 200 E. Randolph Street Suite 1500 Chicago, IL 60601 USA	Aon Hewitt Inc./Aon Hewitt Investment Management Inc. 225 King Street West, Suite 1600 Toronto, ON M5V 3M2 Canada
---	--	--

Copyright © 2018 Aon plc



Appendix

Notes

- The rates of return contained in this report are shown on an after-fees basis unless otherwise noted. They are geometric and time weighted. Returns for periods longer than one year are annualized.
- Universe percentiles are based upon an ordering system in which 1 is the best ranking and 100 is the worst ranking.
- Due to rounding throughout the report, percentage totals displayed may not sum up to 100.0%. Additionally, individual fund totals in dollar terms may not sum up to the plan totals.

Disclaimer

Past performance is not necessarily indicative of future results.

Unless otherwise noted, performance returns presented reflect the respective fund's performance as indicated. Returns may be presented on a before-fees basis (gross) or after-fees basis (net). After-fee performance is net of each respective sub-advisors' investment management fees and include the reinvestment of dividends and interest as indicated on the notes page within this report or on the asset allocation and performance summary pages. Actual returns may be reduced by AHIC's investment advisory fees or other trust payable expenses you may incur as a client. AHIC's advisory fees are described in Form ADV Part 2A. Portfolio performance, characteristics and volatility also may differ from the benchmark(s) shown.

The information contained herein is confidential and proprietary and provided for informational purposes only. It is not complete and does not contain certain material information about making investments in securities including important disclosures and risk factors. All securities transactions involve substantial risk of loss. Under no circumstances does the information in this report represent a recommendation to buy or sell stocks, limited partnership interests, or other investment instruments.

The data contained in these reports is compiled from statements provided by custodian(s), record-keeper(s), and/or other third-party data provider(s). This document is not intended to provide, and shall not be relied upon for, accounting and legal or tax advice. AHIC has not conducted additional audits and cannot warrant its accuracy or completeness. We urge you to carefully review all custodial statements and notify AHIC with any issues or questions you may have with respect to investment performance or any other matter set forth herein.

The mutual fund information found in this report is provided by Thomson Reuters Lipper and AHIC cannot warrant its accuracy or timeliness. Thomson Reuters Lipper Global Data Feed provides comprehensive coverage of mutual fund information directly to Investment Metrics, AHIC's performance reporting vendor, via the PARis performance reporting platform. Thomson Reuters Lipper is the data provider chosen by Investment Metrics, and as such, AHIC has no direct relationship with Thomson Reuters Lipper.

Refer to Hedge Fund Research, Inc. www.hedgefundresearch.com for information on HFR indices.

FTSE International Limited ("FTSE") © FTSE 2017. "FTSE®" and "FTSE4Good®" are trademarks of the London Stock Exchange Group companies and are used by FTSE International Limited under license. The FTSE indices are calculated by FTSE International Limited in conjunction with Indonesia Stock Exchange, Bursa Malaysia Berhad, The Philippine Stock Exchange, Inc., Singapore Exchange Securities Trading Limited and the Stock Exchange of Thailand (the "Exchanges"). All intellectual property rights in the FTSE/ASEAN Index vest in FTSE and the Exchanges. Neither FTSE nor its licensors accept any liability for any errors or omissions in the FTSE indices and / or FTSE ratings or underlying data. No further distribution of FTSE Data is permitted without FTSE's express written consent.

Aon Hewitt Investment Consulting, Inc. ("AHIC") is a federally registered investment advisor with the U.S. Securities and Exchange Commission ("SEC"). AHIC is also registered with the Commodity Futures Trade Commission as a commodity pool operator and a commodity trading advisor, and is a member of the National Futures Association. The AHIC ADV Form Part 2A disclosure statement is available upon written request to:

Aon Hewitt Investment Consulting, Inc.
200 East Randolph Street
Suite 1500
Chicago, IL 60601
ATTN: AHIC Compliance Officer