

BOARD OF TRUSTEES
Cobb County Government Employees' Pension Plan Trust
Other Post Employment Benefits (OPEB) Trust
Meeting of February 6, 2019
2nd Fl. BOC Meeting Room 8:00 A.M.

Agenda

- I. Invitation for Public Comment
- II. Approval of Minutes – *Hagler*
- III. Invoice Payments Approval – *Volckmann*
- IV. Manager Report – Delaware – *Herb Zimmerman*
- V. ICMA-RC Relationship Manager – *James Weight*
- VI. Trust Report – Suntrust
 - a.
- VII. Advisor Report – UBS - *Earle Dodd, Allen Wright, Van Price, & Austin Dodd*
 - a. Pension
 - b. Defined Contribution
 - c. OPEB
- VIII. New Business
- IX. Adjourn
- X. Next Trustee Meeting – Wednesday, April 3, 2019

BOARD OF TRUSTEES
Cobb County Government Employees' Pension Plan Trust
Other Post-Employment Benefits (OPEB) Trust
Meeting of December 05, 2018
2nd Fl. BOC Meeting Room 8:00 A.M.

Present: Roger Tutterow, Chair
Sheriff Neil Warren, Vice-Chair
Virgil Moon, Trustee
Tony Hagler, Trustee/Secretary
Bill Volckmann, Trustee

A scheduled meeting of the Board of Trustees of the Cobb County Employees Retirement Plan was called to order by Neil Warren at 10:01 a.m. in the 2nd Floor Board of Commissioners Board Room, 100 Cherokee Street, Marietta, Georgia. The following items of business were discussed:

I. Invitation for Public Comment

No comments

II. Approval of Minutes

A motion was made by Virgil Moon and seconded by Neil Warren to approve the minutes of the October 5, 2018 meeting.

Vote: 5 - 0, in favor

III. Ratify approval of Invoice Payments

A motion was made by Virgil Moon and seconded by Neil Warren to approve seven (7) invoice totaling \$393,088.10 for the Cobb County Employee Retirement Plan, and six (6) invoices totaling \$97,335.27 for the OPEB Plan.

Vote: 5 - 0, in favor

IV. Introduction of James Weight, Relationship Manager from ICMA

V. Managers Reports

a. Vaughan Nelson – *James Eisenman*

VI. Trust Report

a. SunTrust – No Comments

VII. Advisor Report – UBS Consulting – Dodd, Price & Wright

- a. Pension
- b. Defined Contribution
- c. OPEB

VIII. New Business

None

IX. Adjourned at 11:06 a.m.

A motion was made by Virgil Moon and seconded by Neil Warren to adjourn.

Vote: 5 – 0, in favor

The next scheduled meeting will be on February 6, 2019 at 8:00 a.m. in the 2rd Floor Board of Commissioners Board Room, 100 Cherokee Street, Bldg. A., Marietta, Georgia.

CERTIFIED CORRECT:

Anthony B. Hagler
Secretary

Roger Tutterow
Chair



Cobb County Employees Retirement System
**Delaware Diversified
Income Fund**
Institutional Class shares

December 31, 2018



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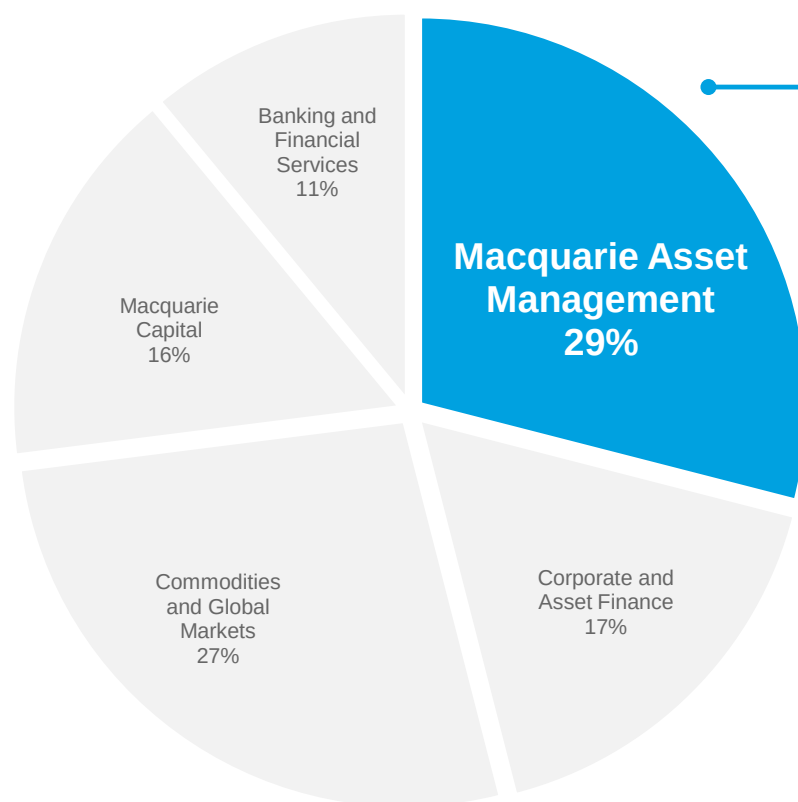
01

Firm overview

Macquarie Group



Diversified global business with 49 years of unbroken profitability



Macquarie Investment Management

Equities / Fixed income / Listed alternatives

\$253.3B

Macquarie Infrastructure and Real Assets

Direct investments in infrastructure / Energy /
Real estate / Agriculture

\$129.3B

Macquarie Specialised Investment Solutions

Client-tailored investment solutions
(e.g. infrastructure debt)

\$5.0B

Asset information as of September 30, 2018

Split based on FY18 net profit contribution, calculated as management accounting profit before unallocated corporate costs, profit share and income tax. As of September 30, 2018.

Diversified Income Pitchbook 4Q2018

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Asset management is the
largest contributor to firm results

Asset management at Macquarie



Benefit from the advantages of a global partner



Research-driven **active manager**



Independent investment teams, 1,500+ employees in 24 countries



Top 50 global asset manager¹



Top 10 global insurance manager¹



World's largest infrastructure manager²

Asset and personnel data as of September 30, 2018.

1. Pensions & Investments, The Largest Money Managers (May 2018).

2. Real Assets IPE, Top 50 infrastructure investment managers (July 2018).

Diversified Income Pitchbook 4Q2018

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Strength of a global leader

What we stand for

The way we do business with you defines us. It is based on three long-held Macquarie principles:



Opportunity

- Identify and realise opportunities for our clients
- Bring innovative and actionable investment insights to clients



Accountability

- Accountable to our clients for all our actions
- Provide transparency including access to investment professionals



Integrity

- Act with honesty and never compromise our standards
- Support the communities in which we live and work

Finding opportunities that matter for clients

A global investment platform



Equities

\$94.2 billion

Geography

- Global
- US
- Asia ex Japan
- Australia
- Emerging markets
- China
- Japan
- Korea

Style

- Value
- Growth
- Core
- Quant

Specialty

- Global listed infrastructure
- Healthcare
- Real estate

Market cap

- Large cap
- Mid cap
- Small cap

Fixed income

\$150.3 billion

Geography

- Global
- US
- Europe
- Emerging markets
- Australia
- Korea

Specialty

- Absolute return
- Liability-driven investing
- Private placements
- Asset-backed
- Municipals (taxable and tax-exempt)
- Currency
- Convertibles

Total Return

- Core
- Core plus
- Multi-sector
- Short/Intermediate

Insurance

Credit-based

- Corporate bond
- Long duration
- High yield
- Bank loans

Multi-asset

\$6.2 billion

Geography

- Global
- US

Style

- Absolute return
- Relative return
- Income

Specialty

- Protection

Alternatives

\$136.9 billion

Direct infrastructure¹

- North America
- Australia
- Europe
- Emerging markets

Real estate¹

Agriculture¹

Energy¹

Infrastructure debt²

Hedge funds

- Long/short equity
- Real estate

Macquarie Investment Management asset totals are:

Total \$253.3 billion, Equities \$94.2 billion, Fixed Income \$150.3 billion, Multi-asset \$6.2 billion, and Alternatives \$2.5 billion.

Macquarie Investment Management strategies unless noted below:

1. Managed by Macquarie Infrastructure and Real Assets. 2. Managed by Macquarie Specialised Investment Solutions.

AUM as of September 30, 2018.

Diversified Income Pitchbook 4Q2018

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A competitive range of
conviction-driven solutions

A world of experience



267 Investment professionals

20+ Average years of portfolio manager industry experience

Locations and number of investment professionals



● Client service location

Macquarie Investment Management data unless otherwise noted. As of September 30, 2018.

Diversified Income Pitchbook 4Q2018

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Investing globally, servicing locally

Delaware Funds[®] by Macquarie



Managing funds for institutions and individual investors since 1929¹



Multi-boutique structure of independent investment teams



38 mutual funds² across equity, taxable and tax-exempt fixed income, multi-asset, and specialty asset classes



\$15.9 billion in SMA assets, including AUM and AUA³



Philadelphia is global headquarters for MIM

1. Establishment of Delaware Investments. As of April 1, 2017 Delaware Investments is Macquarie Investment Management.

2. Number of funds excludes Optimum Fund Trust.

3. \$6.4 billion when excluding model AUA
AUM as of September 30, 2018.



02

Fixed Income Team

Fixed Income overview

- A history built in our two home markets: the US [previously Delaware Investments] and Australia
- \$US135 billion of assets under management for over 140 clients in 13 countries¹
- Four investment hubs with over 115 investment professionals

- Deep and experienced team with easy client access to key investment personnel
- A proposition based on customized solutions and reporting addressing client needs
- 89% of our strategies outperforming over 3 years and 93% over 5 years



LONDON



PHILADELPHIA



NEW YORK



SYDNEY

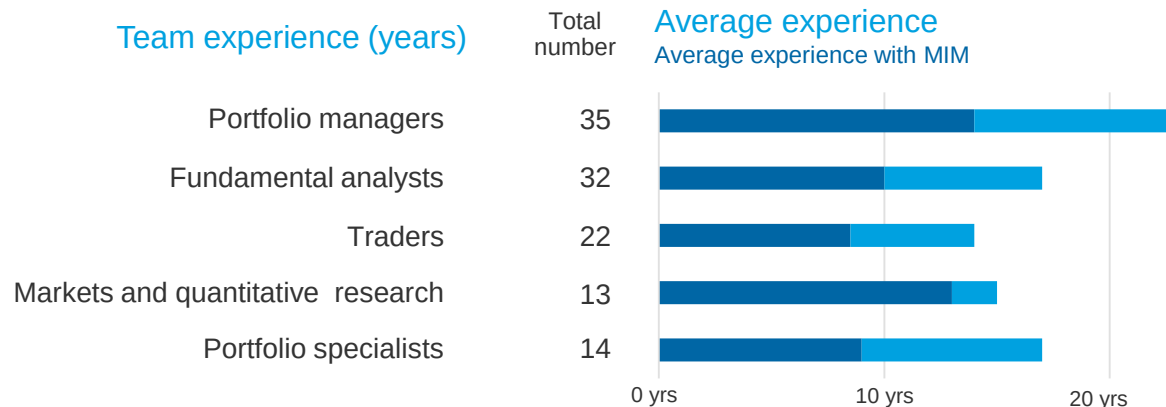
A global full-service provider of investment solutions and a trusted partner

A breadth of capabilities

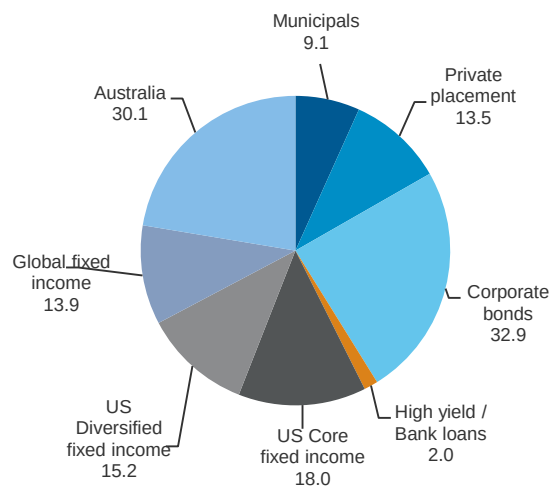


Specialised teams, deep fundamental analysis and proven investment expertise

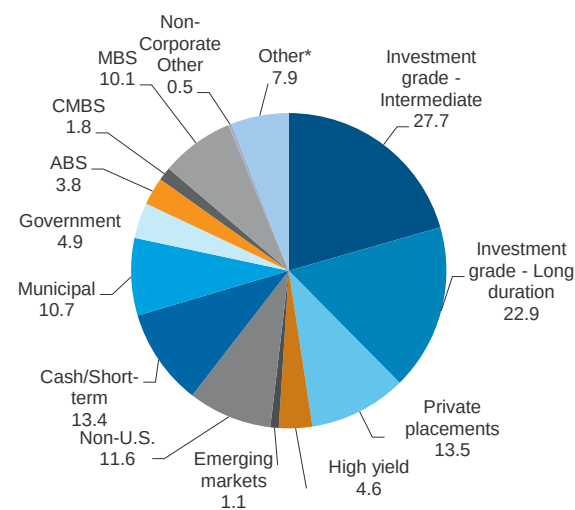
A large, experienced and stable team



Asset breakdown by capability (\$ billion)



Asset breakdown by security (\$ billion)



Managing relevant solutions for our clients



03

Product Description and Philosophy

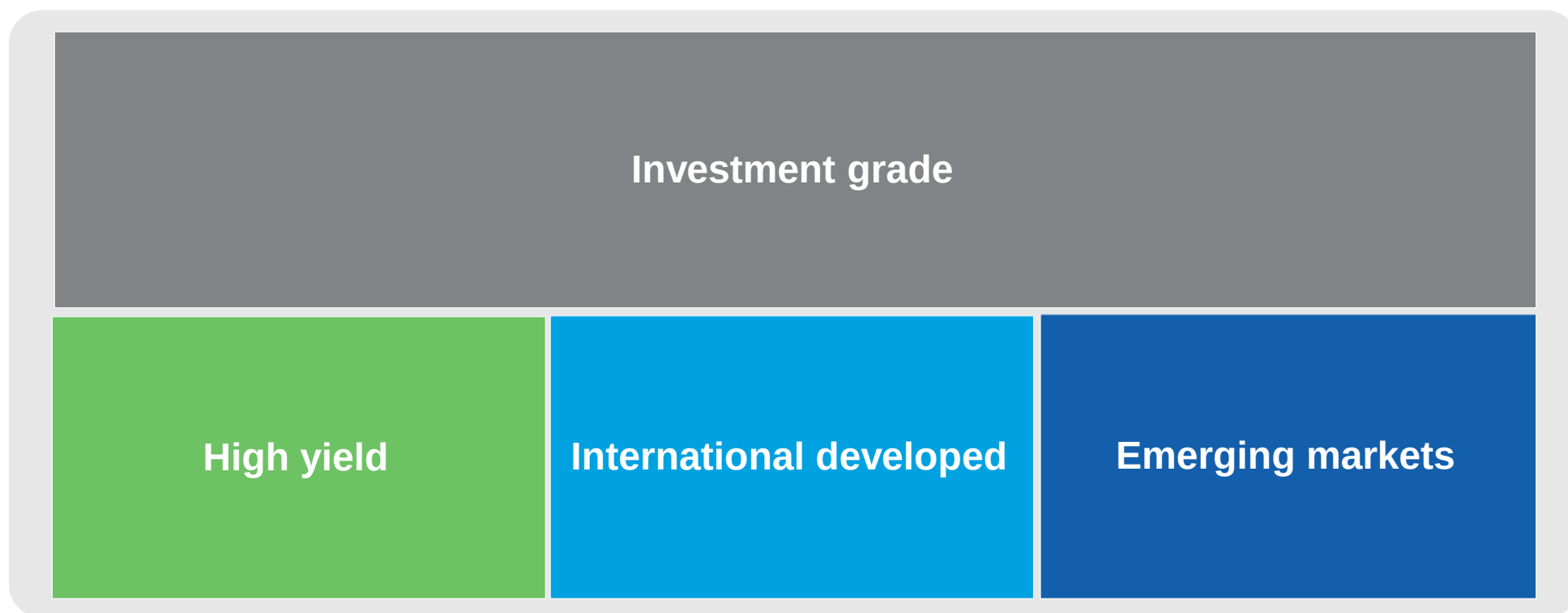
Delaware Diversified Income Fund

A Flexible Core Solution



Our objective is to seek maximum long-term total return, consistent with reasonable risk

The power of diversification



A well diversified portfolio at the sector and security level

Please see important notice and disclaimer page for disclosures.

Diversification within sectors

Focus on the best ideas across sectors

Investment grade				Catalyst	Benefit
Treasurys		Corporates		Interest rate cycle	Typically offsets the increased risks of high-yielding investments
RMBS	CMBS		ABS		
Agency		Non-U.S. Agency			

High yield			Catalyst	Benefit
Industrial	Financial	Utility	Credit cycle	Typically offers attractive total return potential
Convertibles	Bank Loans	Preferred Stock		
BB	B	CCC		

International developed			Catalyst	Benefit
Rate risk by country	Sovereigns	Corporates	Currency fluctuation, varied interest rate environments	Provides opportunity for significant diversification and currency gains
	JPY	EUR		
CAD	GBP	CHF		

Emerging markets		Catalyst	Benefit
\$ Sovereign	Corporates	Commodity cycle, currency fluctuation, and country-specific fundamentals	Offers opportunity for attractive total returns, yield, and currency appreciation
\$ EM corporate	Local currency corporate		

- Build portfolio consistent with team's best ideas, with focus on diversification and liquidity
- Evaluate multiple asset classes to maximize alpha capture and downside protection
- Flexibility to develop customized, client-specific solutions

Communication + collaboration + consistency = durable portfolios

A proven and consistent investment process that has delivered results

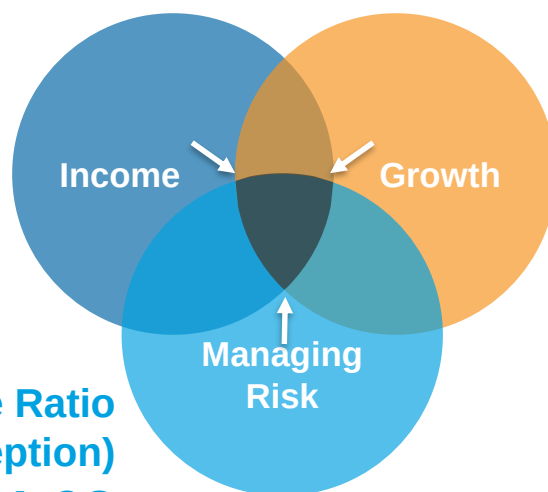


Delaware Diversified Income Fund (DPFFX): A flexible approach to your core fixed income allocation

Searching for income*
4.57% SEC Yield
1st percentile vs.
Morningstar Intermediate-
Term Bond Category

**Sharpe Ratio
(Since inception)**
1.03

5th percentile vs.
Morningstar Intermediate-
Term Bond Category



Getting to growth
**5.83% annualized return
(since inception)**
2nd percentile vs.
Morningstar Intermediate-
Term Bond Category

Mitigating risk

Strengthen your core

Source: Morningstar
*Institutional Class (DPFFX) SEC Yield as of 12/31/2018
Inception 11/02/2002; data as of 12/31/2018
Past performance does not guarantee future results.

We believe that superior research best captures the alpha opportunities that inefficient markets create.

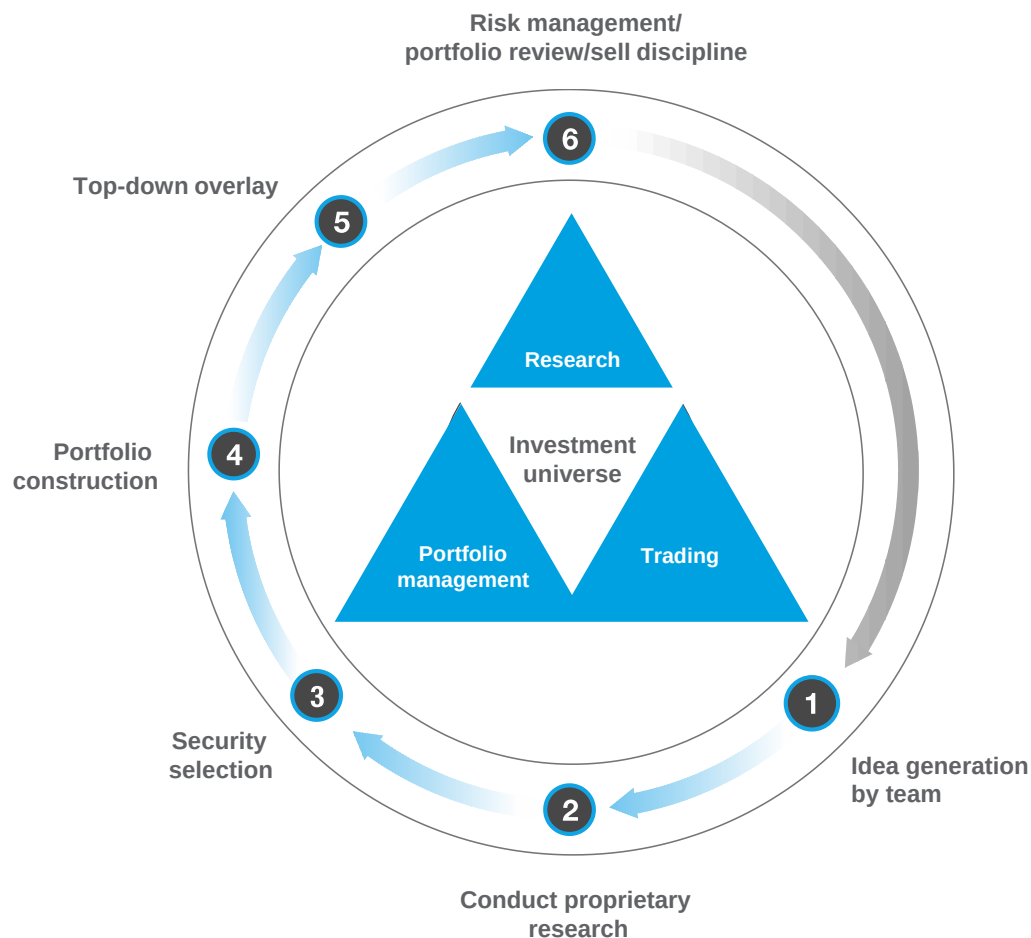
- Bottom-up, fundamental approach to portfolio construction
- Top-down macro risk management
- Attractive risk/reward characteristics and risk-controlled duration

Exploiting inefficiency for a consistent source of strong returns

Process in motion

Collaboration every step of the way

- Strong partnership between portfolio managers, analysts and traders
- Consensus-based decision-making
- Robust culture of risk management



No monopoly on great ideas

Idea generation

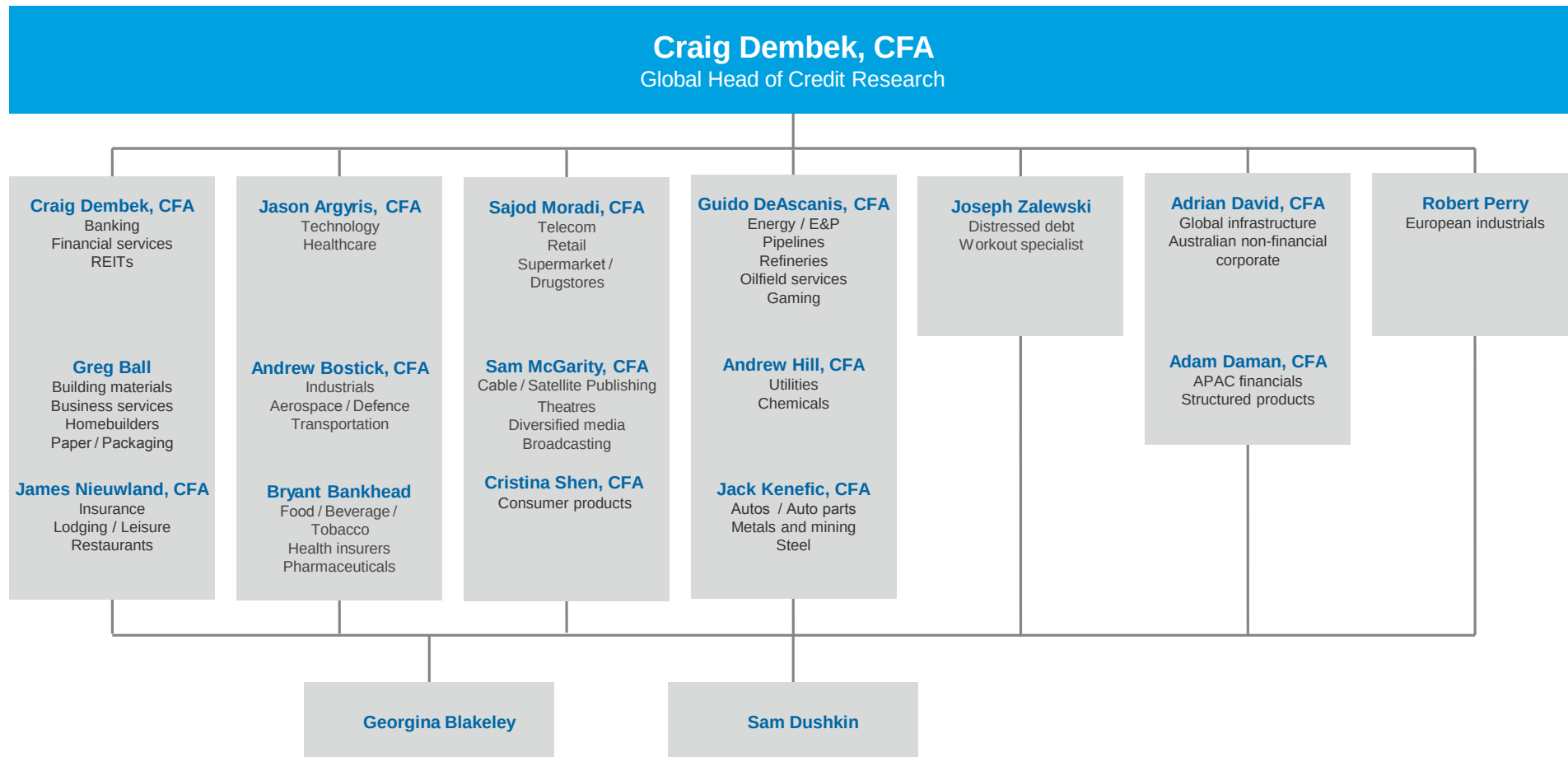
■ Daily ■ Weekly

Monday	Tuesday	Wednesday	Thursday	Friday	
Daily International Multi-Complex Paul Grillo	Daily International Multi-Complex Paul Grillo	Daily International Multi-Complex Paul Grillo	Daily International Multi-Complex Paul Grillo	Daily International Multi-Complex Paul Grillo	7:30 AM
Daily Credit Meeting Craig Dembek	External Weekly Credit Call	Daily Credit Meeting Craig Dembek	Daily Credit Meeting Craig Dembek	Daily Credit Meeting Craig Dembek	8:00 AM
		Weekly Trader's Meeting Kashif Ishaq			8:30 AM
	Daily Credit Meeting Craig Dembek				8:45 AM
Weekly Insurance					9:00 AM
		Investment Grade Portfolio Review Craig Dembek	High Yield Portfolio Review Craig Dembek John McCarthy	Mortgaged/Structured Portfolio Review Brian McDonnell	10:00 AM
Weekly Emerging Market Debt					
Weekly Municipal/Econ Joe Baxter	Credit Perspectives	Weekly Mortgage/Structured Brian McDonnell	Focus Credit Craig Dembek		2:00 PM
Weekly International/EM	Focus Credit Craig Dembek	Focus Credit Craig Dembek	Weekly Risk Management / PM Meeting Roger Early	Focus Credit Craig Dembek	3:00 PM
Weekly Global Portfolio Manager Meeting					4:00 PM

Constant sharing of ideas

Proprietary research

Global corporate research team structure



Industry experts across ratings and capitalization structure

Security selection

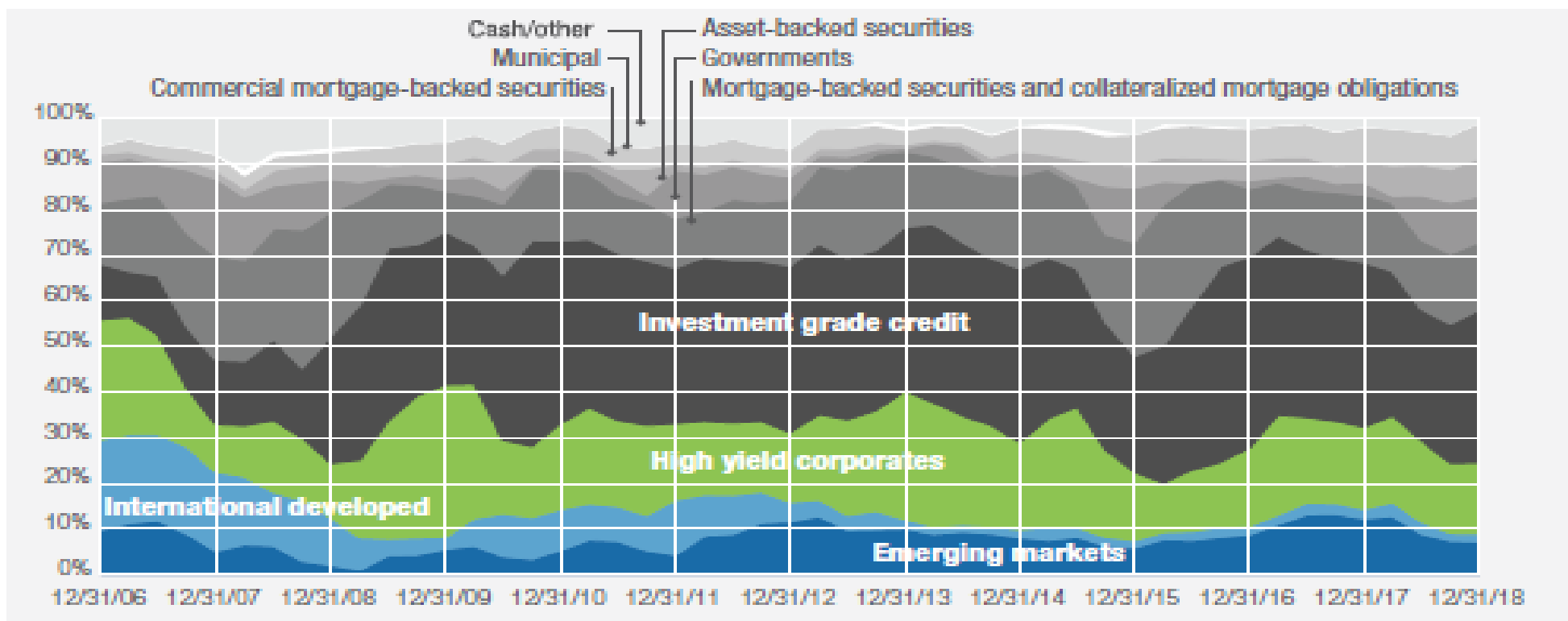
Research process seeks to identify opportunities that drive security selection

Investment sector	Fundamental example	Investment decision
Investment Grade	Strong corporate fundamentals and lower potential for higher rates	• Reduction in ABS and CLOs • Reduce CMO barbell allocation • Increase exposure to IG Corporates • Holding US Treasuries for dry powder
High Yield/Loans	Good corporate fundamentals including lower default rates and higher interest coverage ratios as well as favorable valuations	• Assessing opportunities to increase exposure to HY Bonds and Bank Loans
International Developed	Divergent global growth with muted inflation and low global developed yields	• Minimal exposure to developed currency bonds
Emerging Markets	Slower global growth, lower commodity prices/inflation and favorable valuations	• Assessing potential to increase exposure to EM bonds

Idea generation and proprietary research drive security selection

Portfolio construction

A flexible core portfolio



Data through December 31, 2018
Chart is for Illustrative Purposes Only

Effectively managing risk through different market environments

Top-down overlay

A disciplined and global approach to managing portfolios

- Medium term views are set at our **Strategic Forum**
- Formal weekly interactions cover the following:
 - **Weekly forums:** Assess whether medium term views are challenged and can establish tactical positions
 - **Global investment strategy meeting:** Share views and debate ideas
 - **Portfolio positioning meeting:** Ensure alignment between positions and views
- Regular communication also occurs outside formal meetings



PHILADELPHIA



SYDNEY



LONDON

Strategic Forum

Weekly

Credit
forum

Rates
forum

Currency
forum

Global investment
strategy meeting

Portfolio
positioning
meeting

Leveraging and incorporating specialized investment capabilities

Roger Early - Global Co Head of Fixed Income Investments

Formal monthly team meetings



Performance Attribution	Top Down/ Macro Risk Review	Liquidity/ Trading Risk	Relative Value Review
Co-chairs: David Hillmeyer <i>Head of Multisector/Global Fixed Income — Macquarie Investment Management, Americas</i> Brian McDonnell <i>Head of US Fixed Income</i>	Co-chairs: Paul Matlack <i>Fixed Income Strategist</i> Michael Wildstein <i>Head of Credit and Insurance Asset Management</i> Adam Brown <i>Senior Portfolio Manager</i>	Chair: Kashif Ishaq <i>Global Head of Corporate Bond Trading</i>	Chair: Paul Grillo <i>Chief Investment Officer — Diversified Income</i>

Risk monitoring and control in conjunction with our bottom-up, fundamental security selection process

Sell discipline

Proactive and consistent sell discipline



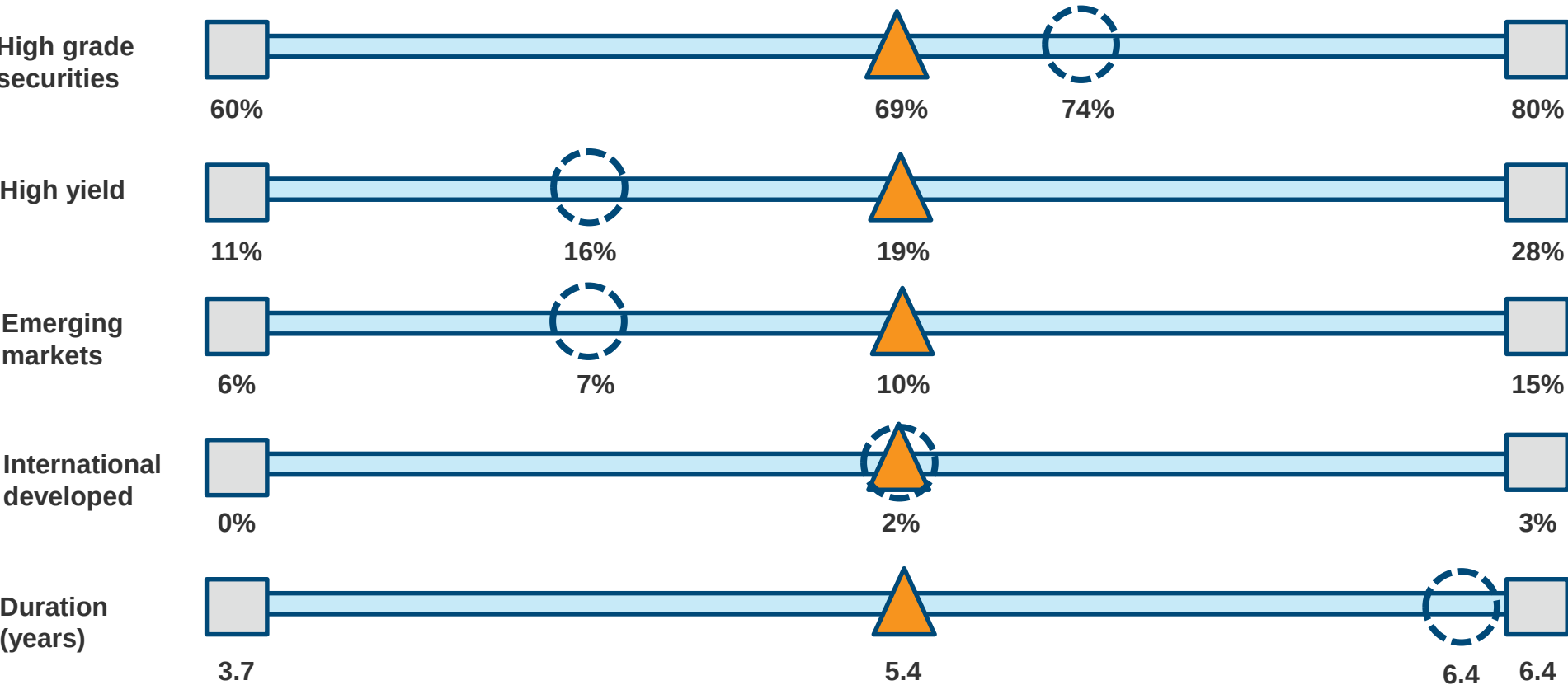


04

Portfolio Positioning and Performance

Diversified Income sector exposure – 5-year average

(as of December 31, 2018)



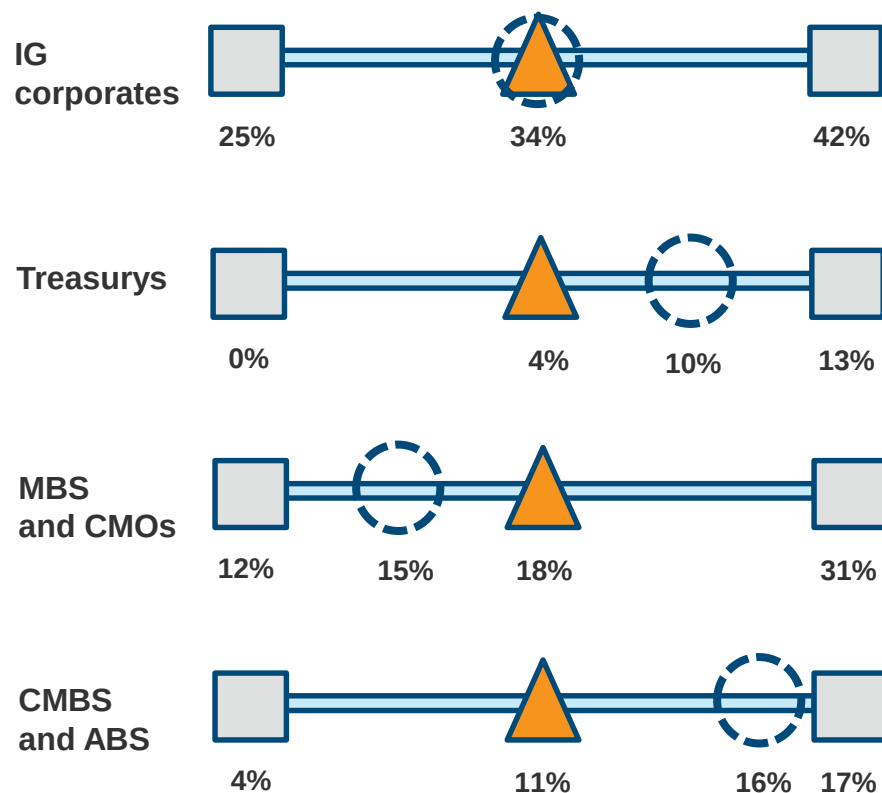
Source: Macquarie Investment Management



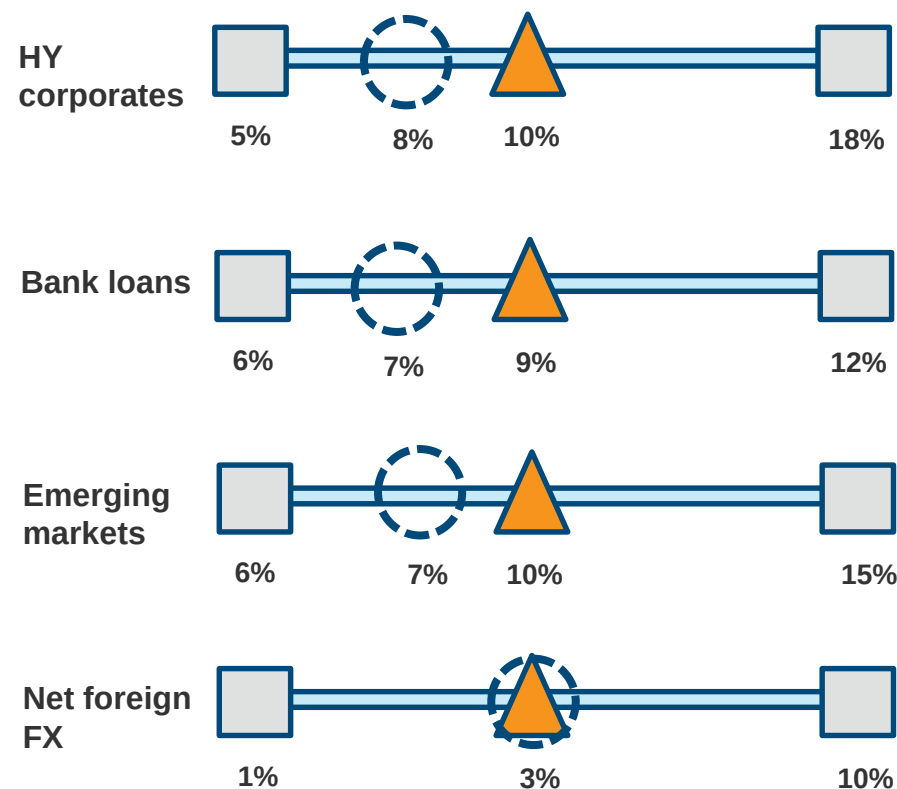
Diversified Income sector exposure

(as of December 31, 2018)

Investment grade



High yield, emerging markets and currency



Data represented by a 5-year average as of 12/31/2018



Sector positioning – Diversified Income



Delaware Diversified Income Fund versus Bloomberg Barclays US Aggregate Index (benchmark)

December 31, 2018

	Benchmark	Delaware Diversified Income Fund				
	2018	2018		2017		2016
	12/31	12/31	06/30	12/31	6/30	12/31
Yield to worst (%)	3.28	4.76	4.43	3.79	3.93	3.75
Duration (years)	5.87	6.44	6.07	4.99	5.49	5.47
Governments (%)	40	10	10	3	3	2
Investment Grade Corporate Bonds (%)	30	33	28	36	37	42
Industrial	15	15	13	17	17	20
Utility	2	5	4	5	6	7
Financials	8	12	10	13	13	13
Non Corporates	5	1	1	1	1	1
High Yield Corporate (%)	0	16	19	18	19	17
Emerging Market Bonds (%)	0	7	9	12	13	9
International Developed (%)	0	2	2	2	2	2
MBS & CMO (%)	28	15	15	15	13	15
Agency	28	11	12	12	10	12
Non-Agency	0	4	3	3	3	2
CMBS (%)	2	8	7	8	7	7
ABS & CLO (%)	0	9	7	5	4	5
Municipal (%)	0	0	0	0	0	0
Cash/Other (%)	0	0	0	1	1	2
Total (%)	100	100	100	100	100	100
Currency Risk (%)	0	2.99	2.57	4.91	8.25	2.49
Developed	0	1.79	0.53	0.90	1.62	0.96
Emerging	0	1.20	2.04	4.01	6.63	1.53

Additional statistics

Delaware Diversified Income Fund — December 31, 2018

Top 10 Sectors – High grade corporates	
Banking	8.19%
Electric	4.43%
Communications	3.47%
Consumer Non-Cyclical	3.37%
Basic Industry	2.69%
Energy	2.62%
Insurance	1.81%
Consumer Cyclical	1.59%
Capital Goods	1.16%
REITS	1.13%
Subtotal	30.46%

Top 10 holdings (excludes cash)	
UNITED STATES TREASURY 3.125 11/15/2028	6.04%
UNITED STATES TREASURY 2.875 10/31/2023	2.77%
FNCL 3.5 2/19 3.5 2/1/2049	2.73%
UNITED STATES TREASURY 2.875 8/15/2028	0.99%
FN AL9903 5.5 5/1/2044	0.70%
FG G61603 6 7/1/2040	0.60%
KEYBANK NA/CLEVELAND 6.95 2/1/2028	0.54%
USB CAPITAL IX 3.5 10/29/2049	0.52%
FN BM4495 6 7/1/2041	0.49%
CVS HEALTH CORP 4.3 3/25/2028	0.44%
Subtotal	15.82%

Top 10 Sectors – High yield	
Consumer Non-Cyclical	3.12%
Communications	2.44%
Technology	1.95%
Capital Goods	1.72%
Energy	1.59%
Consumer Cyclical	1.48%
Basic Industry	1.46%
Banking	1.35%
Insurance	0.77%
Brokerage-AssetMangers-Exchanges	0.52%
Subtotal	16.40%

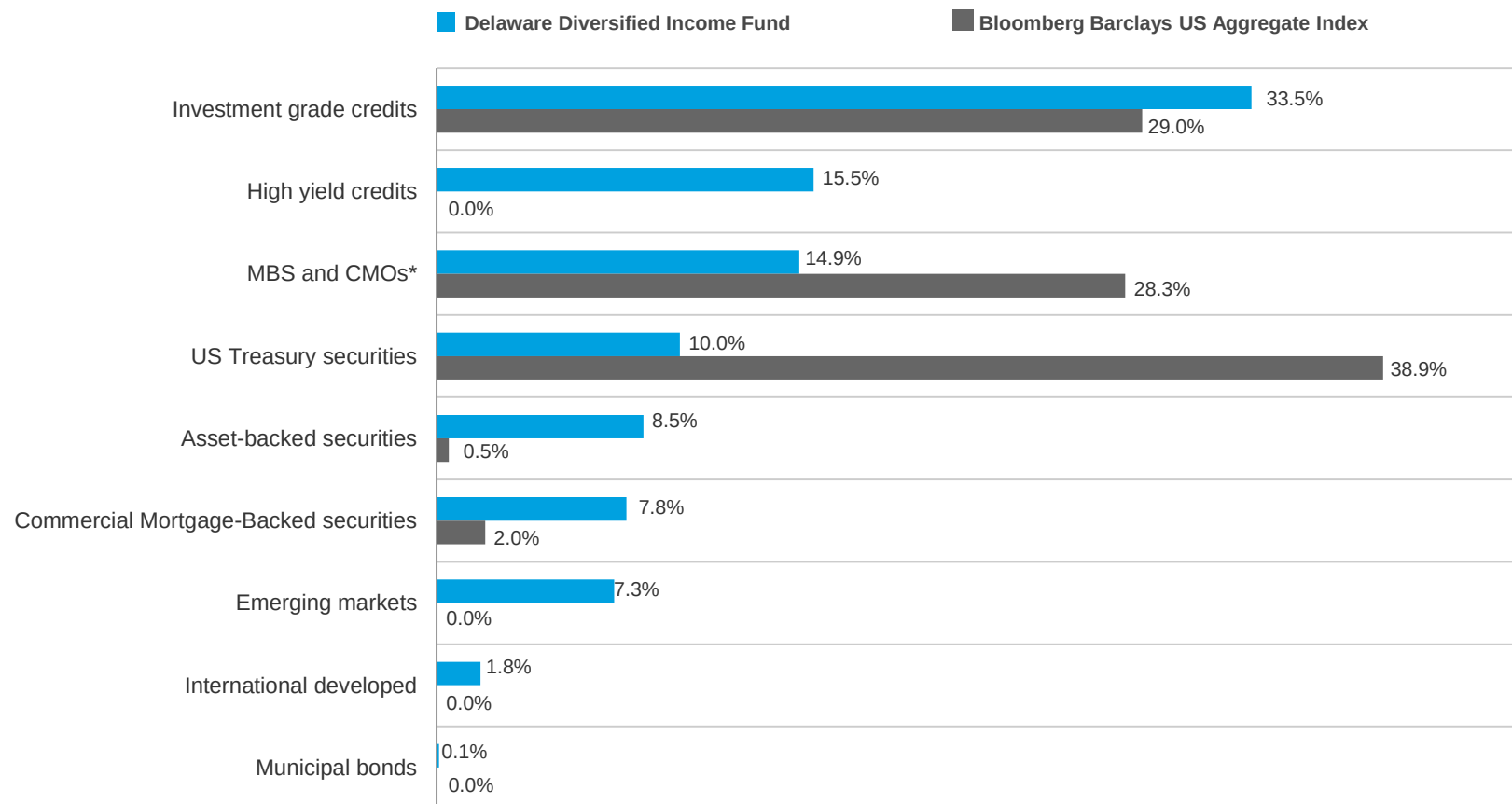
Top 10 tickers (credits)	
USB	0.93%
MS	0.67%
BAC	0.64%
KEY	0.63%
JPM	0.60%
CS	0.47%
FE	0.47%
CMCSA	0.47%
GS	0.44%
TWC	0.44%
Subtotal	5.76%

Top 10 currencies*	
U.S. dollar	97.36%
Australian dollar	0.42%
Euro	0.32%
Colombian peso	0.31%
Brazilian real	0.24%
South African rand	0.22%
Japanese yen	0.22%
Turkish lira	0.20%
British pound	0.14%
New Zealand dollar	0.13%
Subtotal	99.56%

* Includes hedges

Sector allocations

Delaware Diversified Income Fund —December 31, 2018



Source: MIM

* Mortgage-backed securities and collateralized mortgage obligations. List excludes cash and cash equivalents

Diversified Income Pitchbook 4Q2018

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Trailing Performance Delaware Diversified Income Fund (DPFFX)



Returns as of 12/31/2018

	4Q 2018	YTD 2018	1 Year	3 Year	5 Year	10 Year
Delaware Diversified Income (DPFFX)	<u>0.05%</u>	<u>-1.98%</u>	<u>-1.98%</u>	<u>2.44%</u>	<u>2.31%</u>	<u>5.57%</u>
Percentile Rank	86 th	93 rd	93 rd	34 th	49 th	12 th
Morningstar Intermediate Bond Category Average	0.86%	-0.50%	-0.50%	2.15%	2.27%	4.31%
Bloomberg Barclays US Aggregate Index	1.64%	0.01%	0.01%	2.06%	2.52%	3.48%

Source: Morningstar Direct; returns as of 12/31/2018
Past performance does not guarantee future

The performance quoted represents past performance and does not guarantee future results. Investment return and principal value of an investment will fluctuate so that shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance quoted. Performance data current to the most recent month end may be obtained by calling 877 693-3546 or visiting delawarefunds.com/performance.

Total returns may reflect waivers and/or expense reimbursements by the manager and/or distributor for some or all periods shown. Performance would have been lower without such waivers or reimbursements.

Investing involves risk, including the possible loss of principal.

Institutional Class shares are only available to certain investors. See the applicable prospectus for more information.

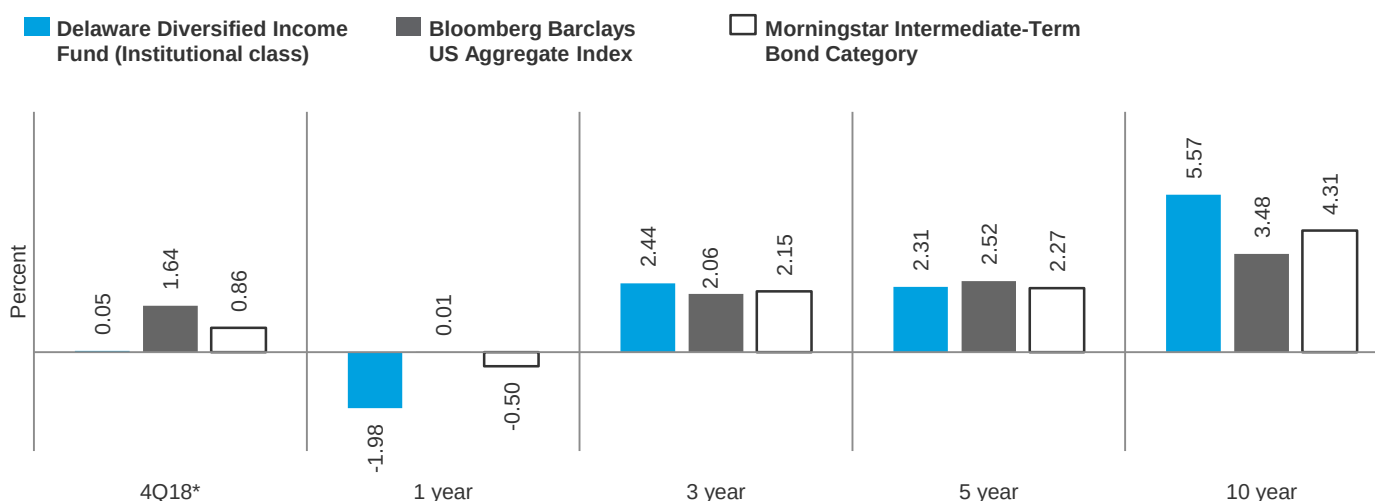
Carefully consider the Fund's investment objectives, risk factors, charges, and expenses before investing. This and other information can be found in the Fund's prospectus and its summary prospectus, which may be obtained by visiting delawarefunds.com/literature or calling 877 693-3546. Investors should read the prospectus and the summary prospectus carefully before investing.

Performance results



Delaware Diversified Income Fund — December 31, 2018

Average annual total return (%)



* Returns for less than one year are not annualized.

Calendar year total returns (%)

	2013	2014	2015	2016	2017
Delaware Diversified Income Fund (Institutional Class)	-1.02	5.37	-1.01	3.94	5.51
Bloomberg Barclays US Aggregate Index	-2.02	5.97	0.55	2.65	3.54
Morningstar Intermediate-Term Bond Category	-1.42	5.18	-0.26	3.23	3.71

Expense ratio	Gross	Net
Institutional Class	0.64%	0.45%

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Carefully consider the Fund's investment objectives, risk factors, charges, and expenses before investing. This and other information can be found in the Fund's prospectus and its summary prospectus, which may be obtained by visiting delawarefunds.com/literature or calling 877 693-3546. Investors should read the prospectus and the summary prospectus carefully before investing.

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Net expense ratio reflects a contractual waiver of certain fees and/or expense reimbursements from April 1, 2018 through April 1, 2019. Please see the fee table in the Fund's prospectus for more information.

Please see important notice and disclaimer page for definitions.

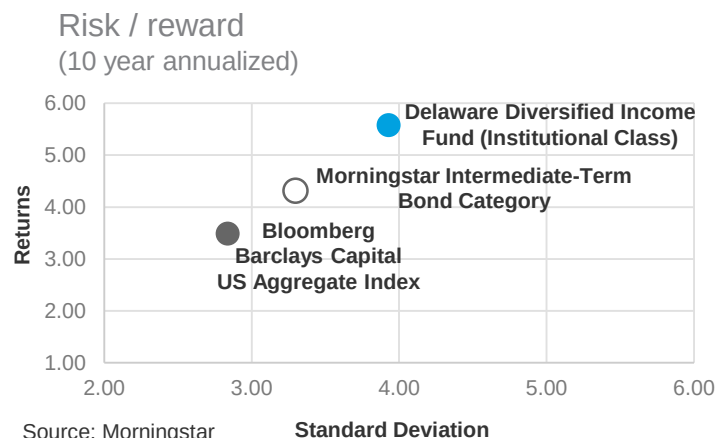
Diversified Income Pitchbook 4Q2018

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Risk statistics — Institutional class



Delaware Diversified Income Fund — December 31, 2018



	Return	Standard deviation
Delaware Diversified Income Fund (Institutional Class)	5.57%	3.93%
Bloomberg Barclays US Aggregate Index	3.48%	2.84%
Morningstar Intermediate-Term Bond Category	4.31%	3.30%

Risk statistics (versus Bloomberg Barclays US Aggregate Index)

(10 year annualized)

	Delaware Diversified Income Fund (Institutional Class)	Morningstar Intermediate-Term Bond Category
Alpha	2.91	-3.72
Beta	0.95	0.93
R2	47.56	59.59
Sharpe Ratio	1.29	1.22
Standard Deviation	3.93	3.30

Source: Morningstar

The performance quoted represents past performance and does not guarantee future results. Investment return and principal value of an investment will fluctuate so that shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance quoted. Performance data current to the most recent month end may be obtained by calling 877 693-3546 or visiting delawarefunds.com/performance.

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Investing involves risk, including possible loss of principal.

Please see important notice and disclaimer page for disclosures.

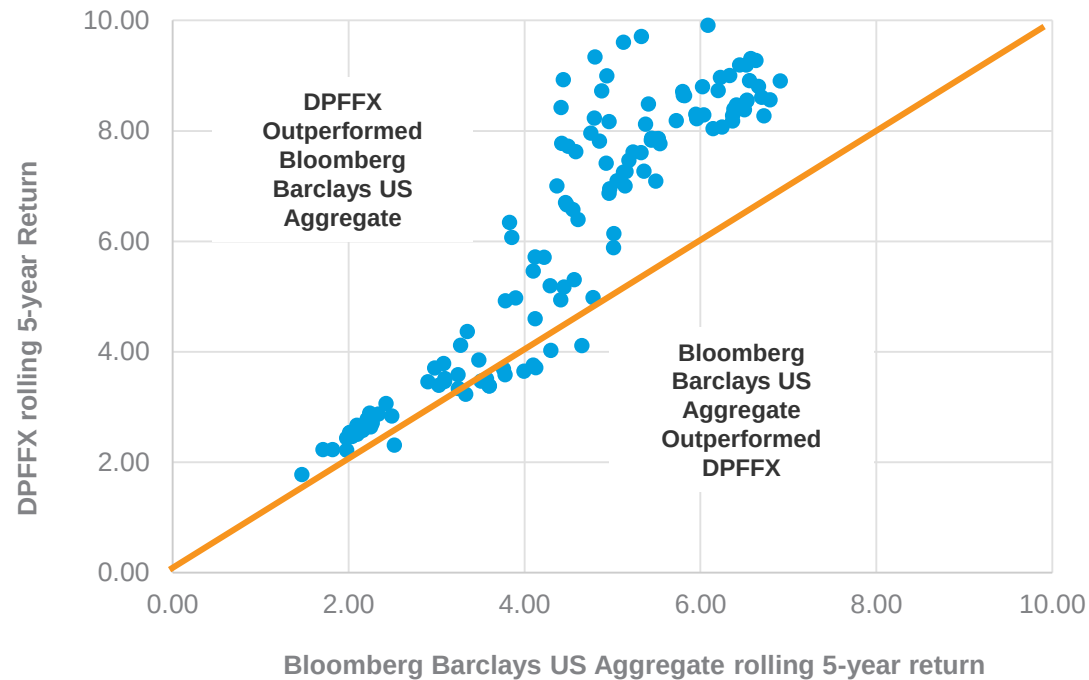
Diversified Income Pitchbook 4Q2018

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A proven and consistent investment process that has delivered results



DPFFX has Outperformed the US Aggregate Index 90% of the time over 5-year rolling periods (11/01/02 – 12/31/18)



DPFFX - Delivering on Growth, Income and Risk Management

	5 Year Annualized Return	5 Year Sharpe Ratio	Yield*
Delaware Diversified Income (DPFFX)	2.31%	0.60	4.58%
Bloomberg Barclays US Aggregate Index	2.52%	0.66	3.28%
Morningstar Intermediate Bond Category Average	2.27%	0.49	3.14%

Source: Morningstar & Barclays Live
Data as of 12/31/2018

* Yield for DPFFX represented by SEC Yield as of 12/31/2018. Yield for Morningstar Intermediate Bond Category represented by average yield of all funds in the category. Yield for Bloomberg Barclays US Aggregate Index represented by the YTW.

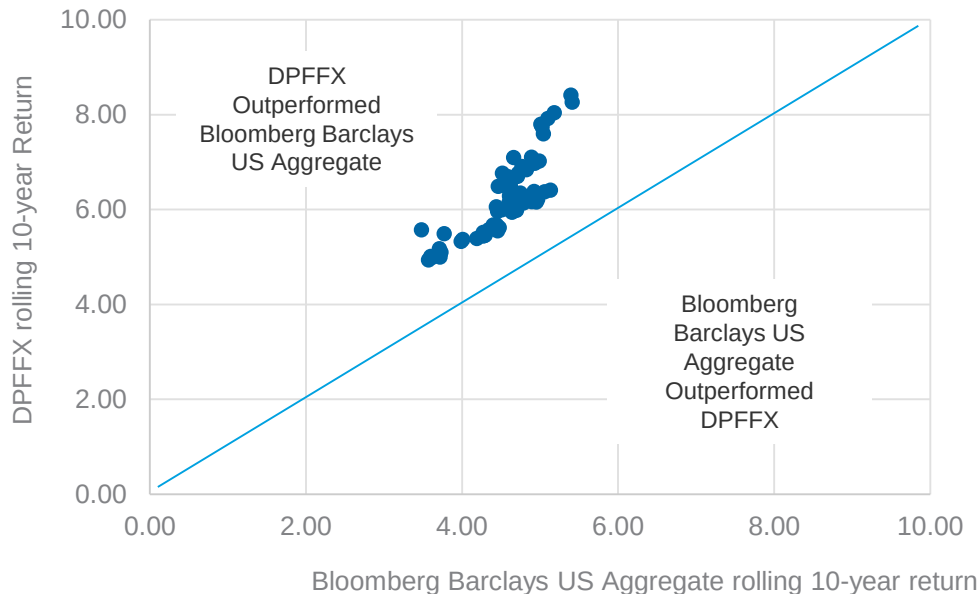
Past performance does not guarantee future results.

Outcome of a flexible-core investment approach

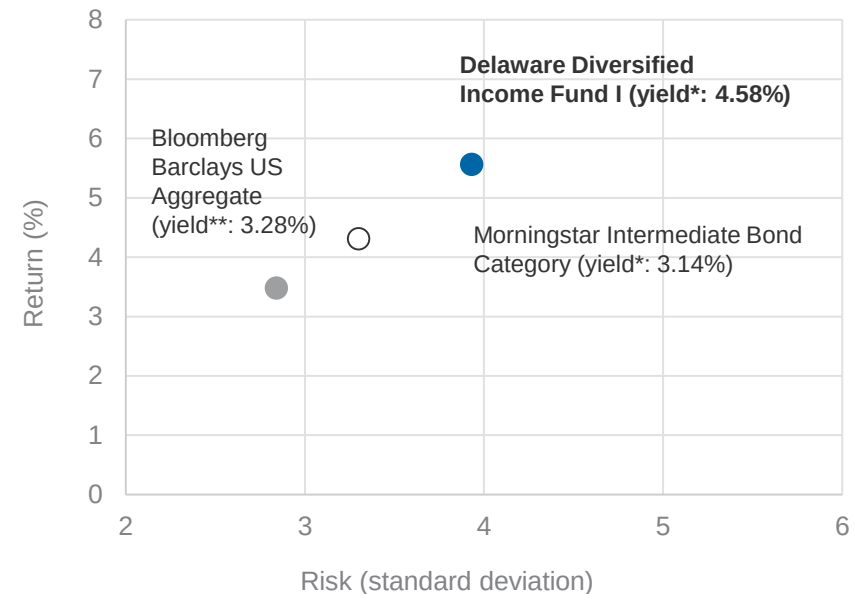
Risk management and consistent income has delivered results

A proven fixed income solution

DPFFX vs. Agg 10-year rolling (11/1/02 – 12/31/18)



10-year trailing risk/reward (as of 12/31/18)



Source: Morningstar

* Institutional Class SEC yield as of December 31, 2018.

** Bloomberg Barclays US Aggregate Index yield = YTW.

Past performance does not guarantee future results.

Diversified Income Pitchbook 4Q2018

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Managing risk since inception



05

Appendix

Biography



25 years at Macquarie
37 years relevant experience

- Master of Business Administration - Pace University
- Bachelor of Business Management - North Carolina State University
- CFA Charterholder

Paul Grillo

Division Director
CIO of Diversified Income

- Paul is a member of the firm's Taxable Income Portfolio Management team, with primary responsibility for portfolio construction and strategic asset allocation and has been influential in the growth and distribution of the firm's multi-sector strategies.
- Paul joined Delaware Investments, a division of Macquarie Investment Management, in 1992 as a mortgage-backed and asset-backed securities analyst, assuming portfolio management responsibilities in the mid-1990s.
- Prior to joining Delaware Investments, Paul served as a mortgage strategist and trader at Dreyfus Corporation. He also worked as a mortgage strategist and portfolio manager at Chemical Investment Group and as a financial analyst at Chemical Bank.

Biography



10 years at Macquarie
25 years relevant experience

- Bachelor degree - Colorado State University
- CFA Charterholder

David Hillmeyer

Executive Director

Head of Multisector/Global Fixed Income

- David is head of multisector/global fixed income. He is co-portfolio manager for the fixed rate multi-sector, core plus and investment grade corporate bond strategies.
- David joined Delaware Investments, a division of Macquarie Investment Management, in August 2007 as a Corporate Bond Trader.
- Prior to this, David worked for more than 11 years in various roles at Hartford Investment Management Company, including senior corporate bond trader, high yield portfolio manager, and quantitative analyst.

Biography



11 years at Macquarie
29 years relevant experience

- Bachelor degree - Boston College
- CFA Charterholder

Brian C. McDonnell

Executive Director

Head of US Fixed Income

- Brian is a member of the firm's Taxable Fixed Income Portfolio Management team, with primary responsibility for portfolio construction and asset allocation.
- Brian joined Delaware Investments, a division of Macquarie Investment Management, in March 2007 as a senior structured products analyst/trader.
- Prior to this, Brian was a managing director and head of fixed income trading at Sovereign Securities, where he was responsible for risk management and hedging of the firm's holdings.

Investment team biographies



Delaware Diversified Income Fund

Roger A. Early, CPA, CFA

Executive Director, Global Co-Head of Fixed Income — Macquarie Investment Management

Roger A. Early is global co-head of the firm's fixed income team. He rejoined Macquarie Investment Management (MIM), which includes the former Delaware Investments, in March 2007 as a member of the firm's taxable fixed income portfolio management team, with primary responsibility for portfolio construction and strategic asset allocation. He became head of fixed income investments in the Americas in February 2015. During his previous time at the firm, from 1994 to 2001, he was a senior portfolio manager in the same area, and he left the firm as head of its US investment grade fixed income group. In recent years, Early was a senior portfolio manager at Chartwell Investment Partners and Rittenhouse Financial and was the chief investment officer for fixed income at Turner Investments. Prior to joining the firm in 1994, he worked for more than 10 years at Federated Investors where he managed more than \$25 billion in mutual fund and institutional portfolios in the short-term and investment grade markets. He left the firm as head of institutional fixed income management. Earlier in his career, he held management positions with the Federal Reserve Bank, PNC Financial, Touche Ross, and Rockwell International. Early earned his bachelor's degree in economics from The Wharton School of the University of Pennsylvania and an MBA with concentrations in finance and accounting from the University of Pittsburgh. He is a member of the CFA Society of Philadelphia.

Paul Grillo, CFA

Senior Vice President, Chief Investment Officer – Diversified Income

Paul Grillo is a member of the firm's taxable fixed income portfolio management team with primary responsibility for portfolio construction and strategic asset allocation. He is also a member of the firm's asset allocation committee, which is responsible for building and managing multi-asset class portfolios. He joined Macquarie Investment Management (MIM), which includes the former Delaware Investments, in 1992 as a mortgage-backed and asset-backed securities analyst, assuming portfolio management responsibilities in the mid-1990s. Grillo serves as lead portfolio manager for the firm's Diversified Income products and has been influential in the growth and distribution of the firm's multisector strategies. Prior to joining the firm, Grillo was a mortgage strategist and trader at Dreyfus Corporation. He also worked as a mortgage strategist and portfolio manager at Chemical Investment Group and as a financial analyst at Chemical Bank. Grillo holds a bachelor's degree in business management from North Carolina State University and an MBA with a concentration in finance from Pace University.

Adam H. Brown, CFA

Senior Vice President, Co-Head of High Yield, Senior Portfolio Manager

Adam H. Brown is a senior portfolio manager on the firm's taxable fixed income team. He manages the bank loan portfolios and is a co-portfolio manager for the high yield, fixed rate multisector, and core plus strategies. Brown joined Macquarie Investment Management (MIM), which includes the former Delaware Investments, in April 2011 as part of the firm's integration of Macquarie Four Corners Capital Management, where he had worked since 2002. At Four Corners, he was a co-portfolio manager on four collateralized loan obligations (CLOs) and a senior research analyst supporting noninvestment grade portfolios. Before that, Brown was with the predecessor of Wells Fargo Securities, where he worked in the leveraged finance group arranging senior secured bank loans and high yield bond financings for financial sponsors and corporate issuers. He earned a bachelor's degree in accounting from the University of Florida and an MBA from the A.B. Freeman School of Business at Tulane University.

Wen-Dar Chen, Ph.D.

Senior Vice President, Senior Portfolio Manager, Fixed Income Strategist

Wen-Dar Chen, Ph.D., is a member of the firm's taxable fixed income portfolio management team with primary responsibility for constructing global investment themes, international portfolio strategic asset allocation, and risk management. He has specialized in quantitative fixed income investments since 1986. Before he joined Macquarie Investment Management (MIM), which includes the former Delaware Investments, in mid-2004 as a senior international debt analyst, he was a quantitative analyst in global asset-backed securities, credit strategies, and portfolio strategies at J.P. Morgan Securities. Since 1998, he has worked to promote the asset-backed securities business in Asia, and published the book, *Asset-Backed Securitization – Theory and Practice*, in Asia in 2002. He worked at Salomon Brothers from 1993 to 1996, and Lehman Brothers from 1990 to 1993, during which time he gained experience with government securities trading desks, proprietary trading of structured products, financial strategies, and index strategies groups. Dr. Chen's degrees include a bachelor's degree in atmospheric sciences from the National Taiwan University, a master's degree in meteorology from the South Dakota School of Mines and Technology, and a Ph.D. in geophysical fluid dynamics from Princeton University.

Investment team biographies



Delaware Diversified Income Fund

J. David Hillmeyer, CFA

Executive Director, Head of Multisector/Global Fixed Income

J. David Hillmeyer is head of multisector/global fixed income. He is co-portfolio manager for the fixed rate diversified multisector, core plus, and investment grade corporate bond strategies. Prior to joining Macquarie Investment Management (MIM), which includes the former Delaware Investments, in August 2007 as a vice president and corporate bond trader, he worked for more than 11 years in various roles at Hartford Investment Management Company, including senior corporate bond trader, high yield portfolio manager / trader, and quantitative analyst. He began his career as an investment advisor in January 1989 at Shawmut Bank, leaving the firm as an investment officer in November 1995. Hillmeyer earned his bachelor's degree from Colorado State University, and he is a member of the CFA Society of Philadelphia and the Philadelphia Council for Business Economics

John P. McCarthy, CFA

Senior Vice President, Co-Head of High Yield, Senior Portfolio Manager

John P. McCarthy is a senior portfolio manager and co-head for the firm's high yield strategies, a role he assumed in July 2016. From December 2012 to June 2016, he was co-head of credit research on the firm's taxable fixed income team. McCarthy rejoined Macquarie Investment Management (MIM), which includes the former Delaware Investments, in March 2007 as a senior research analyst, after he worked in the firm's fixed income area from 1990 to 2000 as a senior high yield analyst and high yield trader, and from 2001 to 2002 as a municipal bond trader. Prior to rejoining Delaware Investments, he was a senior high yield analyst/trader at Chartwell Investment Partners. McCarthy earned a bachelor's degree in business administration from Babson College, and he is a member of the CFA Society of Philadelphia.

Brian C. McDonnell, CFA

Executive Director, Head of US Fixed Income

Brian C. McDonnell is a member of the firm's taxable fixed income portfolio management team with primary responsibility for portfolio construction and strategic asset allocation. He joined Macquarie Investment Management (MIM), which includes the former Delaware Investments, in March 2007 as a vice president and senior structured products analyst/trader, assuming portfolio management responsibilities in 2009. Prior to joining Delaware Investments, he was a managing director and head of fixed income trading at Sovereign Securities, where he was responsible for risk management and hedging of the firm's holdings. Earlier in his career, he spent more than 10 years in various fixed income capacities with Prudential Securities in New York. McDonnell has a bachelor's degree in finance from Boston College, and he is a member of the CFA Society of Philadelphia.

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The views expressed represent the Manager's assessment of the Fund and market environment as of the date indicated, and should not be considered a recommendation to buy, hold, or sell any security, and should not be relied on as research or investment advice. Information is as of the date indicated and subject to change.

Carefully consider the Fund's investment objectives, risk factors, charges, and expenses before investing. This and other information can be found in the Fund's prospectus and its summary prospectus, which may be obtained by visiting delawarefunds.com/literature or calling 877-693-3546. Investors should read the prospectus and the summary prospectus carefully before investing.

Risk disclosure

Fixed income securities and bond funds can lose value, and investors can lose principal, as interest rates rise. They also may be affected by economic conditions that hinder an issuer's ability to make interest and principal payments on its debt. The Fund may also be subject to prepayment risk, the risk that the principal of a fixed income security that is held by the Fund may be prepaid prior to maturity, at the time when interest rates are lower than what the bond was paying. A portfolio may then have to reinvest that money at a lower interest rate.

High yielding, non-investment-grade bonds (junk bonds) involve higher risk than investment grade bonds. The high yield secondary market is particularly susceptible to liquidity problems when institutional investors, such as mutual funds and certain other financial institutions, temporarily stop buying bonds for regulatory, financial, or other reasons. In addition, a less liquid secondary market makes it more difficult for the Fund to obtain precise valuations of the high yield securities in its portfolio.

The Fund may invest in derivatives, which may involve additional expenses and are subject to risk, including the risk that an underlying security or securities index moves in the opposite direction from what the portfolio manager anticipated. A derivatives transaction depends upon the counterparties' ability to fulfill their contractual obligations.

If and when the Fund invests in forward foreign currency contracts or uses other investments to hedge against currency risks, the Fund will be subject to special risks, including counterparty risk.

The Fund may experience portfolio turnover in excess of 100%, which could result in higher transaction costs and tax liability.

International investments entail risks not ordinarily associated with US investments including fluctuation in currency values, differences in accounting principles, or economic or political instability in other nations. Investing in emerging markets can be riskier than investing in established foreign markets due to increased volatility and lower trading volume.

Benchmark

The Bloomberg Barclays US Aggregate Index is a broad composite that tracks the investment grade domestic bond market.

Peer groups

The Morningstar Intermediate-Term Bond Category compares funds that invest primarily in corporate and other investment grade US fixed income issues and typically have durations of 3.5 to 6.0 years. These funds are less sensitive to interest rates, and therefore less volatile, than funds that have longer durations.

The Lipper Core Plus Bond Funds Category compares funds that invest at least 65% in domestic investment-grade debt issues (rated in the top four grades) with any remaining investment in non-benchmark sectors such as high-yield, global and emerging market debt. These funds maintain dollar-weighted average maturities of five to ten years.

Indices

The Bloomberg Barclays US Aggregate Index measures the performance of publicly issued investment grade (Baa3/BBB- or better) corporate, US government, mortgage- and asset-backed securities with at least one year to maturity and at least \$250 million par amount outstanding.

Important notice and disclaimer



Definitions

Beta represents systematic, or market, risk and measures the sensitivity of a manager's returns to the benchmark's return. The benchmark's beta is one. Beta can be viewed as the tendency of a fund's returns to respond to swings in the market.

Current yield is a measurement of the amount of annual income produced by an investment as a percentage of its current price.

Duration is a measurement of the sensitivity of a bond's price to a 1% change in interest rates, given the bond's coupon rate and maturity.

R-squared is a statistical measure that represents the percentage of a fund's movements that are explained by movements in a benchmark index. R-Squared ranges from zero to one. An R-Squared close to 1 indicated a high correlation of the fund's returns to the benchmark's returns.

SEC 30-day yield shows the rate of return (dividends and interest, less expenses) on a fund's offering price over a trailing 30-day period.

Standard deviation measures historical volatility of returns. It is a measure of total risk.

Yield to worst – Given a bond with multiple potential maturity dates and prices due to embedded call options, the practice is to calculate a yield to maturity for each of the call dates and prices and select the lowest yield (the most conservative possible yield) as yield to worst.

Credit quality: The Fund's investment adviser, Delaware Management Company (DMC), a series of Delaware Management Business Trust receives "Credit Quality" ratings for the underlying securities held by the Fund from three "Nationally Recognized Statistical Rating Agencies" (NRSROs) — Standard & Poor's (S&P), Moody's and Fitch. The credit quality breakdown is calculated by DMC based on the NRSRO ratings. If two or more NRSROs have assigned a rating to a security the higher rating (lower value) is used. If only one NRSRO rates a security, that rating is used. For securities rated by an NRSRO other than S&P, that rating is converted to the equivalent S&P credit rating. Securities that are unrated by any of the three NRSROs agencies are included in the "not rated" category. Unrated securities do not necessarily indicate low quality. More information about securities ratings is contained in the Fund's Statement of Additional Information.

LIBOR – London interbank offered rate is a composite of the rates of interest at which banks borrow from one another in the London market, and it is a widely used benchmark for short-term interest rates.

CMOs – Collateralized mortgage obligations refer to a type of mortgage-backed security that contains a pool of mortgages bundled together and sold as an investment.

CLOs – Collateralized loan obligations are securities backed by a pool of debt, often low-rated corporate loans.

Investment manager

Advisory services provided by Macquarie Investment Management Business Trust (MIMBT), a registered investment advisor.

Diversified Income Pitchbook 4Q2018

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Portfolio managers

Roger A. Early, CPA, CFA / Executive Director, Global Co-Head of Fixed Income — Macquarie Investment Management

Paul Grillo, CFA / Senior Vice President, Chief Investment Officer of Total Return Strategies

Adam Brown, CFA / Senior Vice President, Senior Portfolio Manager

Wen-Dar Chen, Ph.D. Vice President, Senior Portfolio Manager and Analyst

J. David Hillmeyer, CFA / Executive Director, Head of Multisector/Global Fixed Income – MIM, Americas

John P. McCarthy, CFA / Senior Vice President, Senior Portfolio Manager, Co-Head of High Yield — Macquarie Investment Management, Americas

Brian C. McDonnell, CFA / Executive Director, Head of US Fixed Income

Distributor

Most mutual funds continuously offer new shares to the public through distributors that are regulated as broker/ dealers and are subject to the Financial Industry Regulatory Authority (FINRA) rules governing mutual fund sales practices.

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COBB COUNTY GOVERNMENT EMPLOYEES' PENSION PLAN

Trust Report: November 30, 2018 -December 31, 2018

February 6, 2019



Lisa Allen
Institutional Advisory Services
Vice President & Client Mgr.
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I. MARKET VALUE UPDATE - NOVEMBER 2018



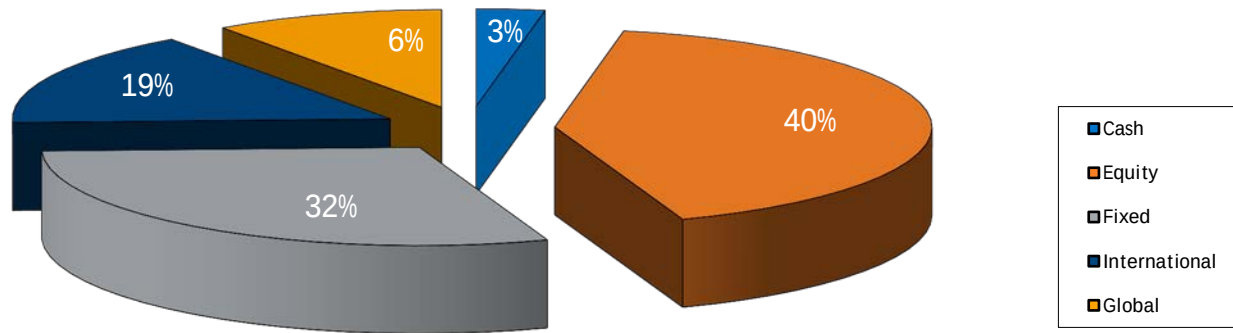
PORTFOLIO ALLOCATION BY INVESTMENT MANAGER - NOVEMBER 2018

INVESTMENT MANAGER	ASSET CLASS	ASSET STYLE	9/30/2018	%	11/30/2018	%
			MARKET VALUE		MARKET VALUE	
Westfield Capital Mgt	Equity	Large Cap Growth	49,409,658	7.2%	45,372,060	7.1%
Vanguard S&P 500 *	Equity	Large Cap Blend	72,568,707	10.5%	72,508,628	11.3%
TCW Asset Mgt	Equity	Large Cap Growth	40,214,394	5.8%	37,032,674	5.8%
Eagle Capital	Equity	Large Cap Value	73,423,400	10.7%	70,430,970	11.0%
Equity Investment Co	Equity	Large Cap Value	0	0.0%	0	0.0%
Vanguard Mid Cap	Equity	Mid Cap Value	44,632,637	6.5%	41,331,654	6.5%
Eagle Asset Mgt	Equity	Small Cap Growth	21,014,264	3.0%	18,973,600	3.0%
Vaughan Nelson	Equity	Small Cap Value	22,898,942	3.3%	21,231,056	3.3%
Total Equity			324,162,002	47.0%	306,880,641	48.0%
Blackrock Global	Global	World Allocation	18,031,538	2.6%	17,852,371	2.8%
First Eagle Global	Global	World Allocation	21,122,879	3.1%	21,033,420	3.3%
Natixis Loomis Sayles Global	Global	World Allocation	19,201,311	2.8%	20,120,516	3.1%
Total Global			58,355,728	8.5%	59,006,307	9.2%
Vanguard Total Int'l Stock	International	Non-US Equity	37,889,779	5.5%	35,745,979	5.6%
Dodge & Cox Int'l	International	Non-US Equity	37,960,174	5.5%	33,781,607	5.3%
Oppenheimer Int'l	International	Non-US Equity	37,685,297	5.5%	33,133,253	5.2%
Total International			113,535,250	16.5%	102,660,839	16.1%
Vanguard Int Bond	Fixed	Intermediate Bond	45,243,060	6.6%	0	6.8%
MacQuarie Diversified	Fixed	Intermediate Bond	44,023,855	6.4%	43,727,085	0.0%
Blackrock Strategic	Fixed	Multi Sector Bond	23,827,185	3.5%	44,571,677	7.0%
CIGNA	Fixed	Stable Value	1,400,000	0.2%	1,400,000	0.2%
Richmond	Fixed	Short-Term Bond	72,919,597	10.6%	72,675,552	11.4%
Total Fixed			187,413,697	27.2%	162,374,315	25.4%
Committee Directed	Cash		5,528,480	0.8%	8,682,925	1.4%
TOTAL TRUST			\$688,995,157	100%	\$639,605,025	100%

* Market Value includes \$22,865.08 cash in Mutual Fund account 1138666

HISTORICAL COST OF ASSETS - NOVEMBER 2018

\$515,488,268.05



SUMMARY REPORT – NOVEMBER 2018

	MONTH <u>11/01/18 - 11/30/18</u>	CALENDAR YTD <u>1/01/18 - 11/30/18</u>	FISCAL YTD <u>10/01/18 - 11/30/18</u>
Beginning Market Value			
Plus Accrued Income	632,405,582	647,395,635	672,158,540
Administrative Receipts/Disbursements			
Employer Contributions	4,124,607	44,757,608	10,088,321
Employee Contributions	1,057,066	12,410,198	2,092,623
Inter-Account Transfers	0	0	0
Benefit Payments	-5,921,108	-63,382,446	-11,871,366
Other Cash Receipts/Disbursements	1,375	20,466	1,375
Administrative Expenses	0	-1,869,418	-518,772
Sub-Total	-738,060	-8,063,592	-207,819
Investment Results			
Non-Cash Receipts/Disbursements	0	-405,479	-205,479
Income Earned	645,582	8,052,560	1,100,970
Gain/Loss on Assets Disposed/Sold	2,352,724	35,591,519	7,265,592
Change In Unrealized Gain/Loss	4,939,196	-42,965,617	-40,506,778
Sub-Total	7,937,502	272,982	-32,345,696
Ending Market Value			
Plus Accrued Income	639,605,025	639,605,025	639,605,025
Market Value Growth			
Percent Change	1.14%	-1.20%	-4.84%
Market Value as of 11/30/17		642,333,333	
Annual Percent Change		-0.42%	
Market Value as of 12/14/18		618,663,240	
Percent Change Since 10/31/18		-3.27%	

ADMINISTRATIVE EXPENSES - NOVEMBER 2018

	MONTH 11/01/18 - 11/30/18	CALENDAR YTD 1/01/18 - 11/30/18	FISCAL YTD 10/01/18 - 11/30/18
Investment Management Fees:			
Westfield Capital Mgt	0	-280,302	-69,751
TCW Asset Management	0	-157,942	0
Eagle Asset Mgt	0	-171,952	-39,400
Equity Investment Company	0	0	0
VNov18han Nelson	0	-219,831	-56,609
Eagle Capital	0	-527,445	-140,310
Richmond	0	-122,512	-36,071
LGIP Fee	0	-979	0
Sub-Total	0	-1,480,963	-342,141
Inv. Mgt. Fees as a % of Assets	0.00%	0.23%	0.05%
Trust Fees:			
SunTrust	0	-131,117	-45,270
Asset Consulting Fees:			
UBS Financial Services	0	-185,000	-118,104
CavanNov18h MacDonald Consulting	0	-62,392	-5,859
Legal & Other Services:			
Troutman Sanders	0	-9,846	-7,398
Cobb County (GAPPT)	0	-100	0
TOTAL ADMINISTRATIVE EXPENSES	0	-1,869,418	-518,772
Total Admin. Exp. As a % of Assets	0.00%	0.29%	0.08%
Reimbursement of Expenses:			
Class Actions Proceeds	325	7,982	325
Sub-Total	325	7,982	325
NET ADMINISTRATIVE EXPENSES*	325	-1,861,436	-518,447
Net Admin. Exp. As a % of Assets	0.00%	0.29%	0.08%

* reflects disbursements made from the Trust only and excludes implicit mutual fund expenses

CLASS ACTION PROCEEDS - NOVEMBER 2018

CLAIMS PAID

<u>2018 Payors</u>	<u>Class Period</u>	<u>Amount</u>	<u>Date Paid</u>
HCA Holdings	1/12/05-7/12/05	4,993	1/22/2018
JP Morgan Chase	10/1/1998-7/1/04	1,383	3/19/2018
Barrick Gold	5/7/2009-11/1/2013	942	7/6/2018
PTC INC Securities	11/24/2011-7/29/2015	29	7/20/2018
AIG	10/28/1999-4/1/2005	146	7/31/2018
Weatherford Intl	3/2/2011-7/24/2012	59	8/2/2018
BNYM-FOREX	2/28/2008-10/4/2011	105	8/3/2018
Home Loan Servicing	2/28/2012-1/22/2015	163	11/27/2018
Home Loan Servicing	2/28/2012-1/22/2015	163	11/29/2018

CLAIMS PAID SUMMARY

2002 - 2005	40,569
2006 - 2010	371,842
2011 - 2015	118,589
2016	1,394
2017	34,902
2018	7,983
Total	575,279

OUTSTANDING CLAIMS

<u>Add Date</u>	<u>Company</u>	<u>Add Date</u>
Mar-08	Key Energy Services	Mar-13
	HCA Holdings	Mar-13
	Martek Bioscience	Mar-13
Apr-08	Vitesse Semiconductor	Feb-14
Apr-08	Genesis Microchip Inc	Jun-14
	Regeneron Pharm Inc	Sep-14
	CV Therapeutics	Sep-15
	Helen of Troy	Nov-15
	Viisage Technology	Nov-15
	Buca	Dec-15
Oct-08	Bisys	Dec-15
	Coca Cola	Dec-15
Jan-09	Netopia	May-16
Jun-09	Level 3	Jul-16
	Carrier Access Corp	Jul-16
	Alliance Gaming	Oct-16
	American Italian Pasta	Aug-17
	KVH Industries	Aug-17
	McKesson/HBOC	Sep-17
	Red Robin Gourmet	Nov-17
	Charlotte Russe	Nov-17
	LHC Group	Feb-18
Sep-17	DFC Global	Feb-18
	MCSI	Apr-18
	Xerox	May-18
May-12	Lehman Brothers	
	Gopro Inc.	
Nov-18	Big Lots	
Nov-18	Vista Outdoors	
	Wyeth	
	Northwest Pipe	
	Pharmacia Corp	
	Citigroup	
	Diebold	
	Weatherford International	
	Biolase	
	Delcath Systems	
	Intralinks Holdings	
	MF Global	
	Tower Group	
	Invacare Corp	
	CVS	
	Bioscrip	
	JP Morgan Chase	
	Barrick Gold	
	Elan Corp	
	PTC Inc.	
	Harman International	
	Home Loan Servicing	
	Aegerion Pharm	
	CTI Biopharma	
	Imperva	
	Ariad Pharmaceuticals	
	Commvault Systems	
	Fitbit Inc.	
	Facebook	
	Allergan Inc.	

MARKET TO MARKET SUMMARY - MONTH ENDING NOVEMBER 30, 2018

	Westfield Capital Mgt	TCW Asset Mgt	Eagle Capital	Equity Investment	Eagle Asset Mgt	Vaughan Nelson	MacQuarie Diversified	CIGNA	Richmond	Mutual Funds	Committee Directed	Combined Account
Market Value												
Plus Accrued Income As Of 11/01/2018	44,733,933	36,143,970	68,889,101	0	18,340,254	20,689,882	43,652,888	1,400,000	72,332,797	316,816,855	9,405,904	632,405,582
Administrative Receipts/Disbursements												
Employer Contributions	0	0	0	0	0	0	0	0	0	0	4,124,607	4,124,607
Employee Contributions	0	0	0	0	0	0	0	0	0	0	1,057,066	1,057,066
Inter-Account Transfers	0	0	0	0	0	0	0	0	0	0	0	0
Benefit Payments	0	0	0	0	0	0	0	0	0	0	-5,921,108	-5,921,108
Other Cash Receipts/Disbursements	0	0	0	0	325	0	0	0	0	0	1,050	1,375
Administrative Expenses	0	0	0	0	0	0	0	0	0	0	0	0
Sub-Total	0	0	0	0	325	0	0	0	0	0	-738,385	-738,060
Investment Results												
Non-Cash Receipts/Disbursements	0	0	0	0	0	0	0	0	0	0	0	0
Income Earned	95,360	28,457	116,391	0	12,982	22,567	3	0	233,828	120,586	15,406	645,582
Gain/Loss On Assets Disposed/Sold	156,247	453	2,127,785	0	114,845	-41,645	0	0	-4,962	0	0	2,352,724
Change In Unrealized Gain/Loss	386,520	859,794	-702,307	0	505,192	560,251	74,194	0	113,890	3,141,663	0	4,939,196
Sub-Total	638,127	888,704	1,541,869	0	633,019	541,173	74,198	0	342,756	3,262,249	15,406	7,937,502
Market Value												
Plus Accrued Income As Of 11/30/2018	45,372,060	37,032,674	70,430,970	0	18,973,599	21,231,056	43,727,085	1,400,000	72,675,552	320,079,105	8,682,925	639,605,025
Cash Balance at SunTrust on 11/30/2018	315,821	651,965	3,316,486	0	441,497	730,149	1,974	0	110,595	22,865	7,772,038	13,363,388
Cash Balance at LGIP on 11/30/2018	0	0	0	0	0	0	0	0	0	0	902,836	902,836
Total Cash As Of 11/30/2018	315,821	651,965	3,316,486	0	441,497	730,149	1,974	0	110,595	22,865	8,674,874	14,266,224
Most Recent Cash Balance as of 12/14/2018	425,555	683,892	3,966,366	0	650,220	688,230	1,977	0	230,835	22,905	150,000	6,819,980
Federated Treasury Obligations												
[Monthly]	0.17%											
Georgia Fund 1* [Monthly]	2.23%											

As published on <https://otfs.georgia.gov>

MARKET TO MARKET SUMMARY - FISCAL YTD AS OF NOVEMBER 30, 2018

	Westfield Capital Mgt	TCW Asset Mgt	Eagle Capital	Equity Investment	Eagle Asset Mgt	Vaughan Nelson	MacQuarie Diversified	CIGNA	Richmond	Mutual Funds	Committee Directed	Combined Account
Market Value												
Plus Accrued Income As Of 10/01/18	49,409,658	40,214,394	73,423,400	0	21,014,264	22,898,942	44,023,855	1,400,000	72,919,597	341,325,950	5,528,480	672,158,540
Administrative Receipts/Disbursements												
Employer Contributions	0	0	0	0	0	0	0	0	0	0	10,088,321	10,088,321
Employee Contributions	0	0	0	0	0	0	0	0	0	0	2,092,623	2,092,623
Inter-Account Transfers	0	0	0	0	0	0	0	0	0	-3,000,000	3,000,000	0
Benefit Payments	0	0	0	0	0	0	0	0	0	0	-11,871,366	-11,871,366
Other Cash Receipts/Disbursements	0	0	0	0	325	0	0	0	0	0	1,050	1,375
Administrative Expenses	-69,751	0	-140,310	0	-39,400	-56,609	0	0	-36,071	0	-176,631	-518,772
Sub-Total	-69,751	0	-140,310	0	-39,074	-56,609	0	0	-36,071	-3,000,000	3,133,996	-207,819
Investment Results												
Non-Cash Receipts/Disbursements	-205,479	0	0	0	0	0	0	0	0	0	0	-205,479
Income Collected	113,267	35,263	170,047	0	22,299	30,058	7	0	468,288	241,292	20,448	1,100,970
Gain/Loss On Assets Sold	643,712	685,122	4,414,644	0	215,860	-88,426	0	0	-123,183	1,517,862	0	7,265,592
Change In Unrealized Gain/Loss	-4,519,347	-3,902,106	-7,436,811	0	-2,239,750	-1,552,910	-296,777	0	-553,079	-20,006,000	0	-40,506,778
Sub-Total	-3,967,847	-3,181,720	-2,852,120	0	-2,001,591	-1,611,277	-296,770	0	-207,974	-18,246,845	20,448	-32,345,696
Market Value												
Plus Accrued Income As Of 11/30/2018	45,372,060	37,032,674	70,430,970	0	18,973,599	21,231,056	43,727,085	1,400,000	72,675,552	320,079,105	8,682,924	639,605,025

II. MARKET VALUE UPDATE - DECEMBER 2018



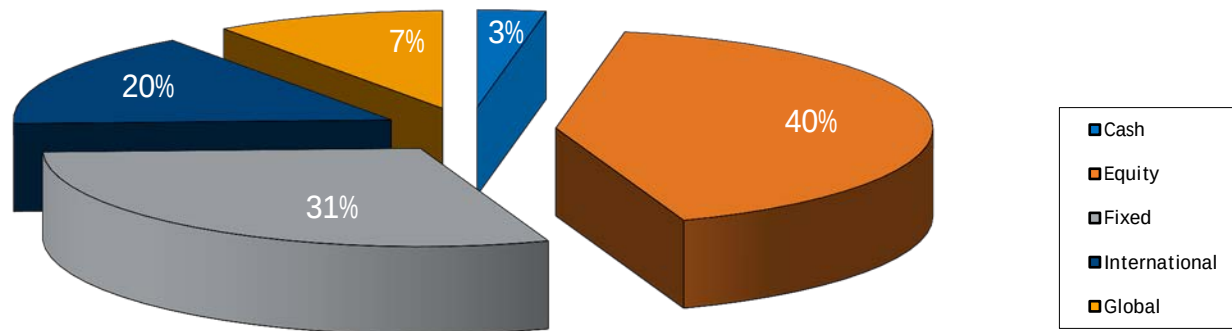
PORTFOLIO ALLOCATION BY INVESTMENT MANAGER - DECEMBER 2018

INVESTMENT MANAGER	ASSET CLASS	ASSET STYLE	9/30/2018 MARKET VALUE	%	12/31/2018 MARKET VALUE	%
Westfield Capital Mgt	Equity	Large Cap Growth	49,409,658	7.2%	41,353,310	6.9%
Vanguard S&P 500 *	Equity	Large Cap Blend	72,568,707	10.5%	65,959,920	10.9%
TCW Asset Mgt	Equity	Large Cap Growth	40,214,394	5.8%	33,971,181	5.6%
Eagle Capital	Equity	Large Cap Value	73,423,400	10.7%	63,323,298	10.5%
Equity Investment Co	Equity	Large Cap Value	0	0.0%	0	0.0%
Vanguard Mid Cap	Equity	Mid Cap Value	44,632,637	6.5%	37,244,374	6.2%
Eagle Asset Mgt	Equity	Small Cap Growth	21,014,264	3.0%	16,721,398	2.8%
Vaughan Nelson	Equity	Small Cap Value	22,898,942	3.3%	18,775,130	3.1%
Total Equity			324,162,002	47.0%	277,348,610	46.0%
Blackrock Global	Global	World Allocation	18,031,538	2.6%	17,126,854	2.8%
First Eagle Global	Global	World Allocation	21,122,879	3.1%	20,032,067	3.3%
Natixis Loomis Sayles Global	Global	World Allocation	19,201,311	2.8%	19,096,111	3.2%
Total Global			58,355,728	8.5%	56,255,032	9.3%
Vanguard Total Int'l Stock	International	Non-US Equity	37,889,779	5.5%	34,017,240	5.6%
Dodge & Cox Int'l	International	Non-US Equity	37,960,174	5.5%	31,508,799	5.2%
Oppenheimer Int'l	International	Non-US Equity	37,685,297	5.5%	31,576,459	5.2%
Total International			113,535,250	16.5%	97,102,497	16.1%
Vanguard Int Bond	Fixed	Intermediate Bond	45,243,060	6.6%	0	7.3%
MacQuarie Diversified	Fixed	Intermediate Bond	44,023,855	6.4%	44,171,610	0.0%
Blackrock Strategic	Fixed	Multi Sector Bond	23,827,185	3.5%	44,602,476	7.4%
CIGNA	Fixed	Stable Value	1,400,000	0.2%	1,400,000	0.2%
Richmond	Fixed	Short-Term Bond	72,919,597	10.6%	73,996,607	12.3%
Total Fixed			187,413,697	27.2%	164,170,693	27.2%
Committee Directed	Cash		5,528,480	0.8%	7,962,736	1.3%
TOTAL TRUST			\$688,995,157	100%	\$602,839,567	100%

* Market Value includes \$22,947.11 cash in Mutual Fund account 1138666

HISTORICAL COST OF ASSETS - DECEMBER 2018

\$520,761,794.87



SUMMARY REPORT - DECEMBER 2018

	MONTH <u>12/01/18 - 12/31/18</u>	CALENDAR YTD <u>1/01/18 - 12/31/18</u>	FISCAL YTD <u>10/01/18 - 12/31/18</u>
Beginning Market Value			
Plus Accrued Income	639,605,025	647,395,635	672,158,540
Administrative Receipts/Disbursements			
Employer Contributions	4,190,355	48,947,963	14,278,676
Employee Contributions	1,023,911	13,434,109	3,116,534
Inter-Account Transfers	0	0	0
Benefit Payments	-5,885,552	-69,267,999	-17,756,919
Other Cash Receipts/Disbursements	7	20,148	1,057
Administrative Expenses	-53,532	-1,922,625	-571,979
Sub-Total	-724,812	-8,788,404	-932,631
Investment Results			
Non-Cash Receipts/Disbursements	0	-405,479	-205,479
Income Earned	3,364,864	11,417,424	4,465,834
Gain/Loss on Assets Disposed/Sold	2,521,291	38,112,810	9,786,883
Change In Unrealized Gain/Loss	-41,926,801	-84,892,419	-82,433,580
Sub-Total	-36,040,646	-35,767,664	-68,386,342
Ending Market Value			
Plus Accrued Income	602,839,567	602,839,567	602,839,567
Market Value Growth			
Percent Change	-5.75%	-6.88%	-10.31%
Market Value as of 11/30/17		642,333,333	
Annual Percent Change		-6.15%	
Market Value as of 1/14/19		618,625,316	
Percent Change Since 12/31/18		2.62%	

ADMINISTRATIVE EXPENSES - DECEMBER 2018

	MONTH 12/01/18 - 12/31/18	CALENDAR YTD 1/01/18 - 12/31/18	FISCAL YTD 10/01/18 - 12/31/18
Investment Management Fees:			
Westfield Capital Mgt	0	-280,302	-69,751
TCW Asset Management	0	-157,942	0
Eagle Asset Mgt	0	-171,952	-39,400
Equity Investment Company	0	0	0
VDec18han Nelson	0	-219,831	-56,609
Eagle Capital	0	-527,445	-140,310
Richmond	0	-122,512	-36,071
LGIP Fee	-37	-1,016	-37
Sub-Total	-37	-1,481,000	-342,178
Inv. Mgt. Fees as a % of Assets	0.00%	0.25%	0.06%
Trust Fees:			
SunTrust	-47,264	-178,382	-92,535
Asset Consulting Fees:			
UBS Financial Services	0	-185,000	-118,104
CavanDec18h MacDonald Consulting	0	-62,392	-5,859
Legal & Other Services:			
Troutman Sanders	-6,231	-16,076	-13,628
Cobb County (GAPPT)	0	-100	0
TOTAL ADMINISTRATIVE EXPENSES	-53,532	-1,922,950	-572,304
Total Admin. Exp. As a % of Assets	0.01%	0.32%	0.09%
Reimbursement of Expenses:			
Class Actions Proceeds	7	7,989	332
Sub-Total	7	7,989	332
NET ADMINISTRATIVE EXPENSES*	-53,526	-1,914,961	-571,972
Net Admin. Exp. As a % of Assets	0.01%	0.32%	0.09%

* reflects disbursements made from the Trust only and excludes implicit mutual fund expenses

CLASS ACTION PROCEEDS - DECEMBER 2018

CLAIMS PAID

<u>2018 Payors</u>	<u>Class Period</u>	<u>Amount</u>	<u>Date Paid</u>	<u>Company</u>
HCA Holdings	1/12/05-7/12/05	4,993	1/22/2018	Key Energy Services
JP Morgan Chase	10/1/1998-7/1/04	1,383	3/19/2018	HCA Holdings
Barrick Gold	5/7/2009-11/1/2013	942	7/6/2018	Martek Bioscience
PTC INC Securities	11/24/2011-7/29/2015	29	7/20/2018	Genesis Microchip Inc
AIG	10/28/1999-4/1/2005	146	7/31/2018	Regeneron Pharm Inc
Weatherford Intl	3/2/2011-7/24/2012	59	8/2/2018	CV Therapeutics
BNYM-FOREX	2/28/2008-10/4/2011	105	8/3/2018	Helen of Troy
Home Loan Servicing	2/28/2012-1/22/2015	163	11/27/2018	Viisage Technology
Home Loan Servicing	2/28/2012-1/22/2015	163	11/29/2018	Buca
JP Morgan Chase	04/13/12-05/21/12	169	12/27/2018	Bisys
Home Loan Servicing	2/28/2012-1/22/2015	-163	11/29/2018	Coca Cola

CLAIMS PAID SUMMARY

2002 - 2005	40,569
2006 - 2010	371,842
2011 - 2015	118,589
2016	1,394
2017	34,902
2018	7,989
Total	575,285

OUTSTANDING CLAIMS

<u>Add Date</u>	<u>Company</u>	<u>Add Date</u>
Mar-08	Biolase	Sep-15
	Delcath Systems	Nov-15
	Intralinks Holdings	Nov-15
Apr-08	MF Global	Dec-15
	Tower Group	Dec-15
	Invacare Corp	Dec-15
	CVS	May-16
	Bioscrip	Jul-16
	JP Morgan Chase	Jul-16
Oct-08	Barrick Gold	Oct-16
	Elan Corp	Aug-17
Jan-09	PTC Inc.	Aug-17
Jun-09	Harman International	Sep-17
	DFC Global	Sep-17
	Home Loan Servicing	Nov-17
	Aegerion Pharm	Nov-17
	CTI Biopharma	Feb-18
	Imperva	Feb-18
	Ariad Pharmaceuticals	Apr-18
	Commvault Systems	May-18
	Lehman Brothers	May-12
	Fitbit Inc.	Aug-18
	Facebook	Aug-18
Mar-13	Gopro Inc.	Aug-18
Mar-13	Allergan Inc.	Aug-18
Mar-13	Big Lots	Nov-18
Feb-14	Vista Outdoors	Nov-18
Jun-14	Quality Systems Inc	Dec-18
Sep-14	Intuitive Surgical	Dec-18

MARKET TO MARKET SUMMARY - MONTH ENDING DECEMBER 31, 2018

	Westfield	TCW	Eagle	Equity	Eagle	Vaughan	MacQuarie			Mutual	Committee	Combined
	Capital Mgt	Asset Mgt	Capital	Investment	Asset Mgt	Nelson	Diversified	CIGNA	Richmond	Funds	Directed	Account
Market Value												
Plus Accrued Income As Of 12/01/2018	45,372,060	37,032,674	70,430,970	0	18,973,599	21,231,056	43,727,085	1,400,000	72,675,552	320,079,105	8,682,925	639,605,025
Administrative Receipts/Disbursements												
Employer Contributions	0	0	0	0	0	0	0	0	0	0	4,190,355	4,190,355
Employee Contributions	0	0	0	0	0	0	0	0	0	0	1,023,911	1,023,911
Inter-Account Transfers	0	0	0	0	0	0	0	0	0	0	0	0
Benefit Payments	0	0	0	0	0	0	0	0	0	0	-5,885,552	-5,885,552
Other Cash Receipts/Disbursements	169	0	0	0	-163	0	0	0	0	0	0	7
Administrative Expenses	0	0	0	0	0	0	0	0	0	0	-53,532	-53,532
Sub-Total	169	0	0	0	-163	0	0	0	0	0	-724,818	-724,812
Investment Results												
Non-Cash Receipts/Disbursements	0	0	0	0	0	0	0	0	0	0	0	0
Income Earned	26,683	15,660	41,322	0	8,290	60,128	4	0	236,642	2,971,504	4,630	3,364,864
Gain/Loss On Assets Disposed/Sold	-273,599	-514	626,934	0	-54,394	-252,292	0	0	-177,246	2,652,402	0	2,521,291
Change In Unrealized Gain/Loss	-3,772,004	-3,076,639	-7,775,929	0	-2,205,935	-2,263,762	444,521	0	1,261,659	-24,538,712	0	-41,926,801
Sub-Total	-4,018,919	-3,061,493	-7,107,672	0	-2,252,039	-2,455,926	444,524	0	1,321,055	-18,914,806	4,630	-36,040,646
Market Value												
Plus Accrued Income As Of 12/31/2018	41,353,310	33,971,181	63,323,298	0	16,721,397	18,775,130	44,171,610	1,400,000	73,996,607	301,164,299	7,962,736	602,839,567
Cash Balance at SunTrust on 12/31/2018	148,943	584,264	2,831,274	0	682,901	769,755	1,977	0	363,336	22,905	5,954,416	11,359,771
Cash Balance at LGIP on 12/31/2018	0	0	0	0	0	0	0	0	0	0	2,004,136	2,004,136
Total Cash As Of 12/31/2018	148,943	584,264	2,831,274	0	682,901	769,755	1,977	0	363,336	22,905	7,958,552	13,363,907
Most Recent Cash Balance as of 1/14/2019	65,466	914,132	2,837,581	0	665,429	599,917	1,981	0	364,342	22,947	149,438	5,621,232
Federated Treasury Obligations [Monthly]	0.19%											
Georgia Fund 1* [Monthly]	2.35%											
As published on https://otfs.georgia.gov												

MARKET TO MARKET SUMMARY - FISCAL YTD AS OF DECEMBER 31, 2018

	Westfield Capital Mgt	TCW Asset Mgt	Eagle Capital	Equity Investment	Eagle Asset Mgt	Vaughan Nelson	MacQuarie Diversified	CIGNA	Richmond	Mutual Funds	Committee Directed	Combined Account
Market Value												
Plus Accrued Income As Of 10/01/18	49,409,658	40,214,394	73,423,400	0	21,014,264	22,898,942	44,023,855	1,400,000	72,919,597	341,325,950	5,528,480	672,158,540
Administrative Receipts/Disbursements												
Employer Contributions	0	0	0	0	0	0	0	0	0	0	14,278,676	14,278,676
Employee Contributions	0	0	0	0	0	0	0	0	0	0	3,116,534	3,116,534
Inter-Account Transfers	0	0	0	0	0	0	0	0	0	-3,000,000	3,000,000	0
Benefit Payments	0	0	0	0	0	0	0	0	0	0	-17,756,919	-17,756,919
Other Cash Receipts/Disbursements	169	0	0	0	-163	0	0	0	0	0	1,050	1,057
Administrative Expenses	-69,751	0	-140,310	0	-39,074	-56,609	0	0	-36,071	0	-230,164	-571,979
Sub-Total	-69,581	0	-140,310	0	-39,237	-56,609	0	0	-36,071	-3,000,000	2,409,178	-932,631
Investment Results												
Non-Cash Receipts/Disbursements	-205,479	0	0	0	0	0	0	0	0	0	0	-205,479
Income Collected	139,950	50,923	211,369	0	30,589	90,186	11	0	704,931	3,212,796	25,078	4,465,834
Gain/Loss On Assets Sold	370,113	684,608	5,041,579	0	161,466	-340,718	0	0	-300,429	4,170,265	0	9,786,883
Change In Unrealized Gain/Loss	-8,291,351	-6,978,744	-15,212,740	0	-4,445,685	-3,816,671	147,744	0	708,579	-44,544,711	0	-82,433,580
	0	0	0				0	0	0	0	0	
Sub-Total	-7,986,767	-6,243,213	-9,959,792	0	-4,253,630	-4,067,203	147,754	0	1,113,081	-37,161,651	25,078	-68,386,342
Market Value												
Plus Accrued Income As Of 12/31/2018	41,353,310	33,971,181	63,323,298	0	16,721,397	18,775,130	44,171,609	1,400,000	73,996,607	301,164,299	7,962,736	602,839,567



BENEFIT PAYMENTS - JANUARY 1, 2018 to DECEMBER 31, 2018

	CALENDAR YTD	FISCAL YTD	FISCAL YTD
	<u>01/01/18 - 12/31/18</u>	<u>10/01/18 - 12/31/18</u>	<u>MONTHLY AVERAGE</u>
Monthly Checks	1237	265	88
Monthly Direct Deposit	<u>29,503</u>	<u>7,549</u>	<u>2,516</u>
Total Monthly Payments	30,740	7,814	2,604
Lump Sum Payments	<u>287</u>	<u>107</u>	<u>36</u>
Total Benefit Payments	31,027	7,921	2,640

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IV. PLAN CONTACTS





CONTACTS - BOARD OF TRUSTEES

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Chairman

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4Q 2018 REVIEW

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Quarterly Market Review

4th Quarter 2018

This report has been prepared by UBS Financial Services Inc. ("UBS FS").
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2018 started with rising rates weighing on bond returns...

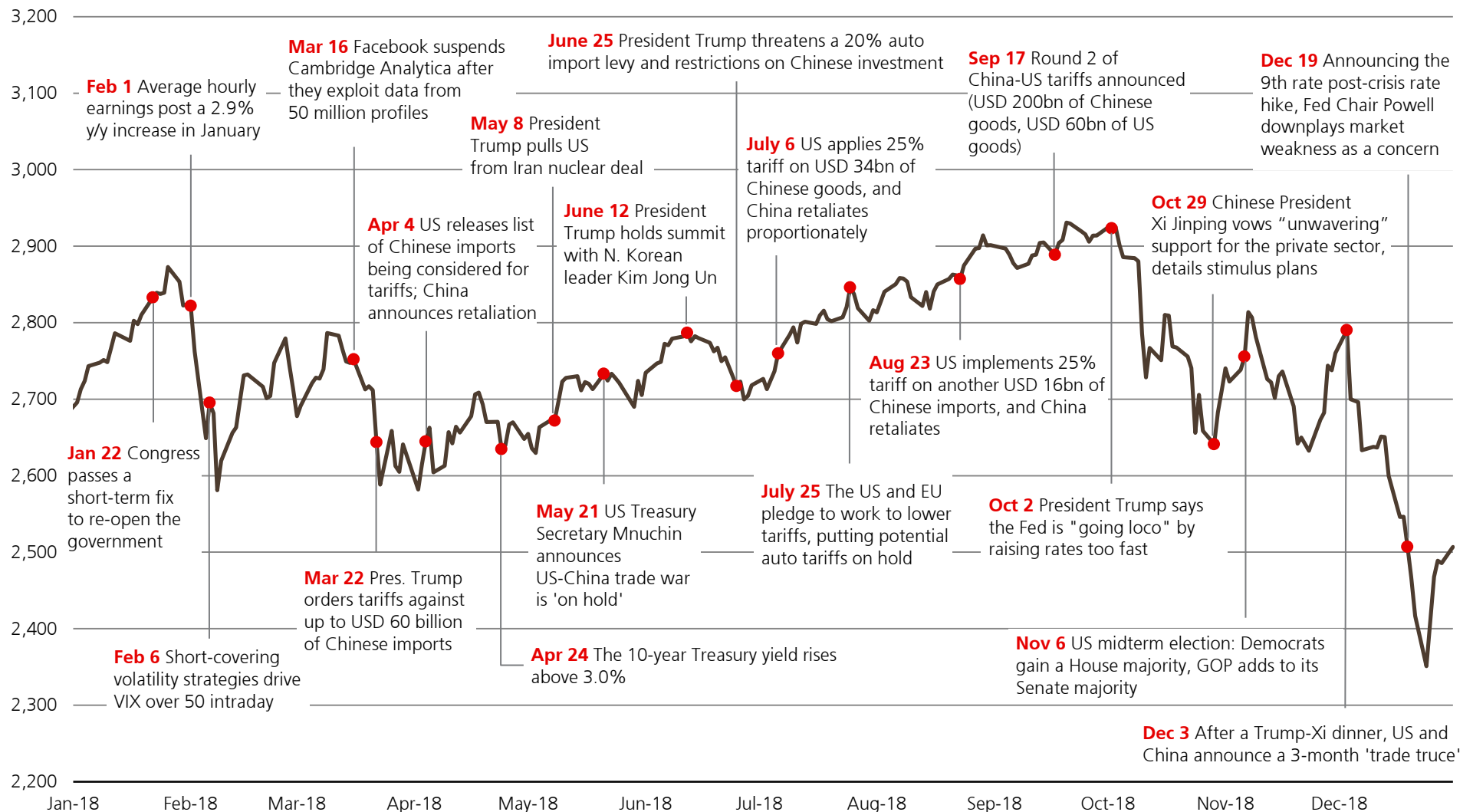
10-year Treasury yield and performance of the Bloomberg Barclays US Agg. Bond Index (100= 31 Dec. 2017)



Source: Bloomberg, UBS, as of 31 December 2018

...but in 4Q, inflation anxiety gave way to growth fears...

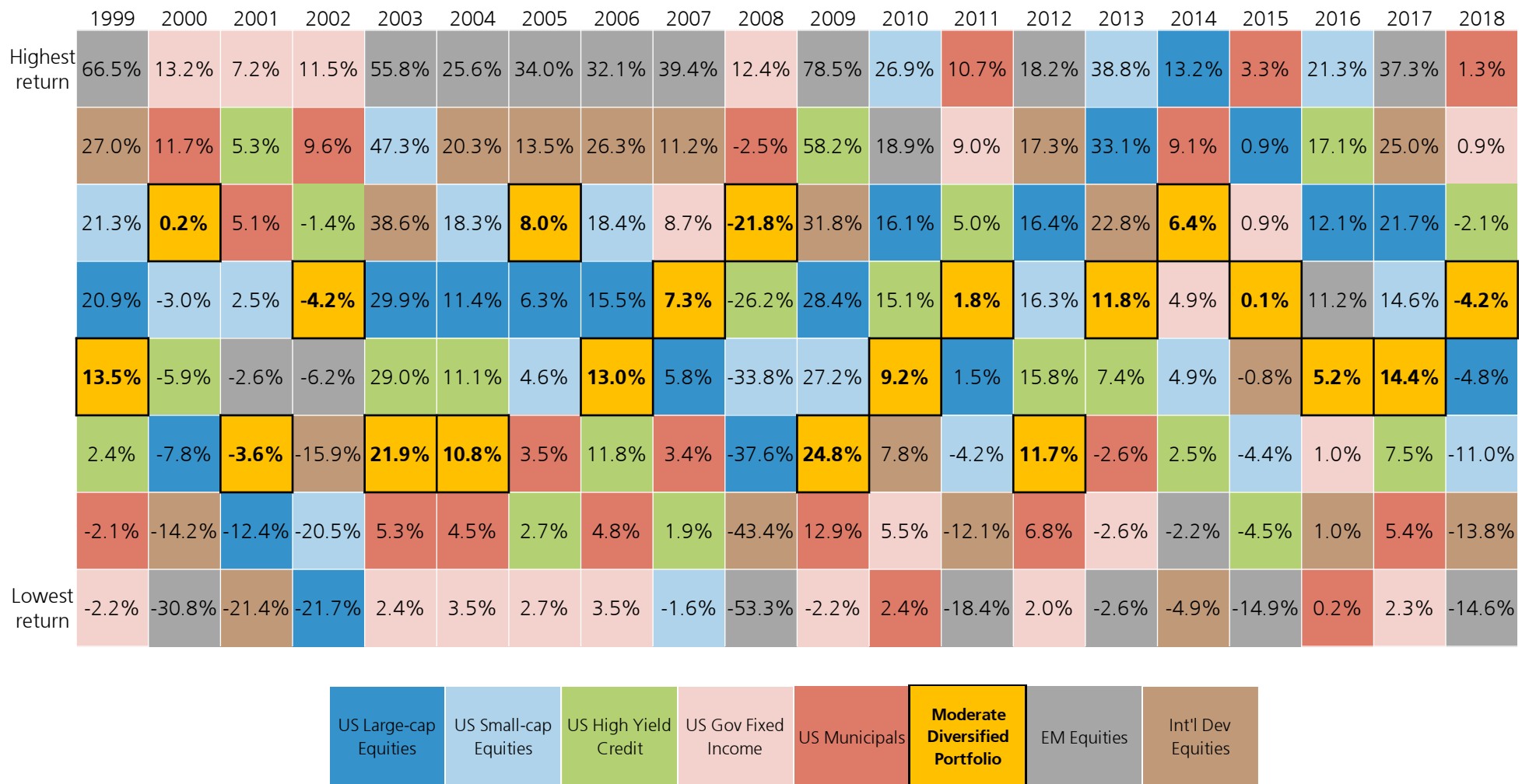
S&P 500 price, with callouts for select news items



Source: Bloomberg, UBS, as of 31 December 2018

...resulting in a "risk off" year with few places to hide

Quilt chart of select asset classes' calendar year performance

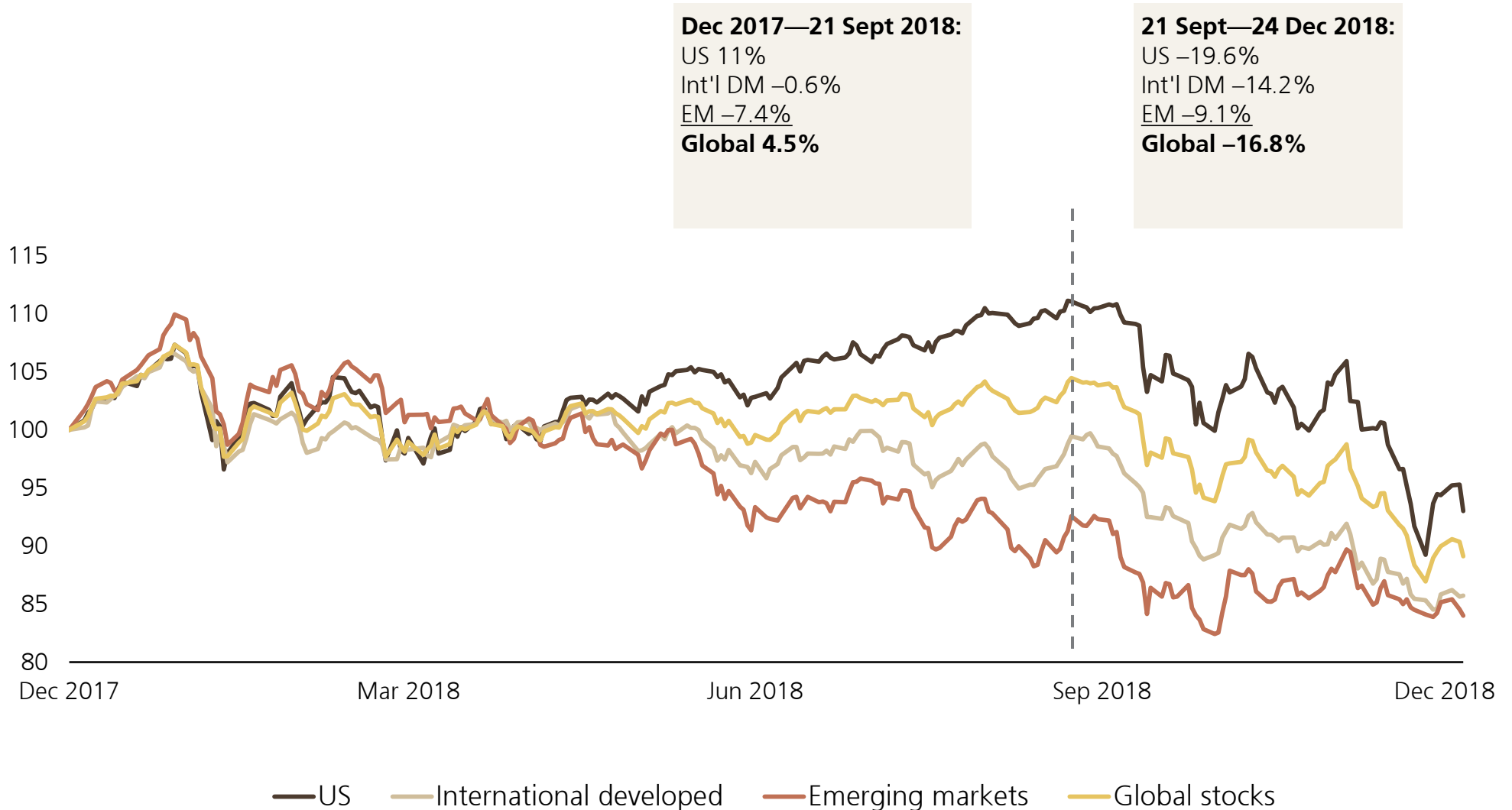


Source: Bloomberg, UBS, as of 31 December 2018

Note: The Moderate Diversified Portfolio performance calculations are a hypothetical analysis based on historical asset class returns. This backward-looking illustration assumes an investment in asset class indexes represented by the current Strategic Asset Allocation (SAA) for a moderate risk profile investor in a taxable portfolio without non-traditional assets. Performance calculations assume annual rebalancing, don't take into account any prior SAA for this investor profile, and include time periods before the SAA was created. See the latest UBS House View: Investment Strategy Guide (ISG) for the detailed SAA of the taxable portfolio without non-traditional assets. These calculations will not match the performance measurement published in the ISG, which reflects a monthly rebalancing. For periods prior to 2009, this illustration assumes that the Bloomberg Barclays EM Local Currency Government Total Return Index allocation (inception date of 4 July 2008) was invested fully in the Bloomberg Barclays EM USD Aggregate Total Return Index.

So although US stocks were resilient until 4Q...

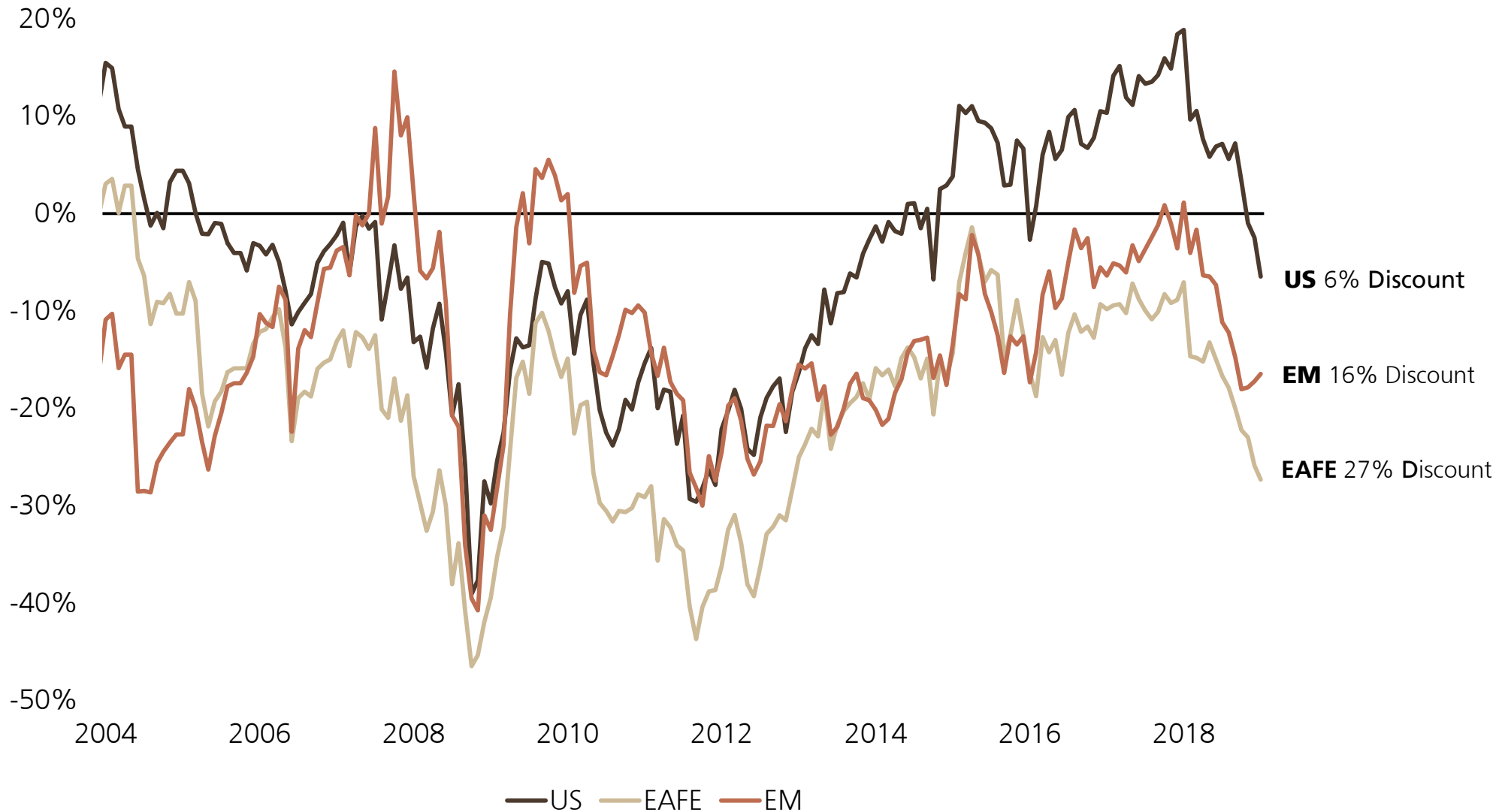
Growth of USD 100 invested in December 2017 (Russell 1000, MSCI EAFE, and MSCI EM)



Source: Bloomberg, UBS, as of 31 December 2018

...all regions are now in the "bargain bin" ...

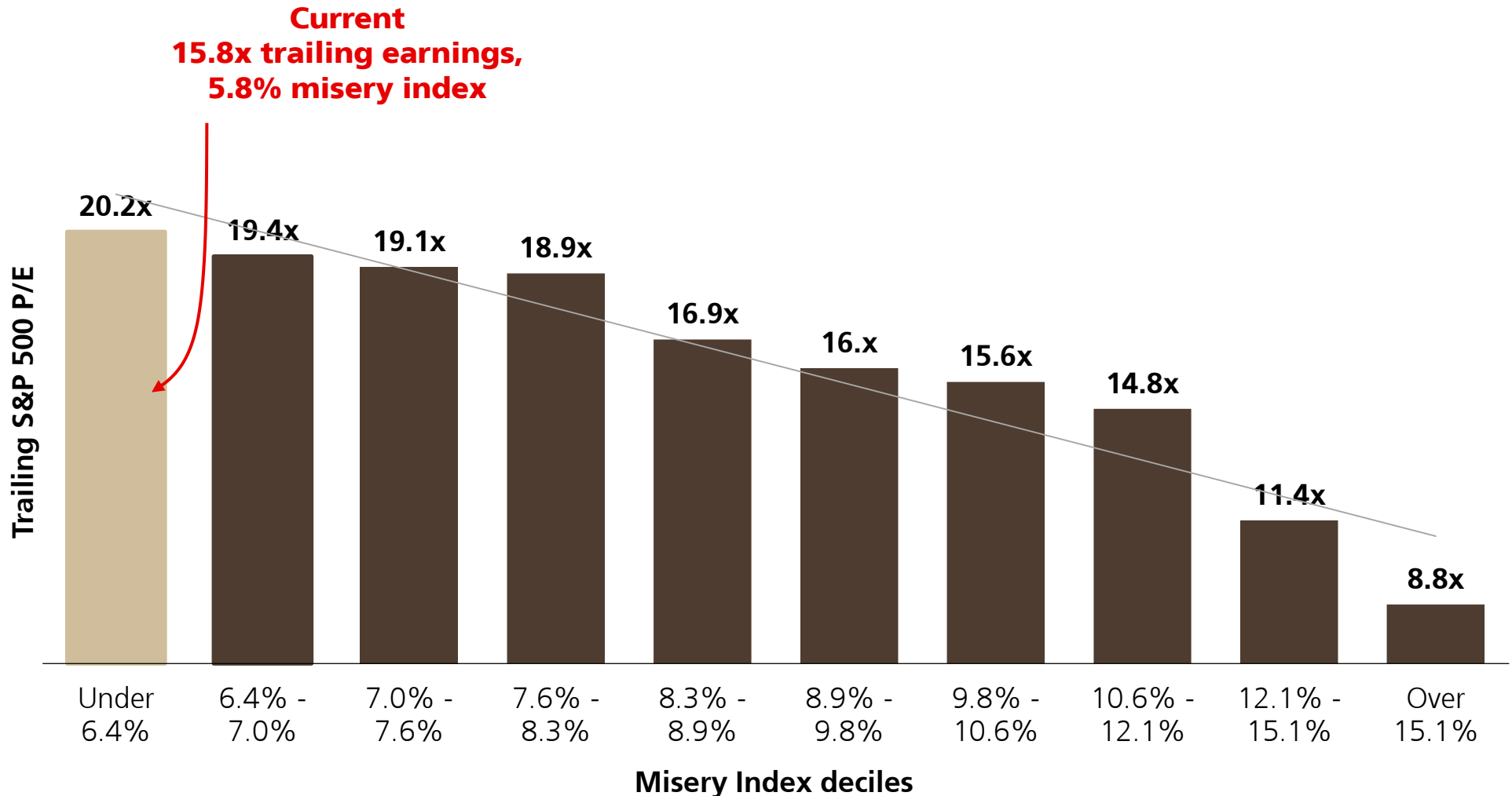
Regional valuations (forward P/E ratio), each relative to its own 30-year average



Source: Bloomberg, UBS, as of 31 December 2018

...especially given the economic backdrop

Average trailing S&P 500 P/E at varying deciles of the Misery Index (inflation rate + unemployment rate)



Source: FactSet, Bloomberg, UBS, as of 4 January 2019

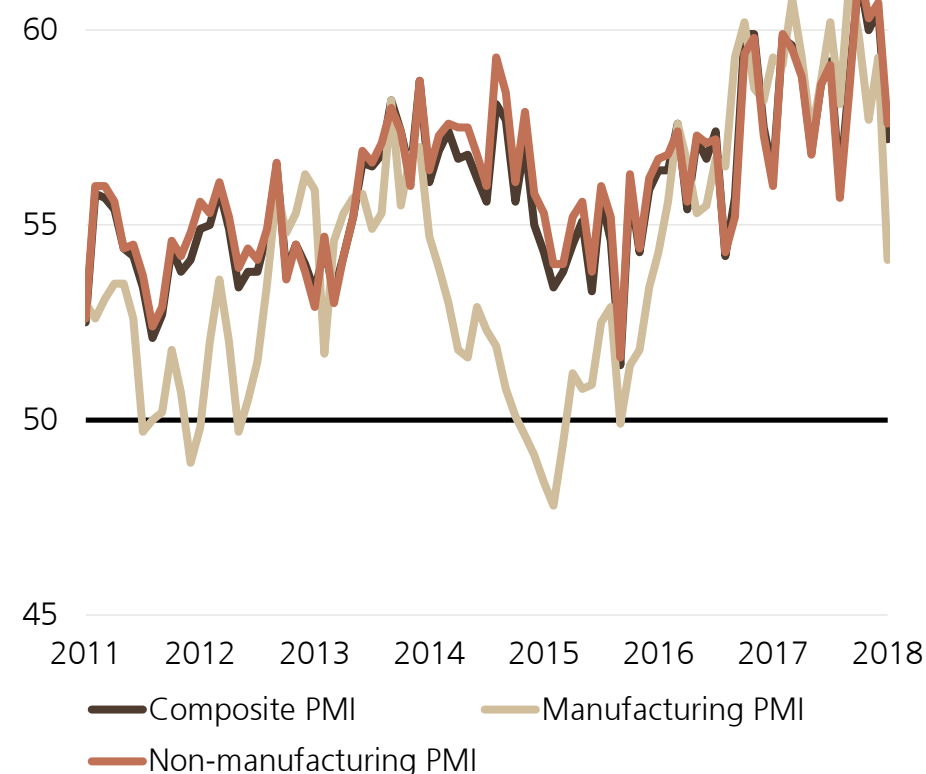
4Q 2018 economic review

Macroeconomic indicators and reactions

- **Economic growth** decelerated from near-record readings earlier in 2018. For example, the ISM manufacturing and non-manufacturing readings each exceeded 60 in 3Q, but dipped back to the mid-50s in 4Q. US real GDP, which had registered a 4.2% quarter-over-quarter reading in 2Q, fell to 3.4% in 3Q, and the St. Louis Fed's GDP Nowcast points to 2.6% growth in 4Q. While this data points to continued solid growth, some of the stimulus from higher government spending and tax reform is starting to fade and we've seen some pockets of weakness (e.g. housing data) that have fueled concerns that rate hikes have started to curb growth.
- **Inflation**, which briefly touched the Fed's 2% target during the summer, also abated, helping reduce the concern that the Fed might need to accelerate rate hikes and bring about a faster end to the cycle. Due in part to weaker housing data, and concerns over a slowing global economy (in particular, China), the pendulum of rate expectations swung in the other direction, and markets have priced out further rate hikes.
- The **US labor market** has remained surprisingly robust. US nonfarm payrolls grew 312,000 in December as additional workers entered the labor force, bringing the unemployment rate back to 3.9% and average hourly earnings up to a 3.2% year-over-year pace.

US PMIs have dipped, but remain firmly in expansion (50+) territory

ISM Purchasing Managers' Indices



Source: Bloomberg, UBS, as of 7 January 2019

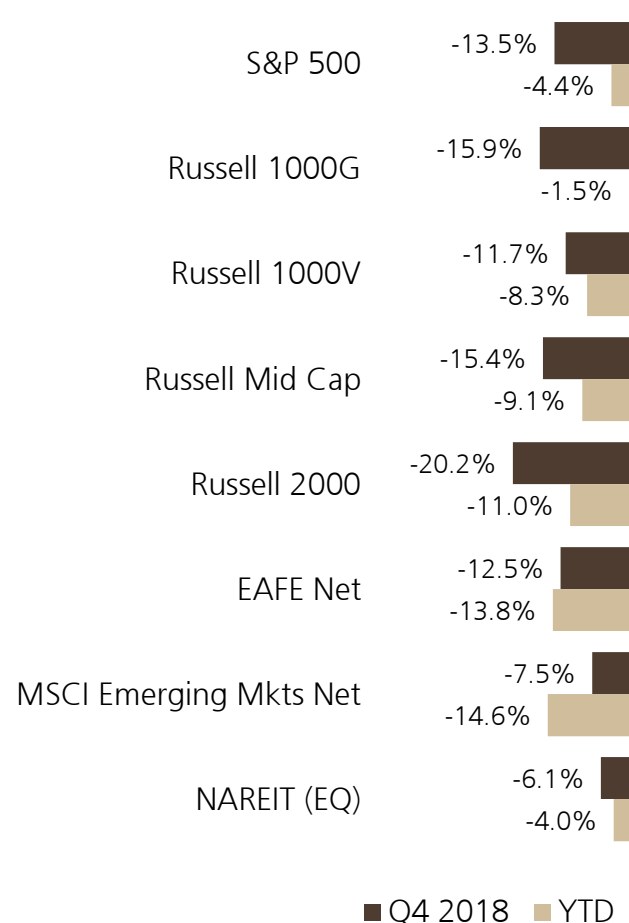
4Q 2018 equity review

US stocks underperform as growth fears become contagious

- The fourth quarter saw a major turning point, with global stocks falling -13%, led by US stock losses as they "caught down" to their international peers.
- Losses were particularly large for parts of the market that had outperformed earlier in the year, such as US large-cap growth and US small caps.
- There were a number of concerns that helped to fuel the selloff, from uncertainty over trade tensions to weakening Chinese growth, and these fears were exacerbated by a fear that monetary policy was becoming too restrictive at a time when fiscal policy was waning.

A reversal of fortunes for equities

Total return for select asset classes



Source: Bloomberg, UBS, as of 31 December 2018

Domestic Equity Style & Market Capitalization

Annualized return, select time periods, in %

Q4-2018

LARGE	(11.7)	(13.8)	(15.9)
MID CAP	(15.0)	(15.4)	(16.0)
SMALL	(18.7)	(20.2)	(21.7)
	VALUE	BLEND	GROWTH

1-Year

LARGE	(8.3)	(4.8)	(1.5)
MID CAP	(12.3)	(9.1)	(4.8)
SMALL	(12.9)	(11.0)	(9.3)
	VALUE	BLEND	GROWTH

3-Year

LARGE	7.0	9.1	11.1
MID CAP	6.1	7.0	8.6
SMALL	7.4	7.4	7.2
	VALUE	BLEND	GROWTH

5-Year

LARGE	5.9	8.2	10.4
MID CAP	5.4	6.3	7.4
SMALL	3.6	4.4	5.1
	VALUE	BLEND	GROWTH

Source: Morningstar, as of 31 December 2018

Representative Indices Used in Style Grid:

Large Cap Value: Russell 1000 Value Index
Large Cap Blend: Russell 1000 Index
Large Cap Growth: Russell 1000 Growth Index

Mid Cap Value: Russell MidCap Value Index
Mid Cap Blend: Russell MidCap Index
Mid Cap Growth: Russell MidCap Growth Index

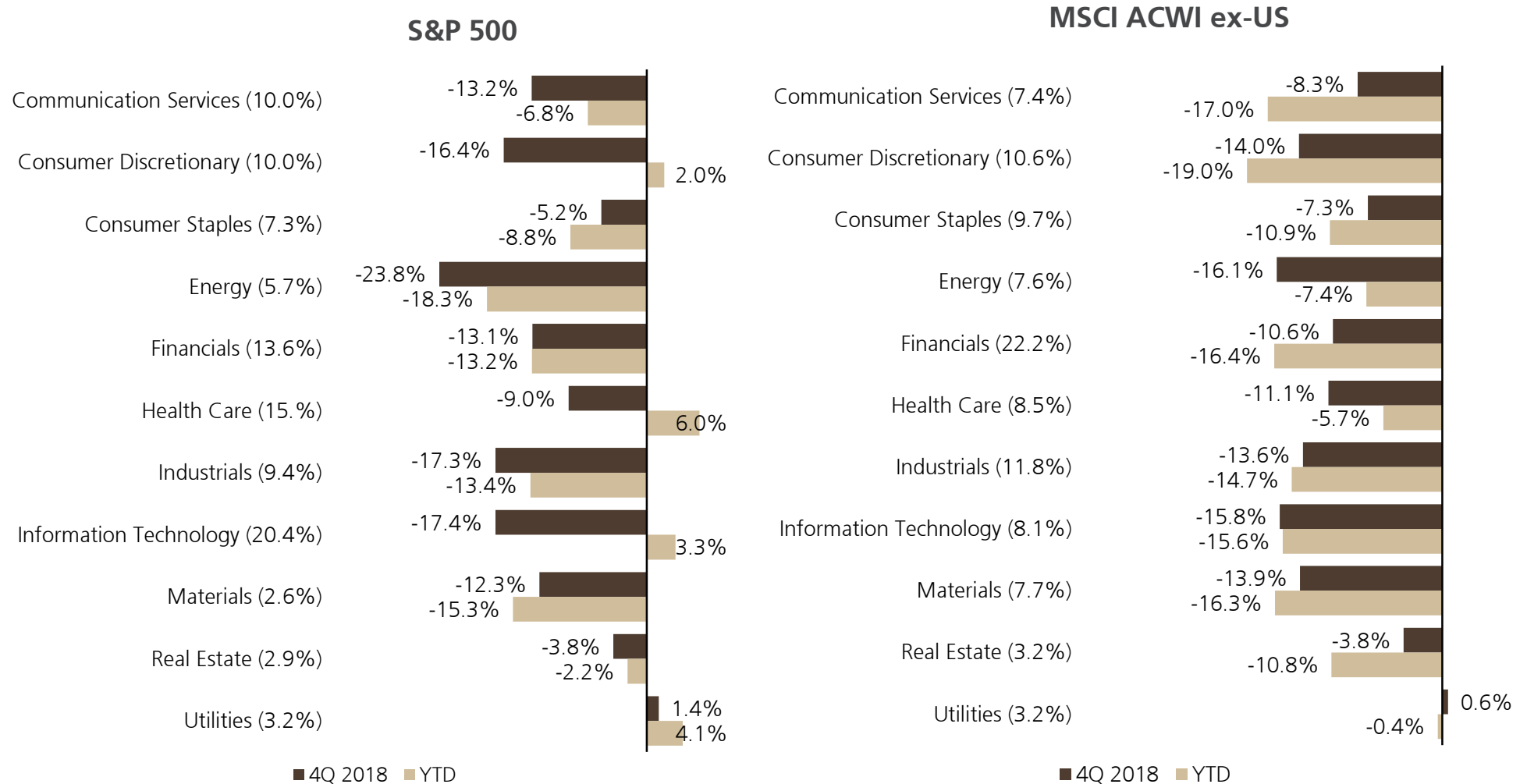
Small Cap Value: Russell 2000 Value Index
Small Cap Blend: Russell 2000 Index
Small Cap Growth: Russell 2000 Growth Index

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Sector Performance S&P 500 and MSCI ACWI ex-US

Sector performance (weight)



Source: FactSet, UBS, as of 31 December 2018

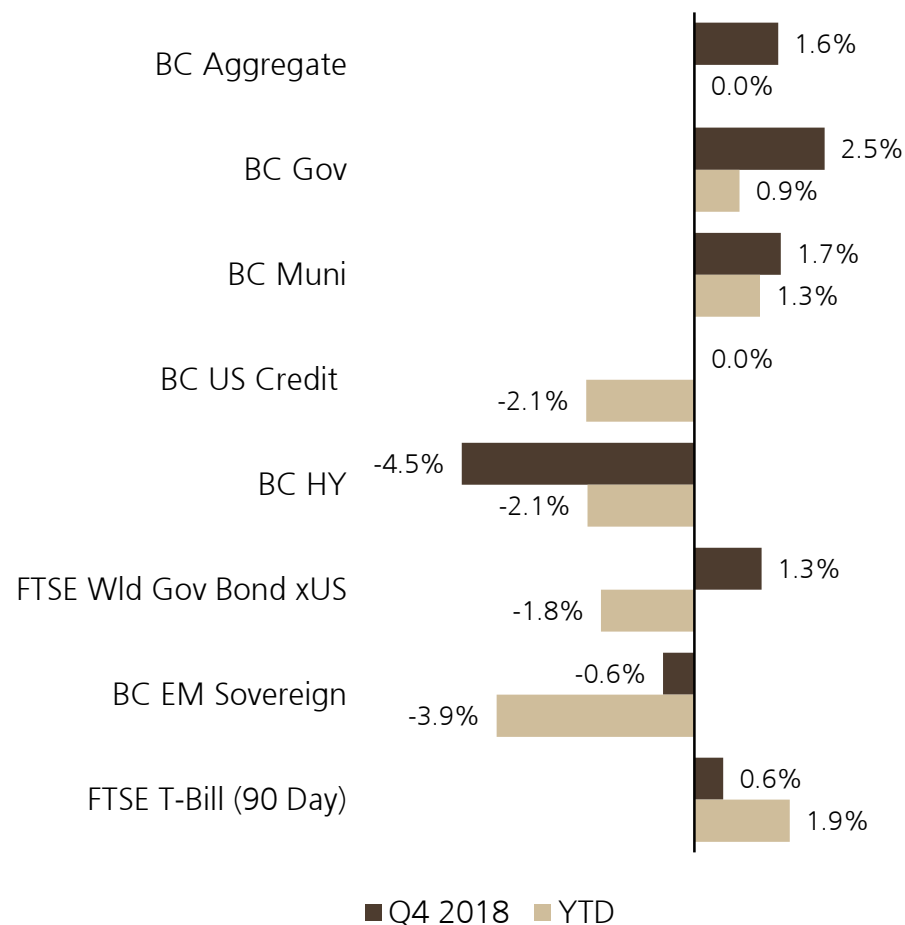
4Q 2018 fixed income review

A flight to quality revives Treasuries and munis

- Interest rates started the quarter by reaching a fresh post-crisis high. The 10-year Treasury yield touched 3.25% in October—and again in November—but then reversed sharply lower due to a flight to quality. As a result, yields retraced most of their 83 basis point (bp) rise and ended up closing the year at 2.68%, just 28bps above the end of 2017.
- The yield spread between 2- and 10-year Treasuries fell as low as 10.7 bps by mid-August, before a re-steepening brought the spread to a closing level of 19 bps. This has helped to assuage concerns that the yield curve would invert (a signal that tends to appear prior to recessions).
- Corporate bonds, which had faced a headwind from the earlier rise interest rates, faced further pressure from credit spread widening. For IG corporate bonds, widening credit spreads were offset by lower interest rates, delivering a flat Q4 return, but the risk off trade shaved 5% off of HY corporate bonds' total return during the quarter.

A Treasury yield U-turn, but credit markets feel the sting

Total return for select asset classes



Source: Bloomberg, UBS, as of 31 December 2018

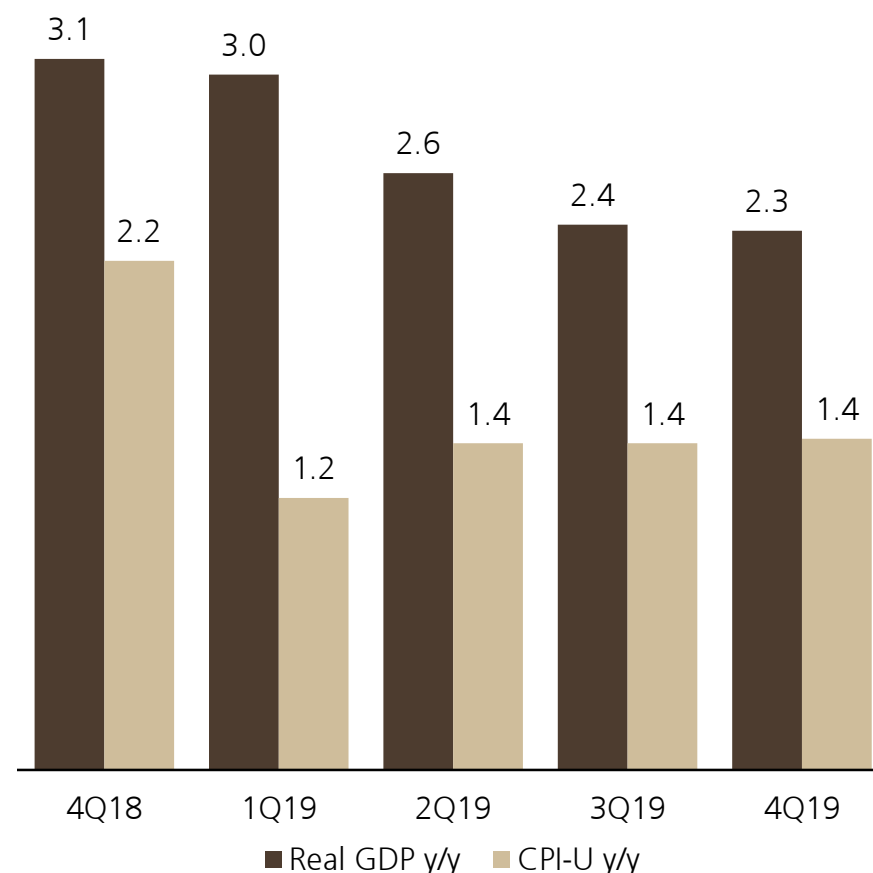
1Q 2019 economic & market outlook

With US growth and inflation set to cool, the Fed can stay on the path to neutral, but trade is a key variable

- **Central bank policy.** As Federal Reserve Chair Jay Powell has noted, the fed funds rate is now within the range of what central banks consider "neutral." While an increasingly tight labor market is generating greater wage growth pressures, we expect the Fed to wait for inflation to return to its 2% before implementing additional rate hikes. Meanwhile, the European Central Bank ended its bond-buying program, leaving the Bank of Japan as the only major central bank adding to its balance sheet. Despite these moves, global central bank policy remains accommodative overall, and we expect ECB rates to remain negative through year-end.
- **Earnings** – 2018 earnings per share growth was 25% in 2018, accompanied by 8% revenue growth and a sizable pickup in investment spending that boosts our intermediate-term outlook. Accounting for a 1–2% drag from trade tariffs, we estimate a 4% EPS growth for the S&P 500 in 2019.
- **Markets** – The S&P 500 ended 2018 at a mere 14.7x next-year earnings, versus 20x when we have this mix of stable growth and contained inflation. So while 2019 will see slower earnings growth than 2018, stock returns can be further fueled by valuation rerating. Meanwhile, interest rates will likely rise again in 2019, with the 10-year yield going back to 3.1% and the Fed producing two more rate hikes. Against this backdrop, we recommend a global and EM equity overweight, but also overweight long-duration US Treasuries as a hedge against weaker growth or rising recession risks. Meanwhile, EM hard-currency bonds continue to offer strong yields and balanced risks.

We expect solid (but decelerating) growth, along with contained inflation

UBS forecasts for year-over-year growth and inflation, in %



Source: UBS, as of 7 January 2019

What trends and catalysts are we watching?

Our House View Briefcase reports address questions on the top of investors' minds

Risk Is the Fed in danger of sparking a US recession?

With a backdrop of decelerating but stable growth, and inflation under control, the Fed can be patient, reducing the risk of triggering a premature recession.

Risk Is China facing a hard landing?

Slowing growth and tariffs are headwinds, but policy is supportive and markets are already pricing in bad news.

Risk Will UK lawmakers approve a Brexit deal?

A Brexit deal is still possible, but is highly uncertain given the political opposition to the proposed terms.

Strategy How can you avoid costly investment mistakes?

The latter stage of an economic cycle is when to begin constructing a financial plan – before the next downturn.

Strategy What do volatile oil prices mean for markets?

The oil market is tightening, and with further supply disruption possible, we expect prices to recover.

Risk Can China and the US resolve their trade tensions?

Conflicts between the US and trade partners won't be easy to resolve, but market damage can be contained.

Risk Will the stock market rebound gain momentum?

The rebound looks promising, but we're looking for further reassurances before calling the rally sustainable.

Risk Should the yield curve worry investors?

The 2s/10s spread is still positive and if it inverts, a recession starts 21 months later by historical averages.

Strategy Does sustainable investing do what it says?

Evidence suggests that investors don't need to sacrifice returns to achieve sustainability goals.

Strategy Is the era of US outperformance ending?

By definition, a global mix of stocks will never outpace every single country market, but it will never be at the bottom of the rankings either.

Source: UBS, as of 11 January 2019

Long-term market view

Calendar year and long-term return statistics for select asset classes

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	1999-2018 return (ann.)	1999-2018 std. dev.
Highest return	66.5%	13.2%	8.4%	11.5%	55.8%	25.6%	34.0%	32.1%	39.4%	12.4%	78.5%	26.9%	9.0%	18.2%	38.8%	13.2%	0.9%	21.3%	37.3%	0.9%	8.3%	19.6%
	27.0%	11.6%	7.2%	10.3%	47.3%	20.2%	13.5%	26.3%	11.2%	5.2%	58.2%	25.5%	7.8%	17.3%	34.8%	13.2%	0.9%	17.1%	25.0%	0.0%	8.3%	33.7%
	21.3%	8.2%	5.3%	-1.4%	40.1%	20.2%	12.7%	18.4%	8.7%	-21.8%	40.5%	18.9%	5.0%	17.3%	33.1%	6.4%	0.5%	13.8%	21.7%	-2.1%	7.4%	19.6%
	20.9%	0.2%	2.5%	-4.2%	38.6%	18.3%	8.0%	15.5%	7.3%	-26.2%	31.8%	16.1%	1.8%	16.4%	22.8%	6.0%	0.1%	12.1%	18.5%	-4.2%	6.4%	16.5%
	18.2%	-3.0%	-2.6%	-6.2%	29.9%	11.4%	6.3%	15.3%	7.0%	-33.8%	28.4%	15.1%	1.5%	16.3%	11.8%	4.9%	-0.8%	11.2%	14.6%	-4.8%	5.8%	18.0%
	13.5%	-5.9%	-3.6%	-15.9%	29.0%	11.1%	4.6%	13.0%	5.8%	-37.6%	27.2%	9.2%	-1.5%	15.8%	7.4%	4.9%	-2.4%	5.2%	14.4%	-9.1%	5.3%	10.3%
	2.4%	-7.8%	-5.6%	-16.2%	21.9%	10.8%	2.7%	11.8%	5.6%	-41.5%	24.8%	7.8%	-4.2%	11.7%	-2.0%	2.5%	-4.4%	2.6%	7.5%	-11.0%	4.3%	3.5%
	-0.8%	-14.2%	-12.4%	-20.5%	4.1%	4.3%	2.7%	4.3%	1.9%	-43.4%	5.9%	6.5%	-12.1%	4.2%	-2.6%	-2.2%	-4.5%	1.0%	3.5%	-13.8%	3.9%	4.8%
Lowest return	-2.2%	-30.8%	-21.4%	-21.7%	2.4%	3.5%	2.4%	3.5%	-1.6%	-53.3%	-2.2%	5.5%	-18.4%	2.0%	-2.6%	-4.9%	-14.9%	1.0%	2.3%	-14.6%	3.5%	21.4%
	US Large-cap Equities US Mid-cap Equities US Small-cap Equities Int'l Dev Equities EM Equities Barclays US Agg Bond US Gov Fixed Income US High Yield Credit Moderate Diversified Portfolio																					

Source: Bloomberg, UBS, as of 31 December 2018.

Note: The Moderate Diversified Portfolio performance calculations are a hypothetical analysis based on historical asset class returns. This backward-looking illustration assumes an investment in asset class indexes represented by the current Strategic Asset Allocation (SAA) for a moderate risk profile investor in a taxable portfolio without non-traditional assets. Performance calculations assume annual rebalancing, don't take into account any prior SAA for this investor profile, and include time periods before the SAA was created. See the latest UBS House View: Investment Strategy Guide (ISG) for the detailed SAA of the taxable portfolio without non-traditional assets. These calculations will not match the performance measurement published in the ISG, which reflects a monthly rebalancing. For periods prior to 2009, this illustration assumes that the Bloomberg Barclays EM Local Currency Government Total Return Index allocation (inception date of 4 July 2008) was invested fully in the Bloomberg Barclays EM USD Aggregate Total Return Index.



Index Flash Report – US Equities

Index	Through 31 December						Annualized Trailing Returns				
	December	YTD	Q1 2018	Q2 2018	Q3 2018	Q4 2018	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
S&P 500	-9.0	-4.4	-0.8	3.4	7.7	-13.5	-4.4	9.3	8.5	12.7	13.1
DJIA	-8.6	-3.5	-2.0	1.3	9.6	-11.3	-3.5	12.9	9.7	12.4	13.2
NASDAQ Comp	-9.4	-2.8	2.6	6.6	7.4	-17.3	-2.8	11.1	11.0	15.7	16.8
Wilshire 5000	-9.3	-5.3	-0.8	3.8	7.3	-14.3	-5.3	9.1	8.1	12.5	13.2
Russell 3000	-9.3	-5.2	-0.6	3.9	7.1	-14.3	-5.2	9.0	7.9	12.5	13.2
Russell 3000G	-8.8	-2.1	1.5	5.9	8.9	-16.3	-2.1	10.9	10.0	13.9	15.2
Russell 3000V	-9.8	-8.6	-2.8	1.7	5.4	-12.2	-8.6	7.0	5.8	10.9	11.1
Russell 1000	-9.1	-4.8	-0.7	3.6	7.4	-13.8	-4.8	9.1	8.2	12.6	13.3
Russell 1000G	-8.6	-1.5	1.4	5.8	9.2	-15.9	-1.5	11.1	10.4	14.1	15.3
Russell 1000V	-9.6	-8.3	-2.8	1.2	5.7	-11.7	-8.3	7.0	5.9	11.0	11.2
Russell 2000	-11.9	-11.0	-0.1	7.8	3.6	-20.2	-11.0	7.4	4.4	10.4	12.0
Russell 2000G	-11.7	-9.3	2.3	7.2	5.5	-21.7	-9.3	7.2	5.1	11.3	13.5
Russell 2000V	-12.1	-12.9	-2.6	8.3	1.6	-18.7	-12.9	7.4	3.6	9.6	10.4
Russell Mid Cap	-9.9	-9.1	-0.5	2.8	5.0	-15.4	-9.1	7.0	6.3	11.5	14.0
Russell Mid Cap Growth	-9.1	-4.8	2.2	3.2	7.6	-16.0	-4.8	8.6	7.4	12.3	15.1
Russell Mid Cap Value	-10.5	-12.3	-2.5	2.4	3.3	-15.0	-12.3	6.1	5.4	10.9	13.0

Source: Morningstar, UBS, as of 31 December 2018

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Index Flash Report – International Equities

Index	Through 31 December						Annualized Trailing Returns				
	December	YTD	Q1 2018	Q2 2018	Q3 2018	Q4 2018	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
EAFE	-4.8	-13.4	-1.4	-1.0	1.4	-12.5	-13.4	3.4	1.0	6.2	6.8
EAFE Net	-4.9	-13.8	-1.5	-1.2	1.4	-12.5	-13.8	2.9	0.5	5.8	6.3
EAFE Growth	-4.8	-12.8	-1.0	0.1	1.5	-13.3	-12.8	2.9	1.6	6.5	7.1
EAFE Value	-4.9	-14.8	-2.0	-2.6	1.2	-11.7	-14.8	2.8	-0.6	5.0	5.5
EAFE Ex-Japan	-4.3	-14.1	-2.3	-0.7	0.6	-12.0	-14.1	2.7	-0.2	5.4	6.6
MSCI World	-7.6	-8.2	-1.2	1.9	5.1	-13.3	-8.2	6.9	5.1	9.7	10.3
MSCI World Net	-7.6	-8.7	-1.3	1.7	5.0	-13.4	-8.7	6.3	4.6	9.0	9.7
MSCI World xUS Net	-5.2	-14.1	-2.0	-0.7	1.3	-12.8	-14.1	3.1	0.3	5.3	6.2
MSCI Emerging Mkts	-2.6	-14.2	1.5	-7.9	-0.9	-7.4	-14.2	9.7	2.0	3.6	8.4
MSCI Emerging Mkts Net	-2.7	-14.6	1.4	-8.0	-1.1	-7.5	-14.6	9.2	1.6	3.2	8.0
MSCI ACWI	-7.0	-8.9	-0.8	0.7	4.4	-12.7	-8.9	7.2	4.8	9.0	10.0
MSCI ACWI Net	-7.0	-9.4	-1.0	0.5	4.3	-12.8	-9.4	6.6	4.3	8.4	9.5
MSCI ACWI xUS	-4.5	-13.8	-1.1	-2.4	0.8	-11.4	-13.8	5.0	1.1	5.3	7.1
MSCI ACWI xUS Net	-4.5	-14.2	-1.2	-2.6	0.7	-11.5	-14.2	4.5	0.7	4.8	6.6
MSCI United Kingdom	-3.8	-14.2	-3.9	2.9	-1.7	-11.8	-14.2	1.6	-1.7	3.5	6.8
MSCI Japan	-6.7	-12.9	0.8	-2.8	3.7	-14.2	-12.9	3.4	3.1	6.9	5.3
MSCI Germany	-5.8	-22.2	-3.6	-4.0	-0.6	-15.5	-22.2	0.7	-2.1	6.4	5.6
MSCI France	-4.6	-12.8	0.3	-0.5	2.8	-15.0	-12.8	5.6	1.2	7.2	5.5
MSCI China	-6.1	-18.9	1.8	-3.5	-7.5	-10.7	-18.9	8.0	4.6	6.9	8.3
MSCI India	-0.1	-7.3	-7.0	-0.6	-2.2	2.5	-7.3	8.2	8.1	8.6	10.7
MSCI Korea	-1.9	-20.9	-0.5	-9.2	0.7	-13.1	-20.9	8.2	1.0	4.1	9.7
MSCI Brazil	-1.8	-0.5	12.4	-26.4	6.1	13.4	-0.5	27.1	0.7	-2.0	5.1
MSCI Mexico	3.3	-15.5	0.9	-3.6	6.9	-18.8	-15.5	-3.8	-7.1	-1.6	4.6
MSCI Russia	-3.5	-0.7	9.4	-6.0	6.2	-9.0	-0.7	17.4	-2.0	0.5	7.3
EURO STOXX 50	-4.4	-16.2	-1.5	-2.3	-0.2	-12.9	-16.2	1.6	-1.8	4.8	3.2

Source: Morningstar, UBS, as of 31 December 2018

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Index Flash Report – Fixed Income

Index	Through 31 December						Annualized Trailing Returns				
	September	YTD	Q1 2018	Q2 2018	Q3 2018	Q4 2018	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
BC Aggregate	1.8	0.0	-1.5	-0.2	0.0	1.6	0.0	2.1	2.5	2.1	3.5
BC Int Aggregate	1.5	0.9	-1.1	0.1	0.1	1.8	0.9	1.7	2.1	1.8	3.1
FTSE Broad Inv Grd	1.9	-0.0	-1.5	-0.2	0.0	1.6	-0.0	2.1	2.5	2.1	3.4
BoA-ML C/G 1-3 yr	0.8	1.6	-0.2	0.3	0.4	1.2	1.6	1.3	1.0	1.1	1.6
BC Int G/C	1.3	0.9	-1.0	0.0	0.2	1.7	0.9	1.7	1.9	1.7	2.9
BC GC	1.9	-0.4	-1.6	-0.3	0.1	1.5	-0.4	2.2	2.5	2.1	3.5
BC US TIPS	0.5	-1.3	-0.8	0.8	-0.8	-0.4	-1.3	2.1	1.7	0.9	3.6
BC US Treasury	2.2	0.9	-1.2	0.1	-0.6	2.6	0.9	1.4	2.0	1.3	2.1
BC Gov	2.1	0.9	-1.1	0.1	-0.6	2.5	0.9	1.4	2.0	1.3	2.1
BC US Credit	1.5	-2.1	-2.1	-0.9	0.9	0.0	-2.1	3.2	3.2	3.3	5.5
BC Global Aggregate xUS	2.2	-2.1	3.6	-4.8	-1.7	0.9	-2.1	3.1	-0.0	0.1	1.7
BC Global Aggregate	2.0	-1.2	1.4	-2.8	-0.9	1.2	-1.2	2.7	1.1	1.0	2.5
BC Muni	1.2	1.3	-1.1	0.9	-0.2	1.7	1.3	2.3	3.8	3.3	4.9
BC Agency	1.4	1.3	-0.5	0.0	-0.0	1.9	1.3	1.6	1.9	1.4	2.1
BC Mortgages	1.8	1.0	-1.2	0.2	-0.1	2.1	1.0	1.7	2.5	2.0	3.1
BC ABS	0.8	1.8	-0.4	0.4	0.5	1.2	1.8	1.8	1.7	1.7	4.6
BoA-ML High Yield	-2.2	-2.3	-0.9	1.0	2.4	-4.7	-2.3	7.3	3.8	5.9	11.0
BoA-ML Treasury 1-5 yr	1.1	1.5	-0.4	0.1	0.1	1.7	1.5	1.1	1.1	0.9	1.3
FTSE T-Bill (90 Day)	0.2	1.9	0.3	0.4	0.5	0.6	1.9	1.0	0.6	0.4	0.4
FTSE Wld Gov Bond	2.4	-0.8	2.5	-3.4	-1.6	1.8	-0.8	2.7	0.8	0.2	1.5
FTSE Wld Gov Bond xUS	2.5	-1.8	4.4	-5.1	-2.2	1.3	-1.8	3.3	0.3	-0.3	1.3

Source: Morningstar, UBS, as of 31 December 2018

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Statement of Risk

1. Equity markets are difficult to forecast because of fluctuations in the economy, investor psychology, geopolitical conditions, and other important variables.
2. Bond market returns are difficult to forecast because of fluctuations in the economy, investor psychology, geopolitical conditions and other important variables. Corporate bonds are subject to a number of risks, including credit risk, interest rate risk, liquidity risk, and event risk. Though historical default rates are low on investment grade corporate bonds, perceived adverse changes in the credit quality of an issuer may negatively affect the market value of securities. As interest rates rise, the value of a fixed coupon security will likely decline. Bonds are subject to market value fluctuations, given changes in the level of risk-free interest rates. Not all bonds can be sold quickly or easily on the open market. Prospective investors should consult their tax advisors concerning the federal, state, local, and non-U.S. tax consequences of owning any securities referenced in this report.
3. Prospective investors should consult their tax advisors concerning the federal, state, local, and non-U.S. tax consequences of owning preferred stocks. Preferred stocks are subject to market value fluctuations, given changes in the level of interest rates. For example, if interest rates rise, the value of these securities could decline. If preferred stocks are sold prior to maturity, price and yield may vary. Adverse changes in the credit quality of the issuer may negatively affect the market value of the securities. Most preferred securities may be redeemed at par after five years. If this occurs, holders of the securities may be faced with a reinvestment decision at lower future rates. Preferred stocks are also subject to other risks, including illiquidity and certain special redemption provisions.
4. Although historical default rates are very low, all municipal bonds carry credit risk, with the degree of risk largely following the particular bond's sector. Additionally, all municipal bonds feature valuation, return, and liquidity risk. Valuation tends to follow internal and external factors, including the level of interest rates, bond ratings, supply factors, and media reporting. These can be difficult or impossible to project accurately. Also, most municipal bonds are callable and/or subject to earlier than expected redemption, which can reduce an investor's total return. Because of the large number of municipal issuers and credit structures, not all bonds can be easily or quickly sold on the open market.

Appendix

Emerging Market Investments

Investors should be aware that Emerging Market assets are subject to, amongst others, potential risks linked to currency volatility, abrupt changes in the cost of capital and the economic growth outlook, as well as regulatory and socio-political risk, interest rate risk and higher credit risk. Assets can sometimes be very illiquid and liquidity conditions can abruptly worsen. WMR generally recommends only those securities it believes have been registered under Federal U.S. registration rules (Section 12 of the Securities Exchange Act of 1934) and individual State registration rules (commonly known as "Blue Sky" laws). Prospective investors should be aware that to the extent permitted under US law, WMR may from time to time recommend bonds that are not registered under US or State securities laws. These bonds may be issued in jurisdictions where the level of required disclosures to be made by issuers is not as frequent or complete as that required by US laws.

For more background on emerging markets generally, see the WMR Education Notes "Investing in Emerging Markets (Part 1): Equities", 27 August 2007, "Emerging Market Bonds: Understanding Emerging Market Bonds," 12 August 2009 and "Emerging Markets Bonds: Understanding Sovereign Risk," 17 December 2009.

Investors interested in holding bonds for a longer period are advised to select the bonds of those sovereigns with the highest credit ratings (in the investment grade band). Such an approach should decrease the risk that an investor could end up holding bonds on which the sovereign has defaulted. Sub-investment grade bonds are recommended only for clients with a higher risk tolerance and who seek to hold higher yielding bonds for shorter periods only.

Non-Traditional Assets

Non-traditional asset classes are alternative investments that include hedge funds, private equity, real estate, and managed futures (collectively, alternative investments). Interests of alternative investment funds are sold only to qualified investors, and only by means of offering documents that include information about the risks, performance and expenses of alternative investment funds, and which clients are urged to read carefully before subscribing and retain. An investment in an alternative investment fund is speculative and involves significant risks. Specifically, these investments (1) are not mutual funds and are not subject to the same regulatory requirements as mutual funds; (2) may have performance that is volatile, and investors may lose all or a substantial amount of their investment; (3) may engage in leverage and other speculative investment practices that may increase the risk of investment loss; (4) are long-term, illiquid investments, there is generally no secondary market for the interests of a fund, and none is expected to develop; (5) interests of alternative investment funds typically will be illiquid and subject to restrictions on transfer; (6) may not be required to provide periodic pricing or valuation information to investors; (7) generally involve complex tax strategies and there may be delays in distributing tax information to investors; (8) are subject to high fees, including management fees and other fees and expenses, all of which will reduce profits.

Interests in alternative investment funds are not deposits or obligations of, or guaranteed or endorsed by, any bank or other insured depository institution, and are not federally insured by the Federal Deposit Insurance Corporation, the Federal Reserve Board, or any other governmental agency. Prospective investors should understand these risks and have the financial ability and willingness to accept them for an extended period of time before making an investment in an alternative investment fund and should consider an alternative investment fund as a supplement to an overall investment program.

In addition to the risks that apply to alternative investments generally, the following are additional risks related to an investment in these strategies:

- **Hedge Fund Risk:** There are risks specifically associated with investing in hedge funds, which may include risks associated with investing in short sales, options, small-cap stocks, "junk bonds," derivatives, distressed securities, non-U.S. securities and illiquid investments.
- **Managed Futures:** There are risks specifically associated with investing in managed futures programs. For example, not all managers focus on all strategies at all times, and managed futures strategies may have material directional elements.
- **Real Estate:** There are risks specifically associated with investing in real estate products and real estate investment trusts. They involve risks associated with debt, adverse changes in general economic or local market conditions, changes in governmental, tax, real estate and zoning laws or regulations, risks associated with capital calls and, for some real estate products, the risks associated with the ability to qualify for favorable treatment under the federal tax laws.
- **Private Equity:** There are risks specifically associated with investing in private equity. Capital calls can be made on short no-tice, and the failure to meet capital calls can result in significant adverse consequences including, but not limited to, a total loss of investment.
- **Foreign Exchange/Currency Risk:** Investors in securities of issuers located outside of the United States should be aware that even for securities denominated in U.S. dollars, changes in the exchange rate between the U.S. dollar and the issuer's "home" currency can have unexpected effects on the market value and liquidity of those securities. Those securities may also be affected by other risks (such as political, economic or regulatory changes) that may not be readily known to a U.S. investor.

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Performance Summary - Gross of Fees
Cobb County Employees Retirement System
As of December 31, 2018

Account	Inception Date	12/31/2018 Market Value	Latest QTR Ranking	%tile	1 Year Ranking	%tile	3 Year Ranking	%tile	5 Year Ranking	%tile	7 Year Ranking	%tile	Inception		
Composite	06/30/1994	\$593,243,859	-10.33%	-5.69%	-5.69%	22	-0.01%	22	2.45%	30	3.01%	6	2.69%	31	4.49%
Policy Index		-8.95%	-5.73%	-5.73%	-5.73%	40	-0.42%	40	2.19%	43	2.53%	32	2.14%	66	3.98%
Dynamic Index		-9.43%	-5.71%	-5.71%	-5.71%	43	-0.49%	43	2.66%	19	2.34%	47	3.49%	3	2.82%
Fixed Income															
Richmond Capital Management	07/31/2007	\$73,993,799	1.54%	-0.01%	-0.01%	22	-0.01%	22	2.45%	30	3.01%	6	2.69%	31	4.49%
Barclays Govt/Credit		1.46%	-0.42%	-0.42%	-0.42%	40	-0.42%	40	2.19%	43	2.53%	32	2.14%	66	3.98%
Blackrock Strategic Income Opps Fund	05/31/2011	\$44,602,476	-0.53%	-0.49%	-0.49%	43	-0.49%	43	2.66%	19	2.34%	47	3.49%	3	2.82%
Barclays Aggregate		1.64%	0.01%	0.01%	0.01%	21	0.01%	21	2.06%	52	2.52%	33	2.10%	69	2.55%
Delaware Diversified Income Fund	05/31/2011	\$44,072,792	0.11%	-1.84%	-1.84%	94	-1.84%	94	2.22%	42	2.29%	51	2.40%	49	2.55%
Barclays Aggregate		1.64%	0.01%	0.01%	0.01%	21	0.01%	21	2.06%	52	2.52%	33	2.10%	69	2.55%
Large Cap Value															
Eagle Capital Large Value	12/31/2002	\$63,302,998	-13.58%	-4.13%	-4.13%	11	-4.13%	11	9.90%	5	9.08%	1	13.86%	1	12.47%
Russell 1000 Value		-11.72%	-8.27%	-8.27%	-8.27%	43	-8.27%	43	6.95%	49	5.95%	45	11.02%	50	8.35%
Large Cap Core															
Vanguard 500 Index	05/31/1999	\$65,936,973	-13.66%	-4.51%	-4.51%	18	-4.51%	18	9.18%	9	8.43%	2	12.65%	7	5.50%
S&P 500 Index		-13.52%	-4.38%	-4.38%	-4.38%	15	-4.38%	15	9.26%	6	8.49%	1	12.70%	5	5.40%
Large Cap Growth															
TCW Large Cap Growth	04/30/2013	\$33,955,518	-15.53%	2.53%	2.53%	17	2.53%	17	7.97%	87	9.00%	58			11.50%
Russell 1000 Growth		-15.89%	-1.51%	-1.51%	-1.51%	55	-1.51%	55	11.15%	21	10.40%	20			12.58%
Westfield Capital Large Growth	07/31/2007	\$41,333,133	-16.20%	-1.83%	-1.83%	55	-1.83%	55	10.14%	50	9.27%	53	14.18%	31	7.98%
Russell 1000 Growth		-15.89%	-1.51%	-1.51%	-1.51%	55	-1.51%	55	11.15%	21	10.40%	20	14.14%	33	9.03%
Mid Cap Core															
Vanguard Midcap Index Fund	05/31/2004	\$37,244,374	-15.47%	-9.20%	-9.20%	18	-9.20%	18	6.41%	34	6.22%	6	11.35%	4	9.12%
Russell Midcap		-15.37%	-9.06%	-9.06%	-9.06%	17	-9.06%	17	7.04%	22	6.26%	5	11.49%	1	8.87%
Small Cap Value															
Vaughan Nelson	04/30/2009	\$18,728,561	-17.88%	-13.56%	-13.56%	43	-13.56%	43	4.24%	86	4.73%	41	10.85%	43	13.11%
Russell 2000 Value		-18.67%	-12.86%	-12.86%	-12.86%	37	-12.86%	37	7.37%	33	3.61%	70	9.57%	78	11.60%
Small Cap Growth															
Eagle Small Cap Growth	10/31/2010	\$16,715,707	-20.28%	-0.44%	-0.44%	34	-0.44%	34	10.95%	44	8.08%	23	13.08%	46	12.45%
Russell 2000 Growth		-21.65%	-9.31%	-9.31%	-9.31%	84	-9.31%	84	7.24%	85	5.13%	80	11.25%	86	10.73%

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Performance Summary - Gross of Fees
Cobb County Employees Retirement System
As of December 31, 2018

Account	Inception Date	12/31/2018 Market Value	Latest QTR	%tile Ranking	YTD	%tile Ranking	1 Year	%tile Ranking	3 Year	%tile Ranking	5 Year	%tile Ranking	7 Year	%tile Ranking	Inception
International Equity															
Vanguard Total International Stock Fund	11/30/2006	\$34,017,240	-11.66%	18	-14.39%	35	-14.39%	35	4.57%	3	0.97%	14	5.24%	49	1.91%
International Index			-11.46%	14	-14.20%	31	-14.20%	31	4.48%	5	0.68%	23	5.52%	35	1.38%
Dodge & Cox International Stock Fund	07/31/2007	\$31,508,799	-12.39%	33	-17.98%	85	-17.98%	85	3.25%	24	-0.52%	68	5.81%	23	1.18%
International Index			-11.46%	14	-14.20%	31	-14.20%	31	4.48%	5	0.68%	23	5.52%	35	0.42%
Oppenheimer International Growth	05/31/2014	\$31,576,459	-14.63%	81	-19.22%	94	-19.22%	94	0.27%	91					-1.33%
MSCI AC Wld X US Net			-11.46%	14	-14.20%	31	-14.20%	31	4.48%	5					-0.08%
Global Allocation															
Global Allocation	03/31/2010	\$56,255,032	-8.39%	58	-6.83%	30	-6.83%	30	4.99%	13	3.24%	9	6.05%	22	5.78%
HFRI Global Hedge			-5.56%	9	-6.72%	25	-6.72%	25	0.45%	99	-0.59%	93	1.01%	99	0.13%

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Performance Summary - Gross of Fees
Cobb OPEB
As of December 31, 2018

Account	Inception Date	12/31/2018 Market Value	Latest QTR Ranking	%tile	YTD Ranking	%tile	1 Year Ranking	%tile	3 Year Ranking	%tile	5 Year Ranking	%tile	7 Year Ranking	%tile	Inception
Composite	09/30/2016	\$113,097,682	-10.14%		-6.17%		-6.17%								4.99%
Policy Index			-8.94%		-5.71%		-5.71%								4.56%
Composite Benchmark Policy Index			-9.13%		-5.70%		-5.70%								
Fixed Income															
Richmond Capital Management	09/30/2017	\$14,934,473	1.52%	17	0.02%	20	0.02%	20							0.59%
<i>BB Gov/Cr Bond</i>			1.46%	21	-0.42%	40	-0.42%	40							0.05%
Blackrock Strategic Income I	09/30/2017	\$8,227,060	-0.47%	97	-0.59%	49	-0.59%	49							0.21%
<i>BB Agg Bond</i>			1.64%	10	0.01%	21	0.01%	21							0.32%
Delaware Diversified Income I	09/30/2017	\$9,141,024	0.04%	90	-2.17%	99	-2.17%	99							-1.29%
<i>BB Agg Bond</i>			1.64%	10	0.01%	21	0.01%	21							0.32%
Domestic Equity															
Eagle Capital Large Value	09/30/2017	\$11,504,940	-13.74%	58	-5.35%	19	-5.35%	19							0.90%
<i>Russell 1000 Value</i>			-11.72%	28	-8.27%	43	-8.27%	43							-2.71%
Vanguard 500 Index	09/30/2017	\$12,177,109	-13.53%	36	-4.42%	16	-4.42%	16							1.53%
<i>S&P 500 Index</i>			-13.52%	36	-4.38%	15	-4.38%	15							1.57%
TCW Large Cap Growth	09/30/2017	\$6,375,868	-15.70%	56	2.61%	16	2.61%	16							6.51%
<i>Russell 1000 Growth</i>			-15.89%	63	-1.51%	55	-1.51%	55							4.95%
Westfield Capital Large Growth	09/30/2017	\$7,147,820	-16.19%	66	-1.70%	55	-1.70%	55							3.30%
<i>Russell 1000 Growth</i>			-15.89%	63	-1.51%	55	-1.51%	55							4.95%
Vanguard Mid-Cap Index Fund Admiral	09/30/2017	\$6,393,842	-15.46%	29	-9.23%	18	-9.23%	18							-3.30%
<i>Russell Midcap</i>			-15.37%	28	-9.06%	17	-9.06%	17							-2.84%
Vaughan Nelson	09/30/2017	\$3,344,343	-18.20%	33	-14.26%	53	-14.26%	53							-8.92%
<i>Russell 2000 Value</i>			-18.67%	45	-12.86%	37	-12.86%	37							-8.97%
Eagle Small Cap Growth Fund	09/30/2017	\$2,725,391	-21.73%	70	-10.01%	90	-10.01%	90							-3.66%
<i>Russell 2000 Growth</i>			-21.65%	70	-9.31%	84	-9.31%	84							-4.14%
International Equity															
Vanguard Total International Stock Fund	09/30/2017	\$7,446,905	-11.63%	16	-14.36%	34	-14.36%	34							-8.23%
<i>MSCI ACWI ex US Net</i>			-11.40%	12	-14.14%	29	-14.14%	29							-7.95%
Dodge & Cox International Stock Fund	09/30/2017	\$5,965,187	-12.39%	33	-17.98%	85	-17.98%	85							-13.84%
<i>MSCI ACWI ex US Net</i>			-11.40%	12	-14.14%	29	-14.14%	29							-7.95%
Oppenheimer International Growth	09/30/2017	\$6,594,300	-14.61%	80	-19.29%	94	-19.29%	94							-13.29%
<i>MSCI ACWI ex US Net</i>			-11.40%	12	-14.14%	29	-14.14%	29							-7.95%

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Performance Summary - Gross of Fees
Cobb OPEB
As of December 31, 2018

Account	Inception Date	12/31/2018 Market Value	Latest QTR	%tile Ranking	YTD	%tile Ranking	1 Year	%tile Ranking	3 Year	%tile Ranking	5 Year	%tile Ranking	7 Year	%tile Ranking	Inception
Global Allocation															
Global Allocation	09/30/2017	\$11,119,419	-8.42%	58	-6.86%	31	-6.86%	31							-2.89%
HFRX Global Hedge			-5.56%	9	-6.72%	25	-6.72%	25							-4.28%

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb County Employees Retirement System
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Total Portfolio

Please contact your UBS Institutional Consultant if you have any questions regarding this report, if your financial situation, individual needs or investment objectives have changed, or if you would like to initiate or modify any investment restrictions on this account.

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Cobb County Employees Retirement System December 31, 2018

Accounts Included in this Report

UBS account statements represent the only official record of holdings, balances, transactions and security values of assets in your UBS Financial Services Inc. accounts and are not replaced, amended or superseded by any information presented in this report. As an accommodation to you, values of accounts that you hold at other financial institutions may be included as part of your UBS IC Consulting Services Agreement based on information, including valuation information, provided to us. This report does not include assets held in your UBS account(s) that are not a part of the Institutional Consulting program unless you have requested that those accounts be included in this report. UBS does not independently verify or guarantee the accuracy or validity of any information provided by sources other than UBS Financial Services Inc. Please see the 'Important Information' section at the end of this report for detailed valuation information.

Account Name	Account Number	Custodian Name
Vaughan Nelson	79xxx49	SunTrust Bank
Blackrock Global Allocation Fund	79xxx61	SunTrust Bank
First Eagle Global Fund	79xxx62	SunTrust Bank
Natixis Loomis Sayles Global Equity	79xxx63	SunTrust Bank
Oppenheimer International Growth	11xxx66	SunTrust Bank
Dodge & Cox International Stock Fund	79xxx35	SunTrust Bank
Vanguard Total International Stock Fund	79xxx53	SunTrust Bank
Eagle Small Cap Growth	79xxx85	SunTrust Bank
Richmond Capital Management	79xxx37	SunTrust Bank
Vanguard Midcap Index Fund	11xxx24	SunTrust Bank
Westfield Capital Large Growth	79xxx32	SunTrust Bank
TCW Large Cap Growth	79xxx76	SunTrust Bank
Vanguard 500 Index	11xxx18	SunTrust Bank
Eagle Capital Large Value	11xxx14	SunTrust Bank
Delaware Diversified Income Fund	79xxx84	SunTrust Bank
Blackrock Strategic Income Opps Fund	79xxx86	SunTrust Bank

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Performance Analysis

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Performance Analysis

The primary index comparison for your portfolio and each of its asset classes is listed below.

CONSOLIDATED PORTFOLIO BENCHMARK

07/01/2013 - Present

- 45% Russell 3000
- 25% Bloomberg Barclays Aggregate Bond
- 20% MSCI AC World X US Net
- 10% HFRX Global Hedge Fund Index

10/01/2010 - 06/30/2013

- 45% Russell 3000
- 30% Bloomberg Barclays Aggregate Bond
- 15% MSCI Net EAFE
- 10% HFRX Global Hedge Fund Index

04/01/2010 - 09/30/2010

- 42% Russell 3000
- 35% Bloomberg Barclays Aggregate Bond
- 13% MSCI Net EAFE
- 10% HFRX Global Hedge Fund Index

10/01/2009 - 03/31/2010

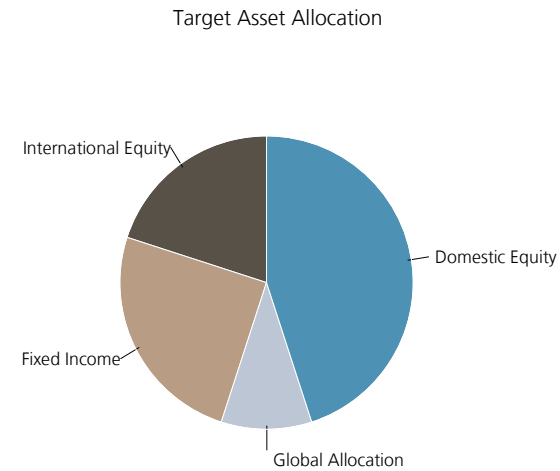
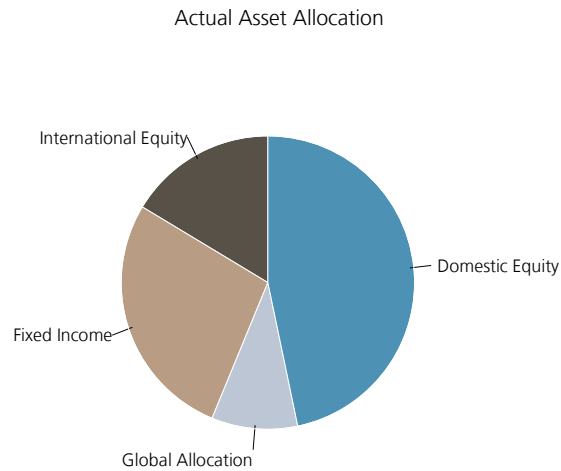
- 50% Russell 3000
- 35% Bloomberg Barclays Aggregate Bond
- 15% MSCI Net EAFE

06/30/1994 - 09/30/2009

- 45% Bloomberg Barclays Aggregate Bond
- 45% Russell 3000
- 10% MSCI Net EAFE

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Actual vs Target Asset Allocation As of December 31, 2018



	Market Value Actual	Percent Actual	Market Value Target	Percent Target	Market Value Difference	Percent Difference
Fixed Income	162,669,066.7	27.4%	148,310,964.7	25.0%	14,358,102.0	2.4%
Domestic Equity	277,217,263.2	46.7%	266,959,736.5	45.0%	10,257,526.7	1.7%
International Equity	97,102,497.4	16.4%	118,648,771.8	20.0%	(21,546,274.4)	(3.6%)
Global Allocation	56,255,031.6	9.5%	59,324,385.9	10.0%	(3,069,354.2)	(0.5%)
Total Fund	\$593,243,858.9	100.0%	\$593,243,858.9	100.0%	\$0.0	0.0%

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Performance Summary - Gross of Fees
Cobb County Employees Retirement System
As of December 31, 2018

Account	Inception Date	12/31/2018 Market Value	Latest QTR	%tile Ranking	YTD	%tile Ranking	1 Year	%tile Ranking	3 Year	%tile Ranking	5 Year	%tile Ranking	7 Year	%tile Ranking	Inception
Composite	06/30/1994	\$593,243,859	-10.33%		-5.69%		-5.69%		5.86%		4.88%		8.12%		7.81%
Policy Index			-8.95%		-5.73%		-5.73%		5.62%		4.39%		7.28%		7.35%
Dynamic Index			-9.43%		-5.71%		-5.71%		5.66%		4.46%		7.37%		
Fixed Income															
Richmond Capital Management	07/31/2007	\$73,993,799	1.54%	15	-0.01%	22	-0.01%	22	2.45%	30	3.01%	6	2.69%	31	4.49%
Barclays Govt/Credit			1.46%	21	-0.42%	40	-0.42%	40	2.19%	43	2.53%	32	2.14%	66	3.98%
Blackrock Strategic Income Opps Fund	05/31/2011	\$44,602,476	-0.53%	98	-0.49%	43	-0.49%	43	2.66%	19	2.34%	47	3.49%	3	2.82%
Barclays Aggregate			1.64%	10	0.01%	21	0.01%	21	2.06%	52	2.52%	33	2.10%	69	2.55%
Delaware Diversified Income Fund	05/31/2011	\$44,072,792	0.11%	88	-1.84%	94	-1.84%	94	2.22%	42	2.29%	51	2.40%	49	2.55%
Barclays Aggregate			1.64%	10	0.01%	21	0.01%	21	2.06%	52	2.52%	33	2.10%	69	2.55%
Large Cap Value															
Eagle Capital Large Value	12/31/2002	\$63,302,998	-13.58%	56	-4.13%	11	-4.13%	11	9.90%	5	9.08%	1	13.86%	1	12.47%
Russell 1000 Value			-11.72%	28	-8.27%	43	-8.27%	43	6.95%	49	5.95%	45	11.02%	50	8.35%
Large Cap Core															
Vanguard 500 Index	05/31/1999	\$65,936,973	-13.66%	45	-4.51%	18	-4.51%	18	9.18%	9	8.43%	2	12.65%	7	5.50%
S&P 500 Index			-13.52%	36	-4.38%	15	-4.38%	15	9.26%	6	8.49%	1	12.70%	5	5.40%
Large Cap Growth															
TCW Large Cap Growth	04/30/2013	\$33,955,518	-15.53%	50	2.53%	17	2.53%	17	7.97%	87	9.00%	58			11.50%
Russell 1000 Growth			-15.89%	63	-1.51%	55	-1.51%	55	11.15%	21	10.40%	20			12.58%
Westfield Capital Large Growth	07/31/2007	\$41,333,133	-16.20%	66	-1.83%	55	-1.83%	55	10.14%	50	9.27%	53	14.18%	31	7.98%
Russell 1000 Growth			-15.89%	63	-1.51%	55	-1.51%	55	11.15%	21	10.40%	20	14.14%	33	9.03%
Mid Cap Core															
Vanguard Midcap Index Fund	05/31/2004	\$37,244,374	-15.47%	30	-9.20%	18	-9.20%	18	6.41%	34	6.22%	6	11.35%	4	9.12%
Russell Midcap			-15.37%	28	-9.06%	17	-9.06%	17	7.04%	22	6.26%	5	11.49%	1	8.87%
Small Cap Value															
Vaughan Nelson	04/30/2009	\$18,728,561	-17.88%	26	-13.56%	43	-13.56%	43	4.24%	86	4.73%	41	10.85%	43	13.11%
Russell 2000 Value			-18.67%	45	-12.86%	37	-12.86%	37	7.37%	33	3.61%	70	9.57%	78	11.60%
Small Cap Growth															
Eagle Small Cap Growth	10/31/2010	\$16,715,707	-20.28%	41	-0.44%	34	-0.44%	34	10.95%	44	8.08%	23	13.08%	46	12.45%
Russell 2000 Growth			-21.65%	70	-9.31%	84	-9.31%	84	7.24%	85	5.13%	80	11.25%	86	10.73%

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Performance Summary - Gross of Fees
Cobb County Employees Retirement System
As of December 31, 2018

Account	Inception Date	12/31/2018 Market Value	Latest QTR	%tile Ranking	YTD	%tile Ranking	1 Year	%tile Ranking	3 Year	%tile Ranking	5 Year	%tile Ranking	7 Year	%tile Ranking	Inception
International Equity															
Vanguard Total International Stock Fund	11/30/2006	\$34,017,240	-11.66%	18	-14.39%	35	-14.39%	35	4.57%	3	0.97%	14	5.24%	49	1.91%
<i>International Index</i>			-11.46%	14	-14.20%	31	-14.20%	31	4.48%	5	0.68%	23	5.52%	35	1.38%
Dodge & Cox International Stock Fund	07/31/2007	\$31,508,799	-12.39%	33	-17.98%	85	-17.98%	85	3.25%	24	-0.52%	68	5.81%	23	1.18%
<i>International Index</i>			-11.46%	14	-14.20%	31	-14.20%	31	4.48%	5	0.68%	23	5.52%	35	0.42%
Oppenheimer International Growth	05/31/2014	\$31,576,459	-14.63%	81	-19.22%	94	-19.22%	94	0.27%	91					-1.33%
<i>MSCI AC Wld X US Net</i>			-11.46%	14	-14.20%	31	-14.20%	31	4.48%	5					-0.08%
Global Allocation															
Global Allocation	03/31/2010	\$56,255,032	-8.39%	58	-6.83%	30	-6.83%	30	4.99%	13	3.24%	9	6.05%	22	5.78%
<i>HFRX Global Hedge</i>			-5.56%	9	-6.72%	25	-6.72%	25	0.45%	99	-0.59%	93	1.01%	99	0.13%

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Performance Summary - Net of Fees
Cobb County Employees Retirement System
As of December 31, 2018

Account	Inception Date	12/31/2018 Market Value	Latest QTR	%tile Ranking	YTD	%tile Ranking	1 Year	%tile Ranking	3 Year	%tile Ranking	5 Year	%tile Ranking	7 Year	%tile Ranking	Inception
Composite	06/30/1994	\$593,243,859	-10.38%		-5.90%		-5.90%		5.61%		4.64%		7.88%		7.54%
Policy Index			-8.95%		-5.73%		-5.73%		5.62%		4.39%		7.28%		7.35%
Dynamic Index			-9.43%		-5.71%		-5.71%		5.66%		4.46%		7.37%		
Fixed Income															
Richmond Capital Management	07/31/2007	\$73,993,799	1.49%	18	-0.21%	29	-0.21%	29	2.23%	41	2.79%	16	2.47%	45	4.26%
Barclays Govt/Credit			1.46%	21	-0.42%	40	-0.42%	40	2.19%	43	2.53%	32	2.14%	66	3.98%
Blackrock Strategic Income Opps Fund	05/31/2011	\$44,602,476	-0.53%	98	-0.49%	43	-0.49%	43	2.66%	19	2.34%	47	3.49%	3	2.82%
Barclays Aggregate			1.64%	10	0.01%	21	0.01%	21	2.06%	52	2.52%	33	2.10%	69	2.55%
Delaware Diversified Income Fund	05/31/2011	\$44,072,792	0.11%	88	-1.84%	94	-1.84%	94	2.22%	42	2.29%	51	2.40%	49	2.55%
Barclays Aggregate			1.64%	10	0.01%	21	0.01%	21	2.06%	52	2.52%	33	2.10%	69	2.55%
Large Cap Value															
Eagle Capital Large Value	12/31/2002	\$63,302,998	-13.75%	52	-4.85%	11	-4.85%	11	9.06%	5	8.28%	2	13.04%	1	11.55%
Russell 1000 Value			-11.72%	29	-8.27%	35	-8.27%	35	6.95%	36	5.95%	33	11.02%	33	8.35%
Large Cap Core															
Vanguard 500 Index	05/31/1999	\$65,936,973	-13.66%	45	-4.51%	18	-4.51%	18	9.18%	9	8.43%	2	12.65%	7	5.50%
S&P 500 Index			-13.52%	36	-4.38%	15	-4.38%	15	9.26%	6	8.49%	1	12.70%	5	5.40%
Large Cap Growth															
TCW Large Cap Growth	04/30/2013	\$33,955,518	-15.53%	47	2.08%	16	2.08%	16	7.37%	85	8.38%	57			10.91%
Russell 1000 Growth			-15.89%	56	-1.51%	46	-1.51%	46	11.15%	12	10.40%	4			12.58%
Westfield Capital Large Growth	07/31/2007	\$41,333,133	-16.33%	66	-2.38%	53	-2.38%	53	9.50%	44	8.63%	48	13.50%	32	7.36%
Russell 1000 Growth			-15.89%	56	-1.51%	46	-1.51%	46	11.15%	12	10.40%	4	14.14%	17	9.03%
Mid Cap Core															
Vanguard Midcap Index Fund	05/31/2004	\$37,244,374	-15.47%	30	-9.20%	18	-9.20%	18	6.41%	34	6.22%	6	11.35%	4	9.12%
Russell Midcap			-15.37%	28	-9.06%	17	-9.06%	17	7.04%	22	6.26%	5	11.49%	1	8.87%
Small Cap Value															
Vaughan Nelson	04/30/2009	\$18,728,561	-18.10%	32	-14.42%	46	-14.42%	46	3.20%	88	3.68%	47	9.75%	51	11.99%
Russell 2000 Value			-18.67%	47	-12.86%	30	-12.86%	30	7.37%	20	3.61%	50	9.57%	57	11.60%
Small Cap Growth															
Eagle Small Cap Growth	10/31/2010	\$16,715,707	-20.44%	37	-1.19%	34	-1.19%	34	10.12%	47	7.27%	27	12.24%	49	11.64%
Russell 2000 Growth			-21.65%	68	-9.31%	79	-9.31%	79	7.24%	80	5.13%	67	11.25%	69	10.73%

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Performance Summary - Net of Fees
Cobb County Employees Retirement System
As of December 31, 2018

Account	Inception Date	12/31/2018 Market Value	Latest QTR	%tile Ranking	YTD	%tile Ranking	1 Year	%tile Ranking	3 Year	%tile Ranking	5 Year	%tile Ranking	7 Year	%tile Ranking	Inception
International Equity															
Vanguard Total International Stock Fund	11/30/2006	\$34,017,240	-11.66%	18	-14.39%	35	-14.39%	35	4.57%	3	0.97%	14	5.24%	49	1.91%
<i>International Index</i>			-11.46%	14	-14.20%	31	-14.20%	31	4.48%	5	0.68%	23	5.52%	35	1.38%
Dodge & Cox International Stock Fund	07/31/2007	\$31,508,799	-12.39%	33	-17.98%	85	-17.98%	85	3.25%	24	-0.52%	68	5.81%	23	1.18%
<i>International Index</i>			-11.46%	14	-14.20%	31	-14.20%	31	4.48%	5	0.68%	23	5.52%	35	0.42%
Oppenheimer International Growth	05/31/2014	\$31,576,459	-14.63%	81	-19.22%	94	-19.22%	94	0.27%	91					-1.33%
<i>MSCI AC Wld X US Net</i>			-11.46%	14	-14.20%	31	-14.20%	31	4.48%	5					-0.08%
Global Allocation															
Global Allocation	03/31/2010	\$56,255,032	-8.39%	58	-6.83%	30	-6.83%	30	4.99%	13	3.24%	9	6.05%	22	5.78%
<i>HFRX Global Hedge</i>			-5.56%	9	-6.72%	25	-6.72%	25	0.45%	99	-0.59%	93	1.01%	99	0.13%

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Cobb County Employees Retirement System

Period Ending December 31, 2018

Account Values							
	Latest Quarter	Fiscal YTD	Year to Date	One Year	Three Years	Five Years	Since Inception
Beginning Mkt Value	\$665,107,993.26	\$639,092,432.18	\$639,092,432.18	\$639,092,432.18	\$520,603,245.75	\$497,503,021.80	\$76,718,742.24
Net Contributions	(\$2,999,505.25)	(\$8,645,946.10)	(\$8,645,946.10)	(\$8,645,946.10)	(\$19,649,308.41)	(\$29,202,609.77)	\$144,076,457.25
Investment Earnings	(\$68,864,629.14)	(\$37,202,627.21)	(\$37,202,627.21)	(\$37,202,627.21)	\$92,289,011.08	\$125,013,777.42	\$372,518,989.96
Ending Mkt Value	\$593,243,858.87	\$593,243,858.87	\$593,243,858.87	\$593,243,858.87	\$593,243,858.87	\$593,243,858.87	\$593,243,858.87

Returns								
	Latest Quarter	Fiscal YTD	Calendar YTD	One Year	Three Years	Five Years	Ten Years	Since Inception
Account	-10.33%	-5.69%	-5.69%	-5.69%	5.86%	4.88%	9.10%	7.81%
Policy Index	-8.95%	-5.73%	-5.73%	-5.73%	5.62%	4.39%	8.18%	7.35%
Difference	-1.38%	0.04%	0.04%	0.04%	0.23%	0.49%	0.92%	0.46%

Calendar Year Returns												
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Account	-5.69%	18.13%	6.47%	0.14%	6.83%	20.45%	13.02%	-0.61%	13.51%	22.58%	-21.04%	8.84%
Policy Index	-5.73%	16.12%	7.64%	-0.96%	6.22%	18.13%	11.67%	0.23%	12.36%	19.16%	-20.91%	6.71%
Difference	0.04%	2.01%	-1.17%	1.10%	0.61%	2.31%	1.35%	-0.83%	1.15%	3.42%	-0.13%	2.13%

Policy Index: 45% Russell 3000, 25% Bloomberg Barclays Aggregate Bond, 20% MSCI AC World X US Net, 10% HFRX Global Hedge Fund Index

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Total Portfolio

Performance Summary Through December 31, 2018

	Quarter	YTD	1 Yr	2 Yr	3 Yr	5 Yr	10 Yr	Inception	Incept Date	Current Assets
Gross Time Weighted Return	-10.33	-5.69	-5.69	5.55	5.86	4.88	9.10	7.81	06/30/1994	\$593,243,859
Universe Median										
Policy Index	-8.95	-5.73	-5.73	4.63	5.62	4.39	8.18	7.35		
%-tile										
(45% Russell 3000, 25% Bloomberg Barclays Aggregate Bond, 20% MSCI AC World X US Net, 10% HFRX Global Hedge Fund Index, established 7/31/2013)										

Richmond Capital Management - (Total Portfolio)

Gross Time Weighted Return	1.54	-0.01	-0.01	2.05	2.45	3.01	4.43	4.49	07/31/2007	\$73,993,799
Universe Median	0.97	-0.59	-0.59	1.56	2.09	2.30	4.47	3.99		
BB Gov/Cr Bond	1.46	-0.42	-0.42	1.77	2.19	2.53	3.46	3.98		
%-tile	15	22	22	17	30	6	51	20		
(100.00% BB Gov/Cr Bond; established 7/31/2007)										

Blackrock Strategic Income Opps Fund - (Total Portfolio)

Gross Time Weighted Return	-0.53	-0.49	-0.49	2.19	2.66	2.34		2.82	05/31/2011	\$44,602,476
Universe Median	0.97	-0.59	-0.59	1.56	2.09	2.30		2.58		
BB Agg Bond	1.64	0.01	0.01	1.76	2.06	2.52		2.55		
%-tile	98	43	43	11	19	47		33		
(100.00% BB Agg Bond; established 5/31/2011)										

Delaware Diversified Income Fund - (Total Portfolio)

Gross Time Weighted Return	0.11	-1.84	-1.84	1.63	2.22	2.29		2.55	05/31/2011	\$44,072,792
Universe Median	0.97	-0.59	-0.59	1.56	2.09	2.30		2.58		
BB Agg Bond	1.64	0.01	0.01	1.76	2.06	2.52		2.55		
%-tile	88	94	94	46	42	51		52		
(100.00% BB Agg Bond; established 5/31/2011)										

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Total Portfolio

Performance Summary Through December 31, 2018

	Quarter	YTD	1 Yr	2 Yr	3 Yr	5 Yr	10 Yr	Inception	Incept Date	Current Assets
Eagle Capital Large Value - (Total Portfolio)										
Gross Time Weighted Return	-13.58	-4.13	-4.13	9.38	9.90	9.08	15.89	12.47	12/31/2002	\$63,302,998
Universe Median	-13.24	-9.47	-9.47	2.67	6.90	5.88	11.83	9.00		
Russell 1000 Value	-11.72	-8.27	-8.27	2.11	6.95	5.95	11.18	8.35		
%-tile	56	11	11	1	5	1	1	1		

(100.00% Russell 1000 Value; established 12/31/2002)

Vanguard 500 Index - (Total Portfolio)

Gross Time Weighted Return	-13.66	-4.51	-4.51	7.83	9.18	8.43	13.13	5.50	05/31/1999	\$65,936,973
Universe Median	-13.77	-6.03	-6.03	6.57	7.87	6.93	12.06	5.20		
S&P 500 Index	-13.52	-4.38	-4.38	7.93	9.26	8.49	13.12	5.40		
%-tile	45	18	18	16	9	2	11	36		

(100.00% S&P 500 Index; established 5/31/1999)

TCW Large Cap Growth - (Total Portfolio)

Gross Time Weighted Return	-15.53	2.53	2.53	16.26	7.97	9.00		11.50	04/30/2013	\$33,955,518
Universe Median	-15.38	-0.82	-0.82	12.75	10.18	9.34		11.89		
Russell 1000 Growth	-15.89	-1.51	-1.51	13.24	11.15	10.40		12.58		
%-tile	50	17	17	14	87	58		58		

(100.00% Russell 1000 Growth; established 4/30/2013)

Westfield Capital Large Growth - (Total Portfolio)

Gross Time Weighted Return	-16.20	-1.83	-1.83	13.58	10.14	9.27	14.35	7.98	07/31/2007	\$41,333,133
Universe Median	-15.38	-0.82	-0.82	12.75	10.18	9.34	14.26	8.60		
Russell 1000 Growth	-15.89	-1.51	-1.51	13.24	11.15	10.40	15.29	9.03		
%-tile	66	55	55	36	50	53	48	70		

(100.00% Russell 1000 Growth; established 7/31/2007)

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Total Portfolio

Performance Summary Through December 31, 2018

	Quarter	YTD	1 Yr	2 Yr	3 Yr	5 Yr	10 Yr	Inception	Incept Date	Current Assets
Vanguard Midcap Index Fund - (Total Portfolio)										
Gross Time Weighted Return	-15.47	-9.20	-9.20	4.07	6.41	6.22	13.97	9.12	05/31/2004	\$37,244,374
Universe Median	-16.76	-11.56	-11.56	0.90	4.89	4.01	12.14	7.59		
Russell Midcap	-15.37	-9.06	-9.06	3.82	7.04	6.26	14.03	8.87		
%-tile	30	18	18	6	34	6	1	1		
(100.00% Russell Midcap; established 5/31/2004)										
Vaughan Nelson - (Total Portfolio)										
Gross Time Weighted Return	-17.88	-13.56	-13.56	-3.49	4.24	4.73		13.11	04/30/2009	\$18,728,561
Universe Median	-18.84	-13.98	-13.98	-2.82	6.36	4.47		13.29		
Russell 2000 Value	-18.67	-12.86	-12.86	-3.06	7.37	3.61		11.60		
%-tile	26	43	43	62	86	41		53		
(100.00% Russell 2000 Value; established 4/30/2009)										
Eagle Small Cap Growth - (Total Portfolio)										
Gross Time Weighted Return	-20.28	-0.44	-0.44	11.52	10.95	8.08		12.45	10/31/2010	\$16,715,707
Universe Median	-20.61	-4.29	-4.29	9.54	9.69	6.98		12.27		
Russell 2000 Growth	-21.65	-9.31	-9.31	5.26	7.24	5.13		10.73		
%-tile	41	34	34	32	44	23		46		
(100.00% Russell 2000 Growth; established 10/31/2010)										
Vanguard Total International Stock Fund - (Total Portfolio)										
Gross Time Weighted Return	-11.66	-14.39	-14.39	4.51	4.57	0.97	6.38	1.91	11/30/2006	\$34,017,240
Universe Median	-13.04	-15.19	-15.19	3.18	2.44	-0.07	5.90	1.24		
International Index	-11.46	-14.20	-14.20	4.47	4.48	0.68	6.16	1.38		
%-tile	18	35	35	12	3	14	29	28		
(100% MSCI AC World X US Net, established 7/01/2013)										

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Total Portfolio

Performance Summary Through December 31, 2018

	Quarter	YTD	1 Yr	2 Yr	3 Yr	5 Yr	10 Yr	Inception	Incept Date	Current Assets
Dodge & Cox International Stock Fund - (Total Portfolio)										
Gross Time Weighted Return	-12.39	-17.98	-17.98	0.83	3.25	-0.52	7.69	1.18	07/31/2007	\$31,508,799
Universe Median	-13.04	-15.19	-15.19	3.18	2.44	-0.07	5.90	0.27		
International Index	-11.46	-14.20	-14.20	4.47	4.48	0.68	6.16	0.42		
%-tile	33	85	85	88	24	68	5	23		

(100% MSCI AC World X US Net, established 7/01/2013)

Oppenheimer International Growth - (Total Portfolio)

Gross Time Weighted Return	-14.63	-19.22	-19.22	1.37	0.27			-1.33	05/31/2014	\$31,576,459
Universe Median	-13.04	-15.19	-15.19	3.18	2.44			-0.64		
MSCI AC Wld X US Net	-11.46	-14.20	-14.20	4.47	4.48			-0.08		
%-tile	81	94	94	81	91			73		

(100.00% MSCI AC Wld X US Net; established 5/31/2014)

Natixis Loomis Sayles Global Equity - (Total Portfolio)

Gross Time Weighted Return	-9.26	-4.92	-4.92	7.76	6.72			5.74	11/30/2015	\$19,096,111
Universe Median	-7.59	-7.65	-7.65	2.77	3.80			3.11		
HFRX Global Hedge	-5.56	-6.72	-6.72	-0.57	0.45			0.00		
%-tile	72	1	1	1	1			1		

(100.00% HFRX Global Hedge; established 11/30/2015)

First Eagle Global Fund - (Total Portfolio)

Gross Time Weighted Return	-8.41	-8.20	-8.20	2.22	5.05	3.51		6.56	03/31/2010	\$20,032,067
Universe Median	-7.59	-7.65	-7.65	2.77	3.80	2.18		4.71		
HFRX Global Hedge	-5.56	-6.72	-6.72	-0.57	0.45	-0.59		0.13		
%-tile	58	60	60	66	11	4		1		

(100.00% HFRX Global Hedge; established 3/31/2010)

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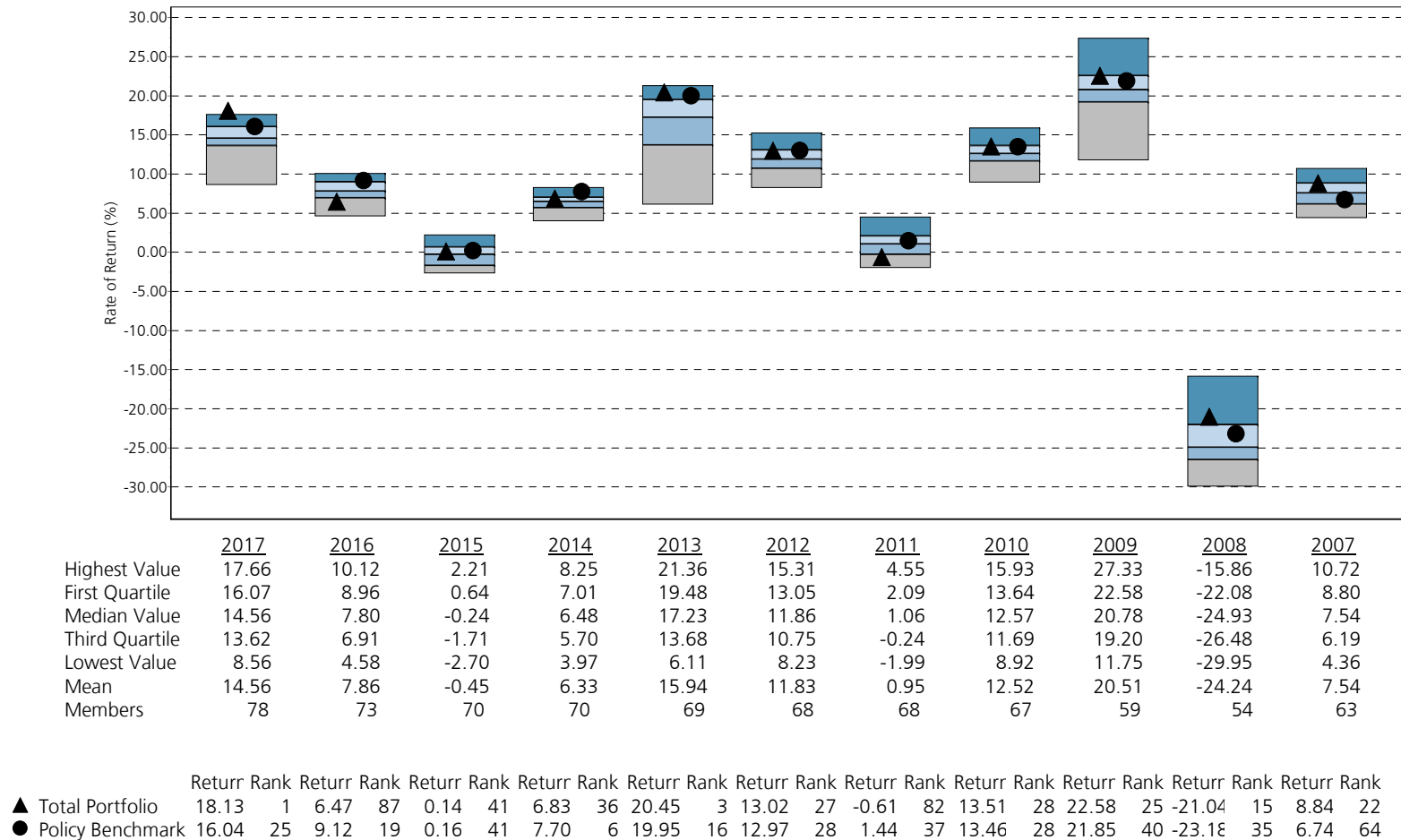
Total Portfolio
Performance Summary Through December 31, 2018

	Quarter	YTD	1 Yr	2 Yr	3 Yr	5 Yr	10 Yr	Inception	Incept Date	Current Assets
Blackrock Global Allocation Fund - (Total Portfolio)										
Gross Time Weighted Return	-7.37	-7.30	-7.30	2.64	3.12	2.12		4.50	03/31/2010	\$17,126,854
Universe Median	-7.59	-7.65	-7.65	2.77	3.80	2.18		4.71		
HFRX Global Hedge	-5.56	-6.72	-6.72	-0.57	0.45	-0.59		0.13		
%-tile	44	42	42	55	72	52		56		

(100.00% HFRX Global Hedge; established 3/31/2010)

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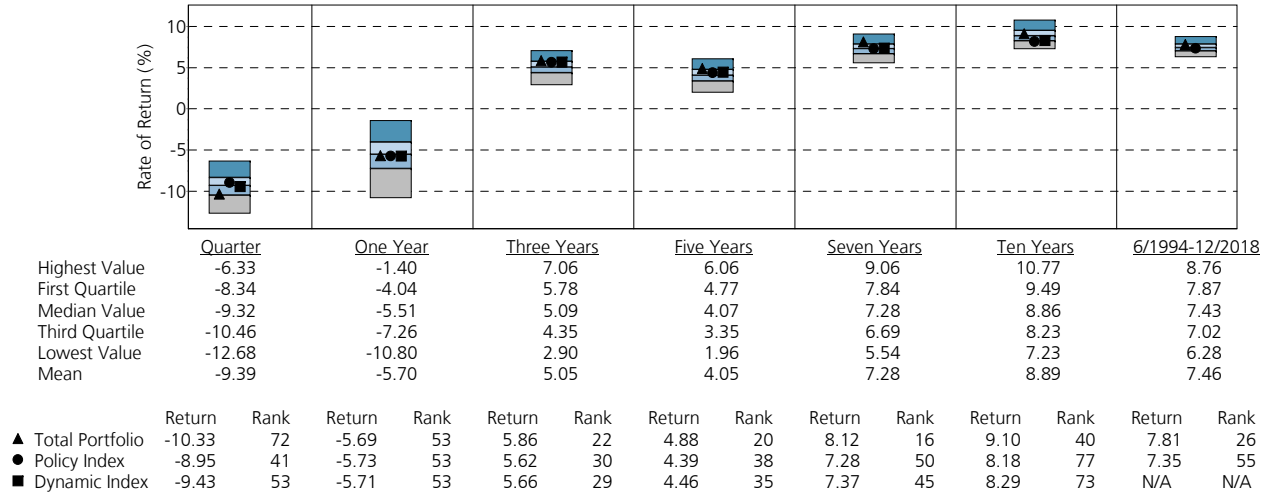
Consolidated Portfolio vs Master Trusts - Public : Plans < \$1 Billion Managers
December 31, 2003 Through December 31, 2018



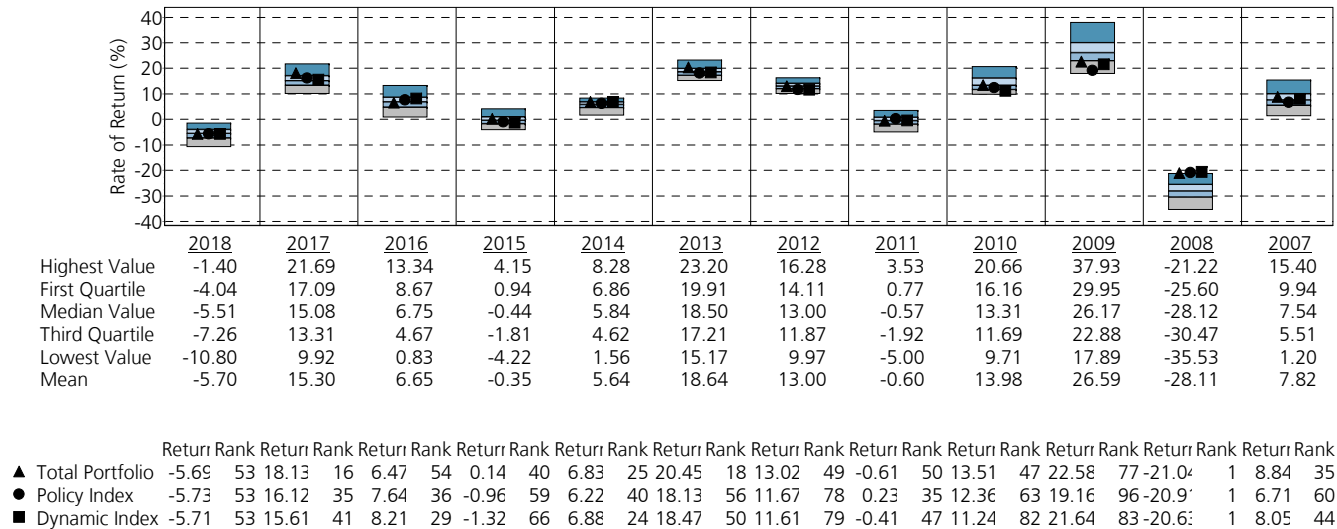
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Consolidated Portfolio Peer Universe Comparison versus 50% Equity, 35% Fixed, 15% International Managers

Trailing Periods



Annual Periods



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Performance Profile
June 30, 1994 Through December 31, 2018

	Ended	Return
Best Quarter	6/1997	14.08
Worst Quarter	9/2011	-11.22
Best 4 Quarters	12/1995	25.64
Worst 4 Quarters	12/2008	-21.04

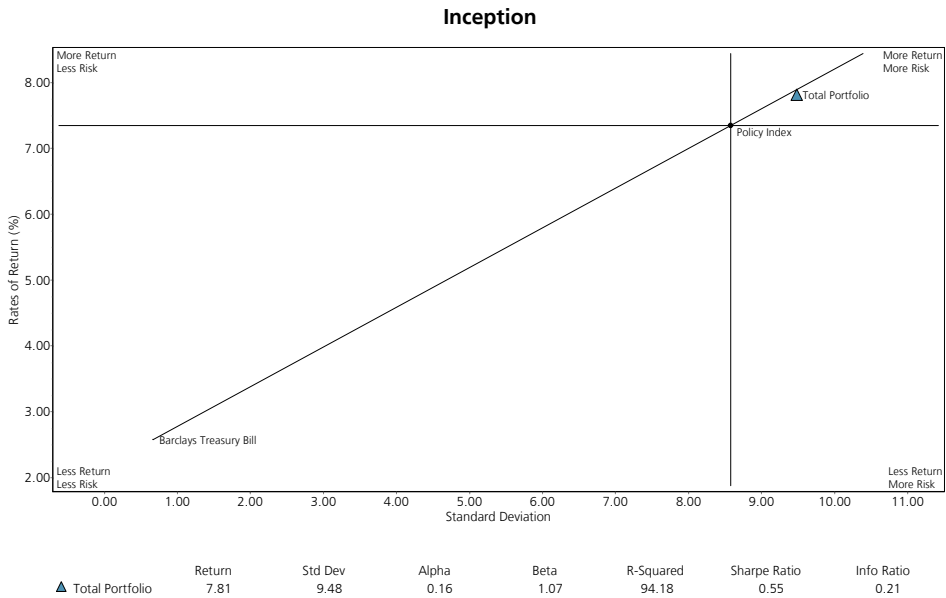
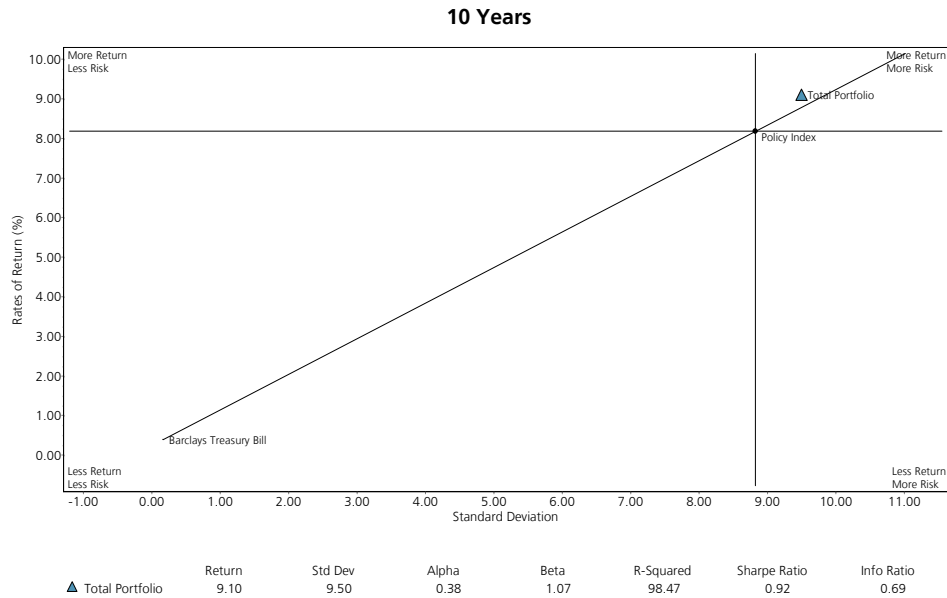
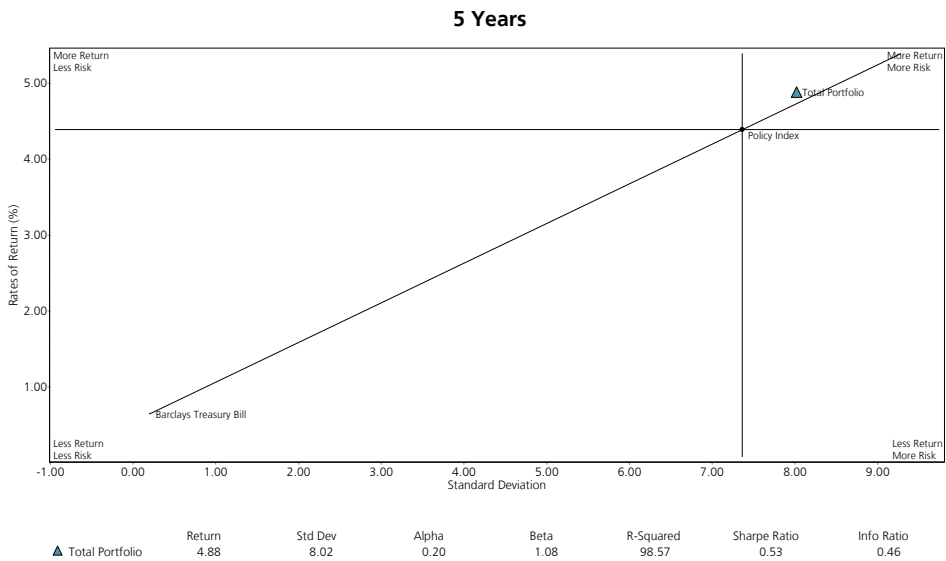
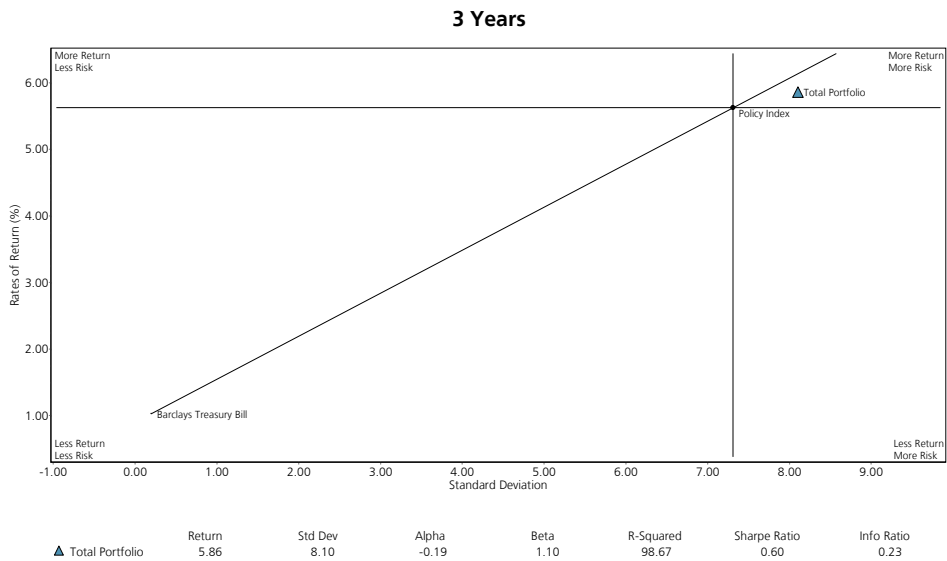
Total # of Periods: 294
of Positive Periods: 189
of Negative Periods: 105

	Latest Month	Latest Quarter	One Year	Two Years	Three Years	Five Years	Ten Years	Since Inception
Consolidated Portfolio	-5.73	-10.33	-5.69	5.55	5.86	4.88	9.10	7.81
Policy Index	-4.83	-8.95	-5.73	4.63	5.62	4.39	8.18	7.35
Excess	-0.90	-1.38	0.04	0.92	0.23	0.49	0.92	0.46
Riskless Index	0.19	0.57	1.88	1.35	1.03	0.65	0.40	2.58
Real ROR	-5.43	-9.97	-7.55	3.48	3.81	3.35	7.20	5.51
CPI	-0.30	-0.40	2.01	2.01	1.98	1.48	1.77	2.17

Period	Return	Std Dev	Sharpe Ratio	Alpha	Beta	R-Squared	Relative Risk	Track Error	Treynor Ratio	Info Ratio
One Year	-5.69	10.36	-0.73	1.23	1.14	99.47	1.15	1.51	-6.61	0.11
Two Years	5.55	8.11	0.52	0.52	1.13	99.08	1.13	1.21	3.73	0.79
Three Years	5.86	7.99	0.60	-0.19	1.10	98.67	1.11	1.18	4.39	0.23
Five Years	4.88	7.95	0.53	0.20	1.08	98.57	1.09	1.13	3.92	0.46
Ten Years	9.10	9.46	0.92	0.38	1.07	98.47	1.08	1.32	8.15	0.69
Since Inception	7.81	9.47	0.55	0.16	1.07	94.18	1.11	2.37	4.88	0.21

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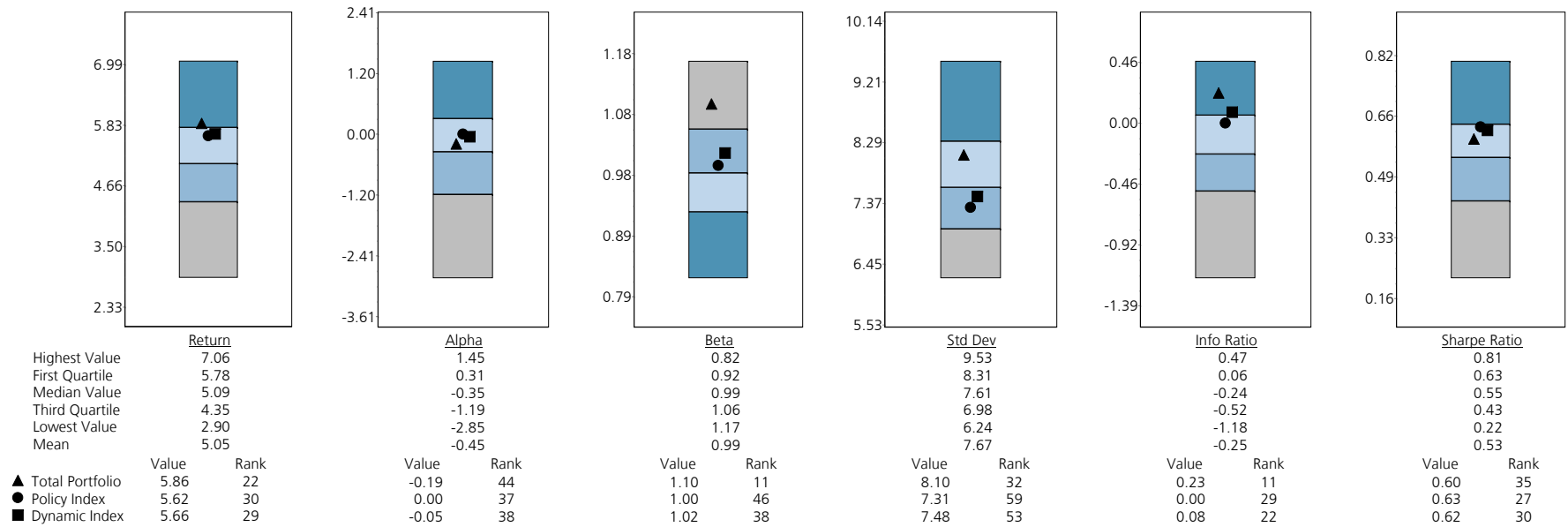
Risk vs Reward Analysis
June 30, 1994 Through December 31, 2018



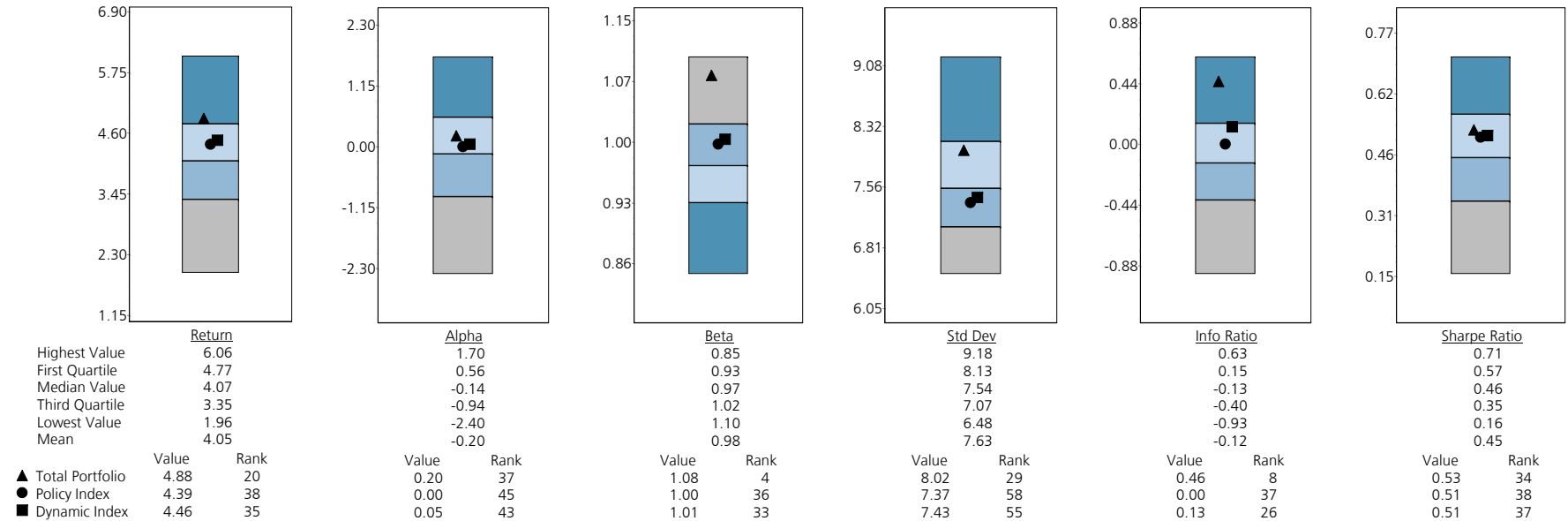
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Consolidated Portfolio vs 50% Equity, 35% Fixed, 15% International Managers December 31, 2015 Through December 31, 2018

3 Year



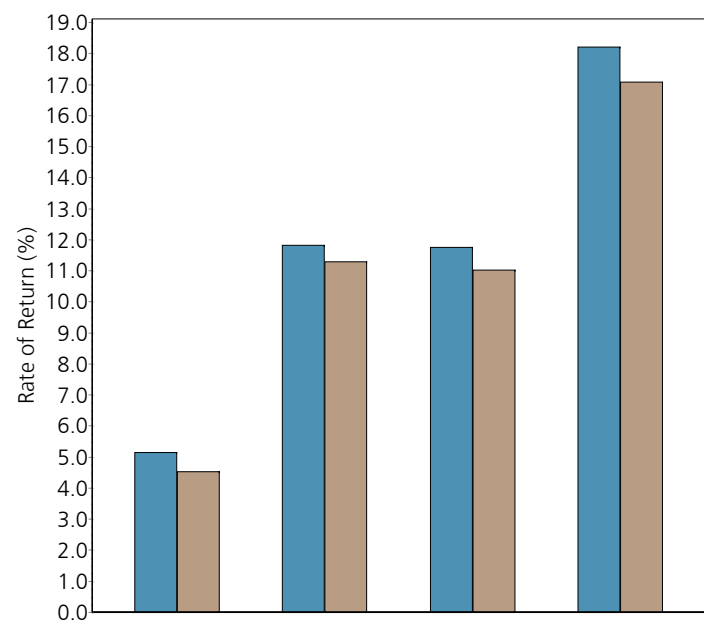
5 Year



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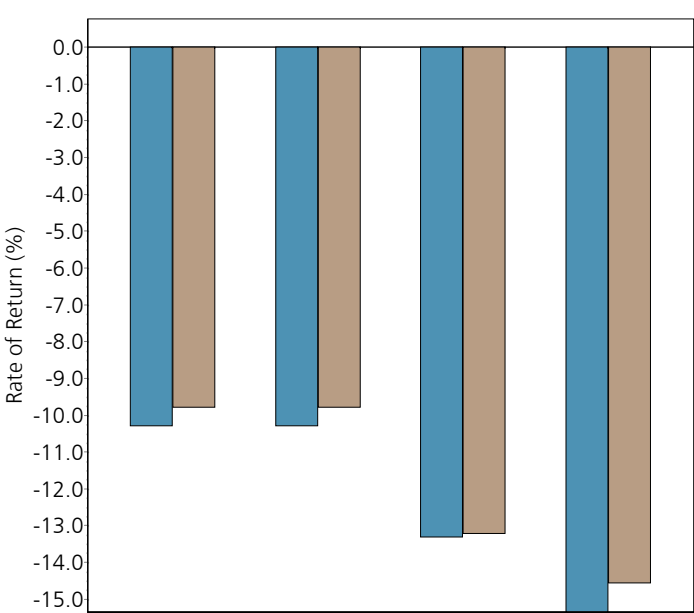
Performance in Rising and Declining Markets
June 30, 1994 Through December 31, 2018

Up Market Performance



	One Year	Three Years	Five Years	Since Inception
Consolidated Portfolio	5.14	11.83	11.77	18.20
Policy Index	4.53	11.29	11.03	17.09
Difference	0.61	0.54	0.74	1.12
Ratio	1.14	1.05	1.07	1.07
Up Periods	2	10	15	71

Down Market Performance



	One Year	Three Years	Five Years	Since Inception
Consolidated Portfolio	-10.30	-10.30	-13.33	-15.36
Policy Index	-9.81	-9.81	-13.23	-14.57
Difference	-0.49	-0.49	-0.10	-0.79
Ratio	1.05	1.05	1.01	1.05
Down Periods	2	2	5	27

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb County Employees Retirement System
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Richmond Capital Management

Please contact your UBS Institutional Consultant if you have any questions regarding this report, if your financial situation, individual needs or investment objectives have changed, or if you would like to initiate or modify any investment restrictions on this account.

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Performance Analysis

The primary index comparison for your portfolio and each of its asset classes is listed below.

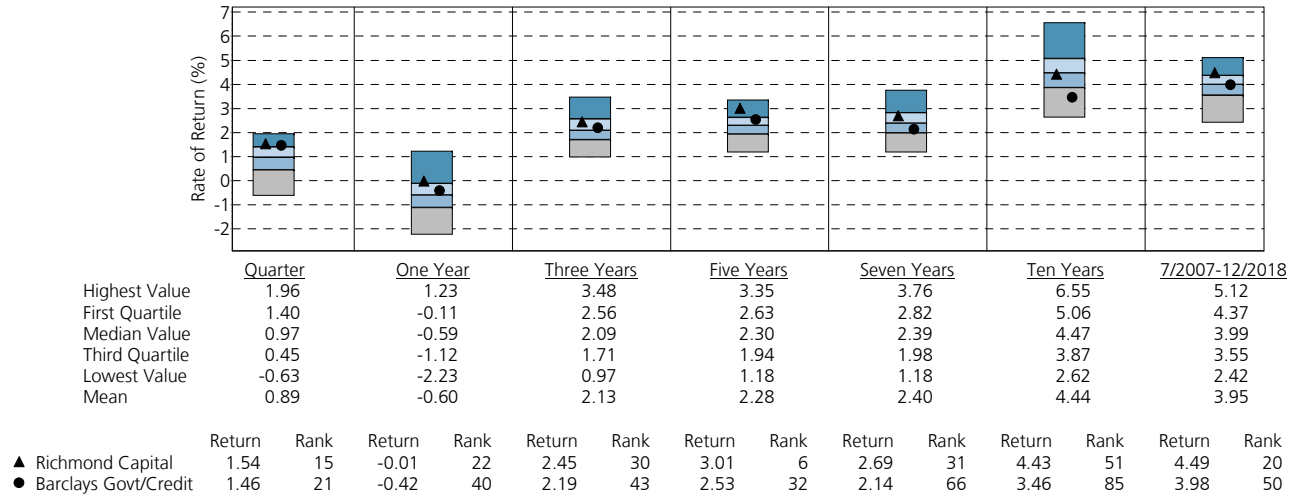
TOTAL FUND BENCHMARK

7/31/2007 - Present

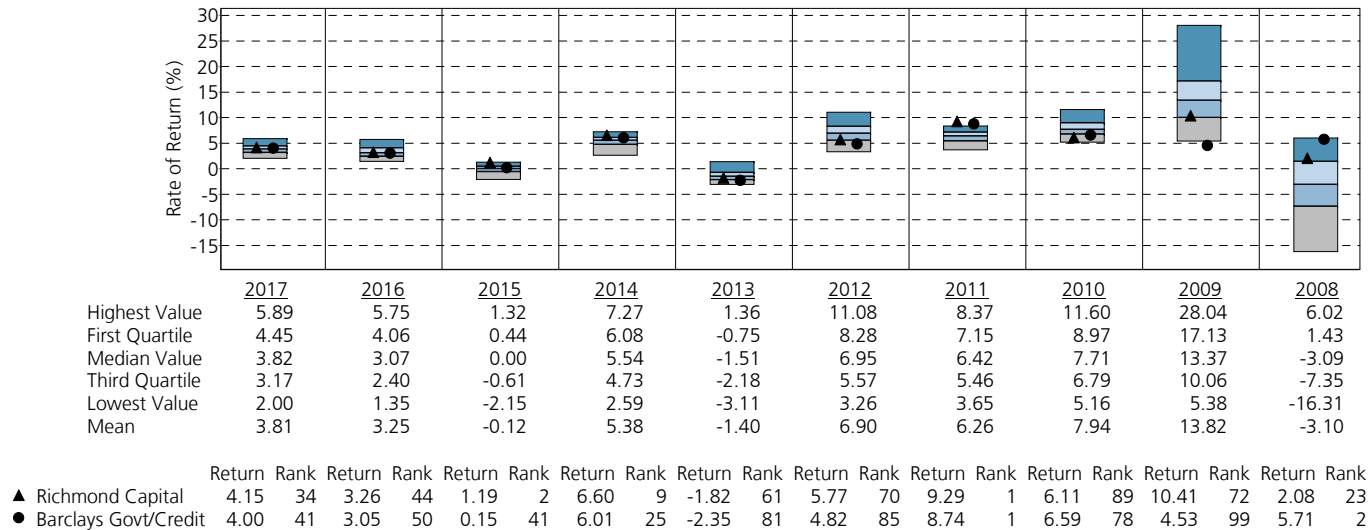
100% Bloomberg Barclays Government/Credit Bond

TOTAL FUND Peer Universe Comparison versus Intermediate Bond Managers

Trailing Periods

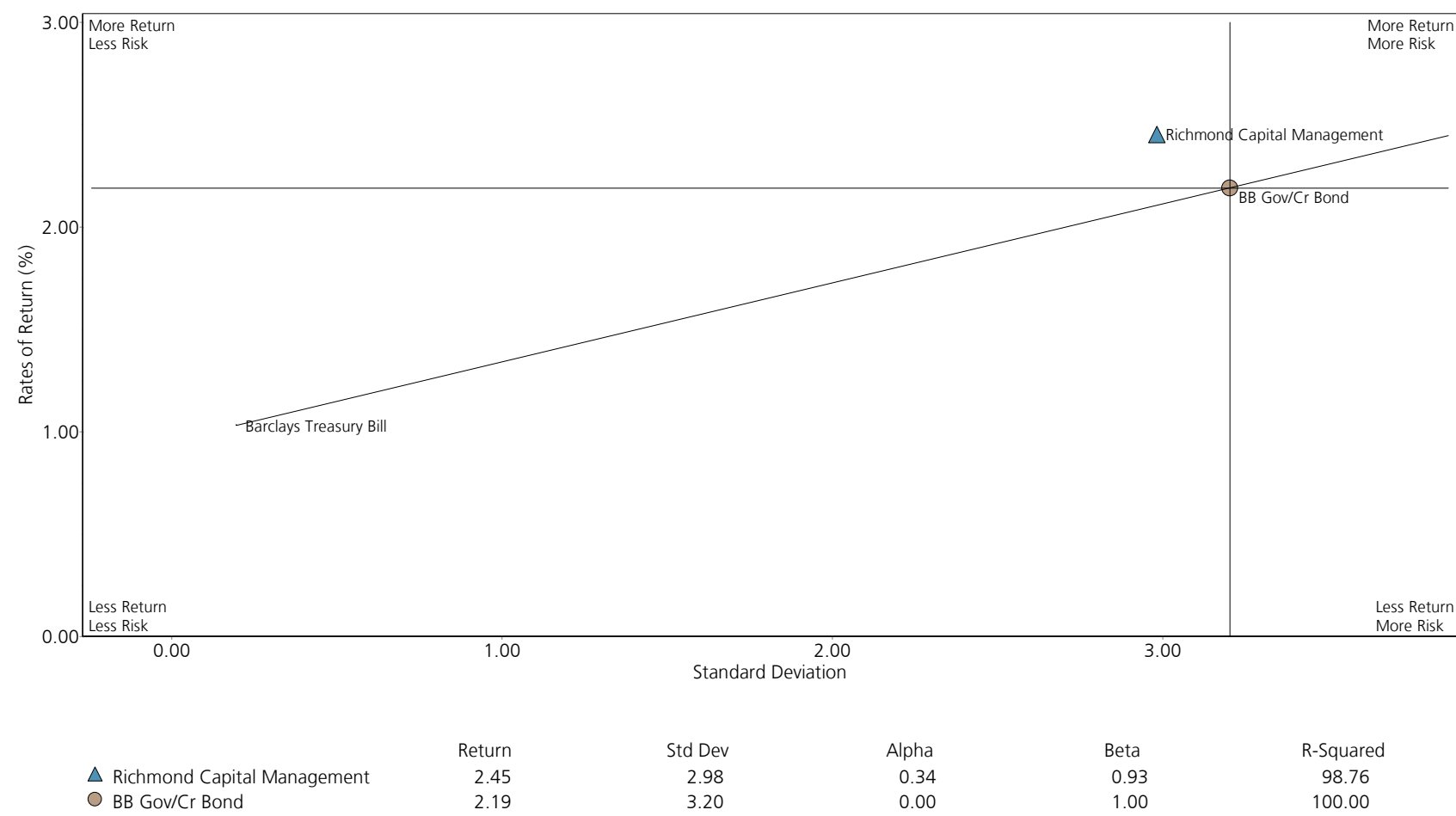


Annual Periods



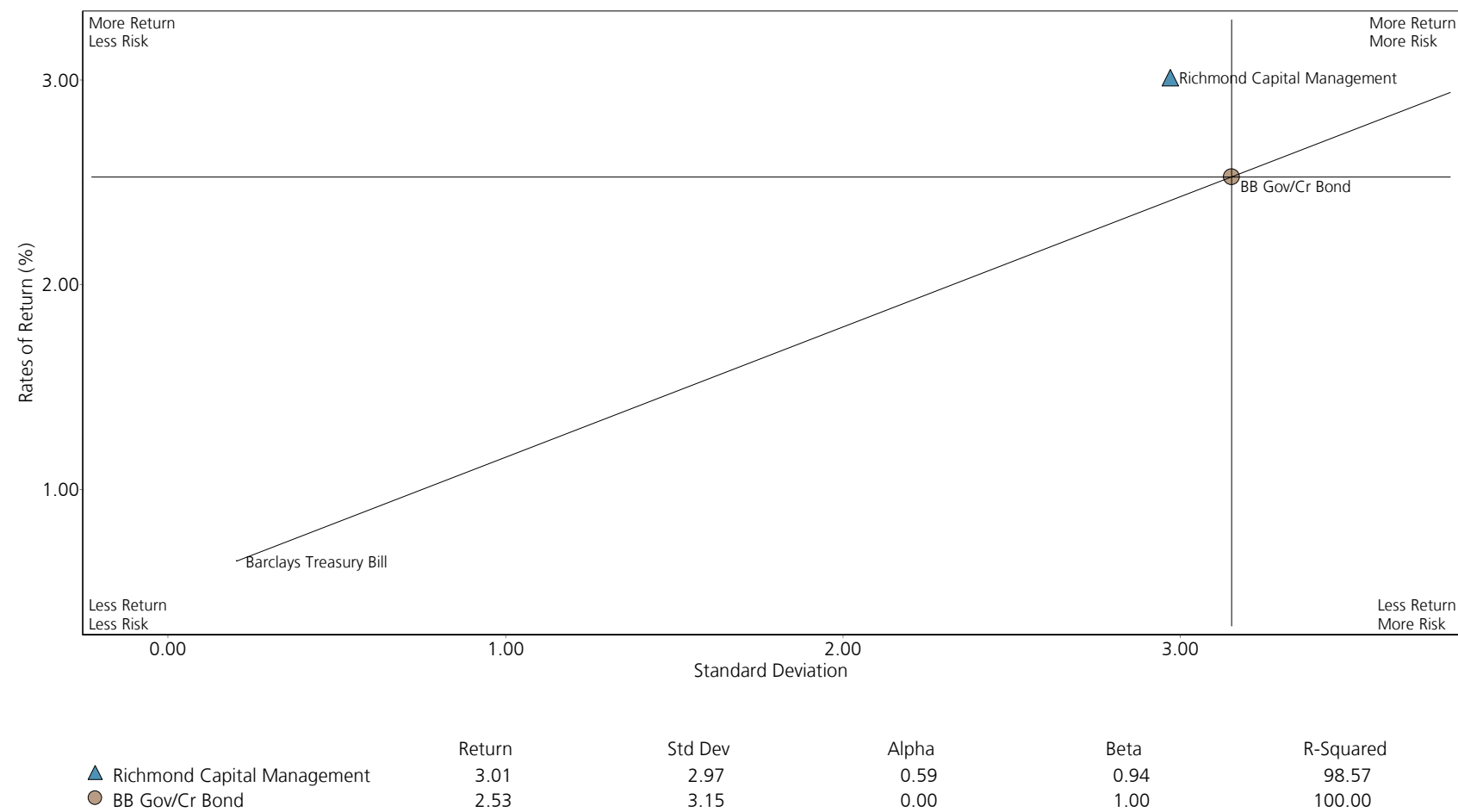
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Risk vs Reward Analysis
December 31, 2015 Through December 31, 2018



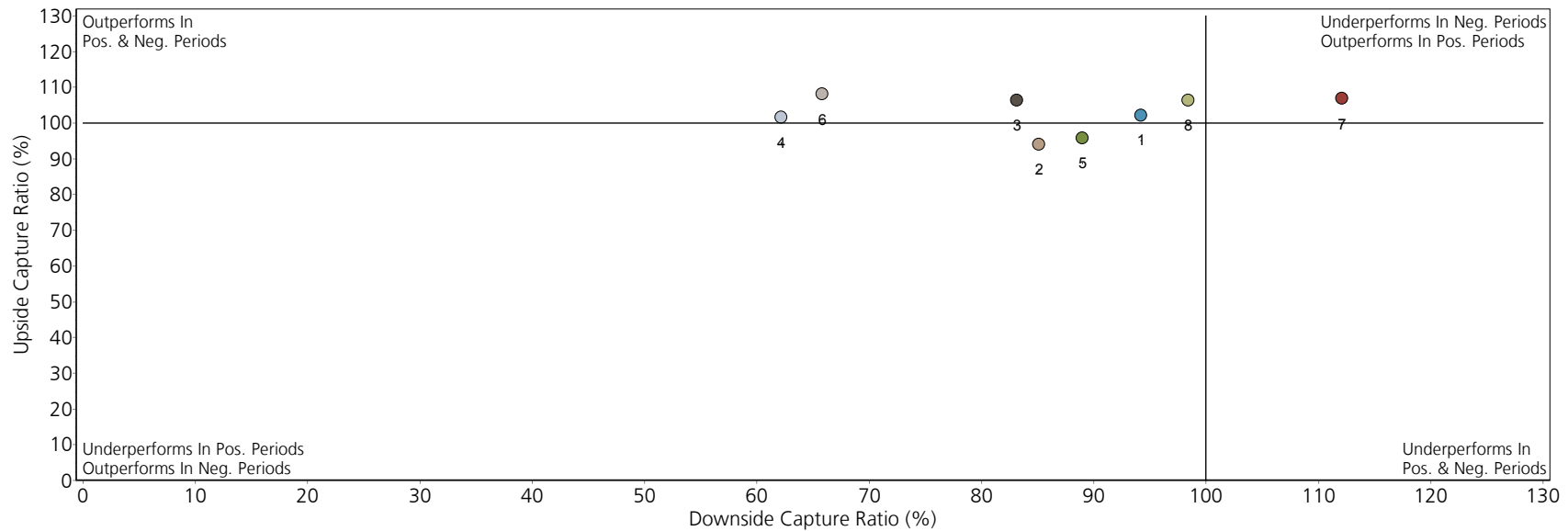
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Risk vs Reward Analysis
December 31, 2013 Through December 31, 2018



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Capture Ratio
July 31, 2007 Through December 31, 2018

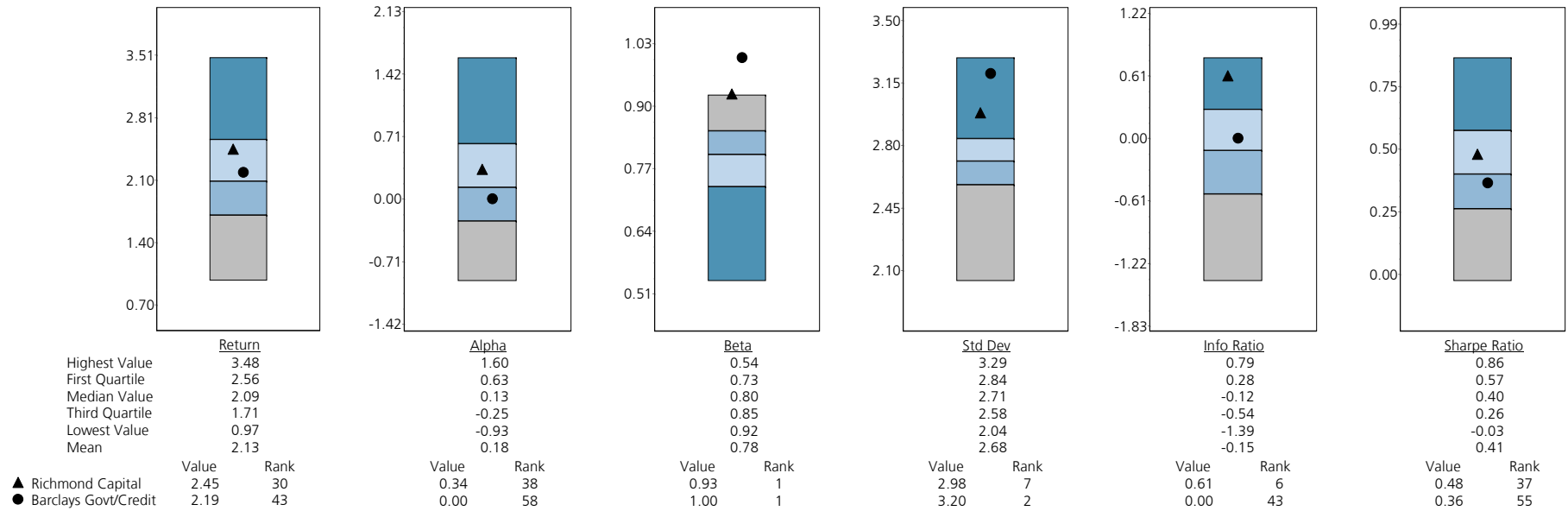


	1	2	3	4	5	6	7	8
	12/2016-12/2017	12/2015-12/2016	12/2014-12/2015	12/2013-12/2014	12/2012-12/2013	12/2011-12/2012	12/2010-12/2011	7/2007-12/2018
Up Periods	9.00	7.00	5.00	8.00	6.00	8.00	9.00	87.00
Upside Capture ROR	4.91	6.89	4.93	7.37	3.61	6.65	10.20	12.63
BB Gov/Cr Bond	4.81	7.33	4.63	7.25	3.77	6.15	9.54	11.87
% Of Capture	102.18	94.08	106.40	101.62	95.85	108.05	106.92	106.41
Down Periods	3.00	5.00	7.00	4.00	6.00	4.00	3.00	50.00
Downside Capture ROR	-0.73	-3.39	-3.57	-0.72	-5.25	-0.83	-0.82	-8.31
BB Gov/Cr Bond	-0.77	-3.99	-4.29	-1.16	-5.90	-1.26	-0.73	-8.45
% Of Capture	94.21	85.10	83.16	62.18	88.96	65.79	112.11	98.41

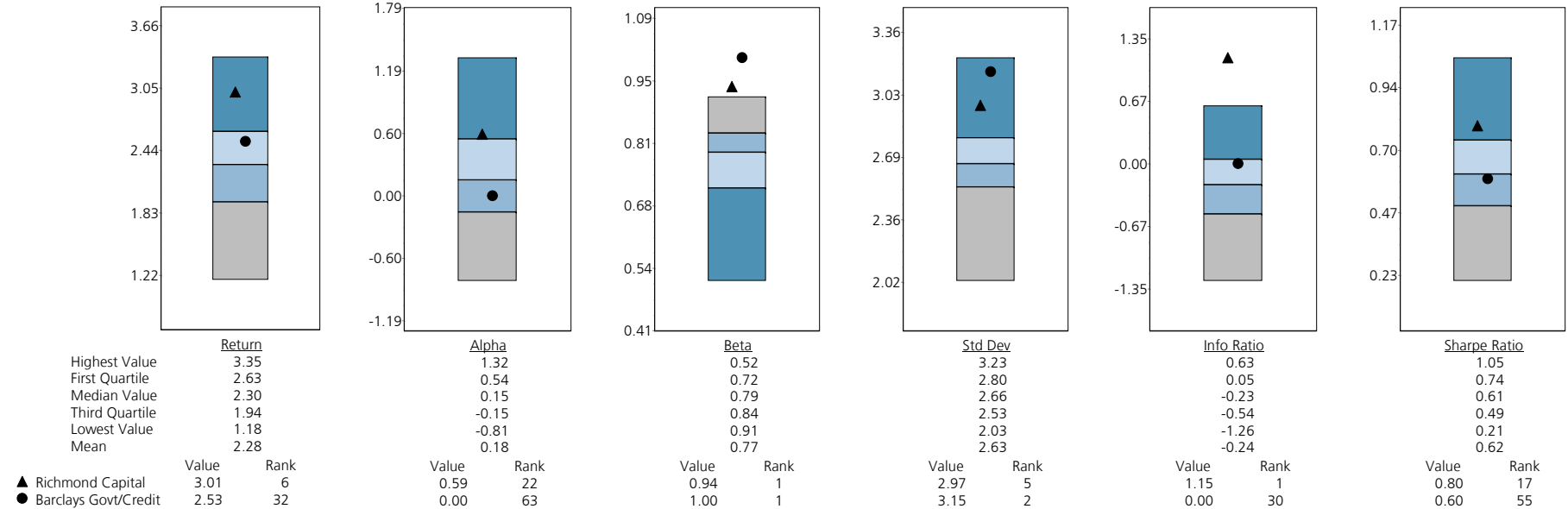
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TOTAL FUND vs Intermediate Bond Managers December 31, 2015 Through December 31, 2018

3 Year



5 Year



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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb County Employees Retirement System
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Blackrock Strategic Income Opps Fund

Please contact your UBS Institutional Consultant if you have any questions regarding this report, if your financial situation, individual needs or investment objectives have changed, or if you would like to initiate or modify any investment restrictions on this account.

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Performance Analysis

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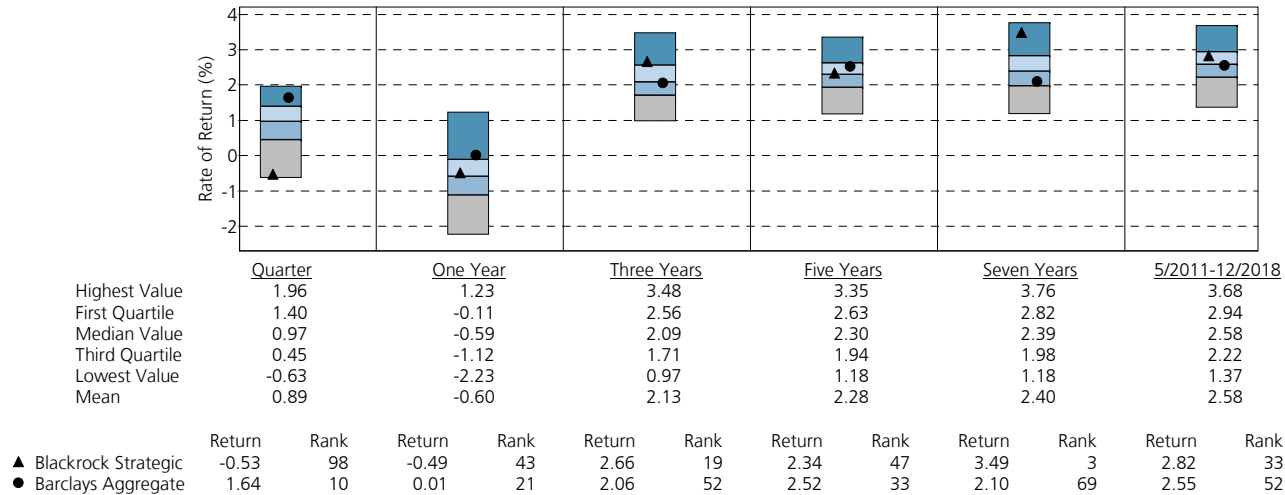
TOTAL FUND BENCHMARK

5/31/2011 - Present
100% Bloomberg Barclays Aggregate Bond

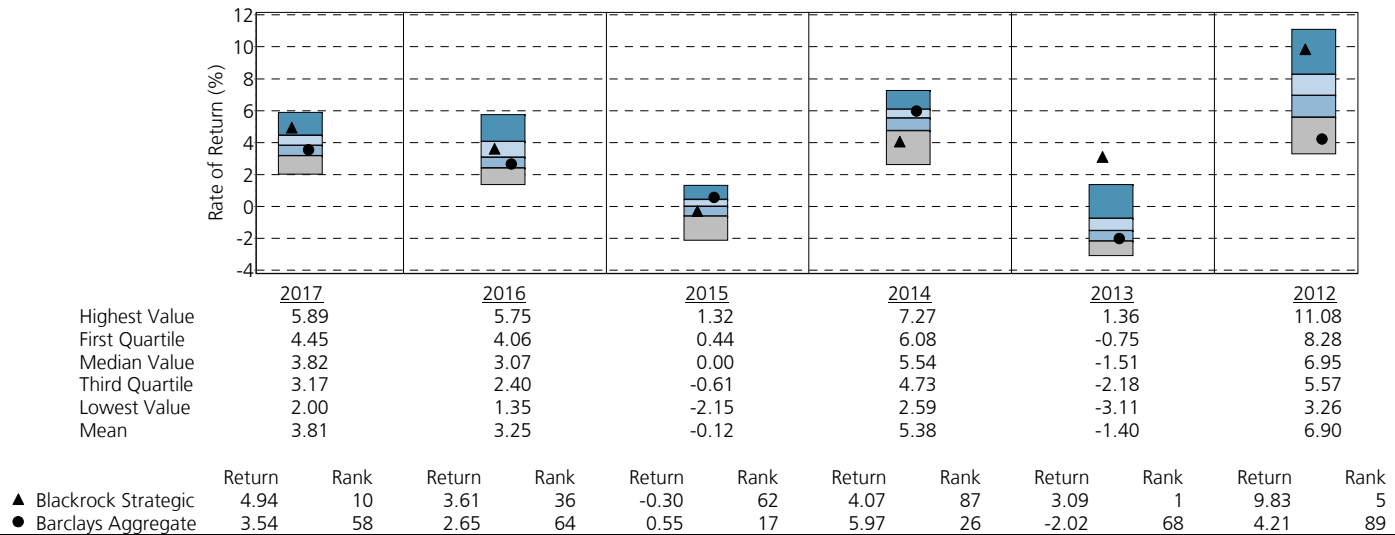
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TOTAL FUND Peer Universe Comparison versus Intermediate Bond Managers

Trailing Periods

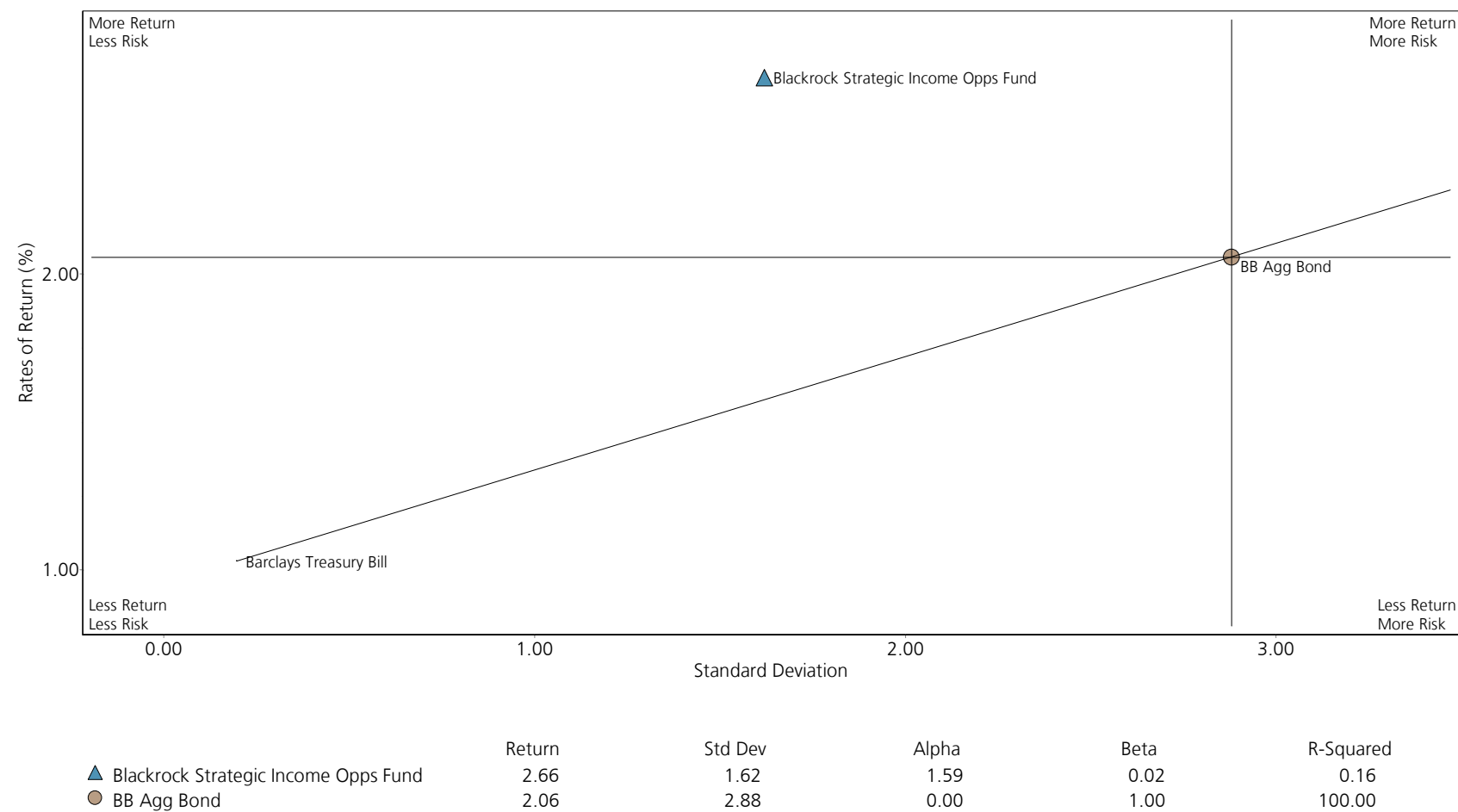


Annual Periods



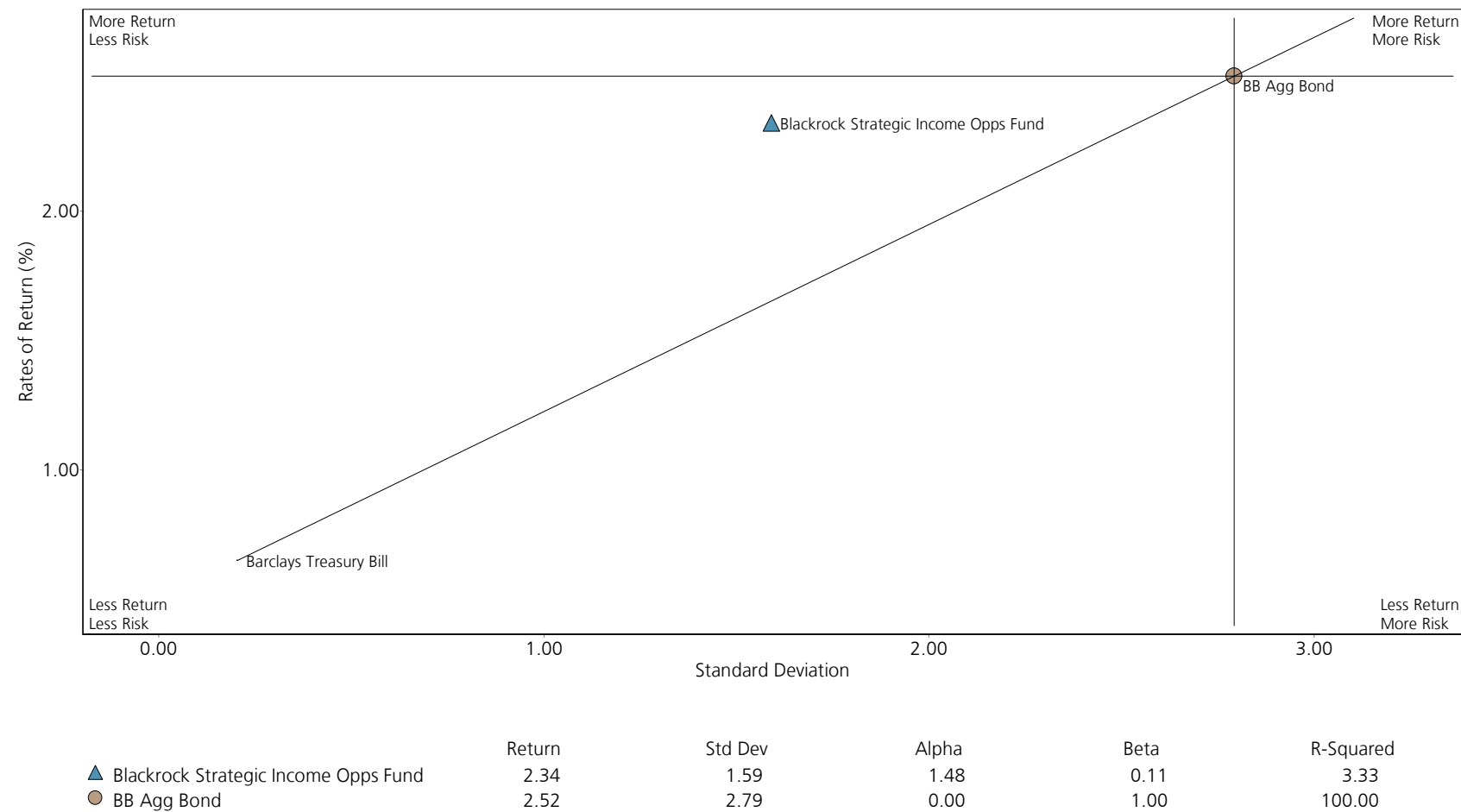
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Risk vs Reward Analysis
December 31, 2015 Through December 31, 2018



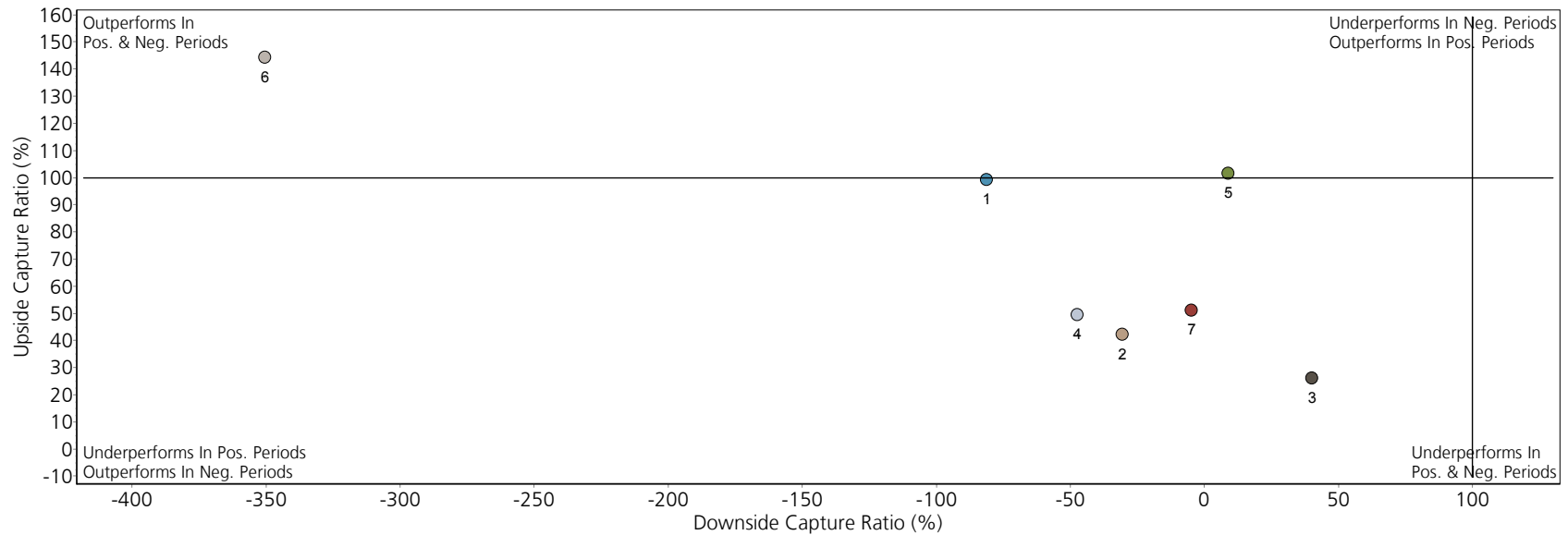
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Risk vs Reward Analysis
December 31, 2013 Through December 31, 2018



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Capture Ratio
May 31, 2011 Through December 31, 2018

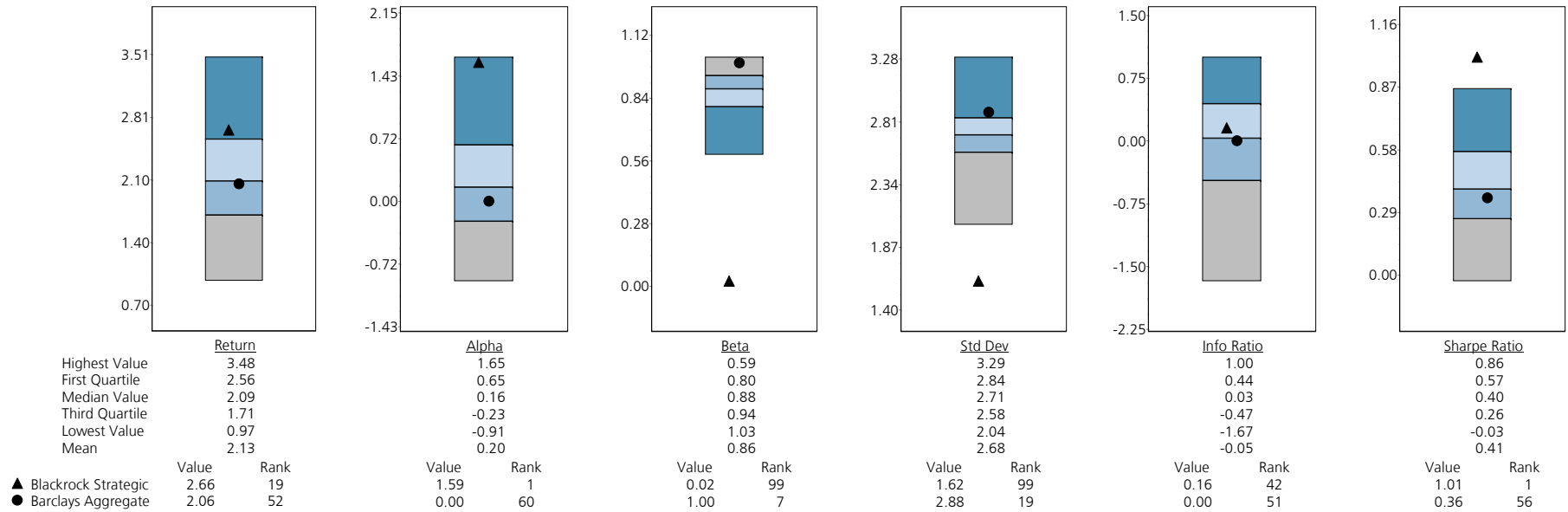


	1	2	3	4	5	6	7
	12/2016-12/2017	12/2015-12/2016	12/2014-12/2015	12/2013-12/2014	12/2012-12/2013	12/2011-12/2012	5/2011-12/2018
Up Periods	8.00	8.00	5.00	9.00	6.00	9.00	56.00
Upside Capture ROR	4.30	2.58	1.04	3.53	3.58	7.16	4.42
BB Agg Bond	4.33	6.13	4.00	7.14	3.53	4.96	8.65
% Of Capture	99.27	42.09	26.06	49.44	101.43	144.22	51.15
Down Periods	4.00	4.00	7.00	3.00	6.00	3.00	35.00
Downside Capture ROR	0.61	1.00	-1.33	0.52	-0.48	2.50	0.32
BB Agg Bond	-0.76	-3.28	-3.32	-1.10	-5.37	-0.71	-6.50
% Of Capture	-81.16	-30.54	40.02	-47.35	8.86	-350.46	-4.88

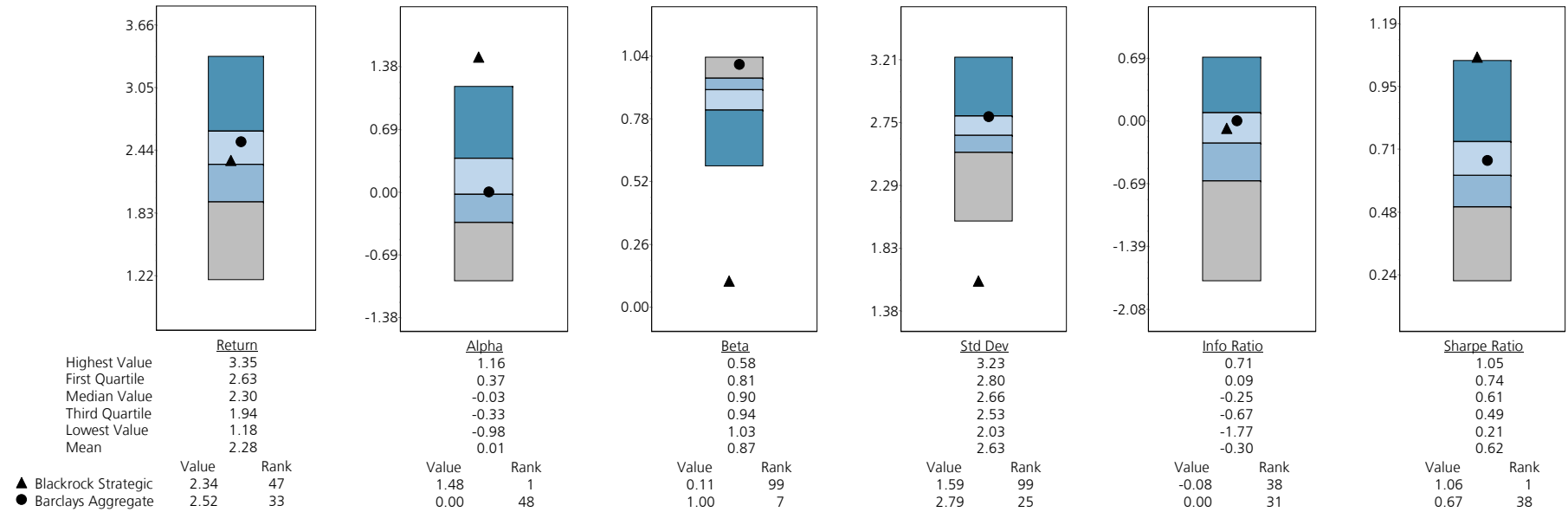
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TOTAL FUND vs Intermediate Bond Managers December 31, 2015 Through December 31, 2018

3 Year



5 Year



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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb County Employees Retirement System
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Delaware Diversified Income Fund

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Performance Analysis

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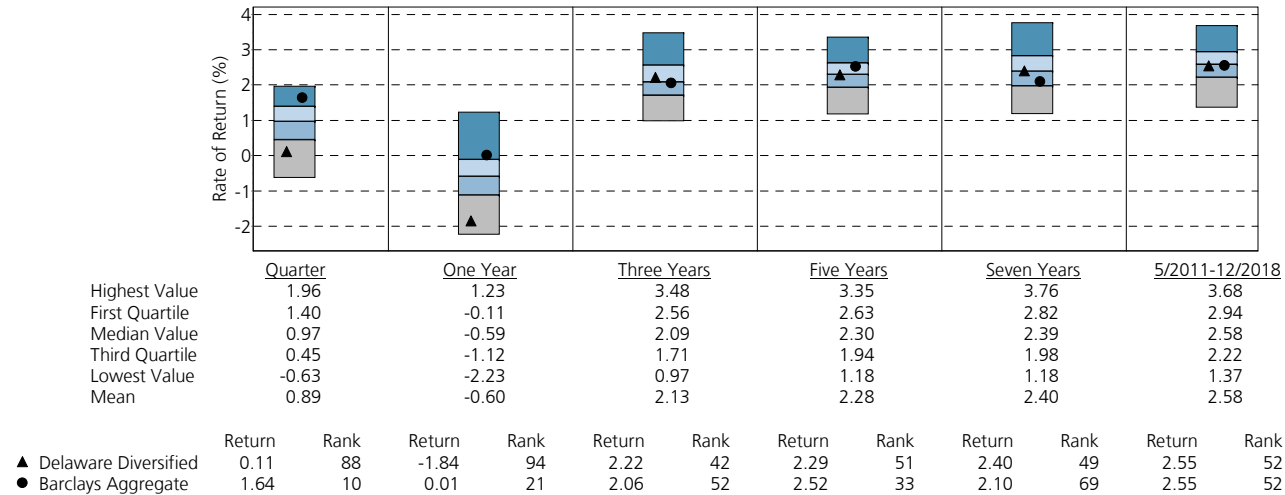
TOTAL FUND BENCHMARK

5/31/2011 - Present

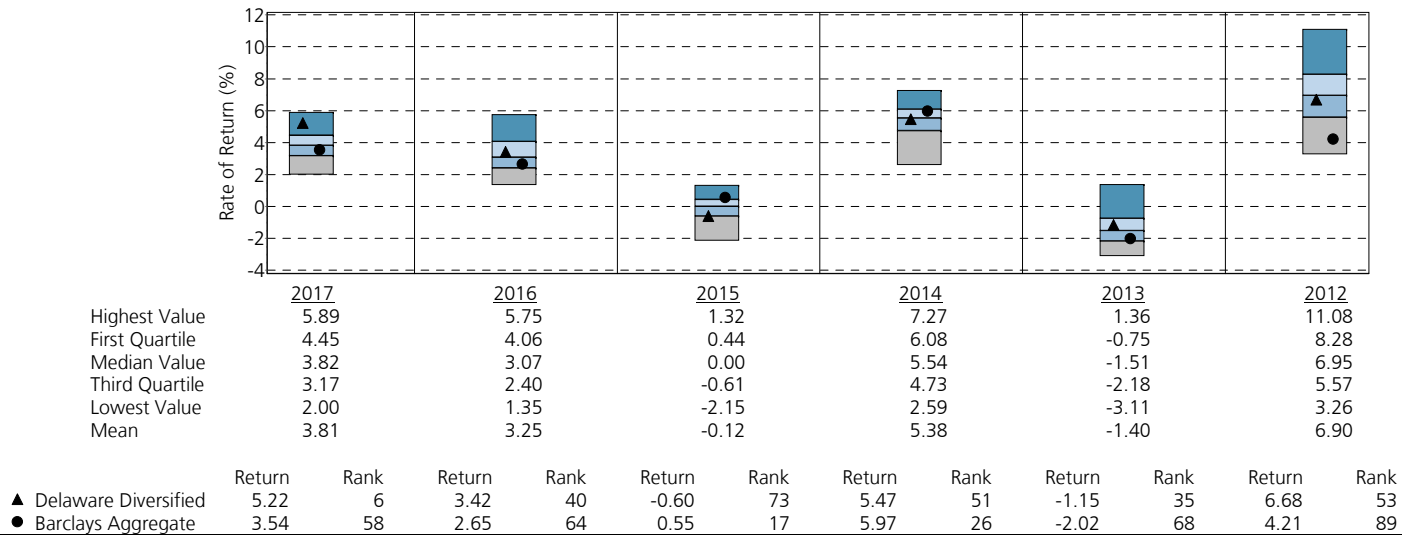
100% Bloomberg Barclays Aggregate Bond

TOTAL FUND Peer Universe Comparison versus Intermediate Bond Managers

Trailing Periods

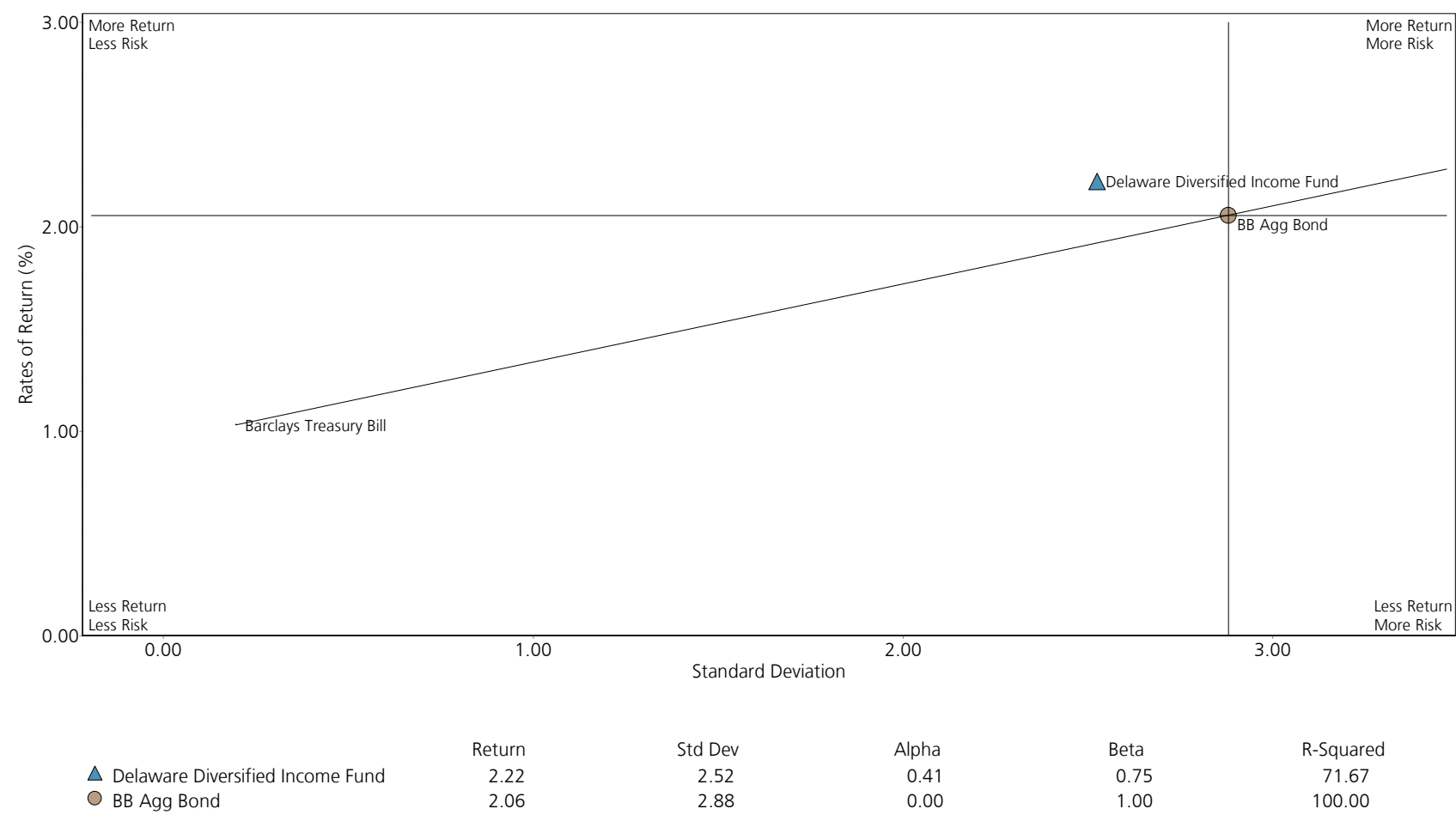


Annual Periods



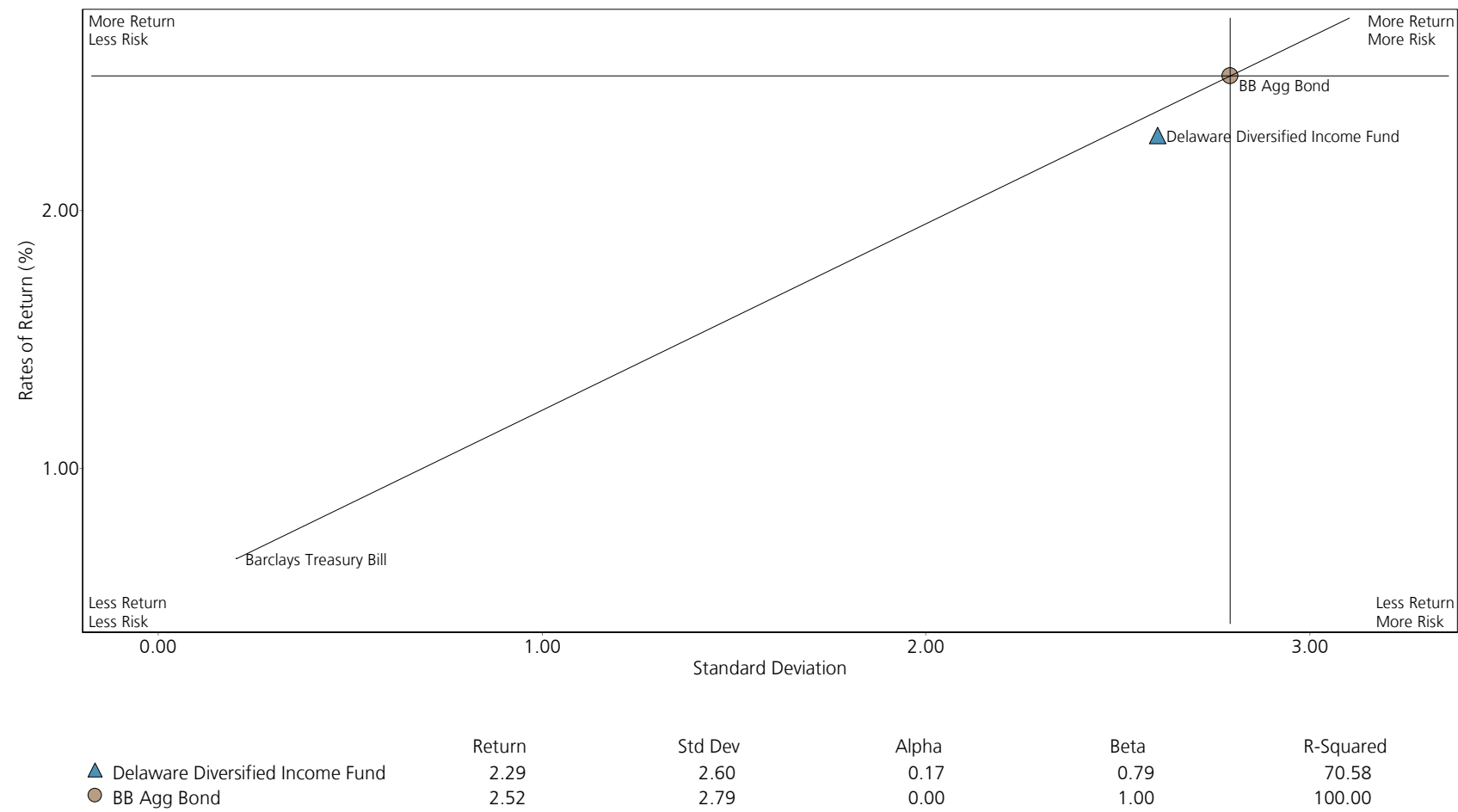
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Risk vs Reward Analysis
December 31, 2015 Through December 31, 2018



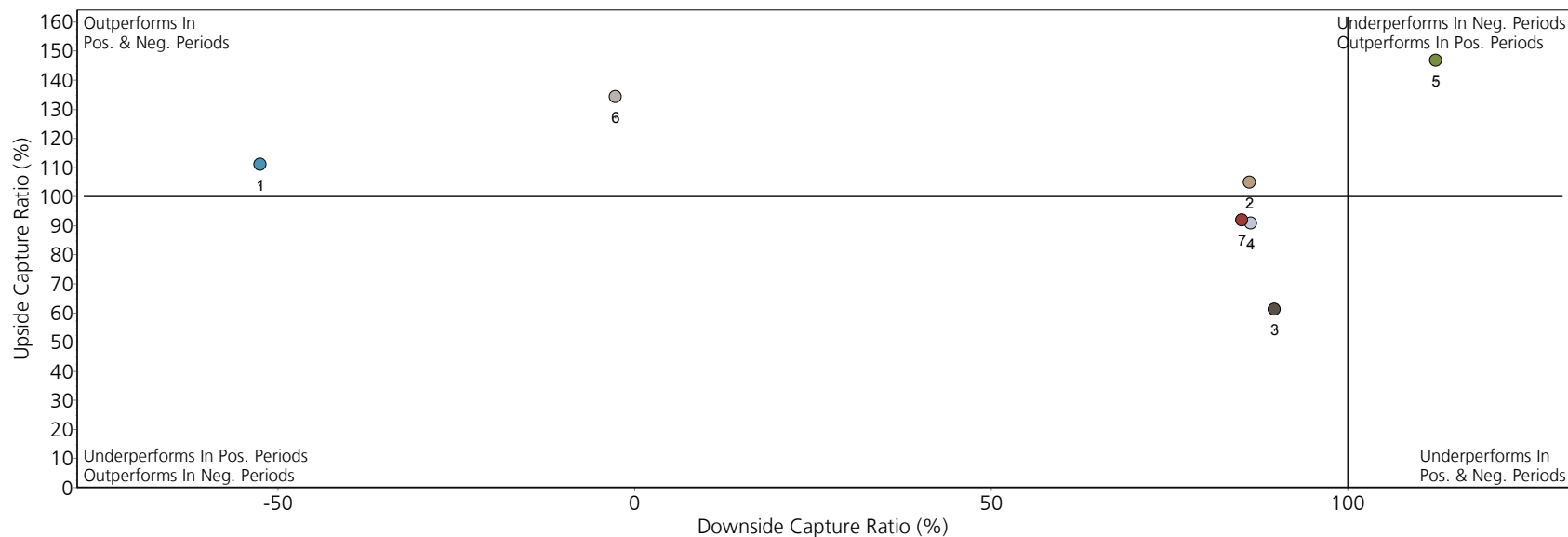
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Risk vs Reward Analysis
December 31, 2013 Through December 31, 2018



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Capture Ratio
May 31, 2011 Through December 31, 2018

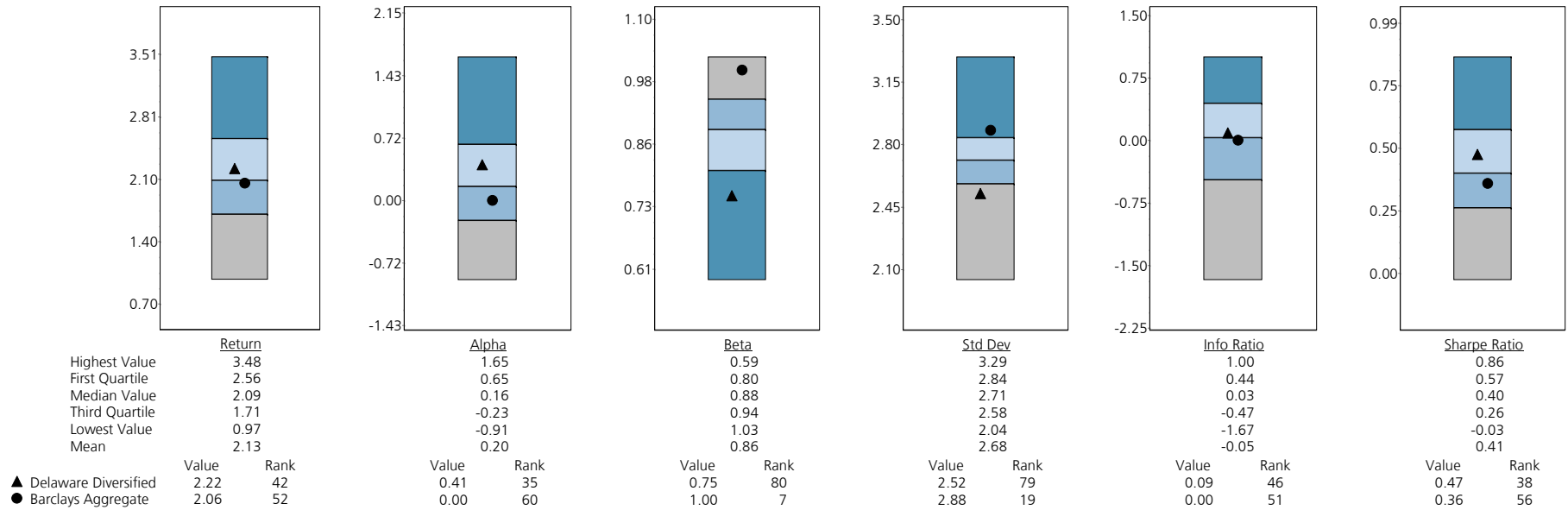


	1	2	3	4	5	6	7
	12/2016-12/2017	12/2015-12/2016	12/2014-12/2015	12/2013-12/2014	12/2012-12/2013	12/2011-12/2012	5/2011-12/2018
Up Periods	8.00	8.00	5.00	9.00	6.00	9.00	56.00
Upside Capture ROR	4.80	6.43	2.45	6.48	5.18	6.66	7.94
BB Agg Bond	4.33	6.13	4.00	7.14	3.53	4.96	8.65
% Of Capture	110.95	104.91	61.28	90.75	146.73	134.24	91.86
Down Periods	4.00	4.00	7.00	3.00	6.00	3.00	35.00
Downside Capture ROR	0.40	-2.83	-2.97	-0.95	-6.02	0.02	-5.53
BB Agg Bond	-0.76	-3.28	-3.32	-1.10	-5.37	-0.71	-6.50
% Of Capture	-52.43	86.23	89.66	86.38	112.28	-2.69	85.15

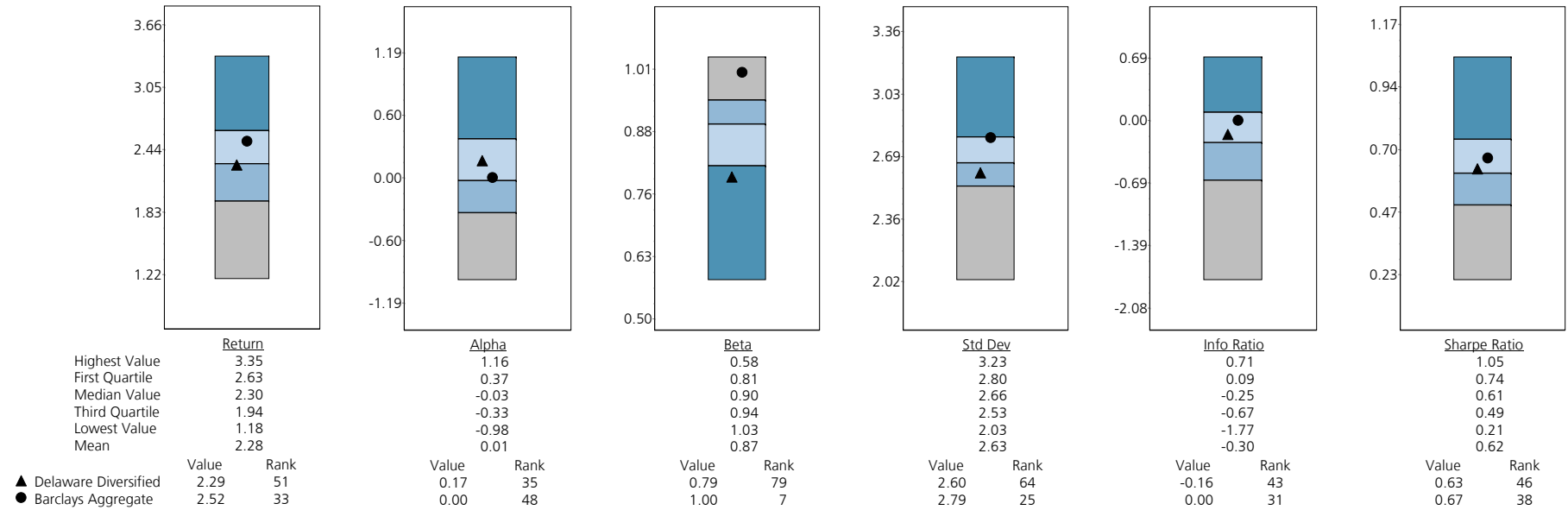
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TOTAL FUND vs Intermediate Bond Managers December 31, 2015 Through December 31, 2018

3 Year



5 Year



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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb County Employees Retirement System
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Eagle Capital Large Value

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Performance Analysis

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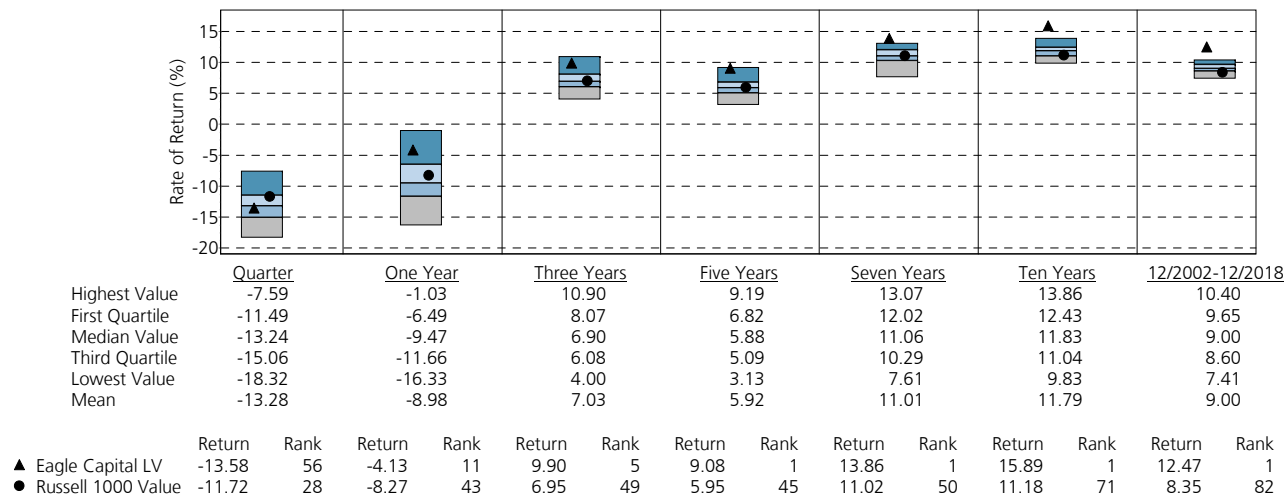
TOTAL FUND BENCHMARK

12/31/2002 - Present
100% Russell 1000 Value

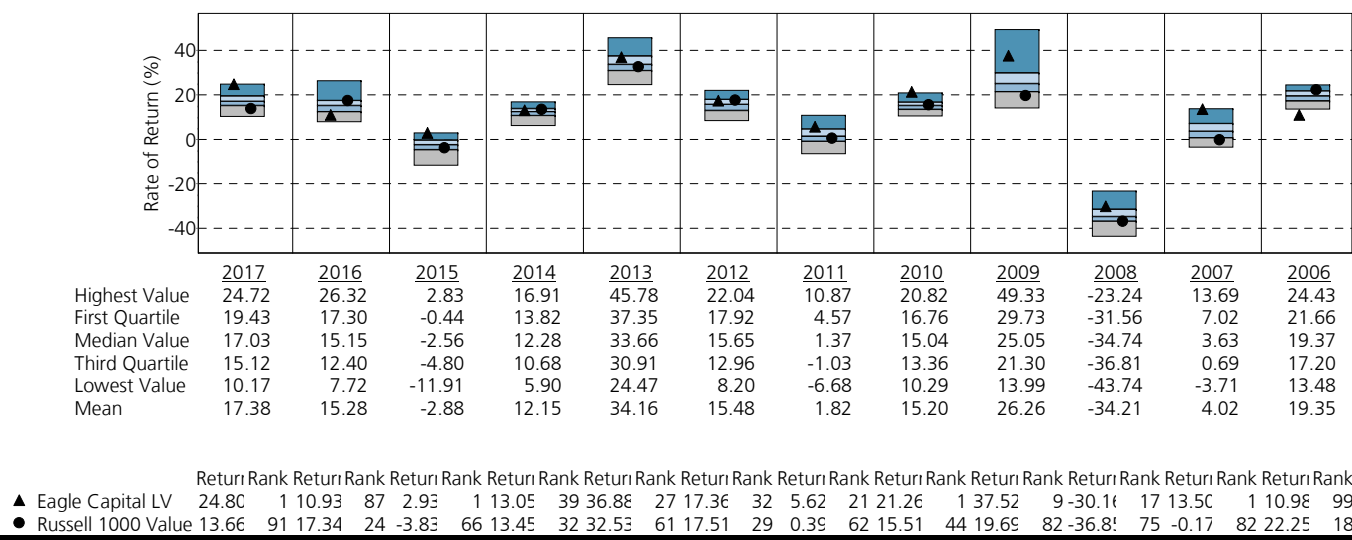
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TOTAL FUND Peer Universe Comparison versus Large Cap Value Managers

Trailing Periods

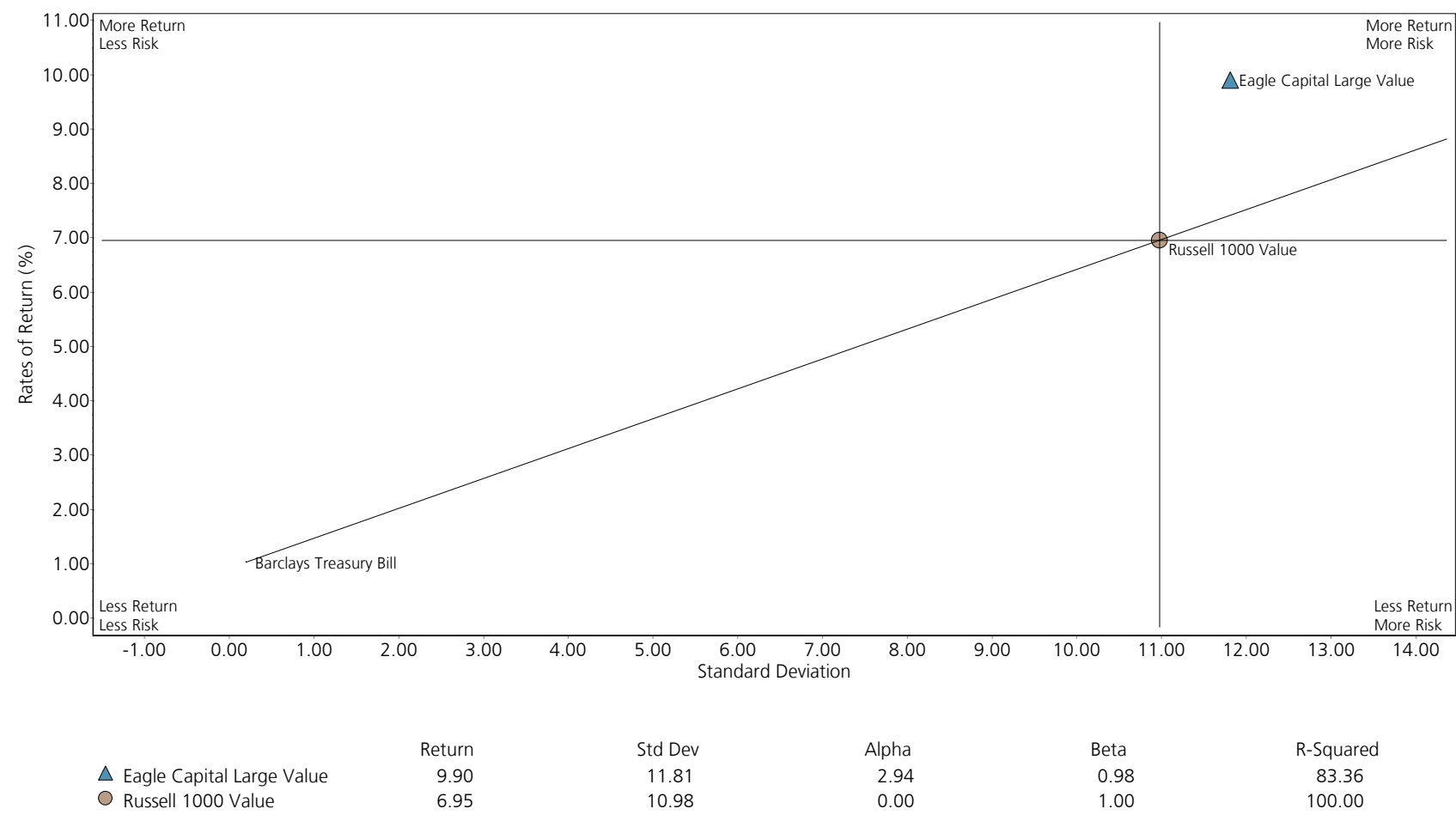


Annual Periods



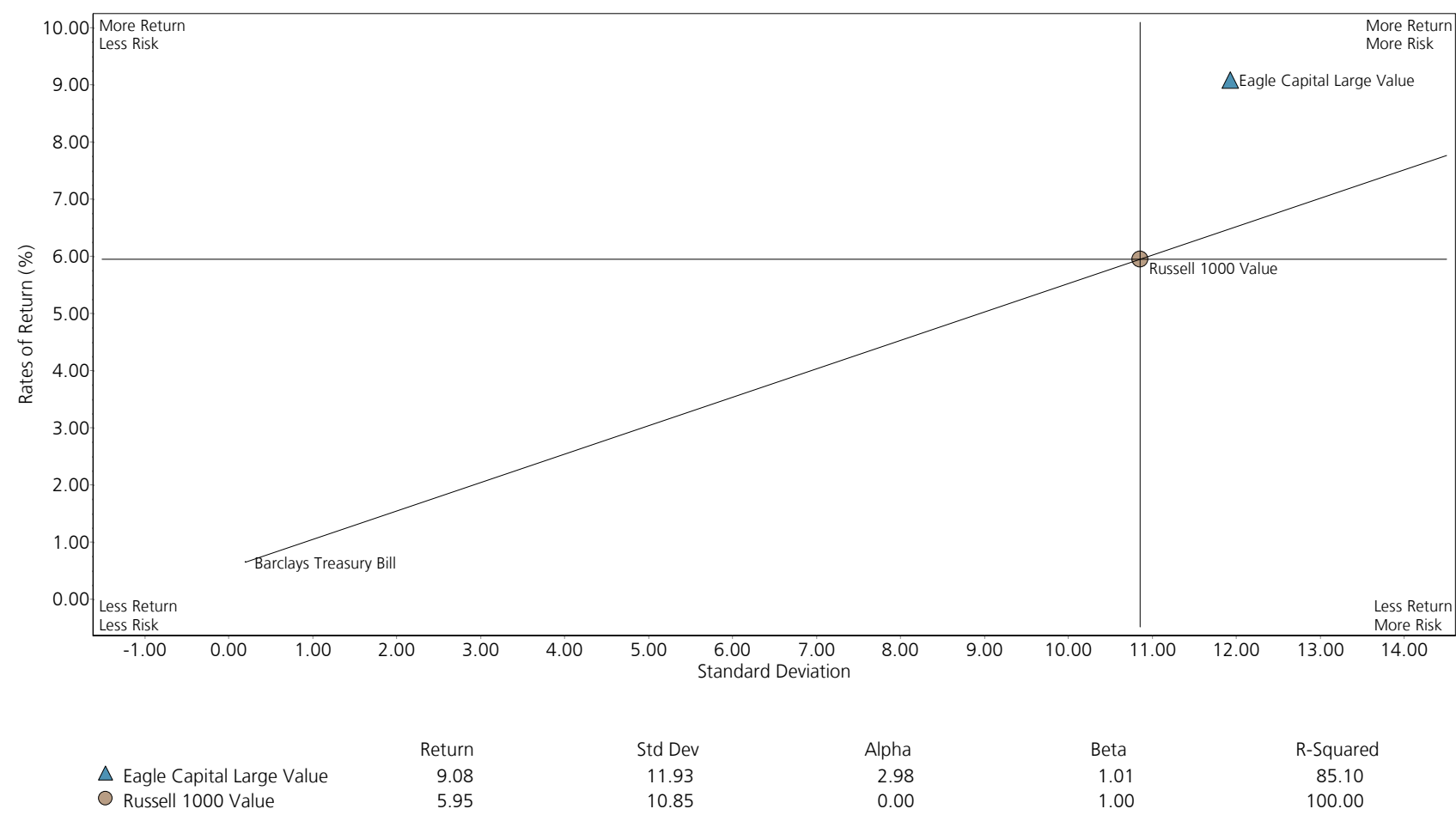
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Risk vs Reward Analysis
December 31, 2015 Through December 31, 2018



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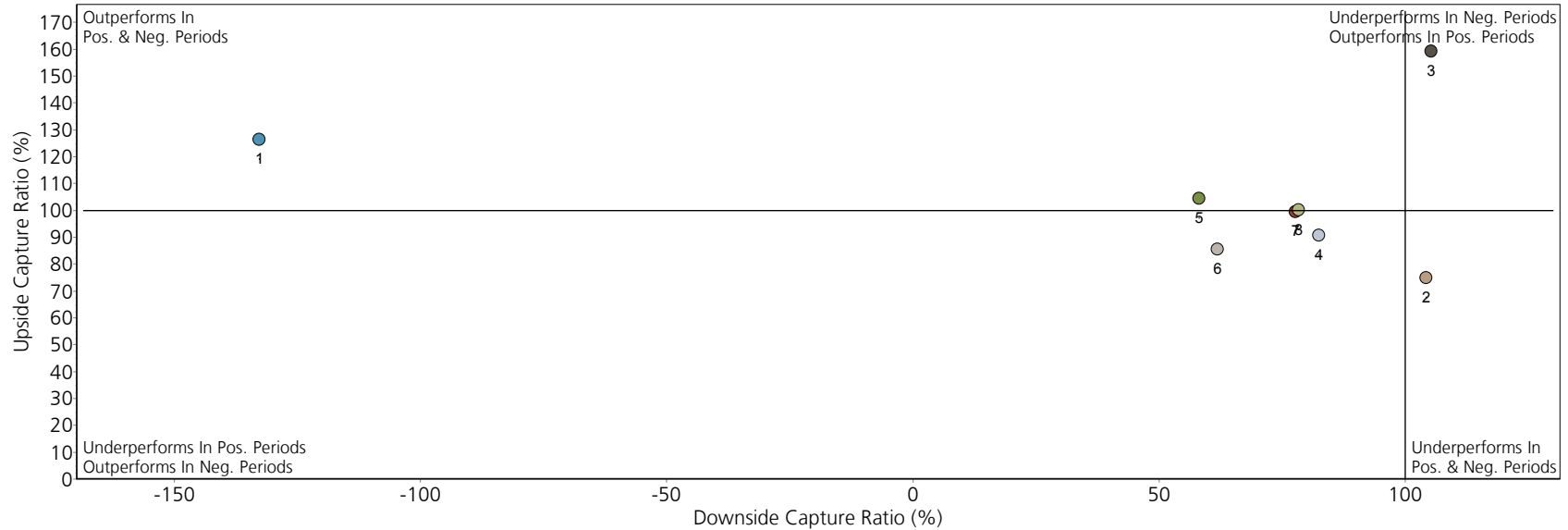
Risk vs Reward Analysis
December 31, 2013 Through December 31, 2018



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Capture Ratio

December 31, 2002 Through December 31, 2018

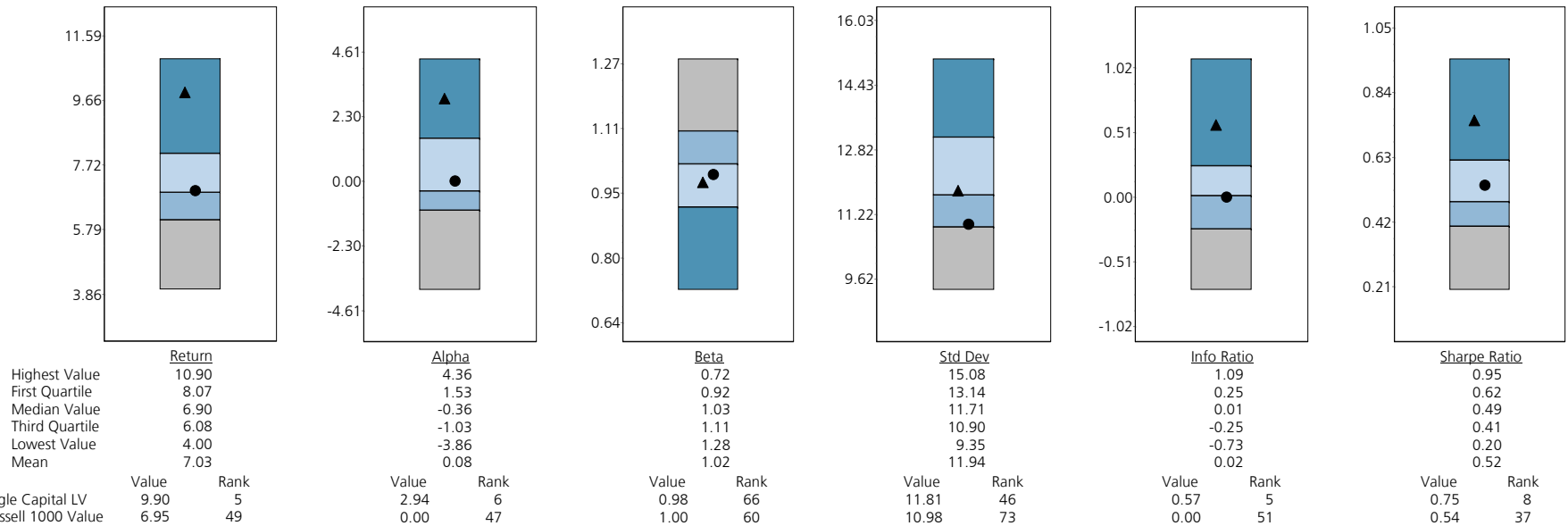


	1	2	3	4	5	6	7	8
	12/2016-12/2017	12/2015-12/2016	12/2014-12/2015	12/2013-12/2014	12/2012-12/2013	12/2011-12/2012	12/2010-12/2011	12/2002-12/2018
Up Periods	8.00	8.00	6.00	9.00	10.00	8.00	6.00	124.00
Upside Capture ROR	20.87	19.46	25.65	20.13	40.67	22.93	24.14	42.05
Russell 1000 Value	16.52	25.97	16.12	22.19	38.98	26.79	24.26	41.99
% Of Capture	126.34	74.91	159.12	90.72	104.35	85.58	99.50	100.14
Down Periods	4.00	4.00	6.00	3.00	2.00	4.00	6.00	68.00
Downside Capture ROR	3.25	-7.14	-18.08	-5.89	-2.70	-4.53	-14.92	-26.52
Russell 1000 Value	-2.45	-6.85	-17.18	-7.15	-4.64	-7.32	-19.21	-33.83
% Of Capture	-132.69	104.19	105.28	82.43	58.13	61.82	77.68	78.39

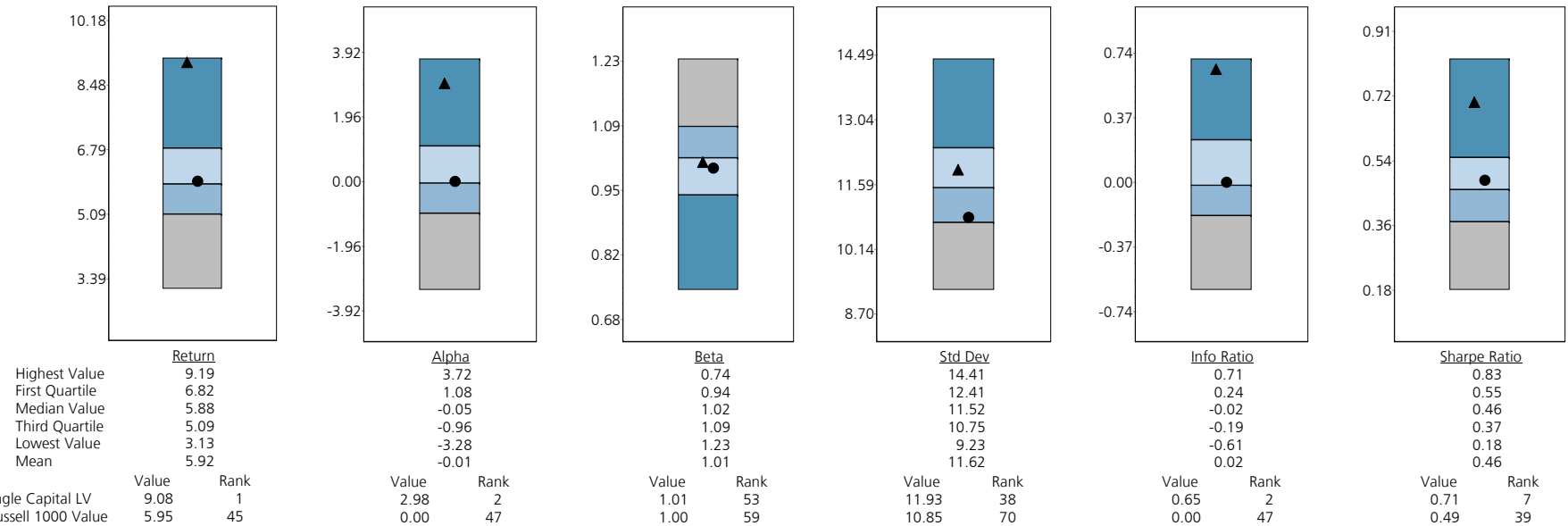
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TOTAL FUND vs Large Cap Value Managers December 31, 2015 Through December 31, 2018

3 Year



5 Year



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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb County Employees Retirement System
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Vanguard 500 Index

Please contact your UBS Institutional Consultant if you have any questions regarding this report, if your financial situation, individual needs or investment objectives have changed, or if you would like to initiate or modify any investment restrictions on this account.

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Performance Analysis

The primary index comparison for your portfolio and each of its asset classes is listed below.

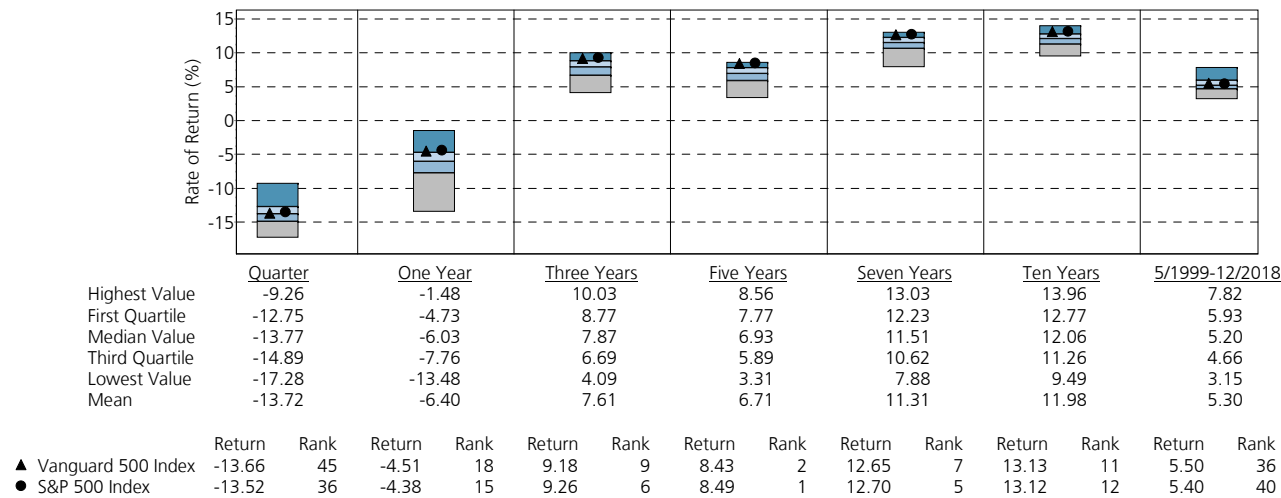
TOTAL FUND BENCHMARK

5/31/1999 - Present
100% S&P 500 Index

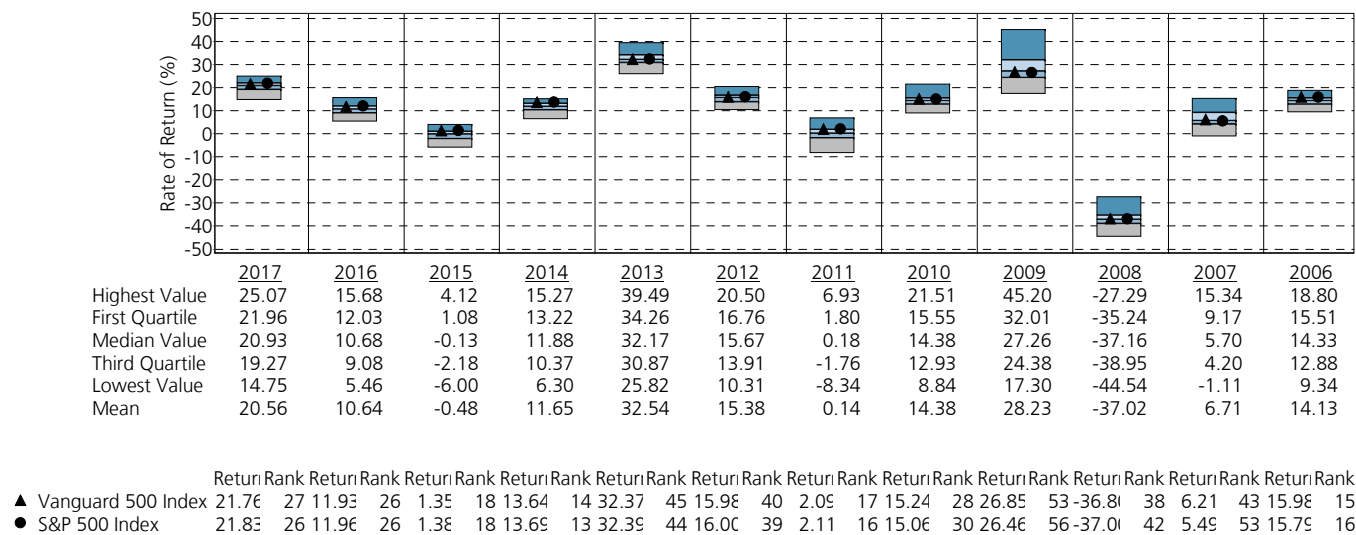
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TOTAL FUND Peer Universe Comparison versus Large Blend Managers

Trailing Periods

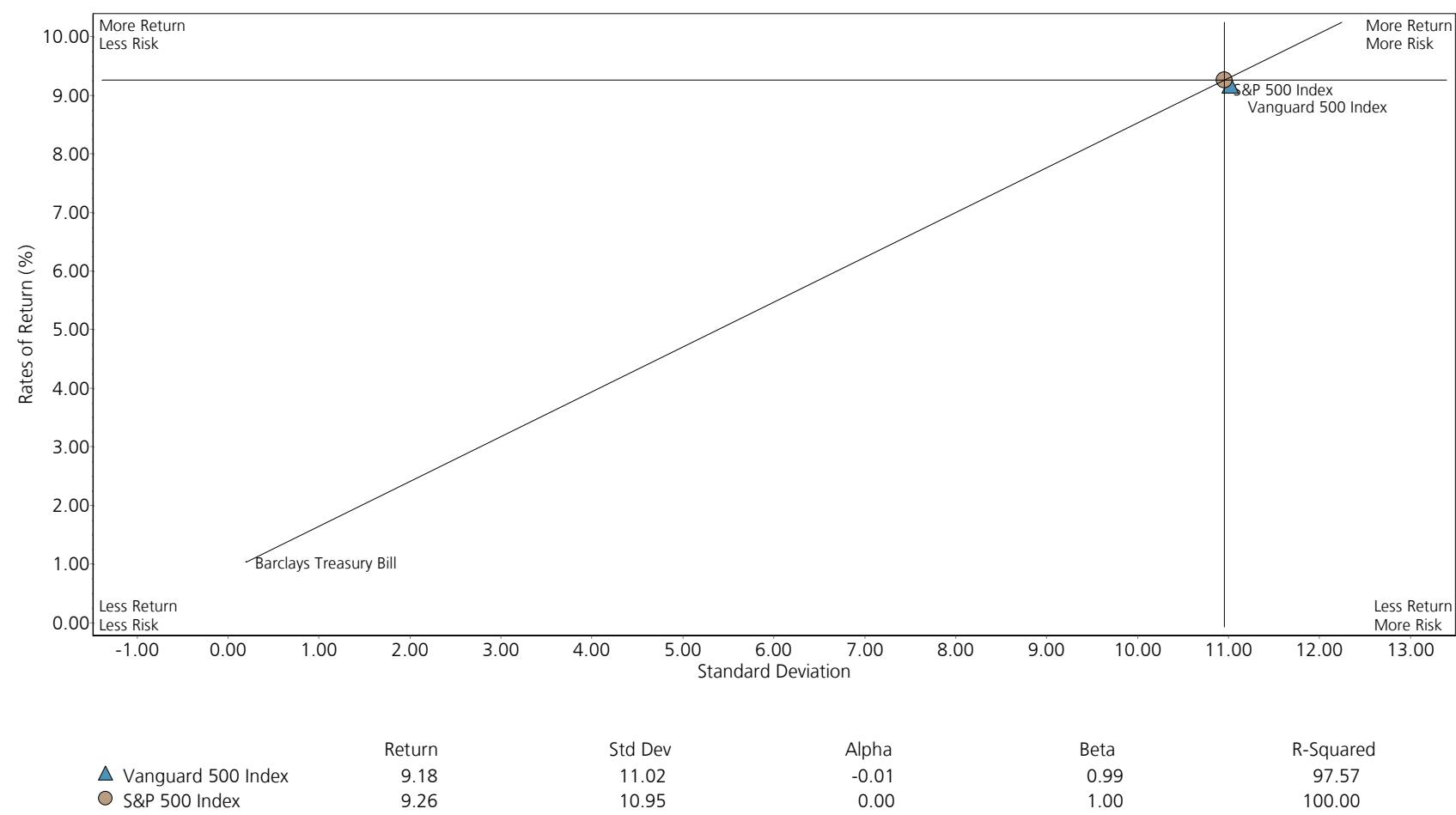


Annual Periods



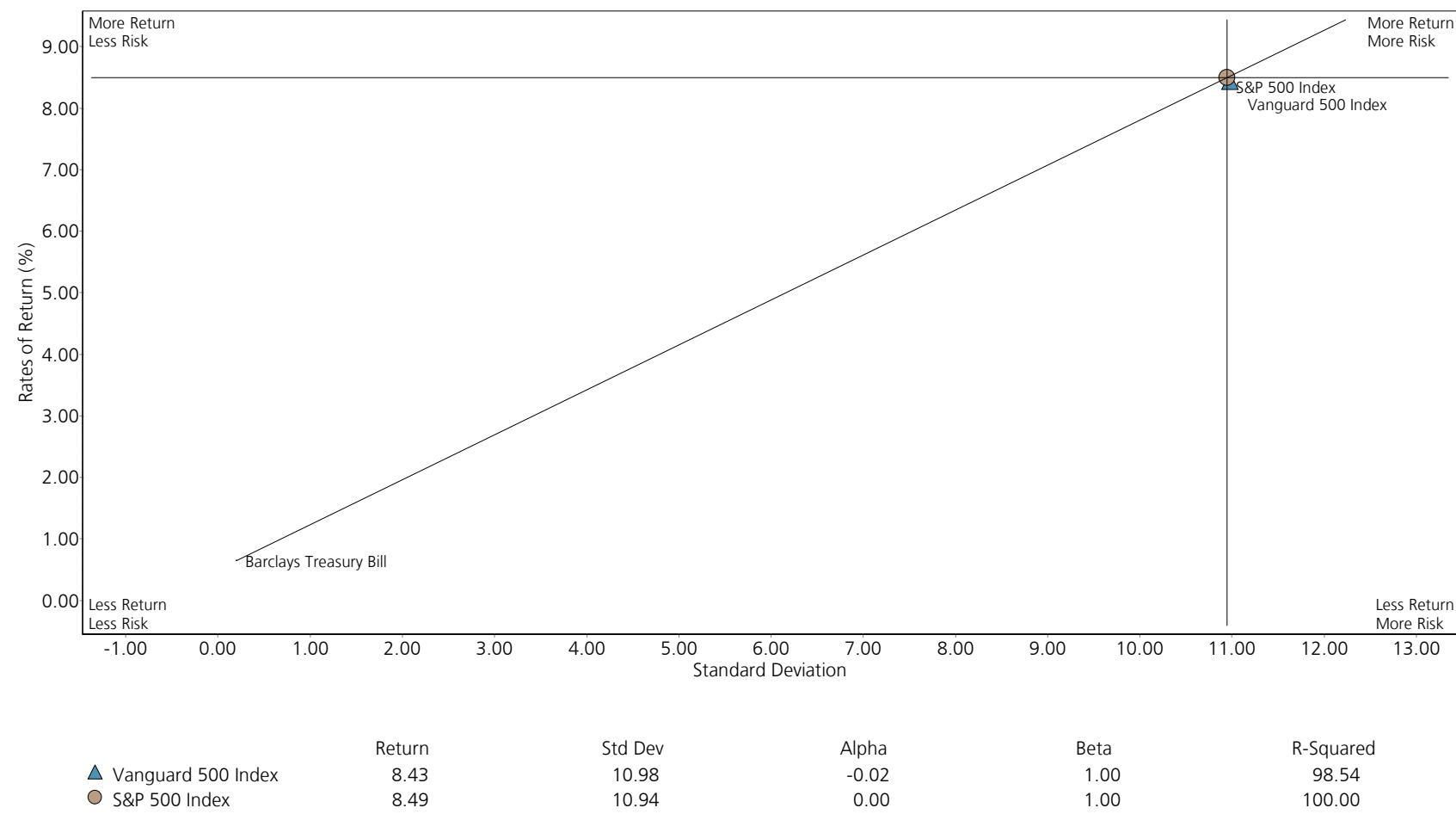
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Risk vs Reward Analysis
December 31, 2015 Through December 31, 2018



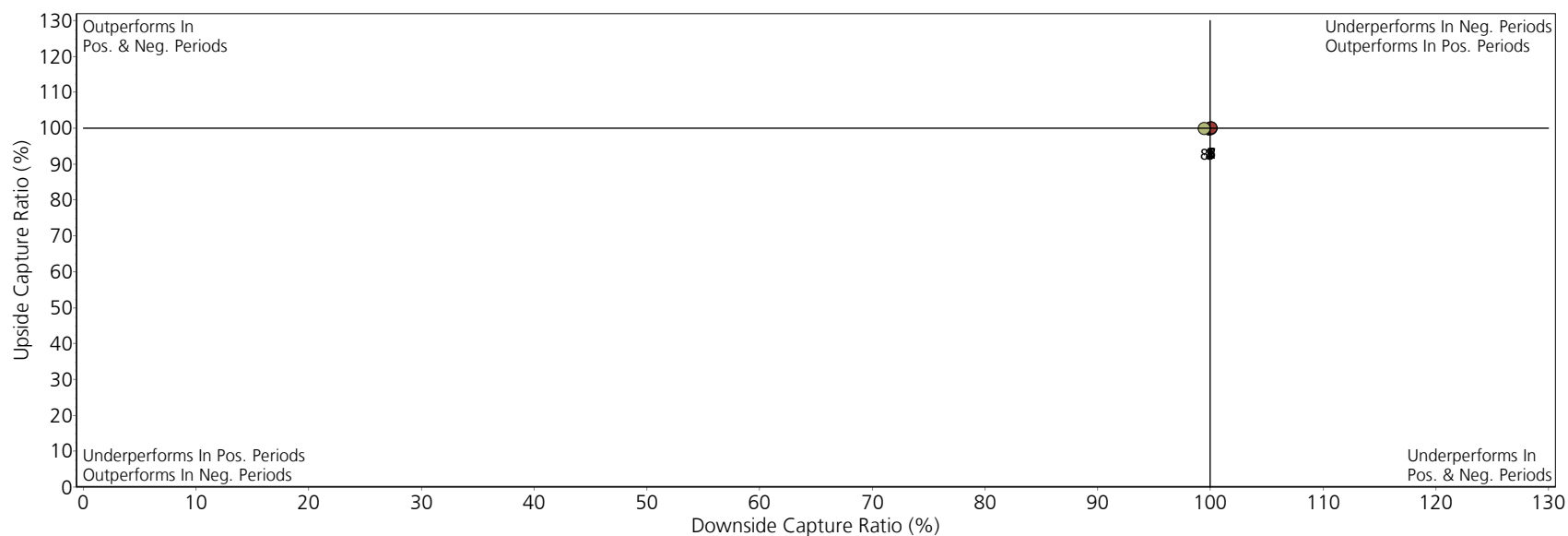
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Risk vs Reward Analysis
December 31, 2013 Through December 31, 2018



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Capture Ratio
May 31, 1999 Through December 31, 2018

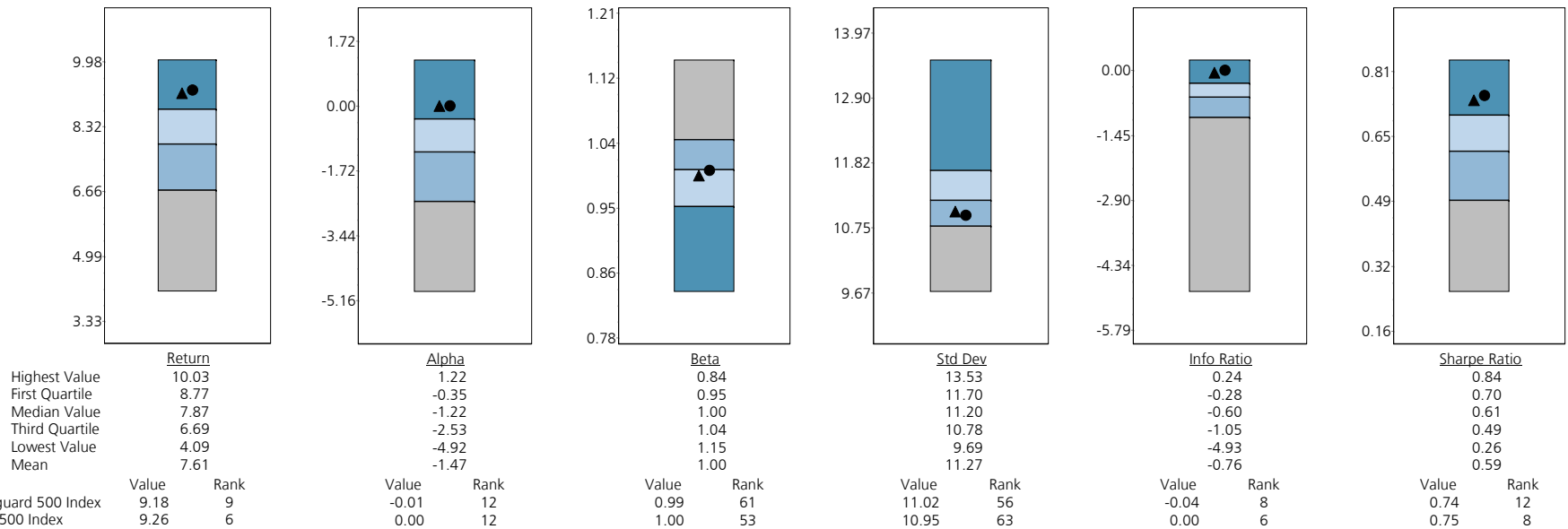


	1	2	3	4	5	6	7	8
	12/2016-12/2017	12/2015-12/2016	12/2014-12/2015	12/2013-12/2014	12/2012-12/2013	12/2011-12/2012	12/2010-12/2011	5/1999-12/2018
Up Periods	12.00	9.00	6.00	8.00	10.00	9.00	6.00	150.00
Upside Capture ROR	21.76	20.14	20.01	21.36	38.18	26.53	22.20	41.39
S&P 500 Index	21.83	20.16	20.07	21.41	38.19	26.54	22.21	41.45
% Of Capture	99.69	99.89	99.73	99.77	99.97	99.96	99.95	99.87
Down Periods	0.00	3.00	6.00	4.00	2.00	3.00	6.00	85.00
Downside Capture ROR	N/A	-6.83	-15.55	-6.36	-4.20	-8.33	-16.46	-37.08
S&P 500 Index	N/A	-6.82	-15.56	-6.36	-4.20	-8.32	-16.45	-37.28
% Of Capture	N/A	100.12	99.92	99.99	100.06	100.12	100.08	99.47

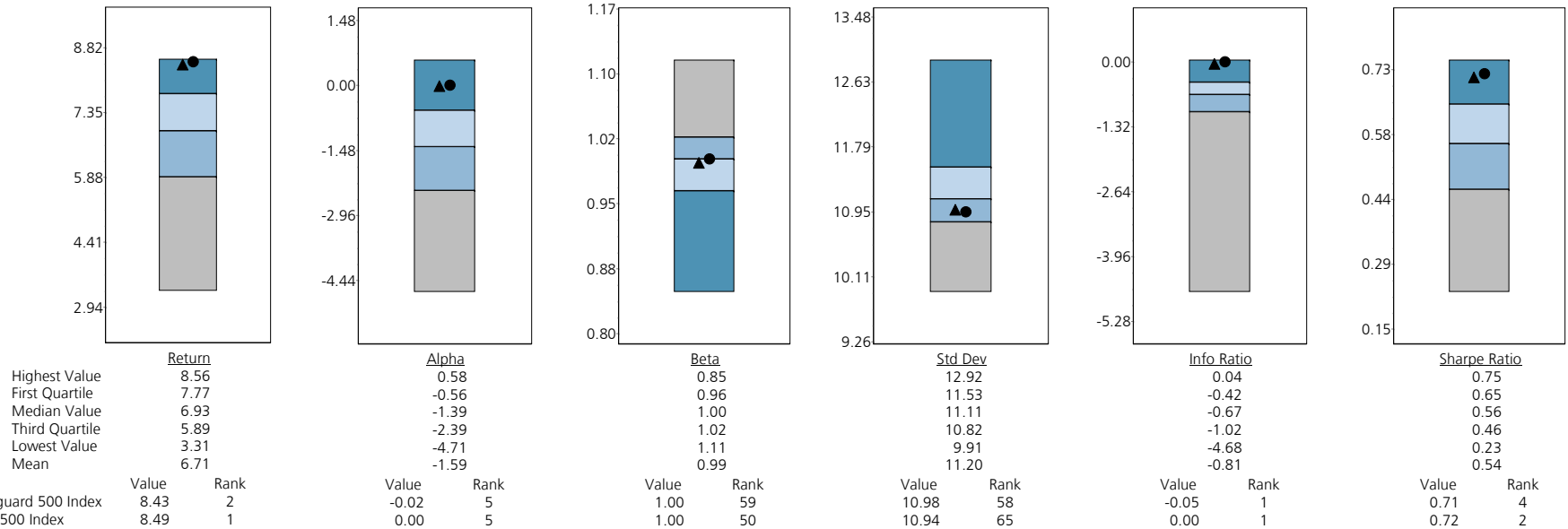
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TOTAL FUND vs Large Blend Managers December 31, 2015 Through December 31, 2018

3 Year



5 Year



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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb County Employees Retirement System
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

TCW Large Cap Growth

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Performance Analysis

The primary index comparison for your portfolio and each of its asset classes is listed below.

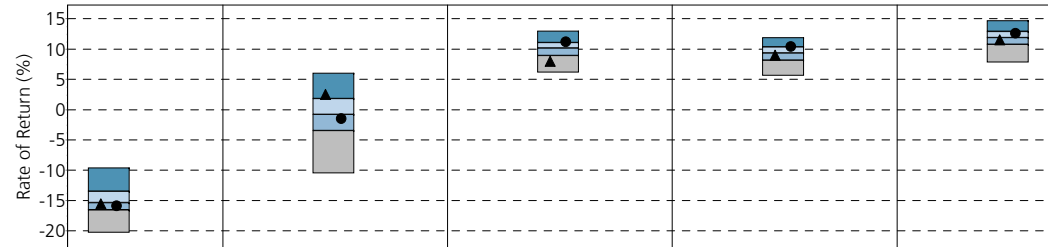
TOTAL FUND BENCHMARK

4/30/2013 - Present
100% Russell 1000 Growth

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TOTAL FUND Peer Universe Comparison versus Large Cap Growth Managers

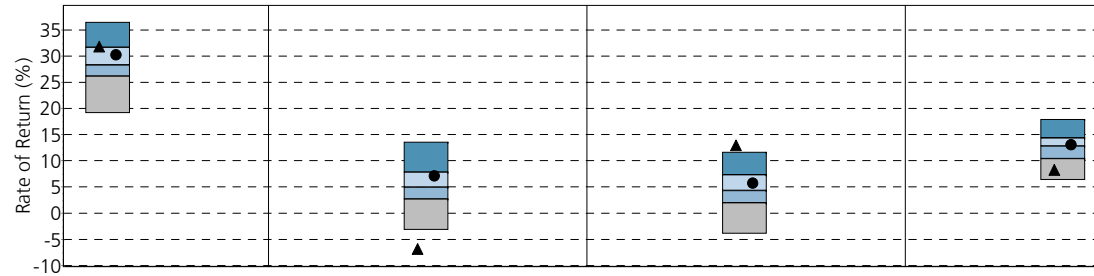
Trailing Periods



	<u>Quarter</u>	<u>One Year</u>	<u>Three Years</u>	<u>Five Years</u>	<u>4/2013-12/2018</u>
Highest Value	-9.62	6.04	12.92	11.89	14.63
First Quartile	-13.46	1.79	11.06	10.31	12.89
Median Value	-15.38	-0.82	10.18	9.34	11.89
Third Quartile	-16.53	-3.43	8.91	8.15	10.76
Lowest Value	-20.28	-10.50	6.12	5.60	7.77
Mean	-15.06	-1.16	9.97	9.17	11.75

	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ TCW LCG	-15.53	50	2.53	17	7.97	87	9.00	58	11.50	58
● Russell 1000 Growth	-15.89	63	-1.51	55	11.15	21	10.40	20	12.58	31

Annual Periods

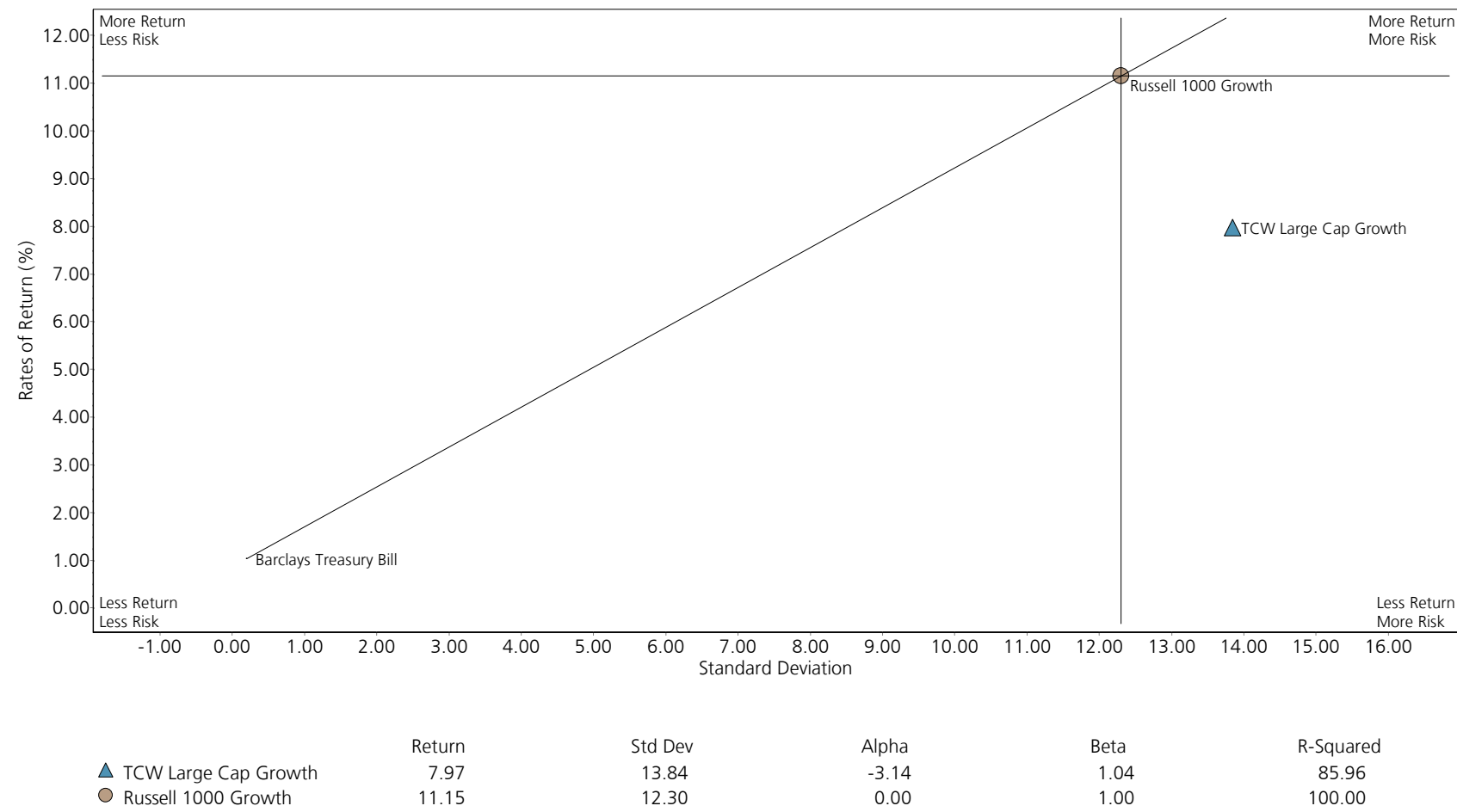


	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Highest Value	36.40	13.53	11.66	17.87
First Quartile	31.66	7.78	7.30	14.33
Median Value	28.30	4.95	4.31	12.80
Third Quartile	26.14	2.66	1.93	10.38
Lowest Value	19.09	-3.22	-3.91	6.31
Mean	28.50	5.07	4.39	12.39

	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ TCW LCG	31.82	24	-6.86	99	12.95	1	8.22	92
● Russell 1000 Growth	30.21	35	7.08	28	5.67	39	13.05	44

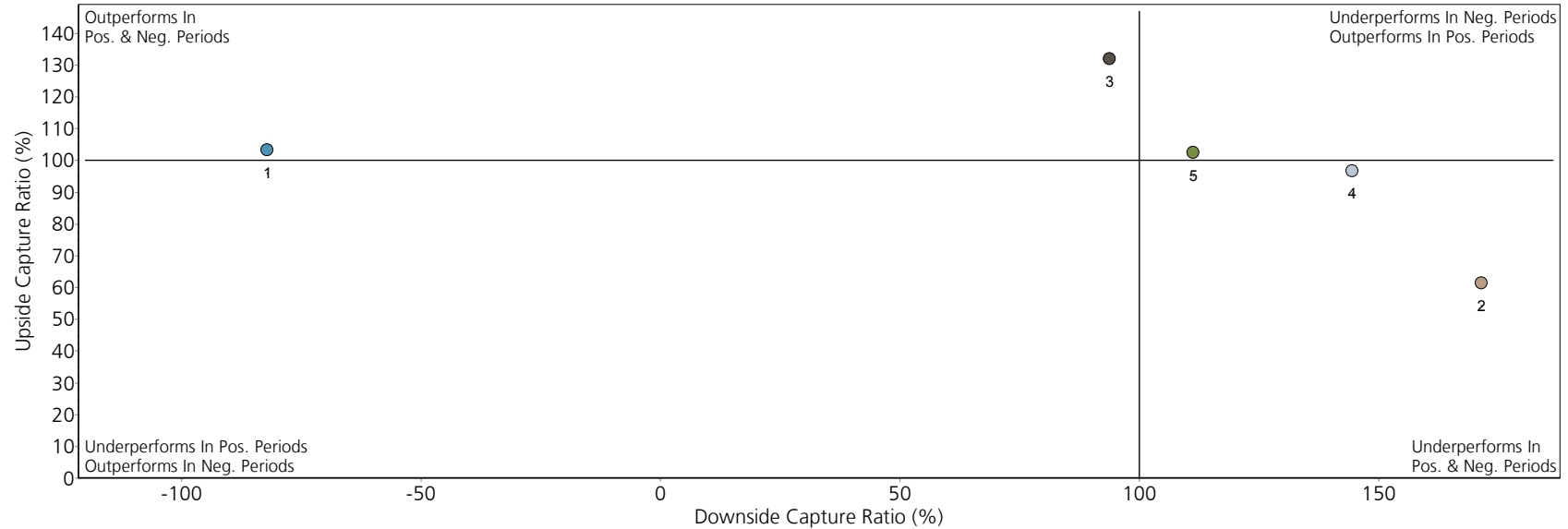
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Risk vs Reward Analysis
December 31, 2015 Through December 31, 2018



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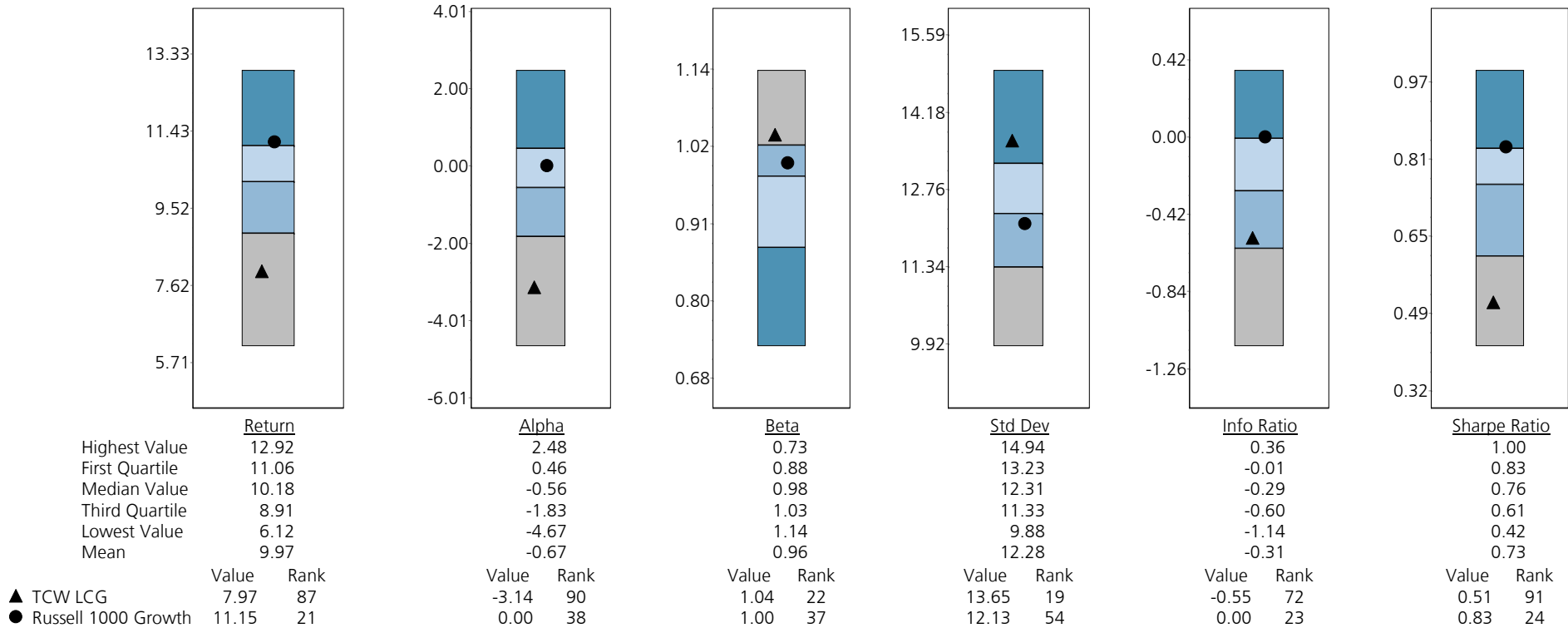
Capture Ratio
April 30, 2013 Through December 31, 2018



	1	2	3	4	5
	12/2016-12/2017	12/2015-12/2016	12/2014-12/2015	12/2013-12/2014	4/2013-12/2018
Up Periods	11.00	6.00	6.00	7.00	44.00
Upside Capture ROR	31.53	11.23	29.58	21.67	42.58
Russell 1000 Growth	30.56	18.31	22.42	22.41	41.58
% Of Capture	103.19	61.34	131.95	96.67	102.41
Down Periods	1.00	6.00	6.00	5.00	24.00
Downside Capture ROR	0.22	-16.27	-12.84	-11.05	-28.96
Russell 1000 Growth	-0.26	-9.49	-13.68	-7.65	-26.04
% Of Capture	-82.04	171.37	93.82	144.49	111.20

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TOTAL FUND vs Large Cap Growth Managers
December 31, 2015 Through December 31, 2018



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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb County Employees Retirement System
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Westfield Capital Large Growth

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Performance Analysis

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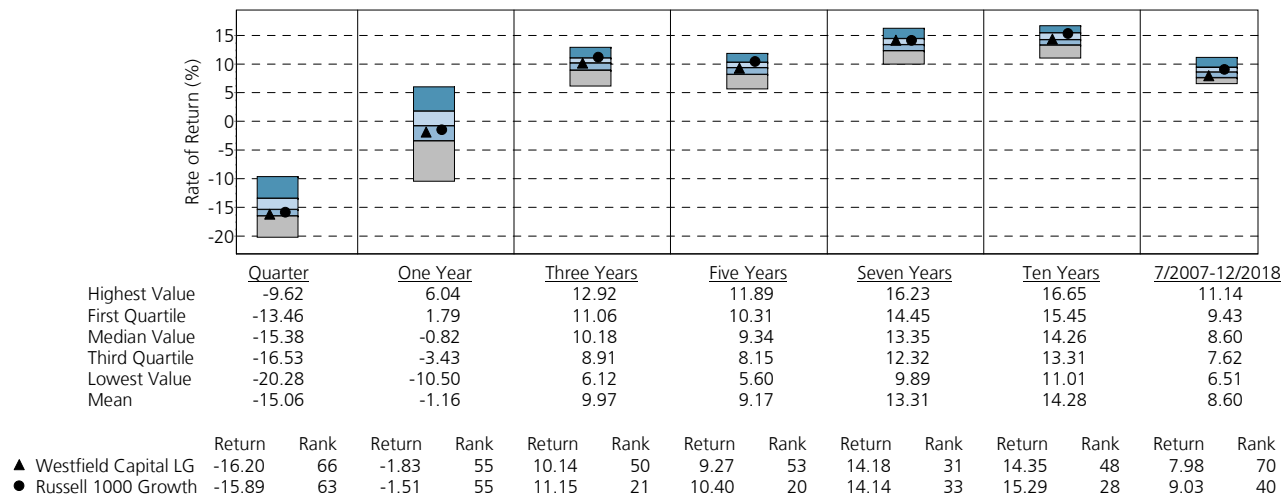
TOTAL FUND BENCHMARK

7/31/2007 - Present
100% Russell 1000 Growth

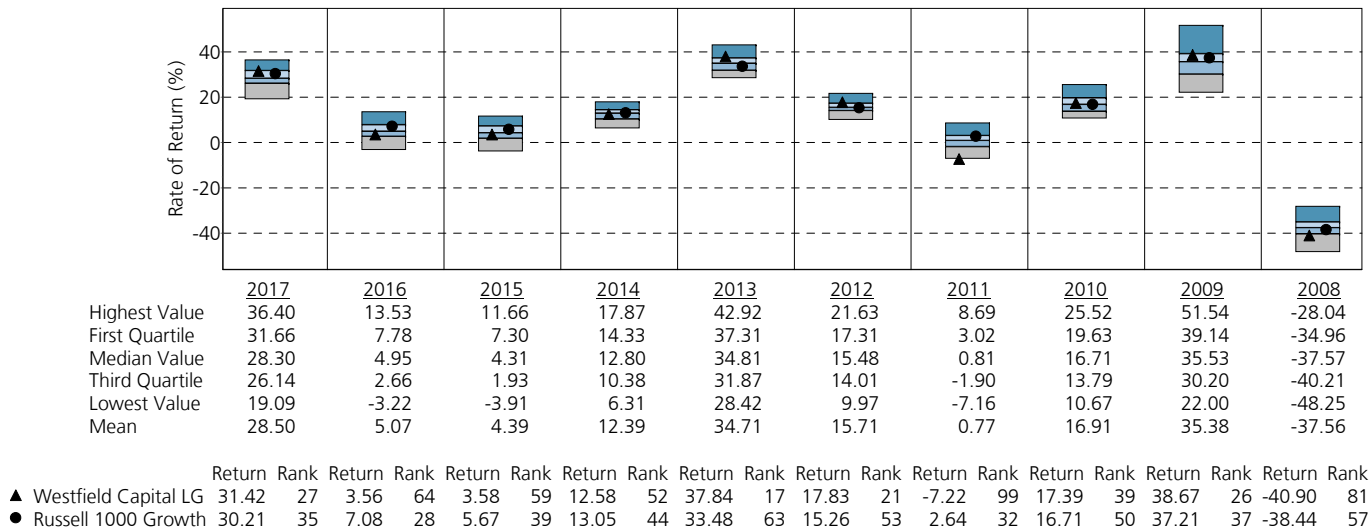
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TOTAL FUND Peer Universe Comparison versus Large Cap Growth Managers

Trailing Periods

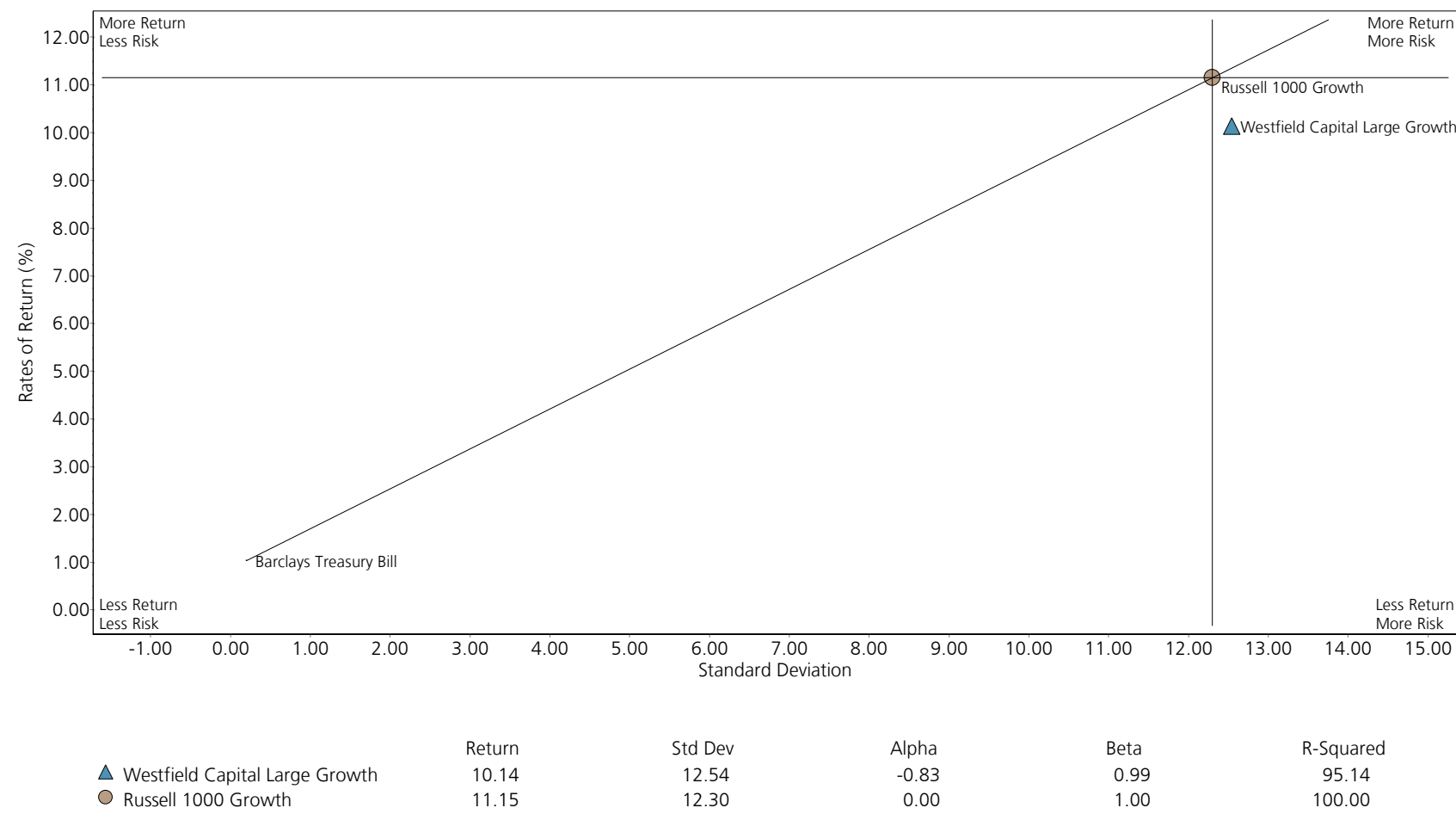


Annual Periods



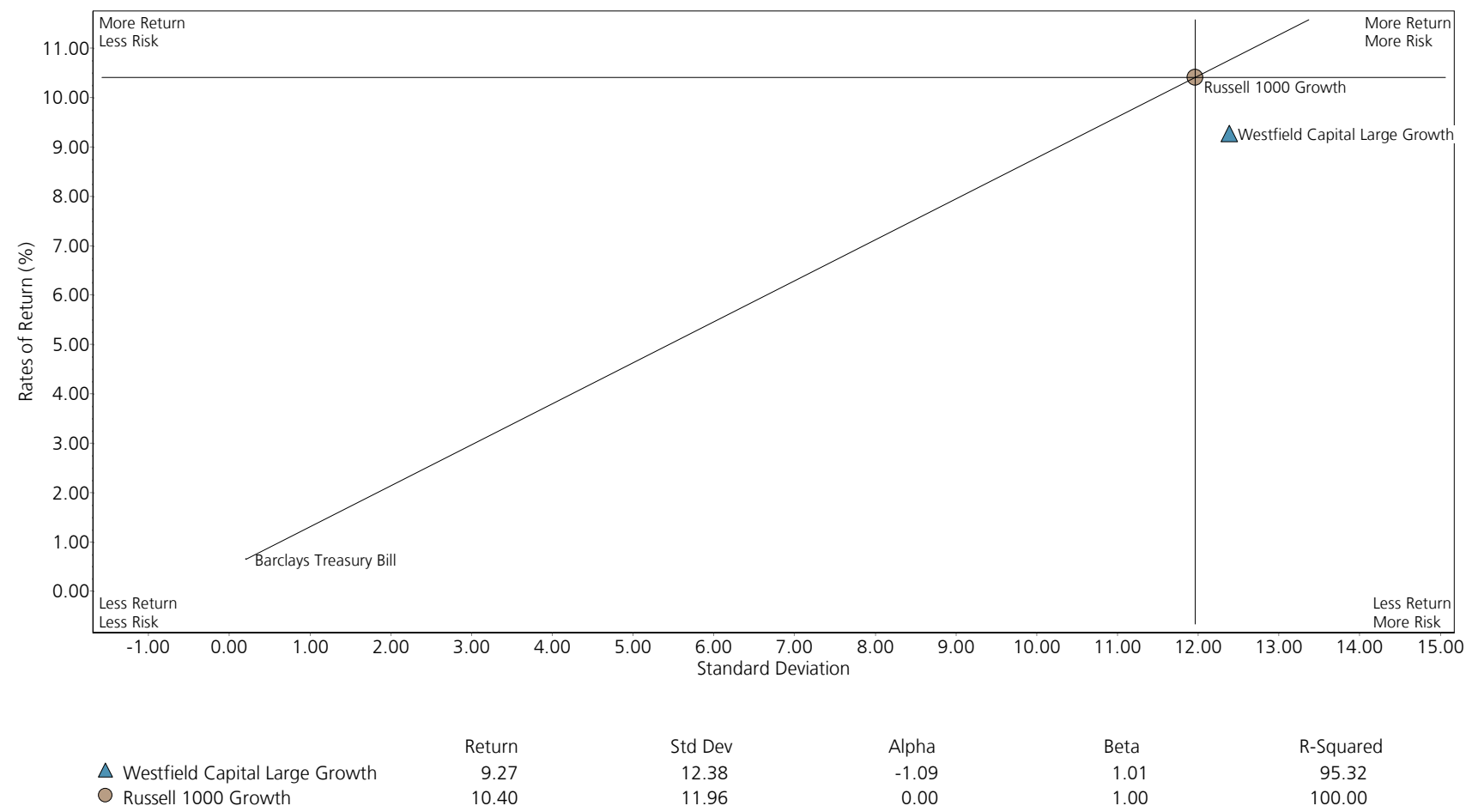
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Risk vs Reward Analysis
December 31, 2015 Through December 31, 2018



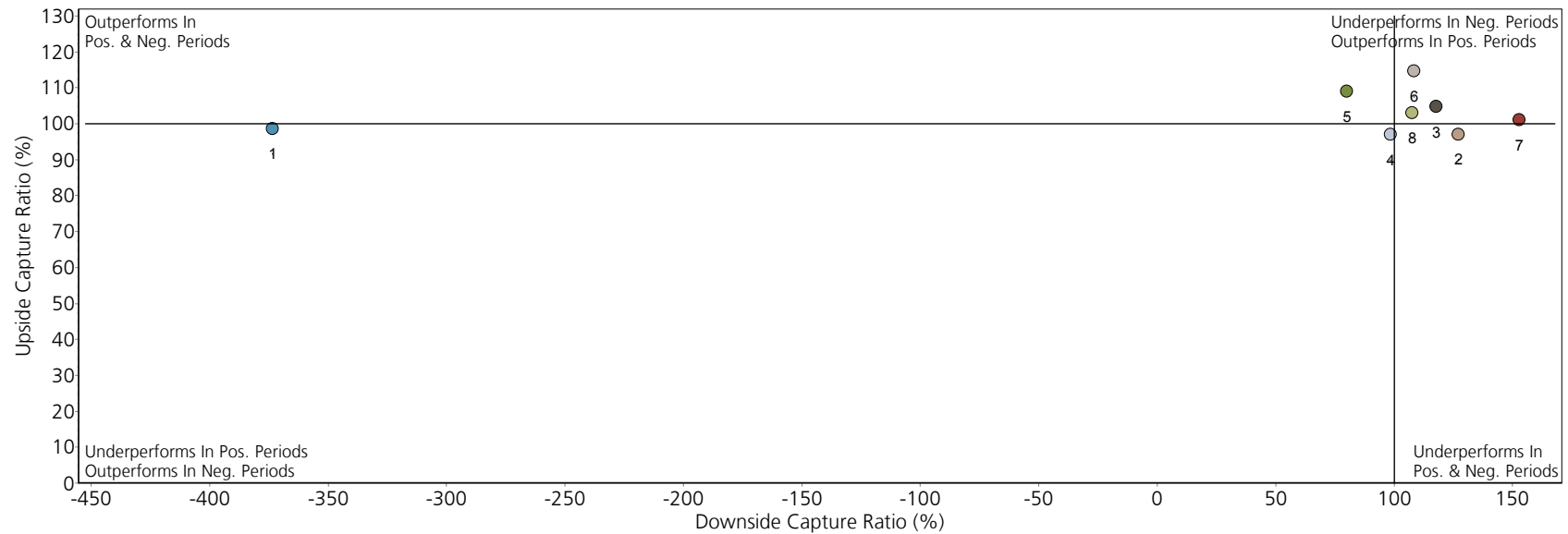
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Risk vs Reward Analysis
December 31, 2013 Through December 31, 2018



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Capture Ratio
July 31, 2007 Through December 31, 2018

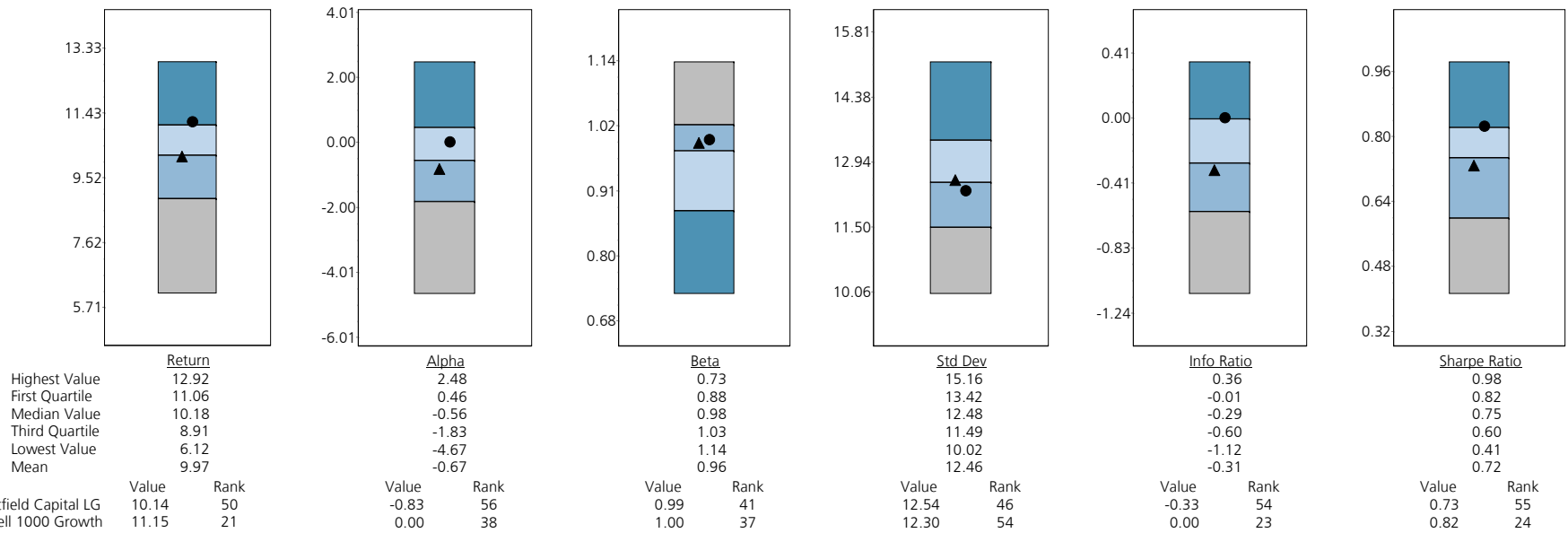


	1	2	3	4	5	6	7	8
	12/2016-12/2017	12/2015-12/2016	12/2014-12/2015	12/2013-12/2014	12/2012-12/2013	12/2011-12/2012	12/2010-12/2011	7/2007-12/2018
Up Periods	11.00	6.00	6.00	7.00	10.00	8.00	5.00	85.00
Upside Capture ROR	30.14	17.77	23.47	21.75	41.90	31.05	21.82	51.48
Russell 1000 Growth	30.56	18.31	22.42	22.41	38.42	27.09	21.61	49.93
% Of Capture	98.64	97.09	104.69	97.04	109.06	114.60	100.99	103.10
Down Periods	1.00	6.00	6.00	5.00	2.00	4.00	7.00	52.00
Downside Capture ROR	0.98	-12.07	-16.10	-7.54	-2.86	-10.08	-23.84	-37.90
Russell 1000 Growth	-0.26	-9.49	-13.68	-7.65	-3.56	-9.31	-15.59	-35.23
% Of Capture	-373.46	127.13	117.71	98.52	80.15	108.30	152.86	107.58

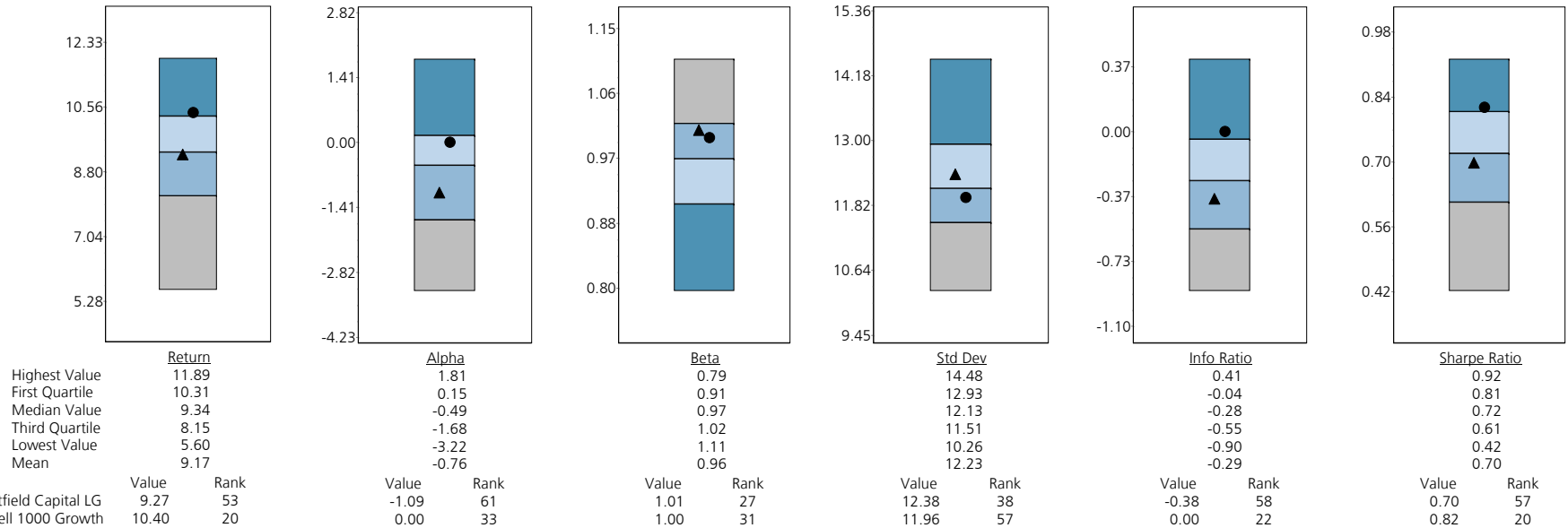
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TOTAL FUND vs Large Cap Growth Managers December 31, 2015 Through December 31, 2018

3 Year



5 Year



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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb County Employees Retirement System
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Vanguard Midcap Index Fund

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Performance Analysis

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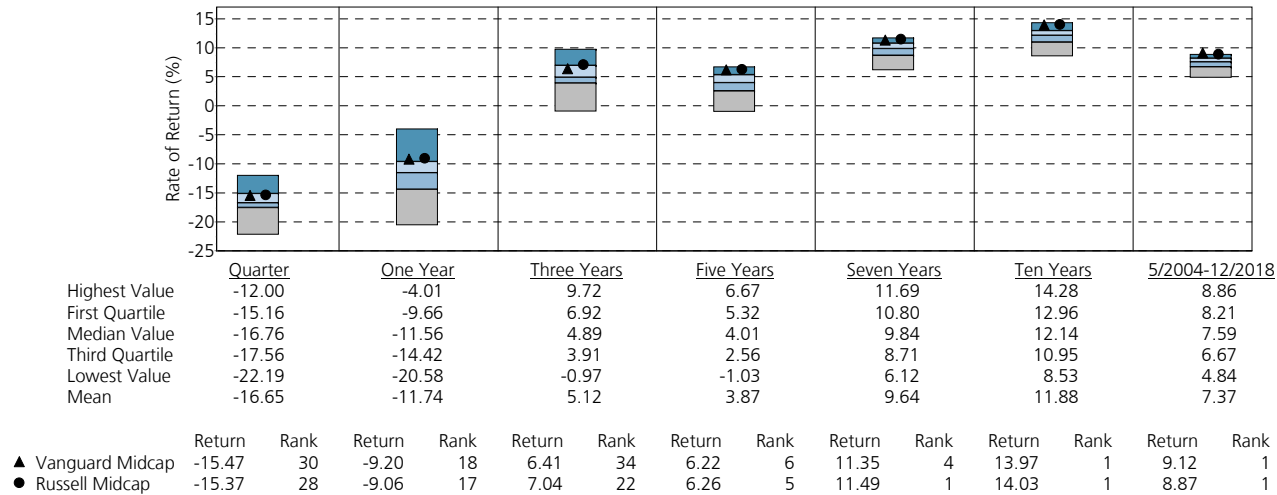
TOTAL FUND BENCHMARK

5/31/2004 - Present
100% Russell Midcap

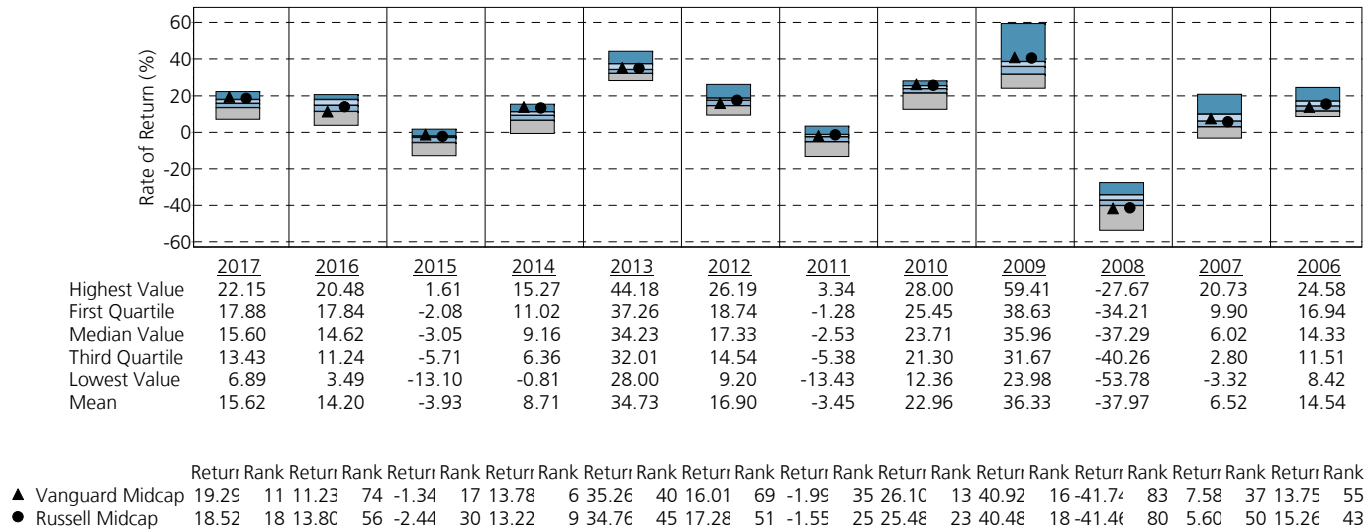
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TOTAL FUND Peer Universe Comparison versus Mid Cap Blend Managers

Trailing Periods

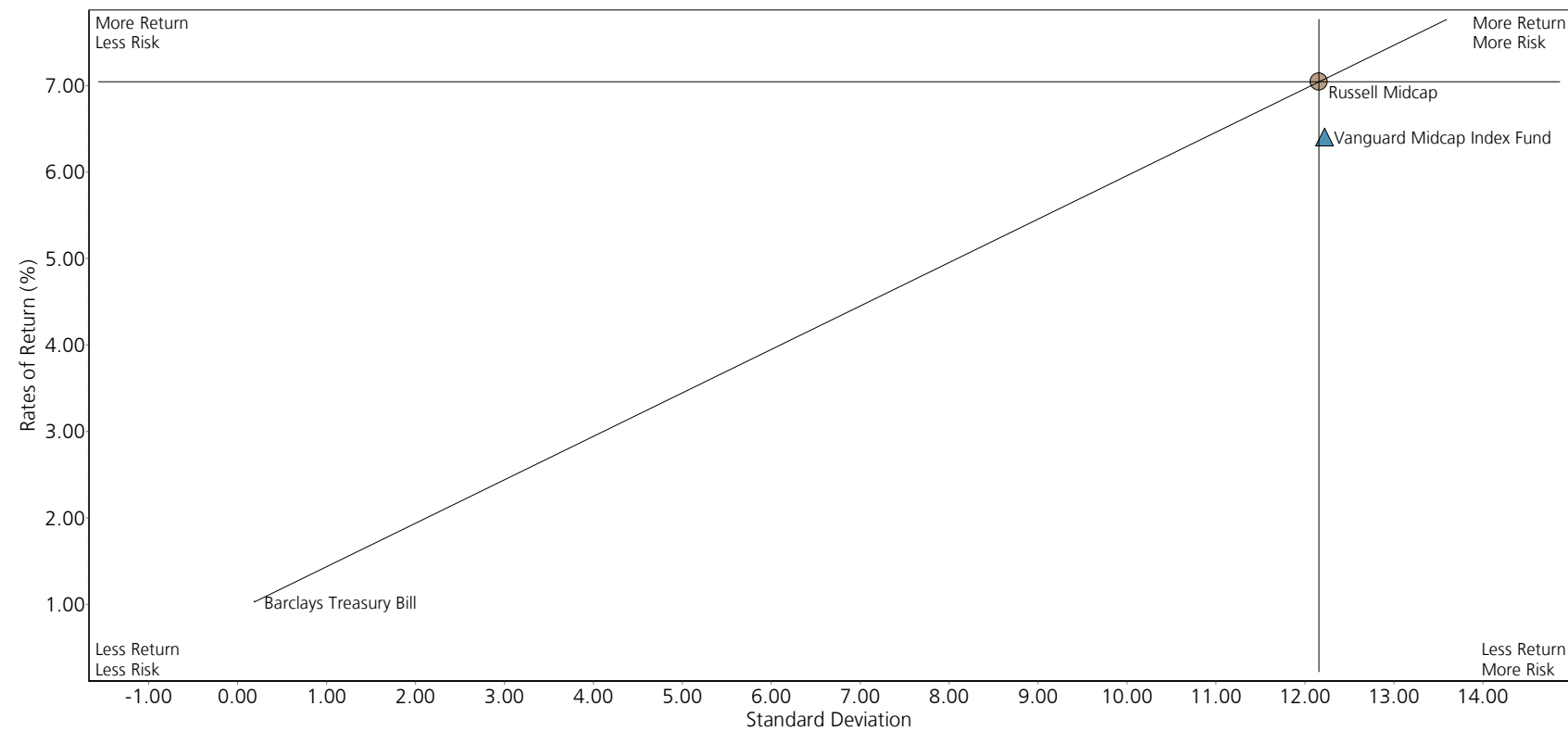


Annual Periods



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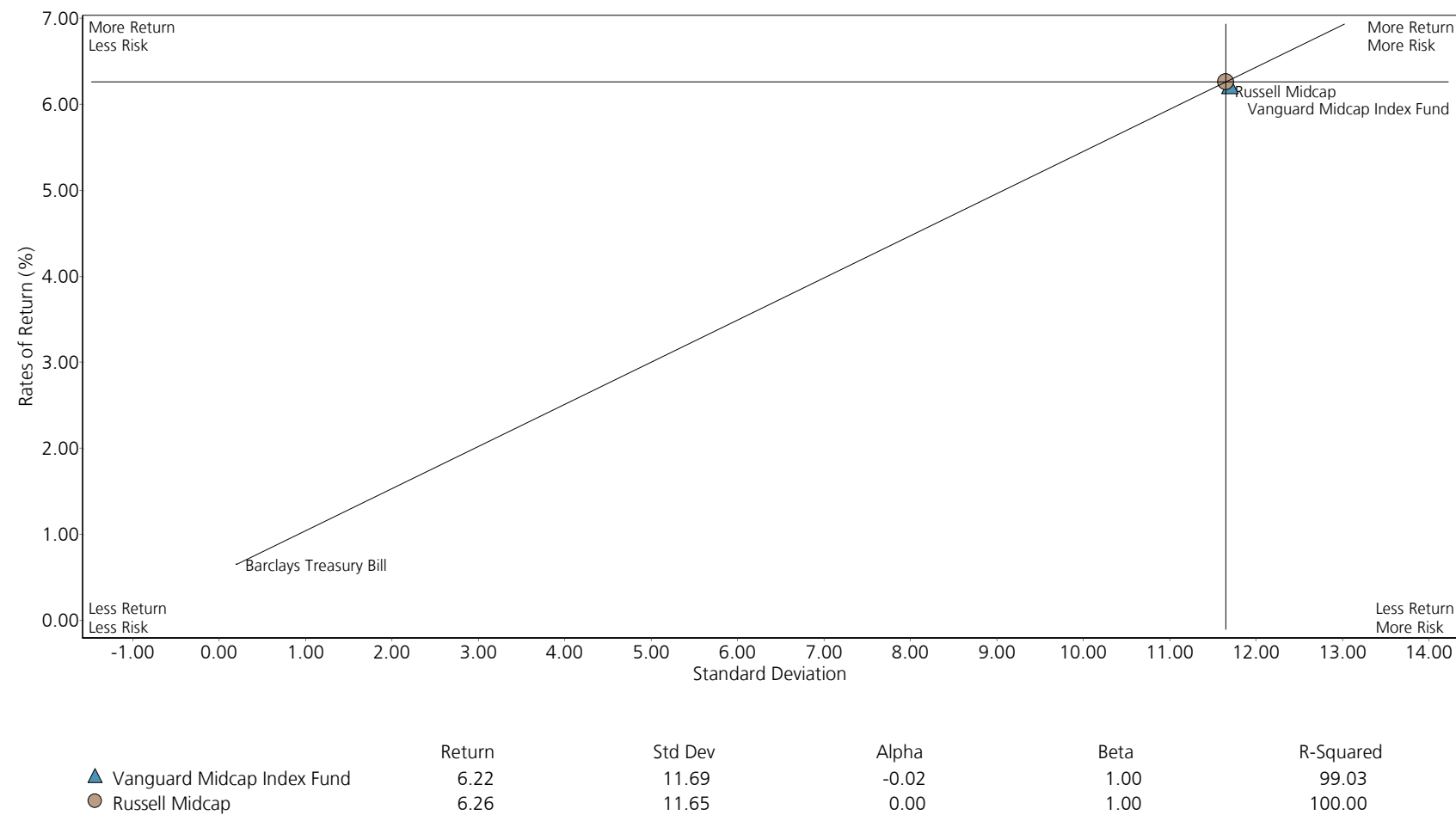
Risk vs Reward Analysis
December 31, 2015 Through December 31, 2018



	Return	Std Dev	Alpha	Beta	R-Squared
▲ Vanguard Midcap Index Fund	6.41	12.22	-0.59	1.00	98.99
● Russell Midcap	7.04	12.15	0.00	1.00	100.00

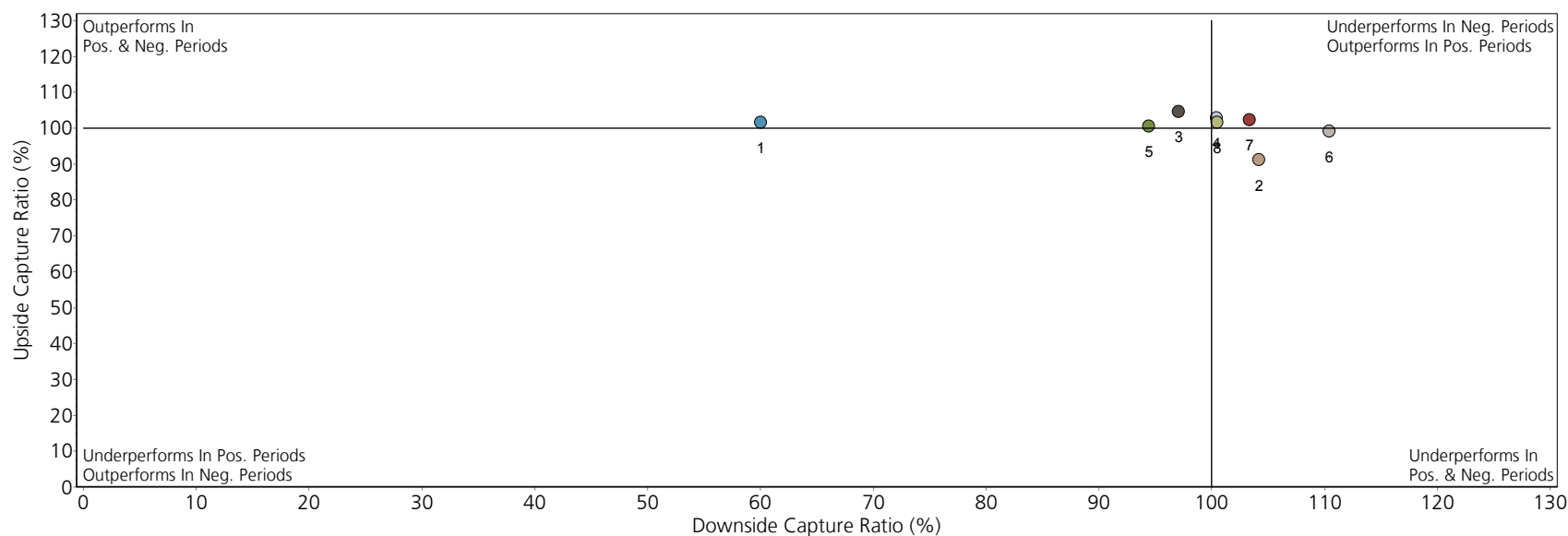
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Risk vs Reward Analysis
December 31, 2013 Through December 31, 2018



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Capture Ratio
May 31, 2004 Through December 31, 2018

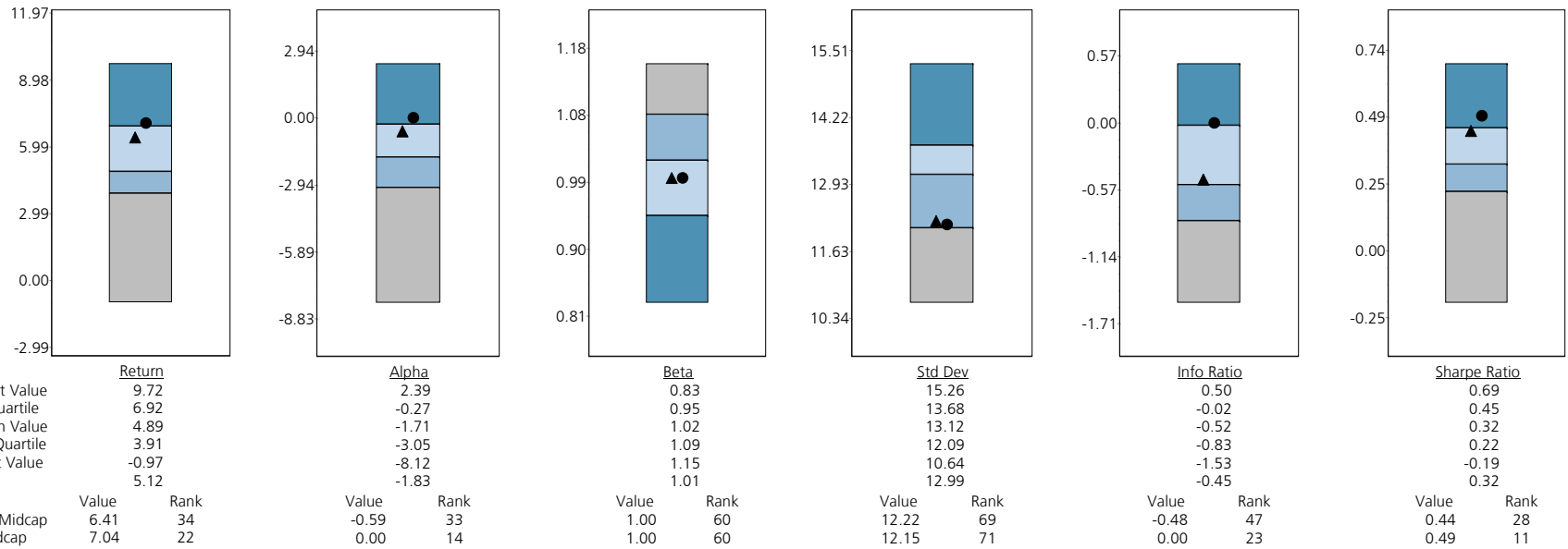


	1	2	3	4	5	6	7	8
	12/2016-12/2017	12/2015-12/2016	12/2014-12/2015	12/2013-12/2014	12/2012-12/2013	12/2011-12/2012	12/2010-12/2011	5/2004-12/2018
Up Periods	10.00	9.00	6.00	7.00	10.00	9.00	5.00	113.00
Upside Capture ROR	19.96	23.79	15.62	24.80	40.35	27.18	25.86	48.61
Russell Midcap	19.63	26.08	14.93	24.13	40.14	27.41	25.28	47.84
% Of Capture	101.69	91.22	104.64	102.78	100.51	99.15	102.32	101.62
Down Periods	2.00	3.00	6.00	5.00	2.00	3.00	7.00	62.00
Downside Capture ROR	-0.56	-10.15	-14.67	-8.83	-3.62	-8.79	-22.13	-37.85
Russell Midcap	-0.93	-9.74	-15.11	-8.79	-3.84	-7.96	-21.41	-37.66
% Of Capture	60.01	104.18	97.07	100.42	94.41	110.43	103.37	100.49

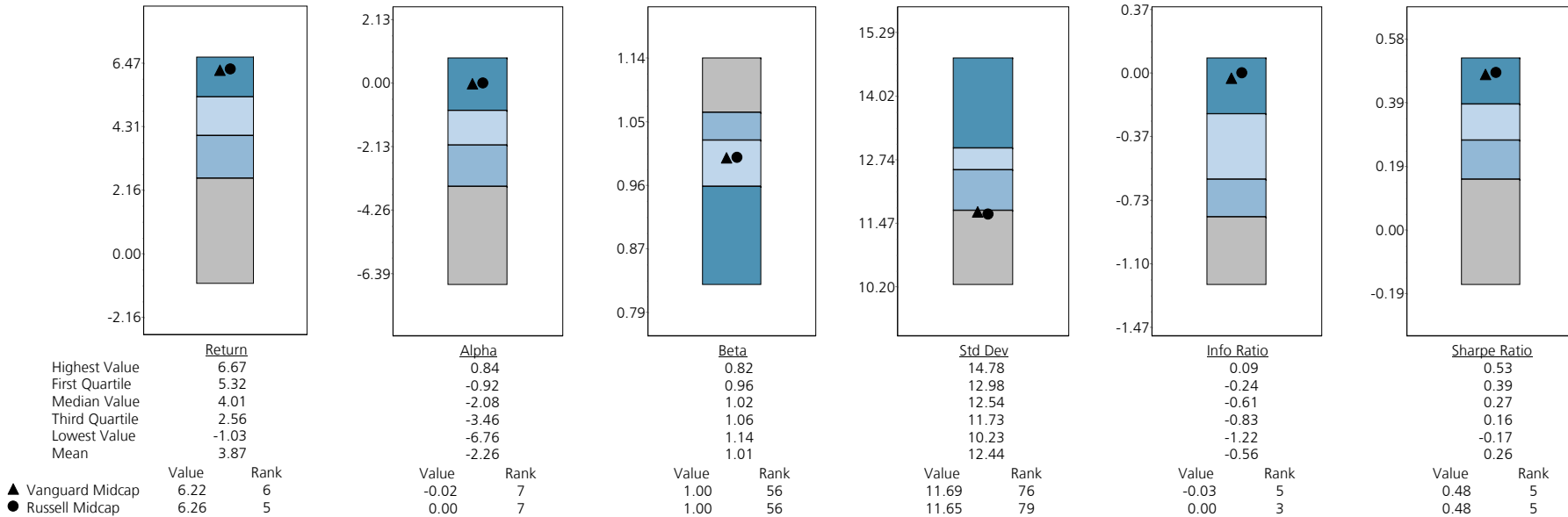
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TOTAL FUND vs Mid Cap Blend Managers December 31, 2015 Through December 31, 2018

3 Year



5 Year



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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb County Employees Retirement System
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Vaughan Nelson

Please contact your UBS Institutional Consultant if you have any questions regarding this report, if your financial situation, individual needs or investment objectives have changed, or if you would like to initiate or modify any investment restrictions on this account.

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Performance Analysis

The primary index comparison for your portfolio and each of its asset classes is listed below.

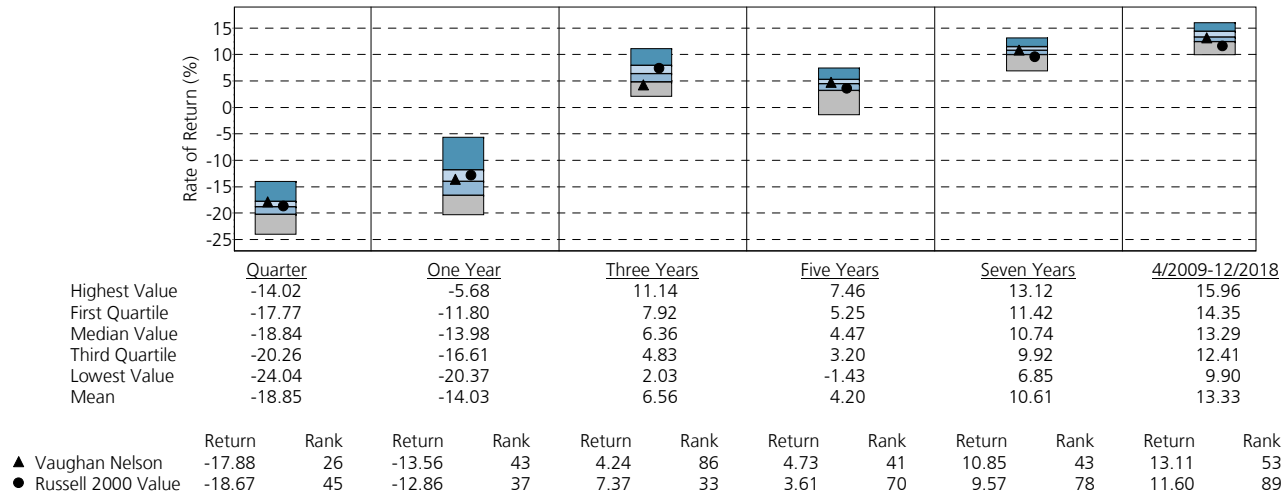
TOTAL FUND BENCHMARK

4/30/2009 - Present
100% Russell 2000 Value

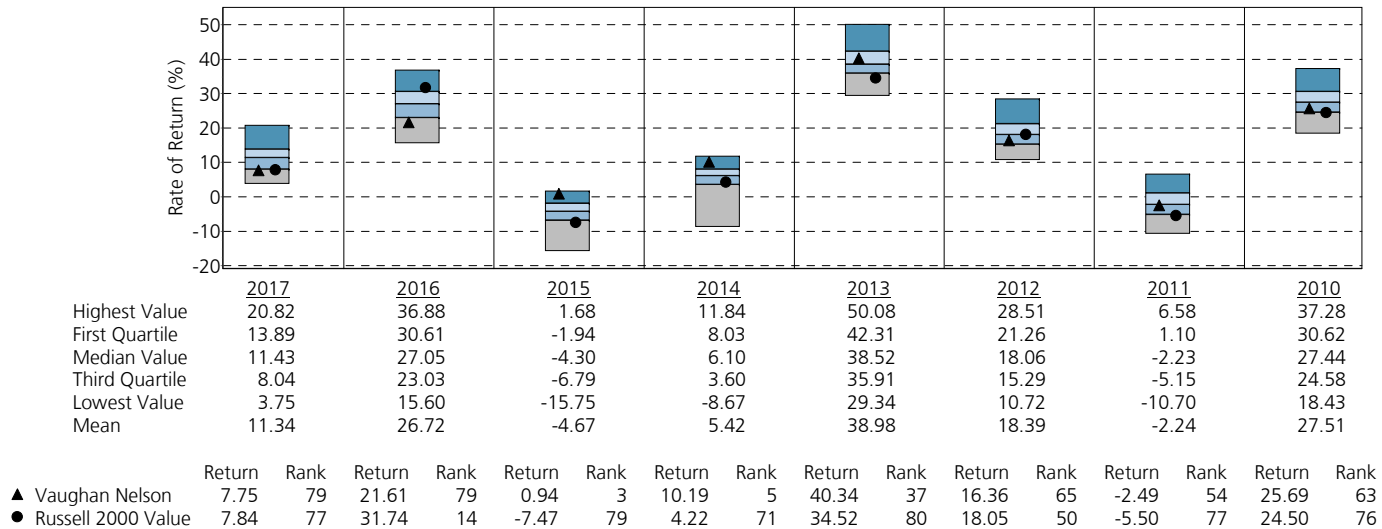
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TOTAL FUND Peer Universe Comparison versus Small Cap Value Managers

Trailing Periods

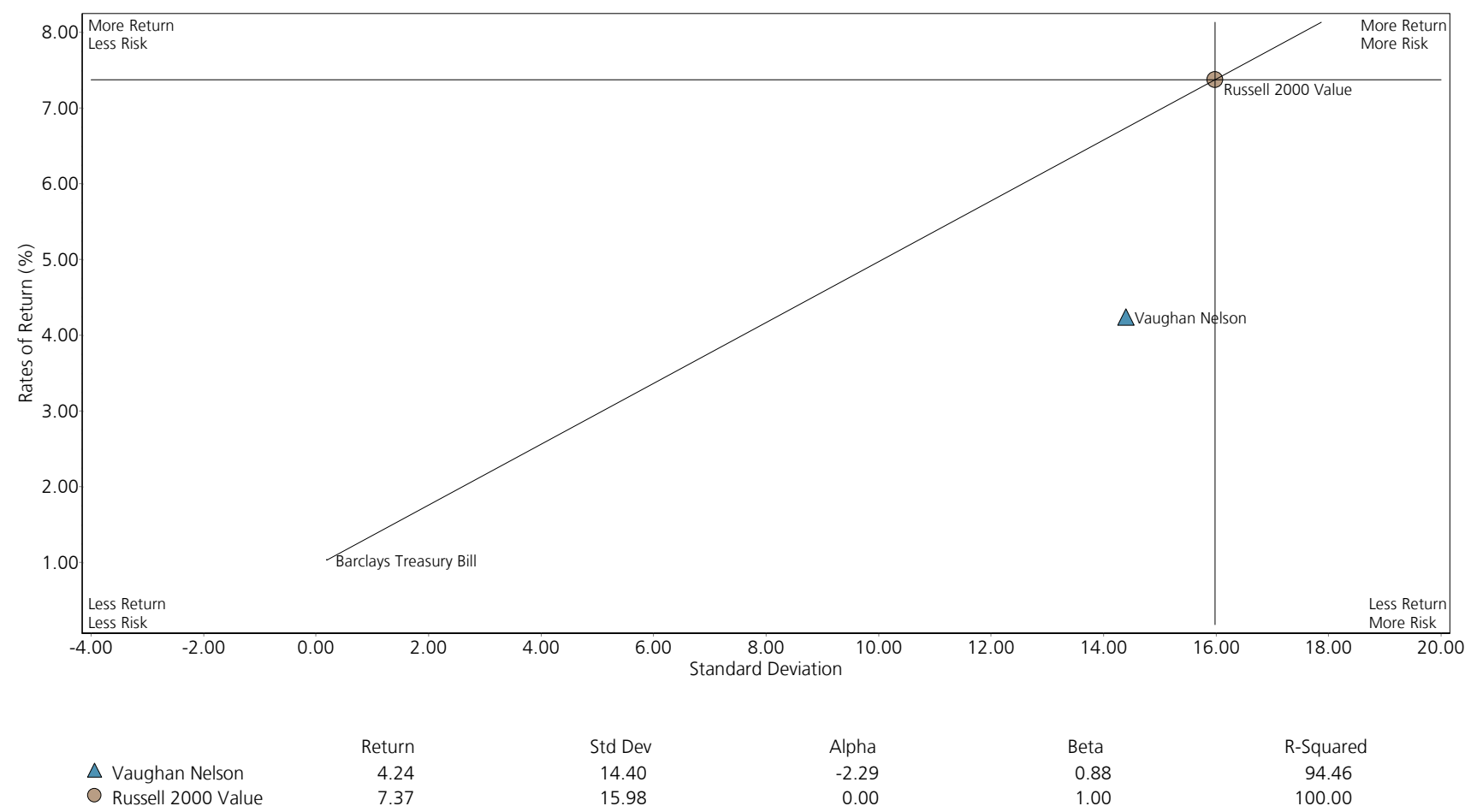


Annual Periods



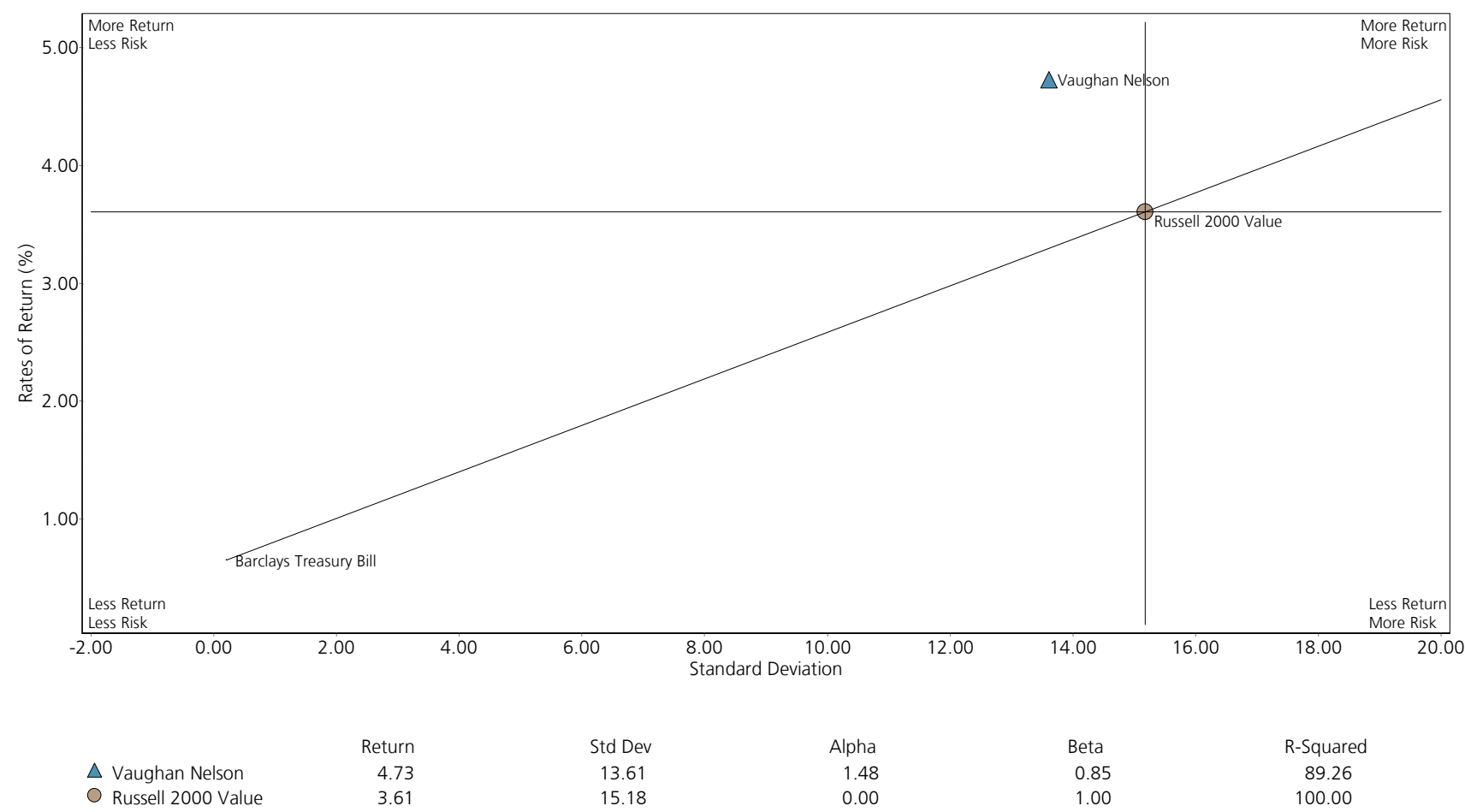
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Risk vs Reward Analysis
December 31, 2015 Through December 31, 2018



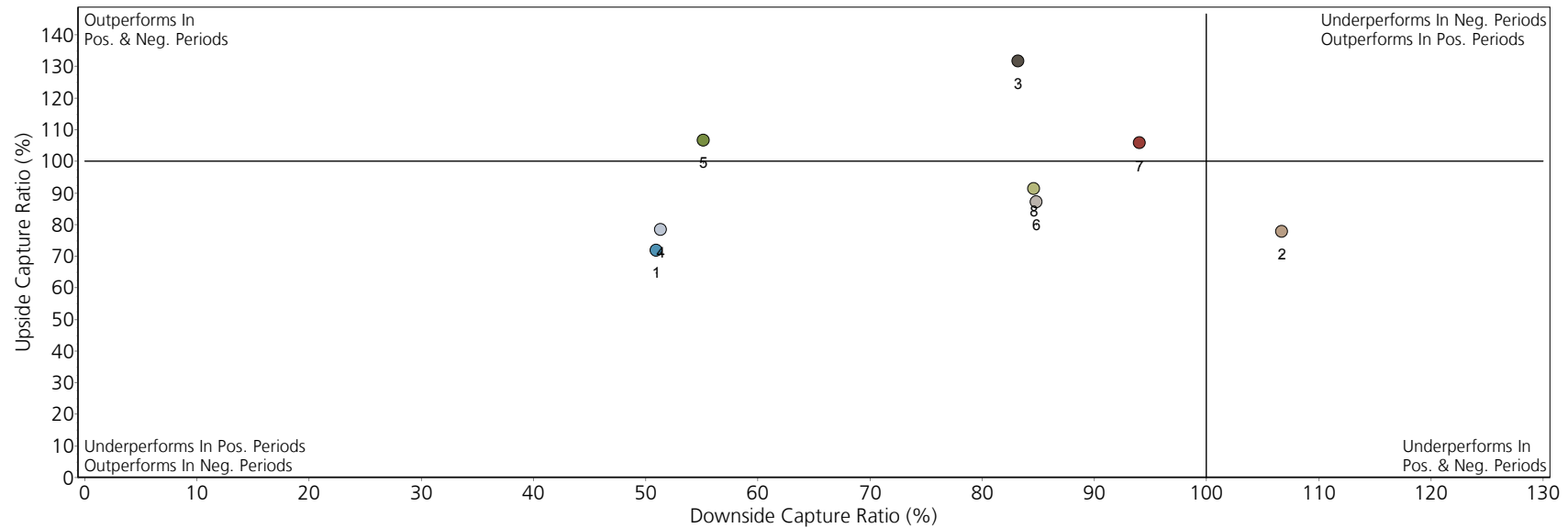
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Risk vs Reward Analysis
December 31, 2013 Through December 31, 2018



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Capture Ratio
April 30, 2009 Through December 31, 2018

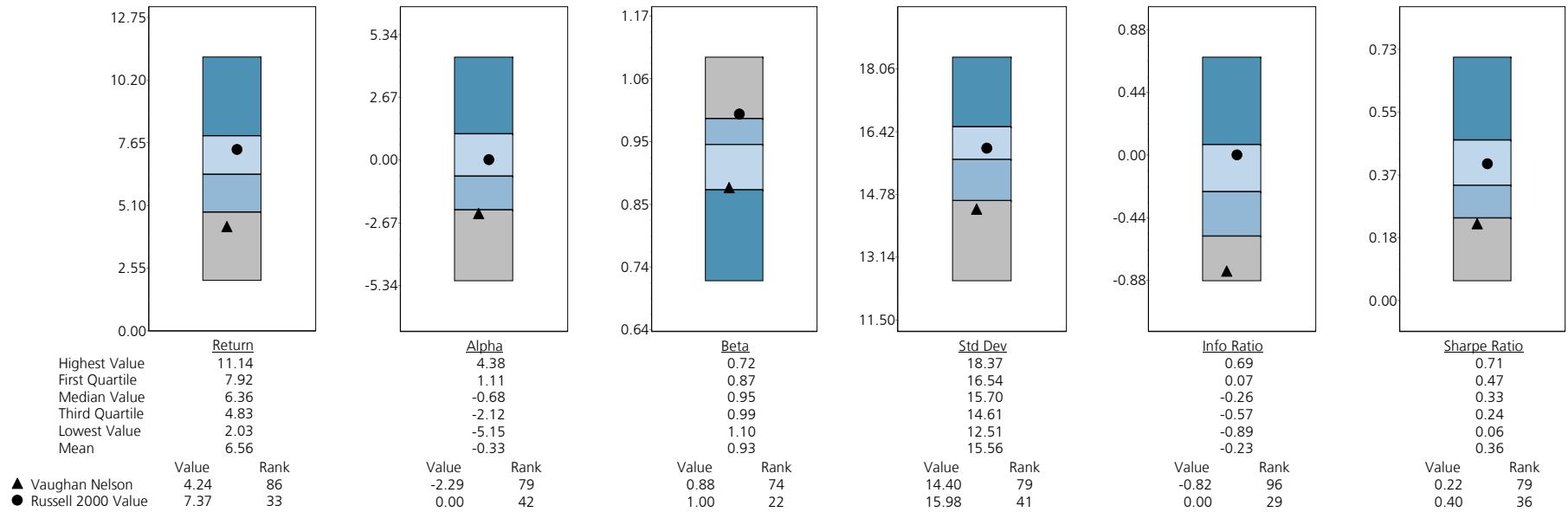


	1	2	3	4	5	6	7	8
	12/2016-12/2017	12/2015-12/2016	12/2014-12/2015	12/2013-12/2014	12/2012-12/2013	12/2011-12/2012	12/2010-12/2011	4/2009-12/2018
Up Periods	7.00	10.00	6.00	7.00	9.00	8.00	6.00	75.00
Upside Capture ROR	12.24	35.79	21.94	21.63	44.24	26.63	27.37	51.07
Russell 2000 Value	17.03	46.03	16.67	27.60	41.45	30.53	25.88	55.91
% Of Capture	71.87	77.75	131.60	78.37	106.72	87.22	105.75	91.35
Down Periods	5.00	2.00	6.00	5.00	3.00	4.00	6.00	41.00
Downside Capture ROR	-4.00	-10.44	-17.22	-9.41	-2.70	-8.11	-23.45	-33.38
Russell 2000 Value	-7.85	-9.78	-20.69	-18.32	-4.90	-9.56	-24.93	-39.46
% Of Capture	50.96	106.69	83.23	51.34	55.18	84.81	94.05	84.58

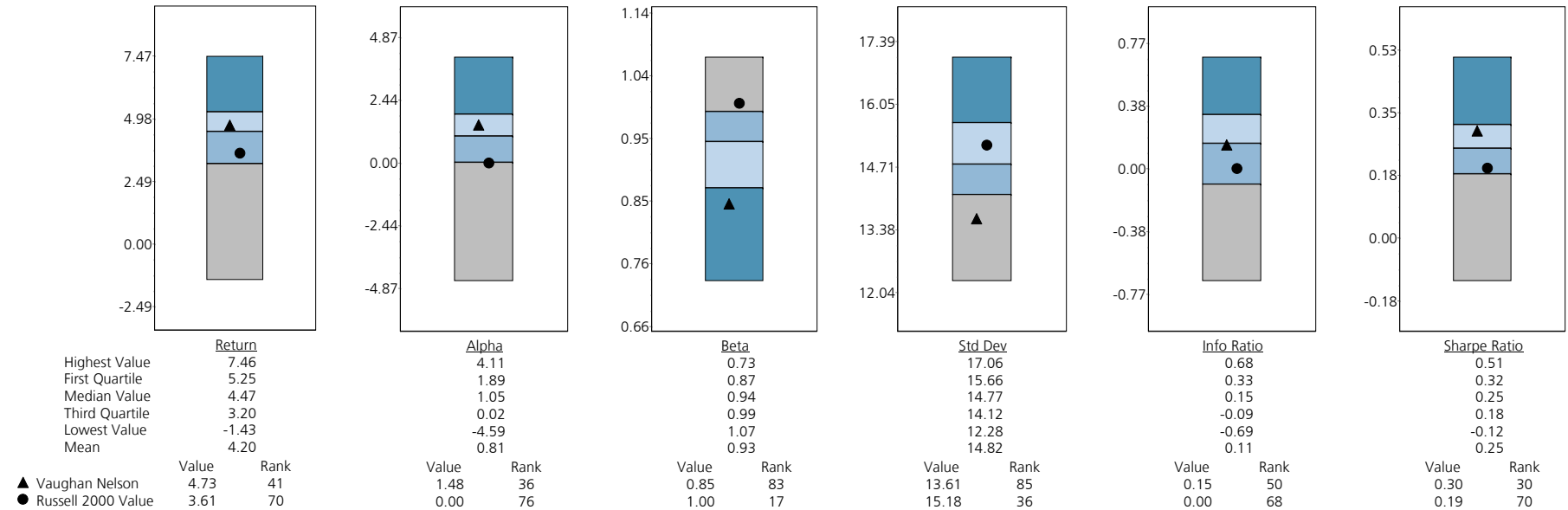
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TOTAL FUND vs Small Cap Value Managers December 31, 2015 Through December 31, 2018

3 Year



5 Year



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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb County Employees Retirement System
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Eagle Small Cap Growth

Please contact your UBS Institutional Consultant if you have any questions regarding this report, if your financial situation, individual needs or investment objectives have changed, or if you would like to initiate or modify any investment restrictions on this account.

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Performance Analysis

The primary index comparison for your portfolio and each of its asset classes is listed below.

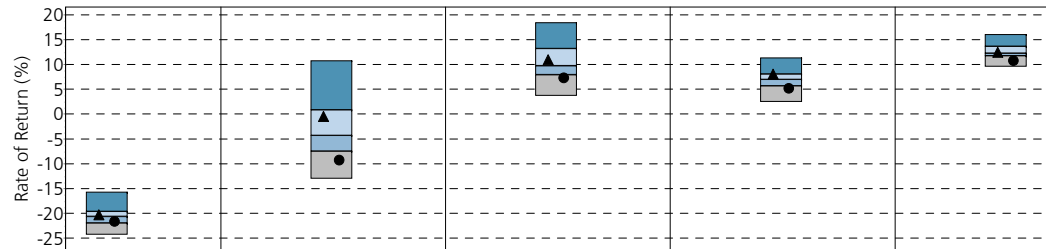
TOTAL FUND BENCHMARK

10/31/2010 - Present
100% Russell 2000 Growth

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TOTAL FUND Peer Universe Comparison versus Small Cap Growth Managers

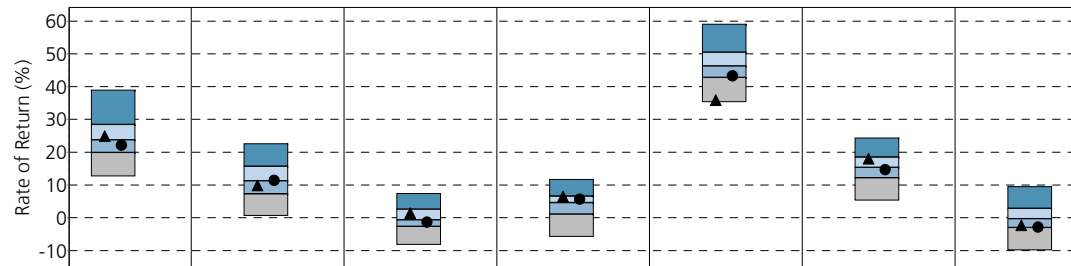
Trailing Periods



	<u>Quarter</u>	<u>One Year</u>	<u>Three Years</u>	<u>Five Years</u>	<u>10/2010-12/2018</u>
Highest Value	-15.71	10.74	18.36	11.31	16.03
First Quartile	-19.62	0.80	13.21	8.05	13.66
Median Value	-20.61	-4.29	9.69	6.98	12.27
Third Quartile	-21.95	-7.52	7.89	5.66	11.71
Lowest Value	-24.25	-13.00	3.74	2.48	9.56
Mean	-20.62	-3.07	10.60	6.89	12.53

	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Eagle SCG	-20.28	41	-0.44	34	10.95	44	8.08	23	12.45	46
● Russell 2000 Growth	-21.65	70	-9.31	84	7.24	85	5.13	80	10.73	87

Annual Periods

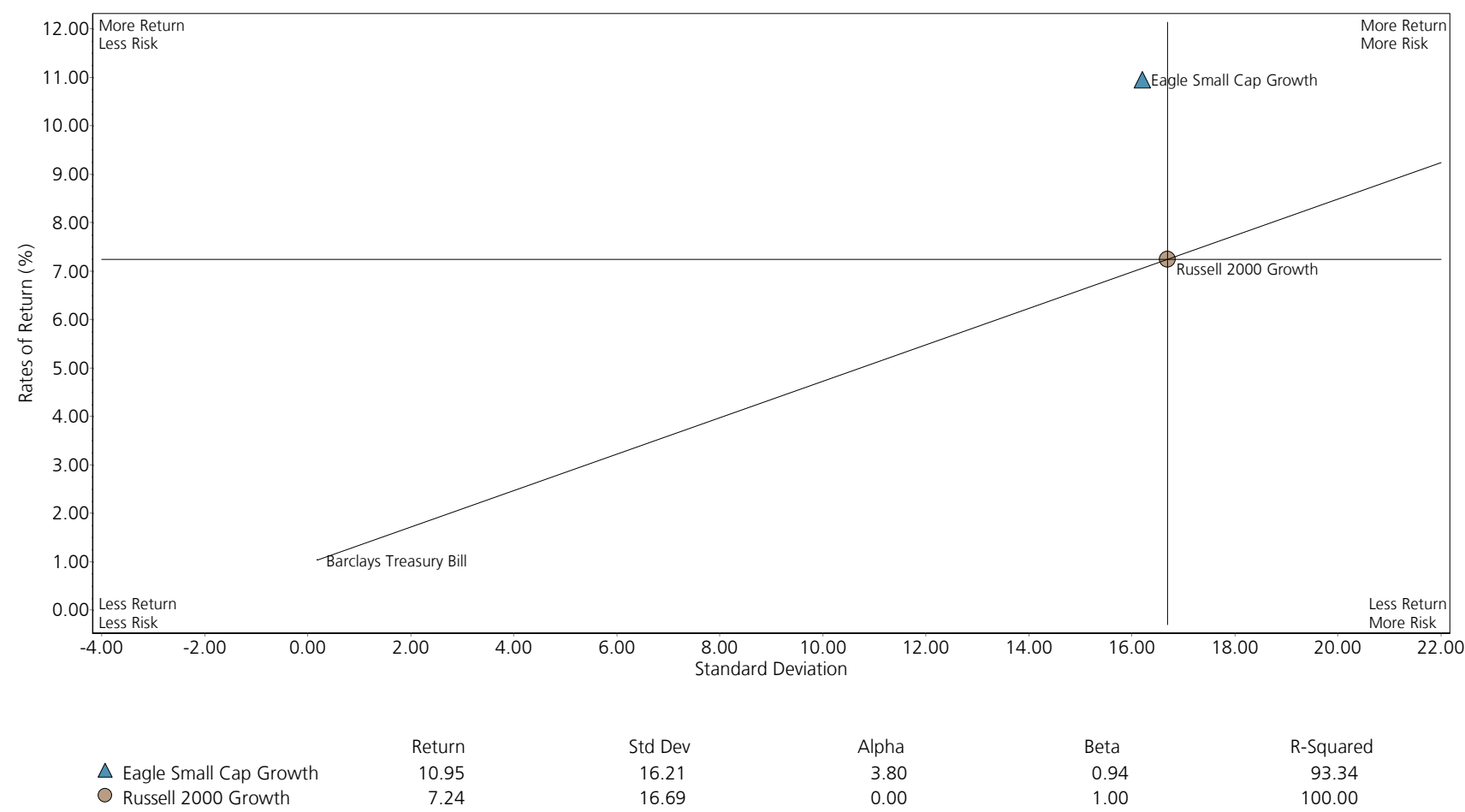


	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>
Highest Value	38.99	22.53	7.34	11.72	58.98	24.30	9.51
First Quartile	28.38	15.63	2.64	6.59	50.56	18.54	2.86
Median Value	23.71	11.28	-0.65	4.54	46.30	15.36	-0.29
Third Quartile	19.83	7.32	-2.68	1.13	42.84	12.19	-3.01
Lowest Value	12.68	0.61	-8.27	-5.81	35.32	5.34	-9.91
Mean	24.32	11.51	-0.20	3.87	46.69	15.38	-0.49

	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Eagle SCG	24.92	43	9.81	60	1.38	36	6.50	26	35.92	97	17.98	29	-2.27	68
● Russell 2000 Growth	22.17	59	11.32	50	-1.38	59	5.60	33	43.30	73	14.59	55	-2.91	72

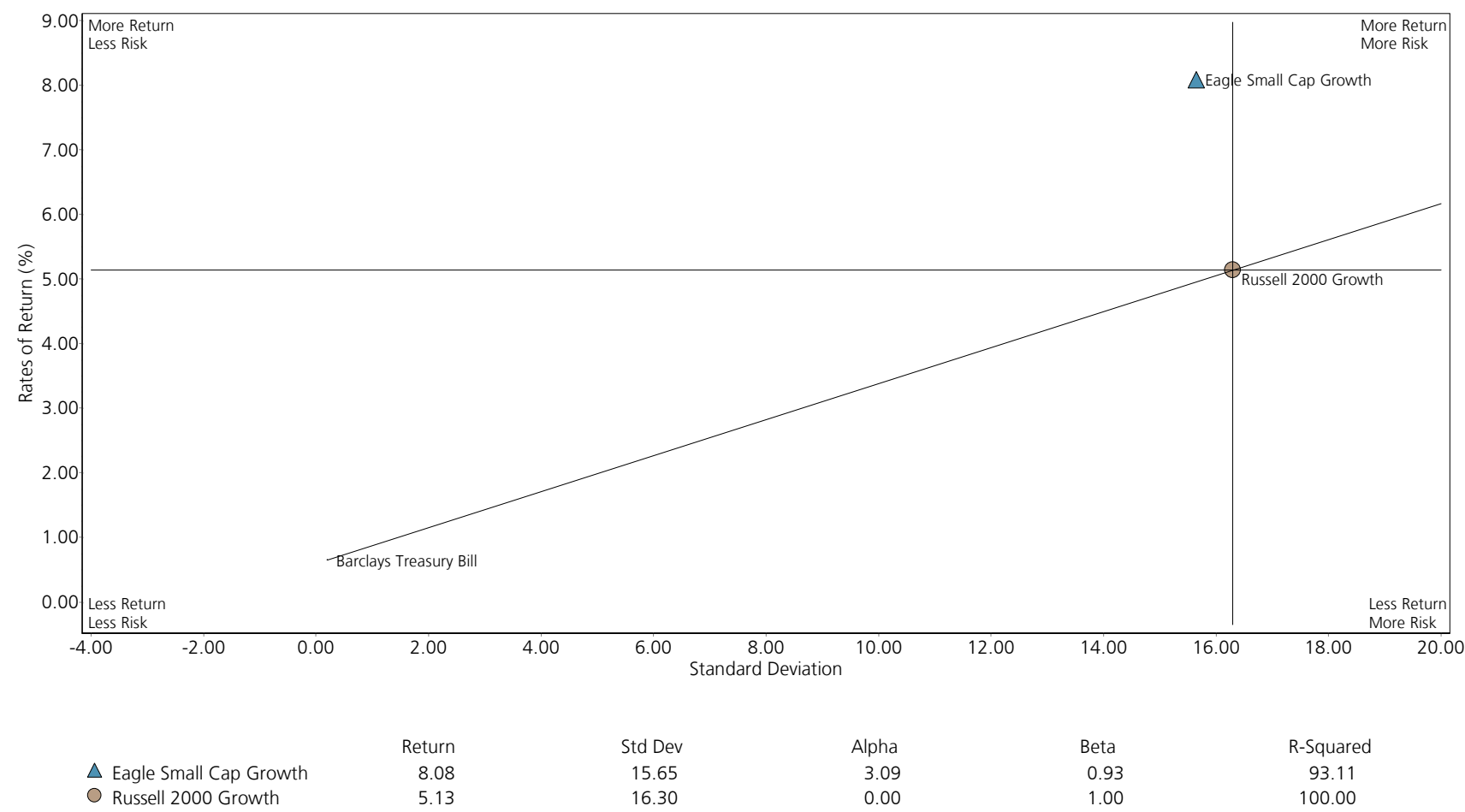
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Risk vs Reward Analysis
December 31, 2015 Through December 31, 2018



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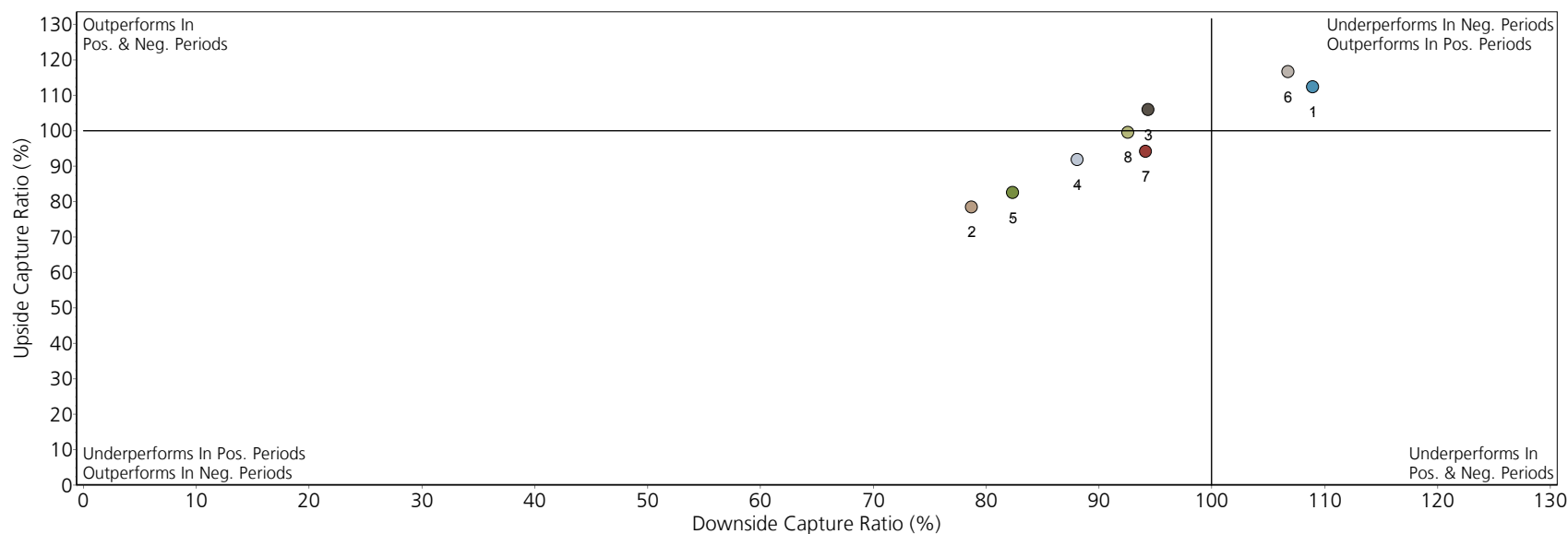
Risk vs Reward Analysis
December 31, 2013 Through December 31, 2018



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Capture Ratio

October 31, 2010 Through December 31, 2018

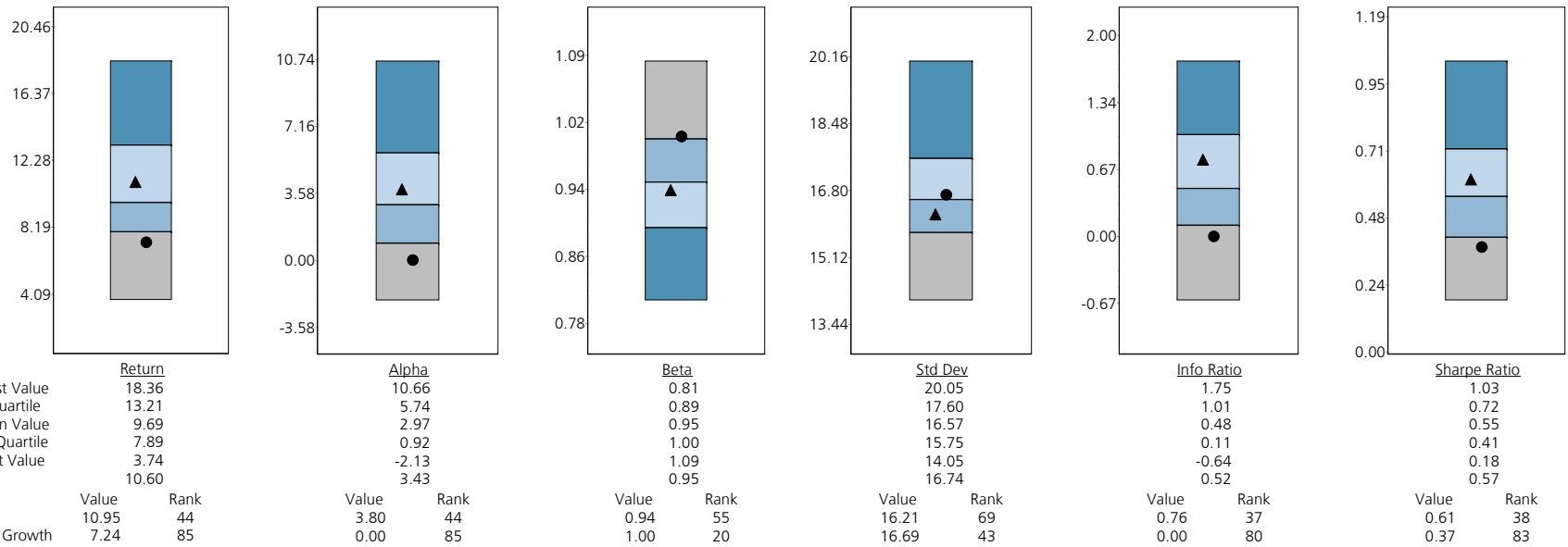


	1	2	3	4	5	6	7	8
	12/2016-12/2017	12/2015-12/2016	12/2014-12/2015	12/2013-12/2014	12/2012-12/2013	12/2011-12/2012	12/2010-12/2011	10/2010-12/2018
Up Periods	10.00	8.00	7.00	7.00	9.00	8.00	4.00	63.00
Upside Capture ROR	26.33	27.18	27.63	28.12	39.61	37.05	30.00	54.15
Russell 2000 Growth	23.43	34.68	26.11	30.62	48.04	31.76	31.86	54.46
% Of Capture	112.38	78.37	105.83	91.83	82.44	116.64	94.15	99.44
Down Periods	2.00	4.00	5.00	5.00	3.00	4.00	8.00	35.00
Downside Capture ROR	-1.12	-13.66	-20.57	-16.87	-2.64	-13.92	-24.82	-36.26
Russell 2000 Growth	-1.03	-17.35	-21.80	-19.15	-3.20	-13.04	-26.37	-39.17
% Of Capture	108.94	78.72	94.36	88.10	82.38	106.76	94.13	92.57

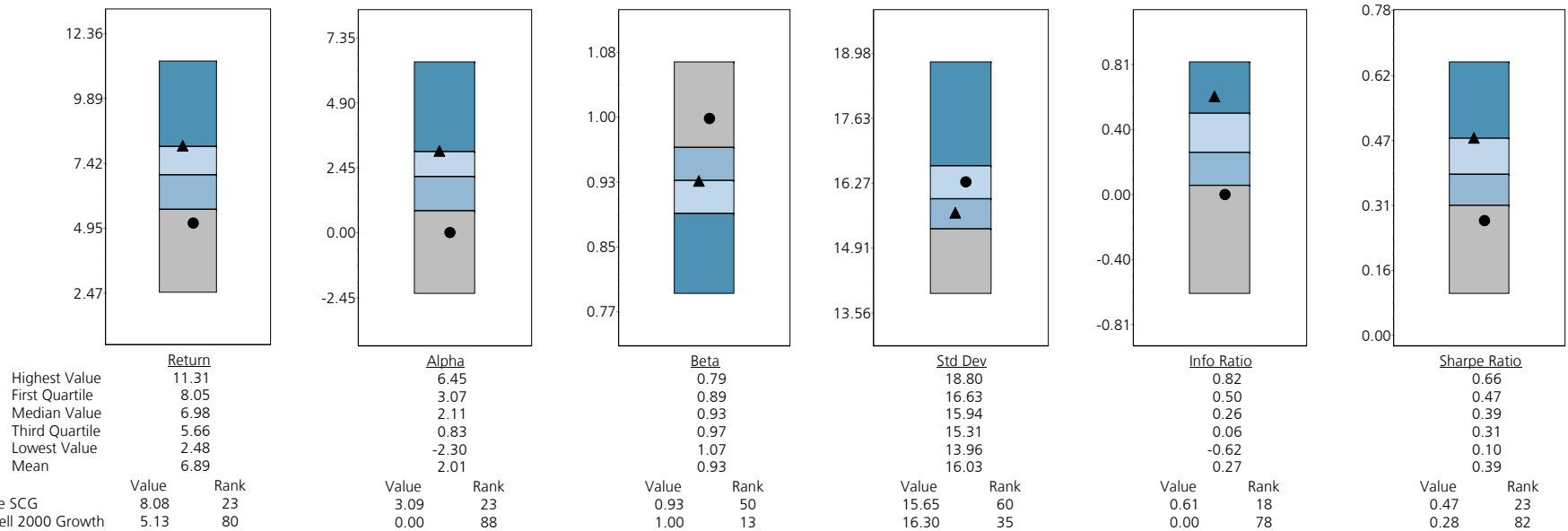
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TOTAL FUND vs Small Cap Growth Managers December 31, 2015 Through December 31, 2018

3 Year



5 Year



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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb County Employees Retirement System
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Vanguard Total International Stock Fund

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Performance Analysis

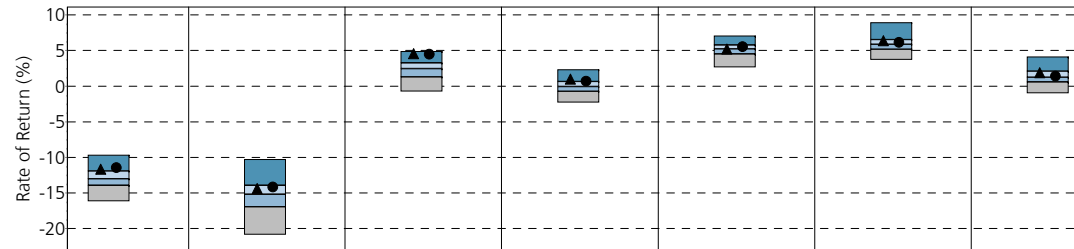
The primary index comparison for your portfolio and each of its asset classes is listed below.

TOTAL FUND BENCHMARK		
07/01/2013 - Present		
100%	MSCI AC World X US Net	
12/31/1998 - 06/30/2013		
100%	MSCI Net EAFE	

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TOTAL FUND Peer Universe Comparison versus Foreign Large Blend Managers

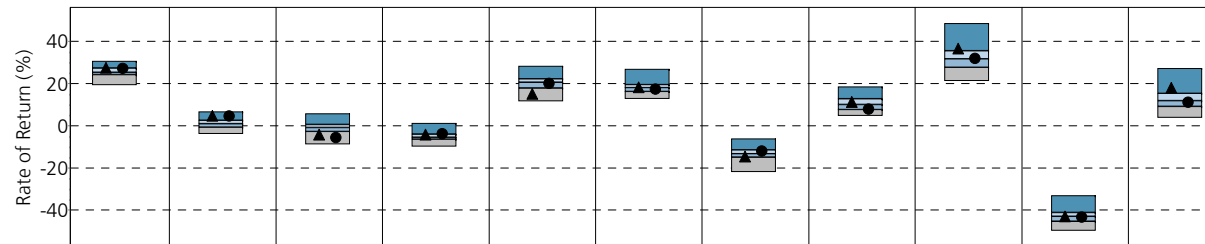
Trailing Periods



	Quarter	One Year	Three Years	Five Years	Seven Years	Ten Years	11/2006-12/2018
Highest Value	-9.72	-10.29	4.85	2.29	7.02	8.88	4.10
First Quartile	-11.94	-13.94	3.25	0.62	5.76	6.55	2.10
Median Value	-13.04	-15.19	2.44	-0.07	5.21	5.90	1.24
Third Quartile	-13.92	-16.94	1.27	-0.74	4.51	5.17	0.56
Lowest Value	-16.15	-20.85	-0.71	-2.30	2.64	3.72	-0.97
Mean	-13.03	-15.42	2.28	-0.08	5.08	5.91	1.33

	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Vanguard Total Intl	-11.66	18	-14.39	35	4.57	3	0.97	14	5.24	49	6.38	29	1.91	28
● International Index	-11.46	14	-14.20	31	4.48	5	0.68	23	5.52	35	6.16	39	1.38	44

Annual Periods

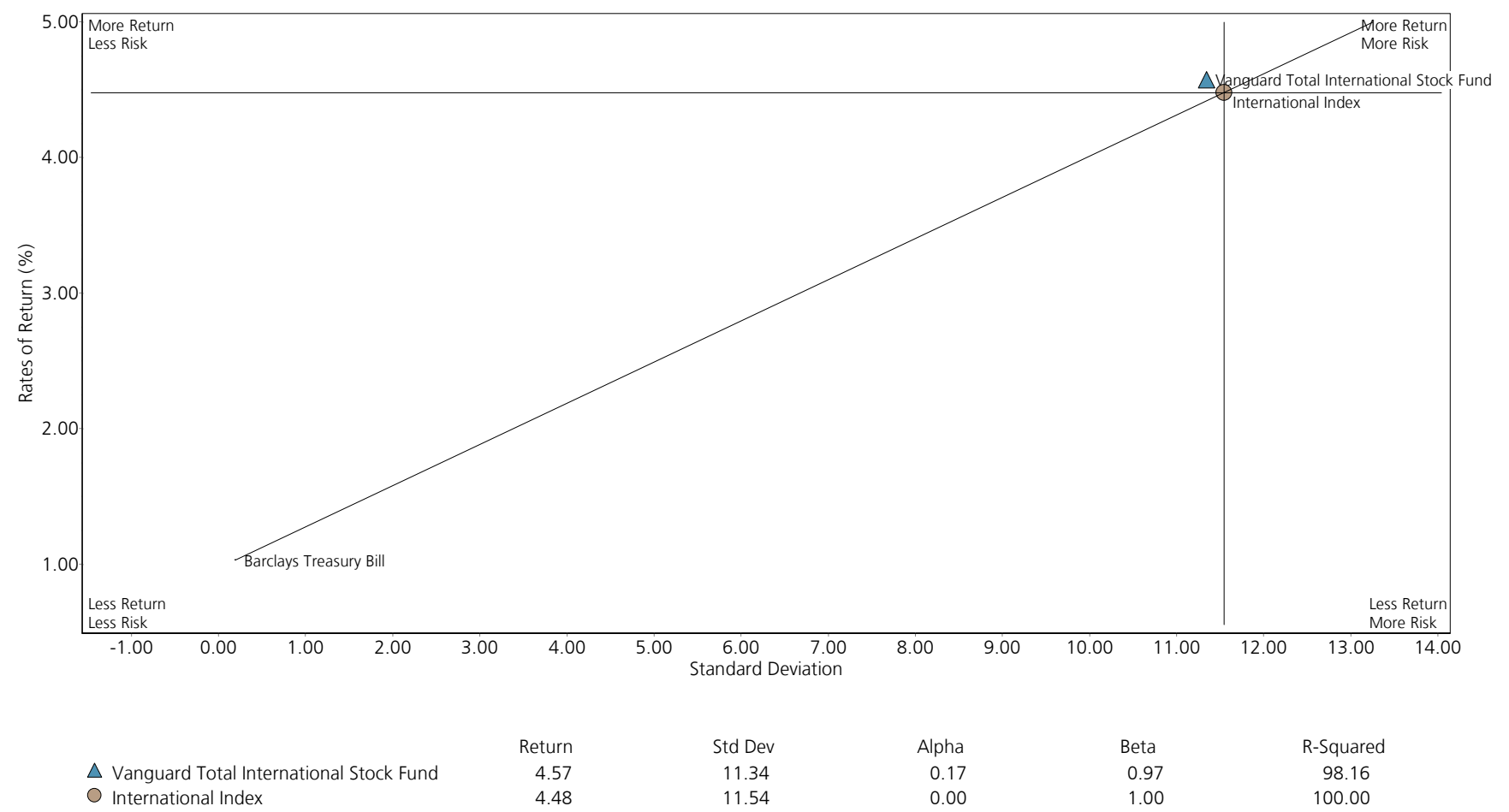


	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Highest Value	30.54	6.48	5.71	0.98	28.13	26.76	-6.27	18.38	48.45	-33.21	27.10
First Quartile	27.30	2.56	0.58	-4.07	22.25	19.53	-11.55	12.65	35.51	-41.24	15.22
Median Value	25.38	0.92	-1.00	-5.41	20.58	18.02	-13.34	10.05	31.76	-43.02	11.81
Third Quartile	24.24	-0.82	-2.79	-6.42	17.74	16.27	-15.06	7.67	27.63	-45.38	9.03
Lowest Value	19.20	-3.79	-8.80	-9.79	11.68	12.67	-21.84	4.75	21.33	-49.73	3.79
Mean	25.64	0.98	-1.31	-5.04	20.12	18.04	-13.19	10.25	32.28	-43.21	12.62

	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Vanguard Total Intl	27.57	22	4.70	8	-4.24	84	-4.15	27	15.15	87	18.27	43	-14.69	70	11.35	37
● International Index	27.19	26	4.50	9	-5.66	92	-3.87	22	20.07	55	17.32	58	-12.14	33	7.75	74

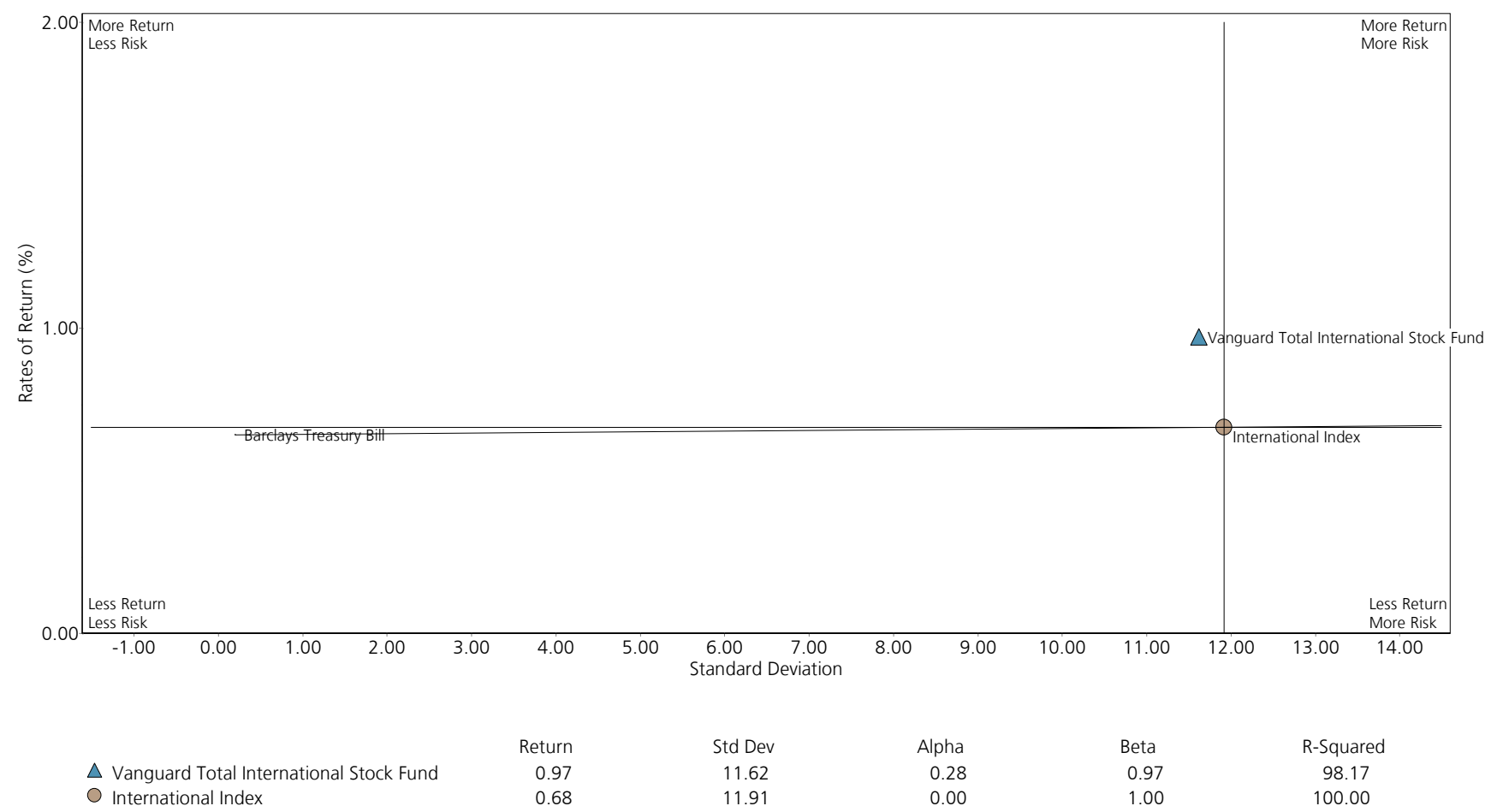
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Risk vs Reward Analysis
December 31, 2015 Through December 31, 2018



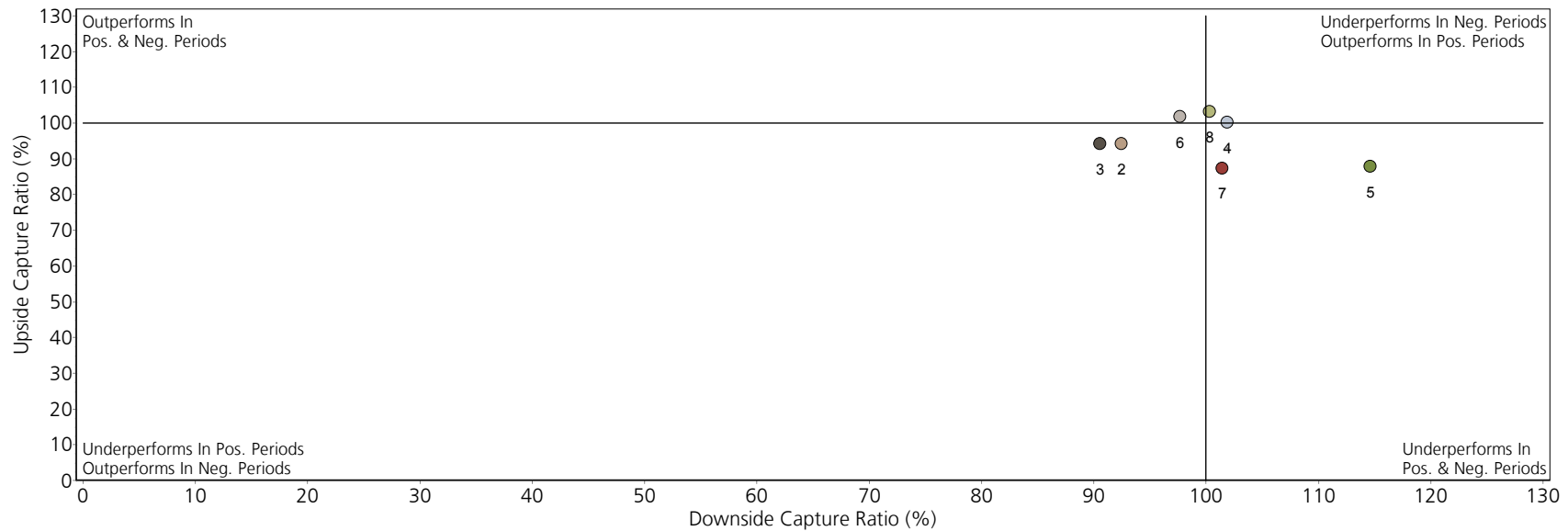
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Risk vs Reward Analysis
December 31, 2013 Through December 31, 2018



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Capture Ratio
November 30, 2006 Through December 31, 2018

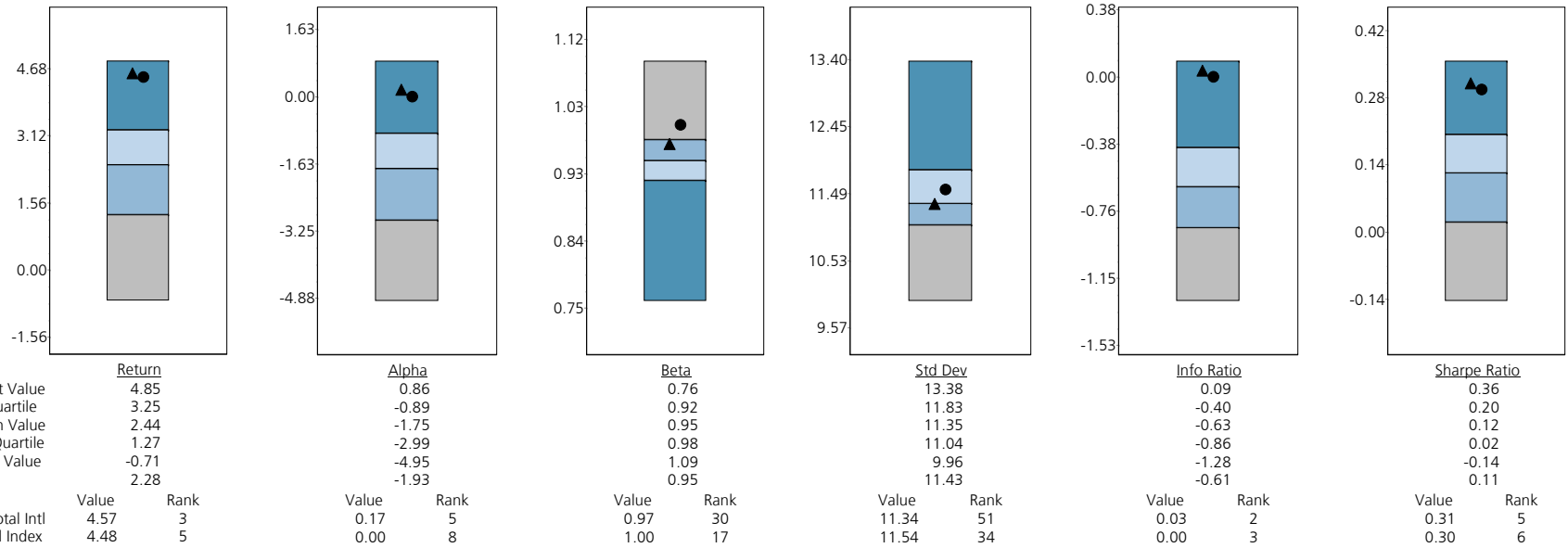


	1	2	3	4	5	6	7	8
	12/2016-12/2017	12/2015-12/2016	12/2014-12/2015	12/2013-12/2014	12/2012-12/2013	12/2011-12/2012	12/2010-12/2011	11/2006-12/2018
Up Periods	12.00	6.00	3.00	7.00	8.00	9.00	4.00	80.00
Upside Capture ROR	27.57	20.42	17.80	12.02	26.88	36.42	19.97	54.63
International Index	27.19	21.68	18.91	12.00	30.60	35.81	22.86	52.94
% Of Capture	101.40	94.18	94.13	100.15	87.84	101.70	87.37	103.20
Down Periods	0.00	6.00	9.00	5.00	4.00	3.00	8.00	65.00
Downside Capture ROR	N/A	-13.06	-18.71	-14.44	-9.24	-13.30	-28.89	-39.00
International Index	N/A	-14.12	-20.66	-14.17	-8.06	-13.62	-28.49	-38.88
% Of Capture	N/A	92.44	90.55	101.90	114.63	97.70	101.43	100.31

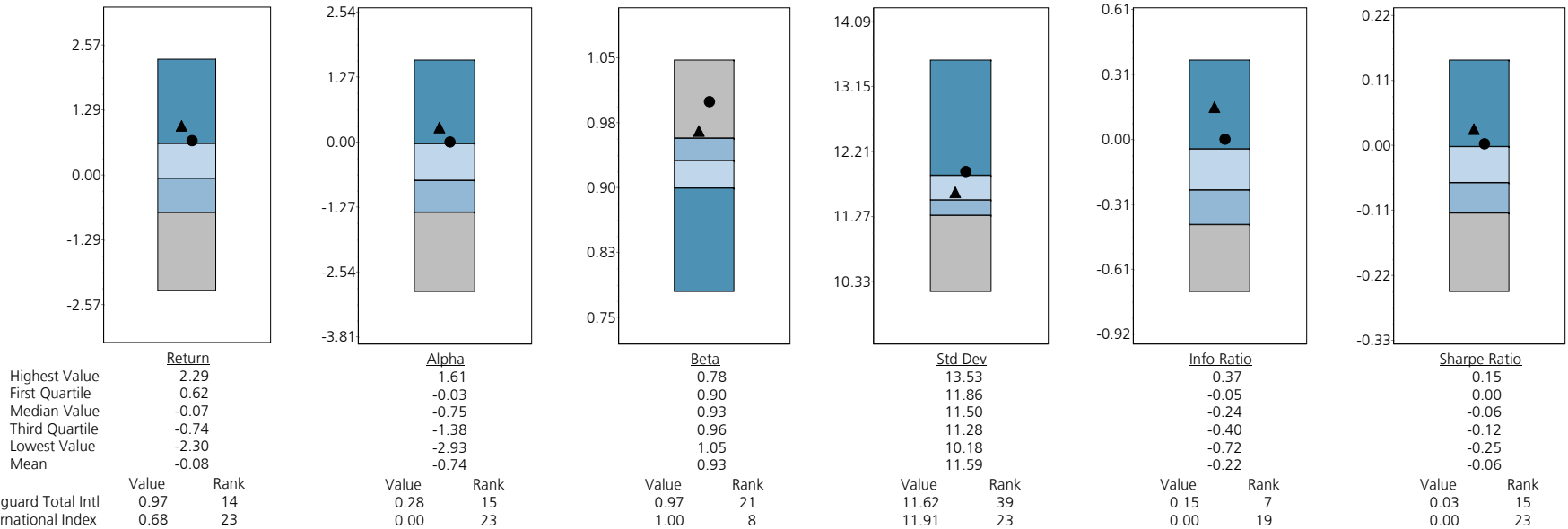
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TOTAL FUND vs Foreign Large Blend Managers December 31, 2015 Through December 31, 2018

3 Year



5 Year



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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb County Employees Retirement System
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Dodge & Cox International Stock Fund

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Performance Analysis

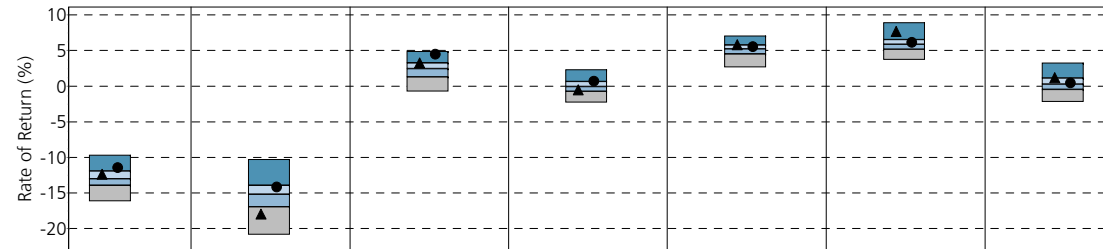
The primary index comparison for your portfolio and each of its asset classes is listed below.

TOTAL FUND BENCHMARK		
07/01/2013 - Present		
100%	MSCI AC World X US Net	
12/31/1998 - 06/30/2013		
100%	MSCI Net EAFE	

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TOTAL FUND Peer Universe Comparison versus Foreign Large Blend Managers

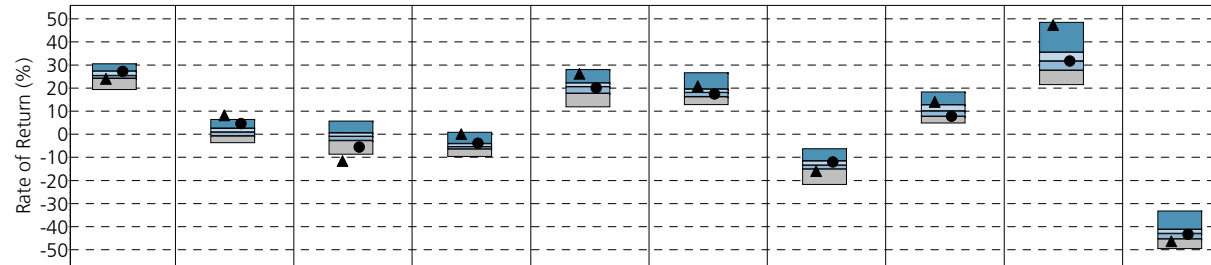
Trailing Periods



	Quarter	One Year	Three Years	Five Years	Seven Years	Ten Years	7/2007-12/2018
Highest Value	-9.72	-10.29	4.85	2.29	7.02	8.88	3.28
First Quartile	-11.94	-13.94	3.25	0.62	5.76	6.55	1.14
Median Value	-13.04	-15.19	2.44	-0.07	5.21	5.90	0.27
Third Quartile	-13.92	-16.94	1.27	-0.74	4.51	5.17	-0.48
Lowest Value	-16.15	-20.85	-0.71	-2.30	2.64	3.72	-2.19
Mean	-13.03	-15.42	2.28	-0.08	5.08	5.91	0.36

	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Dodge & Cox Intl	-12.39	33	-17.98	85	3.25	24	-0.52	68	5.81	23	7.69	5	1.18	23
● International Index	-11.46	14	-14.20	31	4.48	5	0.68	23	5.52	35	6.16	39	0.42	44

Annual Periods

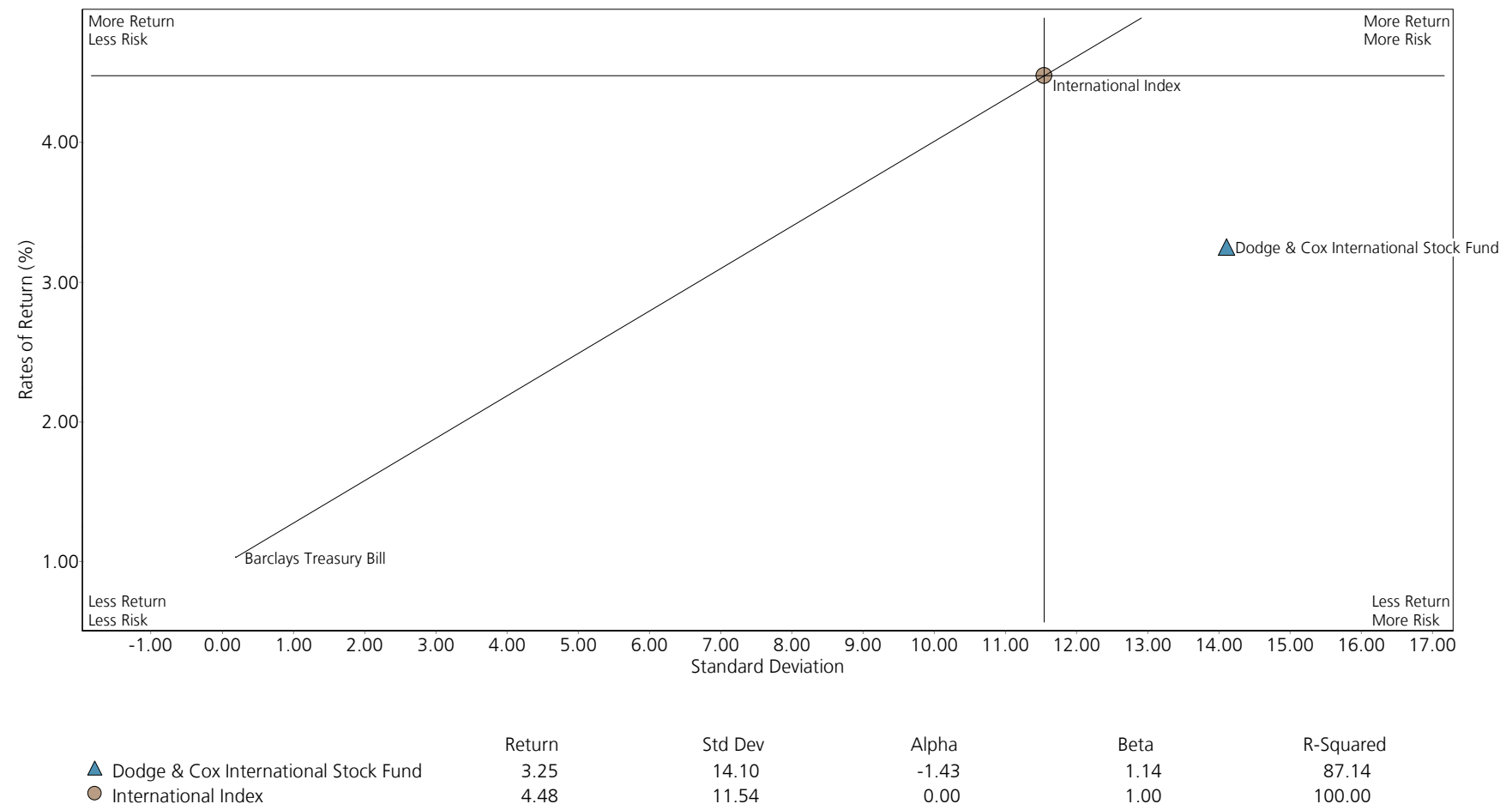


	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Highest Value	30.54	6.48	5.71	0.98	28.13	26.76	-6.27	18.38	48.45	-33.21
First Quartile	27.30	2.56	0.58	-4.07	22.25	19.53	-11.55	12.65	35.51	-41.24
Median Value	25.38	0.92	-1.00	-5.41	20.58	18.02	-13.34	10.05	31.76	-43.02
Third Quartile	24.24	-0.82	-2.79	-6.42	17.74	16.27	-15.06	7.67	27.63	-45.38
Lowest Value	19.20	-3.79	-8.80	-9.79	11.68	12.67	-21.84	4.75	21.33	-49.73
Mean	25.64	0.98	-1.31	-5.04	20.12	18.04	-13.19	10.25	32.28	-43.21

	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Dodge & Cox Intl	23.97	79	8.26	1	-11.58	99	0.08	3	26.15	8	20.82	14	-15.99	86	14.06	14
● International Index	27.19	26	4.50	9	-5.66	92	-3.87	22	20.07	55	17.32	58	-12.14	33	7.75	74

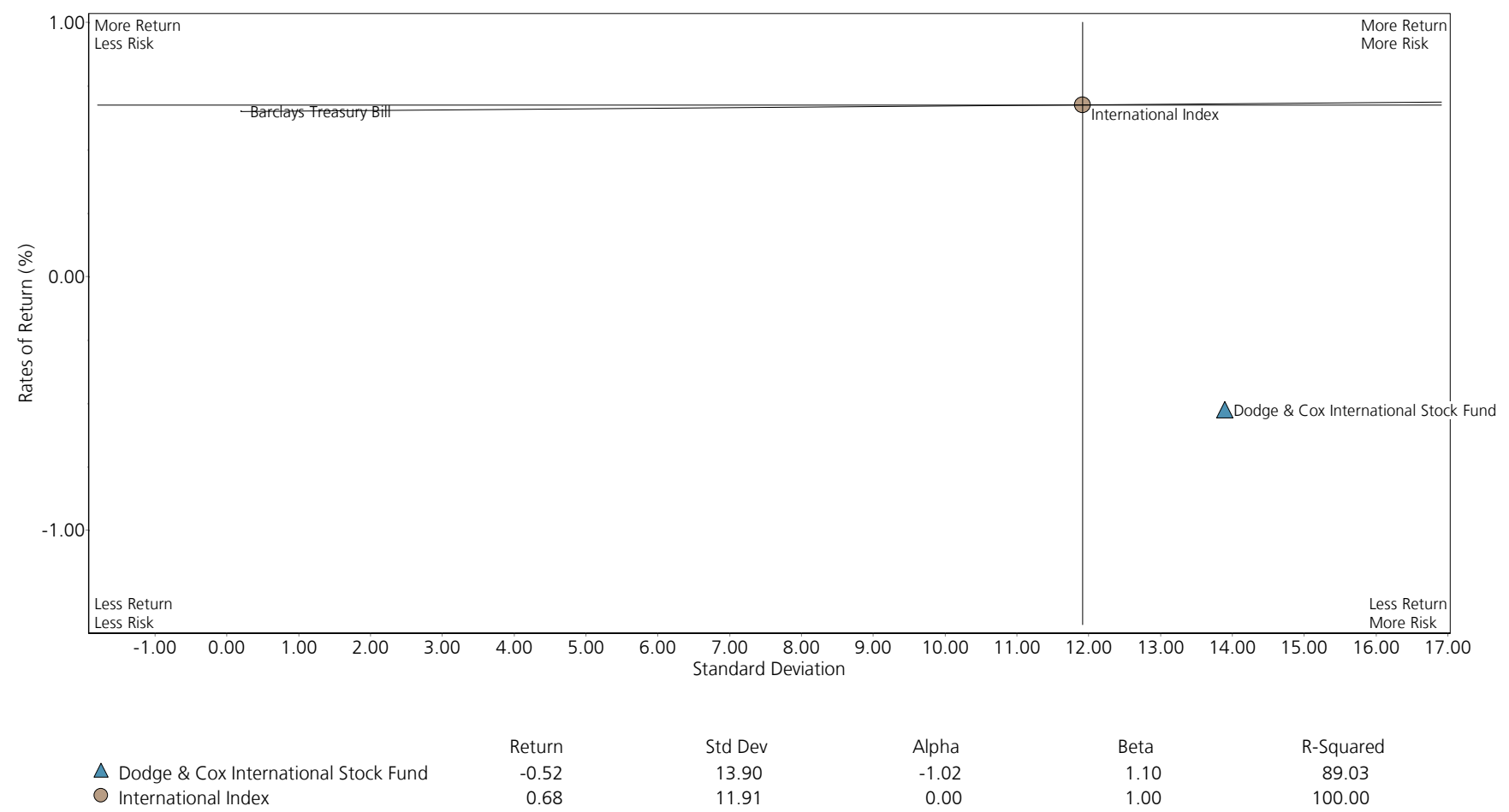
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Risk vs Reward Analysis
December 31, 2015 Through December 31, 2018



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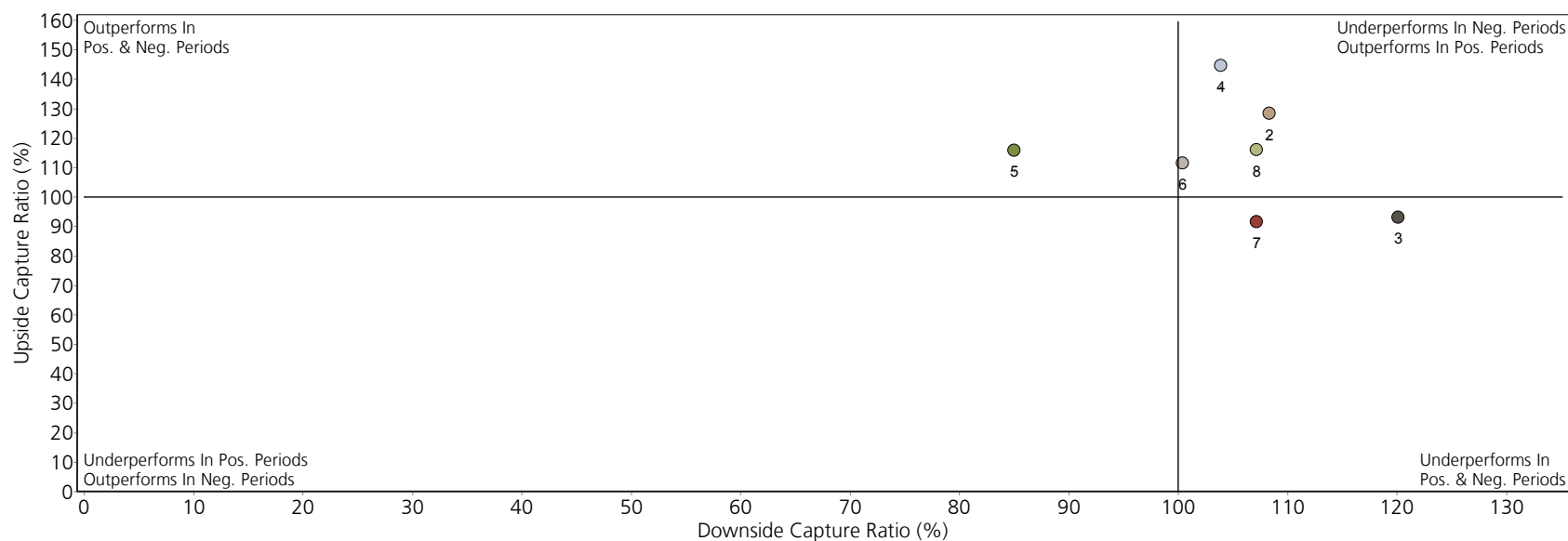
Risk vs Reward Analysis
December 31, 2013 Through December 31, 2018



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Capture Ratio

July 31, 2007 Through December 31, 2018

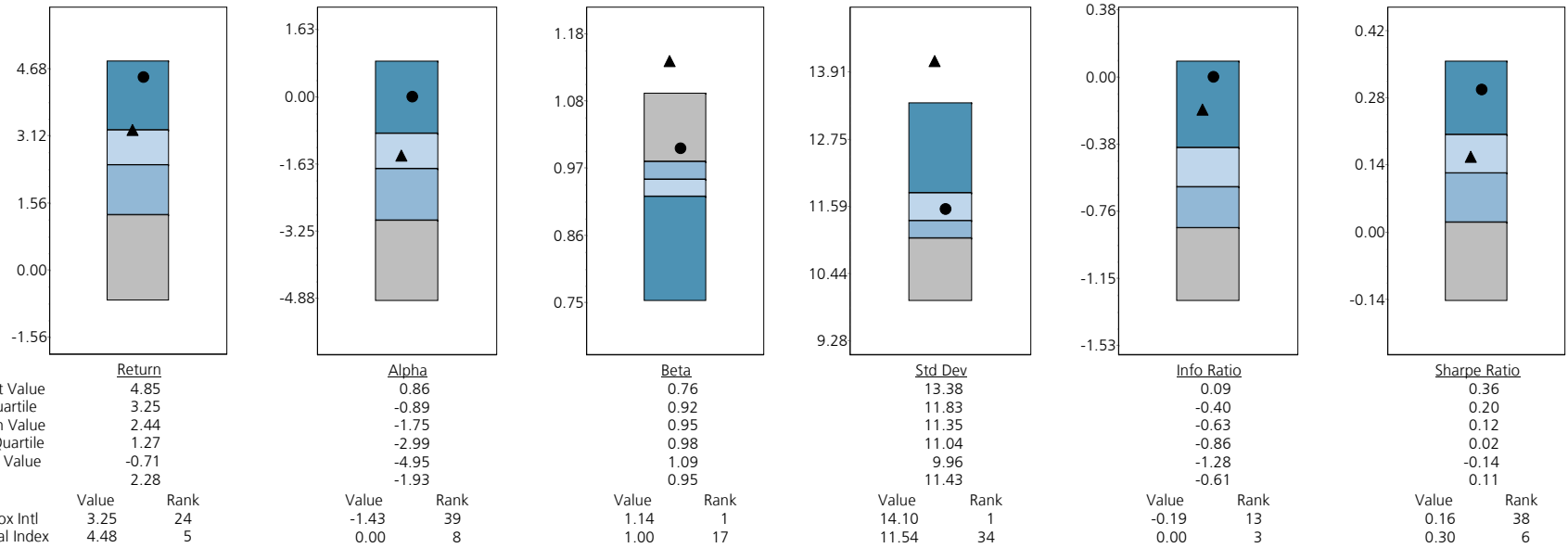


	1	2	3	4	5	6	7	8
	12/2016-12/2017	12/2015-12/2016	12/2014-12/2015	12/2013-12/2014	12/2012-12/2013	12/2011-12/2012	12/2010-12/2011	7/2007-12/2018
Up Periods	12.00	6.00	3.00	7.00	8.00	9.00	4.00	73.00
Upside Capture ROR	23.97	27.82	17.60	17.36	35.43	39.96	20.93	64.76
International Index	27.19	21.68	18.91	12.00	30.60	35.81	22.86	55.85
% Of Capture	88.15	128.32	93.11	144.58	115.81	111.59	91.56	115.96
Down Periods	0.00	6.00	9.00	5.00	4.00	3.00	8.00	64.00
Downside Capture ROR	N/A	-15.30	-24.81	-14.72	-6.85	-13.67	-30.53	-41.99
International Index	N/A	-14.12	-20.66	-14.17	-8.06	-13.62	-28.49	-39.18
% Of Capture	N/A	108.33	120.09	103.91	85.02	100.41	107.17	107.17

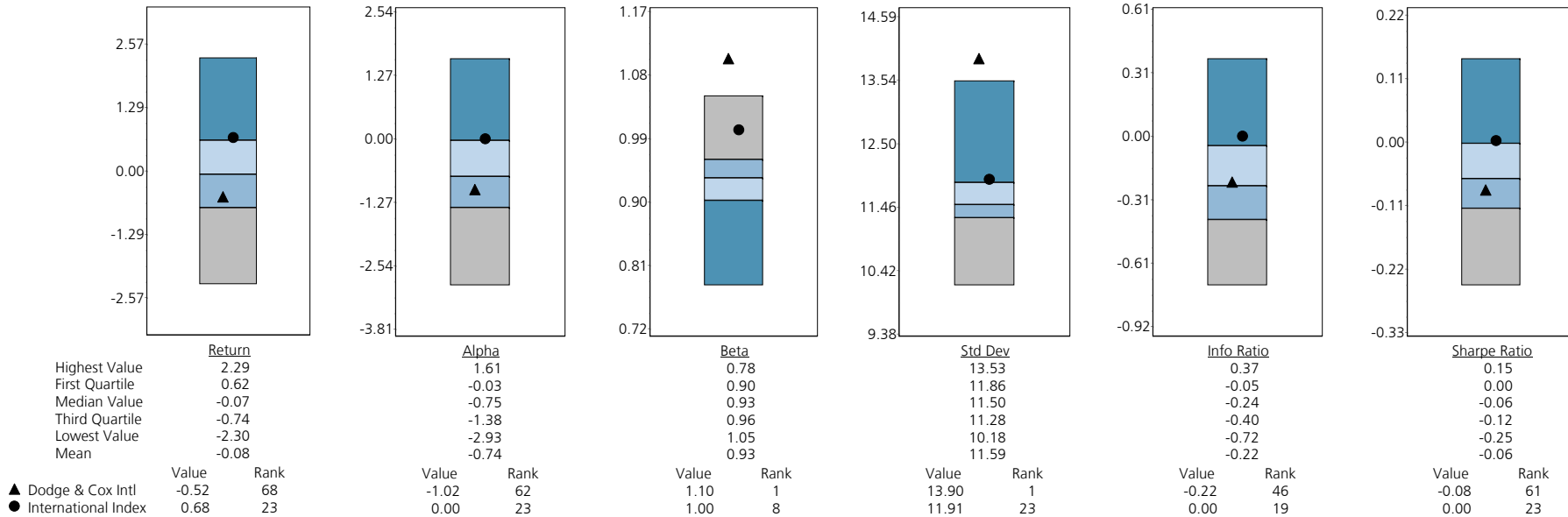
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TOTAL FUND vs Foreign Large Blend Managers December 31, 2015 Through December 31, 2018

3 Year



5 Year



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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb County Employees Retirement System
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Oppenheimer International Growth

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Performance Analysis

The primary index comparison for your portfolio and each of its asset classes is listed below.

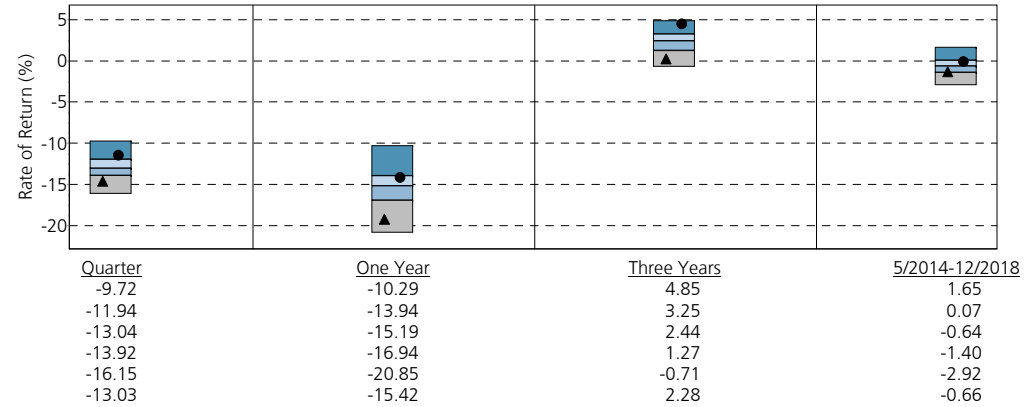
TOTAL FUND BENCHMARK

5/31/2014 - Present
100% MSCI AC World X US Net

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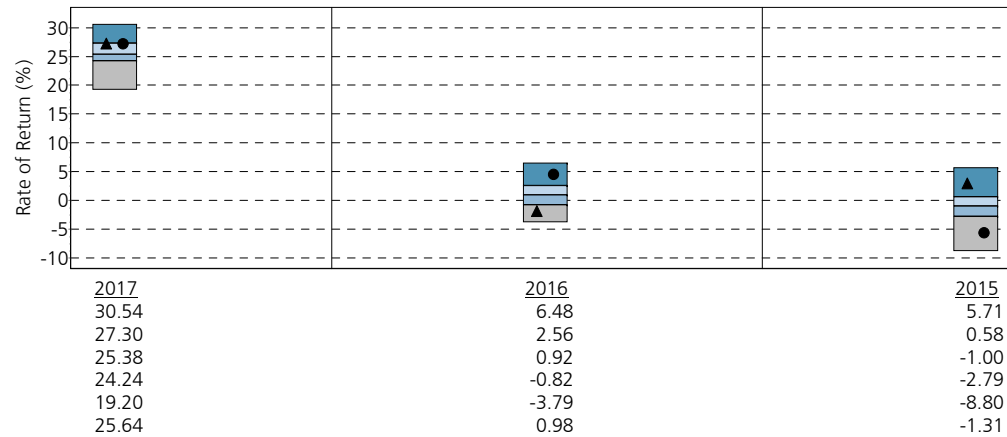
TOTAL FUND Peer Universe Comparison versus Foreign Large Blend Managers

Trailing Periods



▲ Oppenheimer Intl G	Return	Rank	Return	Rank	Return	Rank	Return	Rank
	-14.63	81	-19.22	94	0.27	91	-1.33	73
● MSCI AC Wld X US Net	Return	Rank	Return	Rank	Return	Rank	Return	Rank
	-11.46	14	-14.20	31	4.48	5	-0.08	27

Annual Periods



▲ Oppenheimer Intl G	Return	Rank	Return	Rank	Return	Rank
	27.21	25	-1.88	85	2.98	3
● MSCI AC Wld X US Net	Return	Rank	Return	Rank	Return	Rank
	27.19	26	4.50	9	-5.66	92

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb County Employees Retirement System
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Blackrock Global Allocation Fund First Eagle Global Fund Loomis Sayles Global Equity & Income Fund

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Performance Analysis

The primary index comparison for your portfolio and each of its asset classes is listed below.

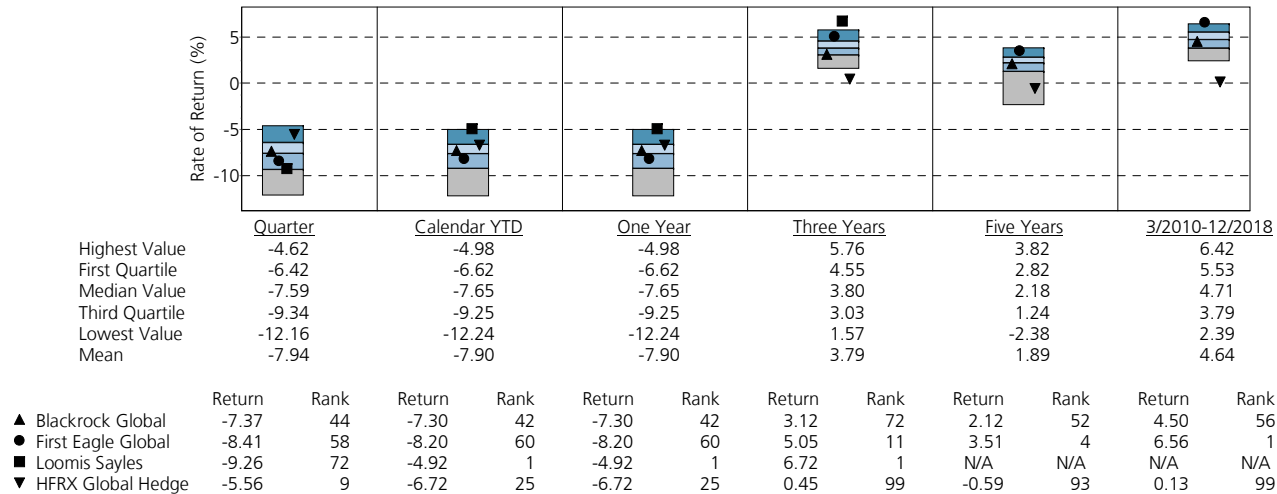
TOTAL FUND BENCHMARK

3/31/2010 - Present
100% HFRX Global Hedge Fund Index

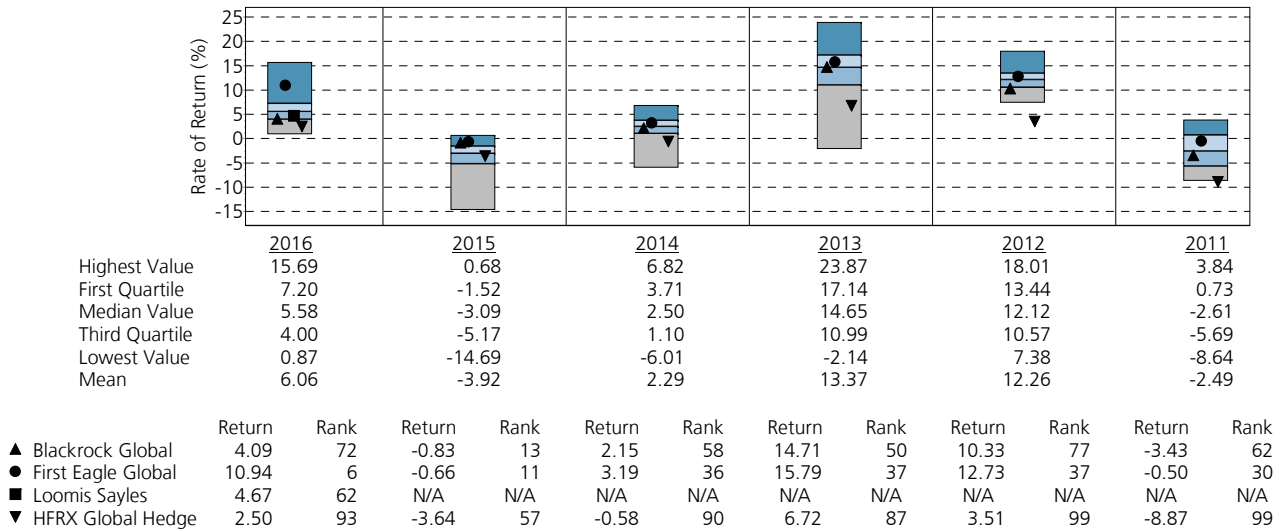
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TOTAL FUND Peer Universe Comparison versus World Allocation Managers

Trailing Periods

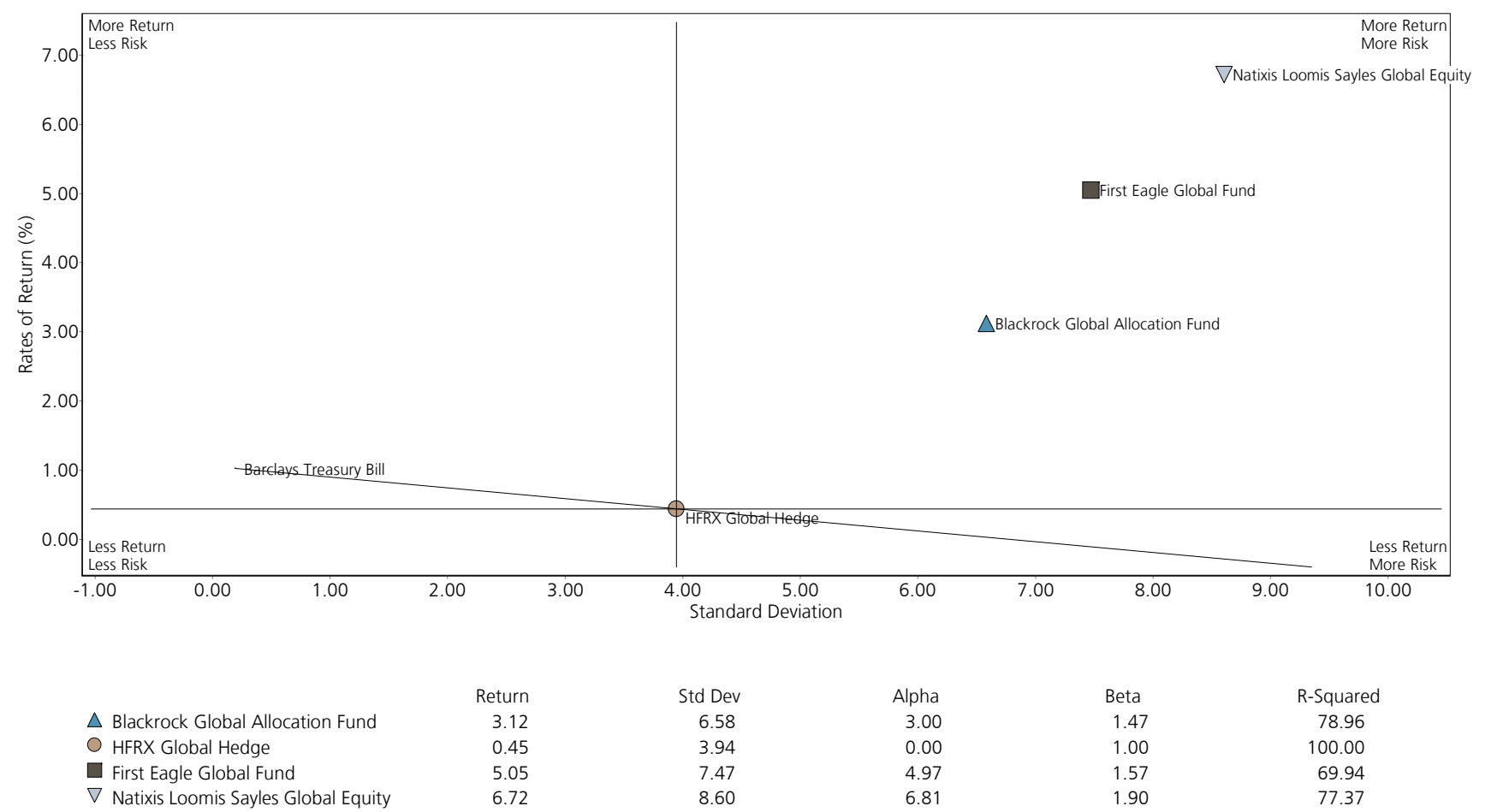


Annual Periods



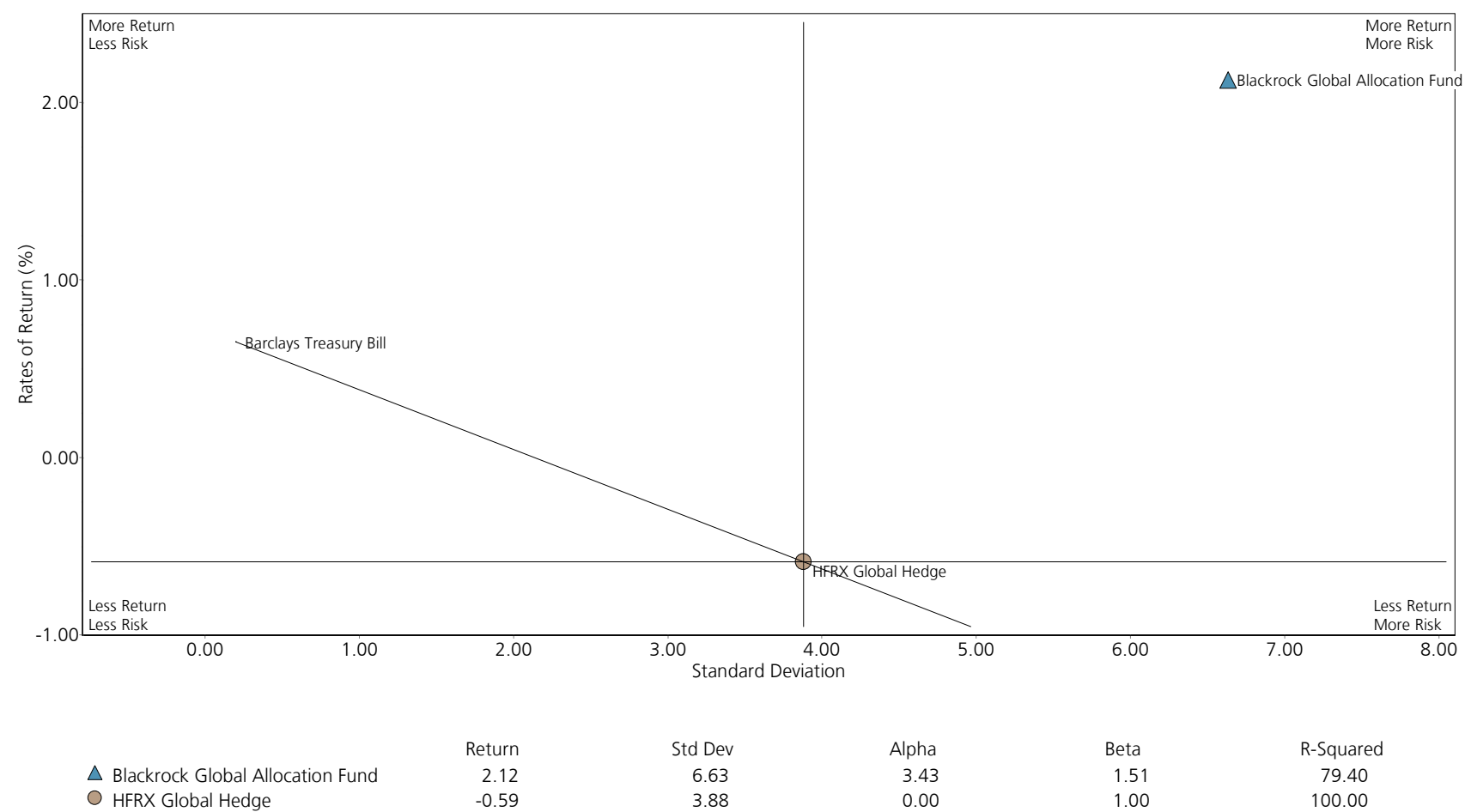
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Risk vs Reward Analysis
December 31, 2015 Through December 31, 2018



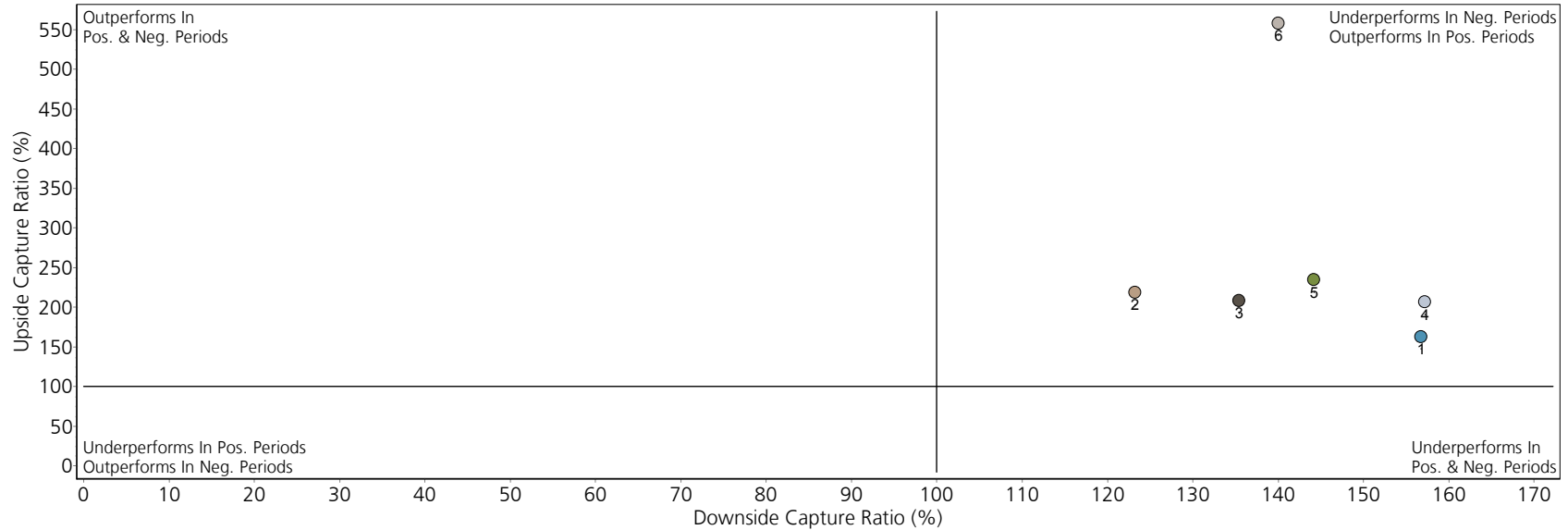
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Risk vs Reward Analysis
December 31, 2013 Through December 31, 2018



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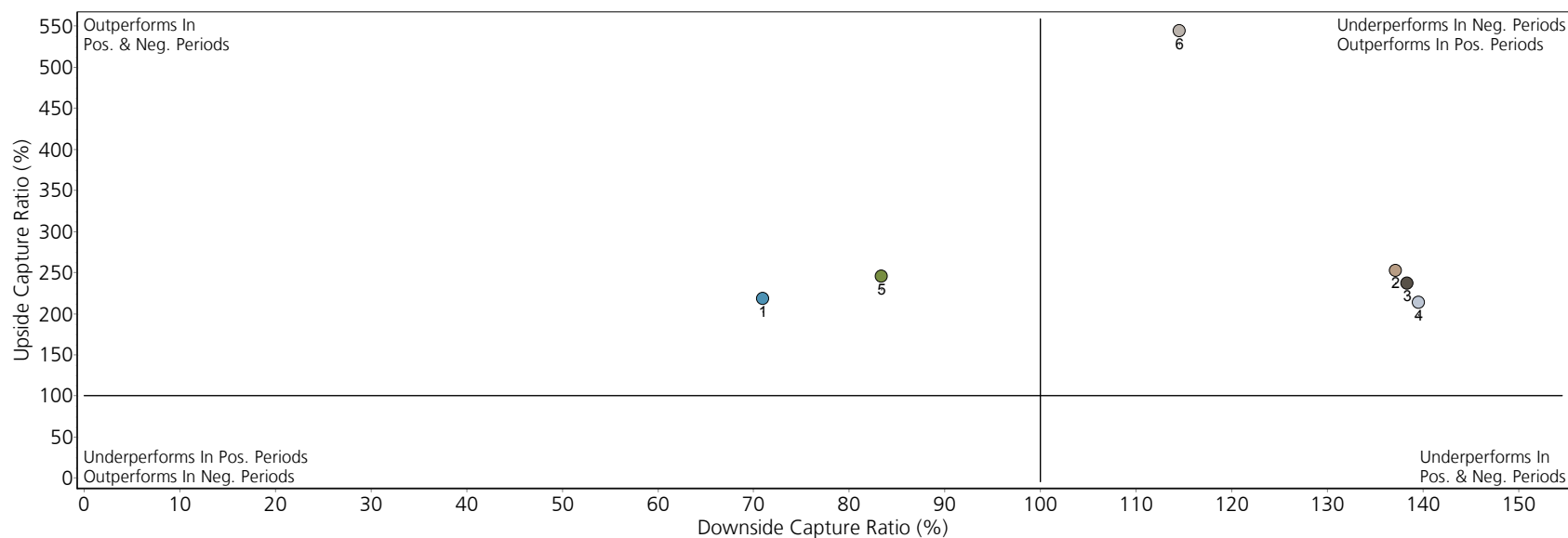
Capture Ratio - Blackrock Global Allocation Fund
December 31, 2010 Through December 31, 2016



	1	2	3	4	5	6
	12/2015-12/2016	12/2014-12/2015	12/2013-12/2014	12/2012-12/2013	12/2011-12/2012	12/2010-12/2011
Up Periods	9.00	5.00	5.00	10.00	8.00	4.00
Upside Capture ROR	10.37	9.50	9.29	18.78	14.48	14.48
HFRX Global Hedge	6.36	4.35	4.46	9.09	6.18	2.59
% Of Capture	162.91	218.59	208.12	206.49	234.32	558.15
Down Periods	3.00	7.00	7.00	2.00	4.00	8.00
Downside Capture ROR	-5.69	-9.43	-6.53	-3.42	-3.62	-15.65
HFRX Global Hedge	-3.63	-7.65	-4.82	-2.18	-2.51	-11.17
% Of Capture	156.75	123.22	135.39	157.21	144.19	140.04

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Capture Ratio - First Eagle Global Fund
December 31, 2010 Through December 31, 2016

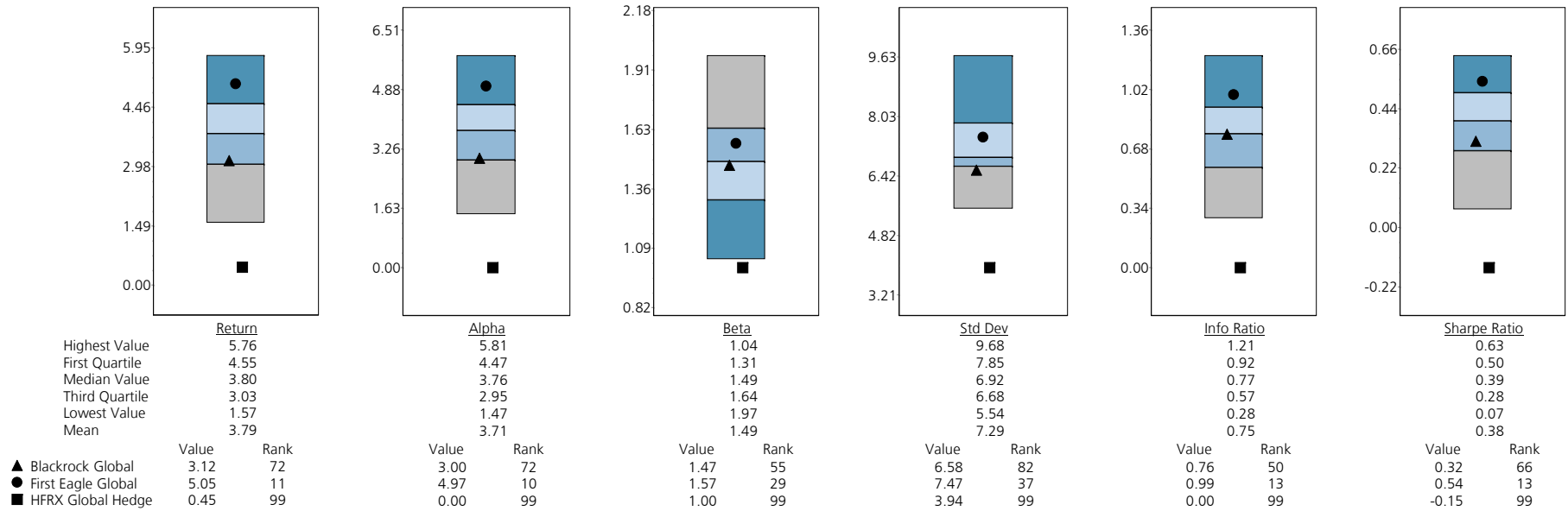


	1	2	3	4	5	6
	12/2015-12/2016	12/2014-12/2015	12/2013-12/2014	12/2012-12/2013	12/2011-12/2012	12/2010-12/2011
Up Periods	9.00	5.00	5.00	10.00	8.00	4.00
Upside Capture ROR	13.88	10.99	10.57	19.42	15.14	14.11
HFRX Global Hedge	6.36	4.35	4.46	9.09	6.18	2.59
% Of Capture	218.05	252.75	236.96	213.54	245.07	543.80
Down Periods	3.00	7.00	7.00	2.00	4.00	8.00
Downside Capture ROR	-2.58	-10.49	-6.67	-3.04	-2.09	-12.80
HFRX Global Hedge	-3.63	-7.65	-4.82	-2.18	-2.51	-11.17
% Of Capture	70.97	137.12	138.37	139.55	83.35	114.54

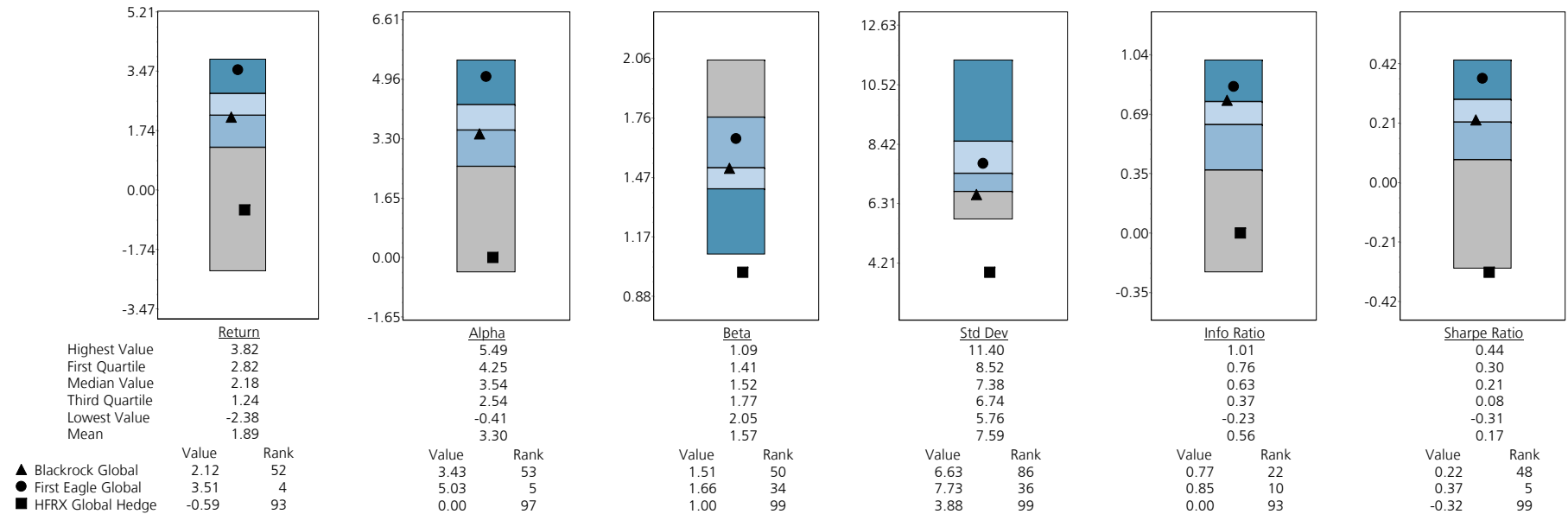
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TOTAL FUND vs World Allocation Managers December 31, 2015 Through December 31, 2018

3 Year



5 Year



This report is provided for informational purposes only. The information shown was obtained from sources believed to be reliable, the accuracy of which cannot be guaranteed. Account statements provided by UBS or other financial institutions are the official record of your holdings, balances, transactions and security values and are not amended or superseded by any of the information presented in this report. Information is current as of the date shown. Past performance is no guarantee of future returns. See IMPORTANT INFORMATION at end of report for assumptions and limitations of the analysis in this report, risk considerations, valuation, fees and other details regarding this report.

Cobb County Employees Retirement System - Investments Not Reviewed by UBS

The firm (UBS) does not currently conduct due diligence and has not otherwise reviewed the following investments or strategies, which are included in this report at your request. The inclusion does not constitute an endorsement that you continue to hold these investments. Please see "Important Information" for additional details.

At the time of report creation, all investments in your portfolio are reviewed.

Cash and Money Market Funds are not included in this analysis. UBS does not research any money market mutual funds, other than those offered by UBS and its affiliates.

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Performance Reconciliation Adjustments

This section provides a record of differences between information reported by your custodian and information used to create this performance report, whether at your direction or as prescribed by your Institutional Consultant on your behalf.

Scenario	Description	Net Adjustment (+/-)

No differences in information were used in the creation of this performance report.

IMPORTANT INFORMATION

This report is provided for informational purposes only, does not constitute an offer to buy or sell securities or investment products, does not constitute a recommendation that you buy, sell or hold securities or investment products, and is current as of the date shown. It may include information regarding your Institutional Consulting accounts held at various UBS entities including UBS Financial Services Inc., UBS Securities LLC and UBS AG (collectively, "UBS" or "UBS entities"), as well as accounts you hold at other financial institutions. Accounts included in this report are identified at the beginning of the report. Also, information may be shown for individual accounts or as one or more combined portfolios; the accounts included in each portfolio are also identified at the beginning of the report.

Investment Monitoring: Neither UBS nor any of its employees will track or monitor specific investments you make to determine whether they complement your Investment Policy, unless you have engaged UBS for such services.

Accounts and Assets Included: UBS account statements are the only official records of holdings, balances, transactions, and security values of assets held in UBS accounts and are not replaced, amended or superseded by any of the information presented in this report. If assets that you hold at other financial institutions are included in this report, they are being provided as part of your UBS IC Consulting Services Agreement or you have asked us to include those assets as an accommodation but they are not included as part of your UBS IC Consulting Services Agreement with us. In either situation, the inclusion of those assets is based on information, including valuation and transactional information, furnished to UBS by your custodian. Because custodians vary in the information they provide to us, reflection of fees within this report will include your investment manager fees and your UBS fees only when your custodian has identified and provided this information to us. This report is not intended to provide you with consolidated information or reporting regarding your holdings at other firms. You should review and maintain the original documents for those assets, such as account statements for individual accounts held away from UBS. Those documents may contain their record of holdings, balances, transactions, and security values of assets held in those accounts, as well as notices, disclosures and other information important to you, and may also serve as a reference should questions arise regarding the accuracy of the information in this report. UBS Financial Services Inc. SIPC coverage would only apply to those assets respectively held at UBS Financial Services Inc. You should contact your financial representative at any other financial institution where you hold an account to determine the availability of SIPC coverage, if any. UBS has not verified and is not responsible for the accuracy or completeness of information regarding assets held at other financial institutions. We require that you hold and purchase only eligible managed assets in your UBS advisory accounts. Please contact your UBS Institutional Consultant for a list of the eligible assets in your program. These reports may provide performance information for eligible and ineligible assets in a fee-based program. Since ineligible assets are not considered Institutional Consulting program assets, the inclusion of such securities will distort the actual performance of your advisory assets. Neither UBS nor your UBS Institutional Consultant will act as your investment adviser with respect to ineligible assets. The investment advisory programs and brokerage accounts we offer are separate and distinct and each is governed by different laws and separate contracts with you.

Valuation: Values shown are not inclusive of margin balances. Every reasonable effort has been made to accurately price securities; however, we make no guarantee with respect to any security's price. To determine the value of securities in your account, we generally rely on third party quotation services. If a price is unavailable or believed to be unreliable, we may determine the price in good faith and may use other sources such as the last recorded transaction. We will generally rely on the value provided by you, the custodian or issuer of that security, when (i) securities are held at another custodian; (ii) investments not available through UBS or that our systems do not recognize. To obtain current quotations, when available, contact your Institutional Consultant. Prices may or may not represent current or future market value. Such pricing may affect the performance information provided in these reports. The services UBS provides to you may be based on and/or include information obtained from third-party sources. UBS will not independently verify pricing information obtained from third-party sources and cannot guarantee the accuracy of such third-party information. If pricing is indicated as "NA", the required data for that field was not provided by the other financial institution or you; this will affect the performance information provided in these reports.

Performance Analytics: Unless otherwise noted, performance shown is based on Time Weighted Rate of Return. Periods greater than one year have been annualized, but annual performance may not represent a full calendar year depending on the inception date of the first account included in these reports. Standard deviations are shown only for periods of 12 months or longer. This report may reflect performance before the deduction of manager fees and UBS Institutional Consulting advisory fees, unless your custodian provides that information to us or you custody your assets at UBS and the performance is reflected as net of those fees. The payment of fees and expenses will reduce the performance of the account and the reduction in performance will have a cumulative effect over time. The net effect of the payment of fees on the annualized performance, and the compounded or cumulative effect over time, is dependent on the amount of the fee and the account's investment performance. For example, an account that experiences an annual gross performance of 10% but incurs a 2.8% annual fee that is deducted quarterly on a prorated basis, will experience net annual performance of 7.1%, a reduction of 2.9% per year. Compounding will similarly affect the account's performance on a cumulative basis.

Performance information incorporates data as of the date your accounts became available for these reports, not as of your initial acquisition of a particular investment unless performance history is imported at client's request. For reports that reflect combined account information, the Performance Start Date will be the earliest performance start date of any of the individual accounts selected for the consolidation time period. If an individual account's performance information is not available for a full reporting time period (month to date, quarter to date, year to date or performance to date), that account's information will only be included for the period when available. For consolidated accounts that include different account Performance Start Dates, the consolidated Additions/Withdrawals, Income Earned and Investment Appreciation/ Depreciation will include all activity that occurred during the consolidated reporting time period. Accounts that hold or held insurance products will be reported on from the month end date of when insurance and annuity activity could be obtained from the carrier. To the extent that your historical data contains a mixture of net and gross performance history related to manager or advisory fees, those distinctions will impact your performance reports to the extent that the different methods of reporting are blended. Note that various factors, including unpriced securities and certain holdings, adjustments or activity may cause the results shown in this report to differ from actual performance (see the Performance Reconciliation Adjustments section for detail on differences between your Custodial statement and information used to create this performance report). Note that these results may differ from other performance reports provided to you by UBS. Performance information may be impacted by the different ways each UBS entity or third party financial institution respectively records trade executions. Past performance is no guarantee of future results. Neither the UBS entities nor any of their respective representatives provide tax or legal advice. You must consult with your legal or tax advisors regarding your personal circumstances.

You have discussed the receipt of this individually customized report with your Financial Advisor. Your UBS account statements and trade confirmation are the official records of your accounts at UBS. We assign index benchmarks to our asset allocations, strategies in our separately managed accounts and discretionary programs based on our understanding of the allocation, strategy, the investment style and our research. The benchmarks included in this report can differ from those assigned through our research process. As a result, you may find that the performance comparisons may differ, sometimes significantly, from that presented in performance reports and other materials that are prepared and delivered centrally by the Firm. Depending upon the composition of your portfolio and your investment objectives, the indexes used in this report may not be an appropriate measure for comparison purposes, and as such, are represented for illustration only. Your portfolio holdings and performance may vary significantly from the index. Your financial advisor can provide additional information about how benchmarks within this report were selected.

Benchmark Index Information:

For comparison purposes, these reports may contain a number of general broad market indices, which were selected to demonstrate the performance of broad market indicators that are readily recognized, rather than for direct performance comparisons, and do not reflect the performance of actual investments. The selection and use of benchmarks is not a promise or guarantee that your accounts will meet or exceed the stated benchmarks. Benchmark information is illustrative and relates to historical performance of market indexes and not the performance of actual investments. Indexes are not available for direct investment and reflect an unmanaged universe of securities. Indices assume no management, custody, transaction fees or expenses that would lower the performance results, and assume reinvestment of dividends and capital gains. Information about indices is based on information obtained from sources believed to be reliable, but no independent verification has been made. UBS does not guarantee the accuracy or completeness of any index information presented. Market index data is subject to review and revision, and UBS reserves the right to substitute indices or display only those indices for which current updated information is available. Information regarding the indexes shown in this report can be found at the end of this report.

Risk Considerations: Some of the general risk considerations associated with the investment options included in this report are described below. The descriptions are not meant to be a complete list of all investment risks. For more complete information regarding fees, expenses, risks and restrictions associated with these investments please review the offering documents and marketing materials. Investors should consult their tax advisor about their specific tax situation before investing in any securities. In addition, clients should familiarize themselves with the particular market risks and the other risks associated with the specific investment. All investments contain risk and may lose value.

- **Cash and cash alternatives:** Cash and cash alternatives typically include money market securities or three-month T-Bills. These securities have short maturity dates and they typically provide a stable investment value as compared to other investments and current interest income. These investments may be subject to credit risks and inflation risks. Treasuries also carry liquidity risks for sales prior to maturity. Investments in money market funds are neither insured nor guaranteed by the Federal Deposit Insurance Corporation ("FDIC"), the U.S. government or any other government agency. There can be no assurance that the funds will be able to maintain a stable net asset value at \$1.00 per share or unit.
- **Alternative Investments:** Non-traditional asset classes are alternative investments that include hedge funds, private equity, and private real estate (collectively, non-traditional or alternative investments). These investments can be subject to substantial risks (including the risks associated with limited liquidity, the use of leverage, short-sales and concentrated positions), may involve complex tax structures and strategies, and may not be easily valued. The risks of alternative investments should be carefully considered in light of your investment objectives, risk tolerance and net worth. Alternative investments are speculative and entail substantial risks, which may place your capital at risk. Alternative investments may not have been registered with the Securities and Exchange Commission or under any state securities laws. The market for such investments may be highly illiquid and subjectively valued, and these reports provide values for informational purposes only. Accuracy is not guaranteed. These values may differ substantially from prices, if any, at which a unit may be bought or sold and do not necessarily represent the value you would receive from the issuer upon liquidation. Issuer estimated values, if any, are generally updated on a regular (annual or semi-annual) basis and are supplied to us by the issuer, but may be calculated based on different information from what is used by third parties to derive their estimated values.
- **U.S. Fixed Income:** Fixed income represents exposure (whether direct or indirect) to debt issued by private corporations, governments or federal agencies. Historically, fixed income has higher return than cash investments but their value can fluctuate dramatically as they are subject to risks including market, interest rate, issuer, credit, default and inflation risk. An investment in a portfolio may be worth more or less than its original cost when redeemed. In addition, fixed income generally has less volatility and long-term return than equities. U.S. fixed income may be further classified as high yield. These investments are high yielding but may also carry more risk. A bond funds yield and value of its portfolio fluctuate and can be affected by changes in interest rates, general market conditions and other political, social and economic developments.
- **U.S. Equity:** Equities represent exposure (whether direct or indirect) to ownership interest in a corporation. Historically, equities are more risky than fixed income or cash investments as they experience greater volatility risk, which is the risk that the value of your investment may fluctuate over time. However, they have had higher returns. Investments in small and medium company stocks can be more volatile over the short term than investments in large company stocks, however, they may offer greater potential for appreciation.
- **Non-U.S. equity and fixed income:** Non-U.S. equity and fixed income represent exposure (whether direct or indirect) to ownership interests and debt, respectively, of foreign governments and corporations that can be sub-divided into those from countries that have developed markets or emerging markets. Further, non-U.S. companies not reporting with the SEC may be subject to accounting, auditing, and financial reporting standards and requirements that differ from companies reporting with the SEC and may have less publicly available information about them than companies reporting with the SEC.
- **International:** Investors in securities of issuers located outside of the United States should be aware that even for securities denominated in U.S. dollars, changes in the exchange rate between the U.S. dollar and the issues "home" currency can have unexpected effects on the market value and liquidity of those securities. Those securities may also be affected by other risks (such as political, economic or regulatory changes) that may not be readily known to a U.S. investor.
- **Variable Annuities:** A variable deferred annuity is a long-term financial product designed for retirement purposes. It is a contractual agreement in which payment(s) are made to an insurance company, which agrees to pay out an income or a lump sum amount at a later date. There are fees and charges associated with a variable annuity contract, which include, but are not limited to, operations charges, sales and surrender charges, administrative fees, and additional charges for optional benefits. Variable annuities are sold by prospectus and you should carefully consider important information on the sub-accounts' investment objectives, risk, charges and expenses. Please read the prospectus and offering documents carefully before you invest. Your Financial Advisor can provide a copy of the prospectus. For current month-end returns: <http://advisor.morningstar.com/familyinfo.asp>. Withdrawals from an annuity contract are taxable as ordinary income, not as capital gains and, if made prior to age 59 and 1/2, may be subject to an additional 10% federal income tax penalty. Withdrawals may also be subject to surrender charges. Withdrawals will reduce the death benefit, living benefits and cash surrender value. For tax purposes, withdrawals will come from any gain in the contract first. Please see the prospectus for complete details. Amounts in the annuity's variable investment portfolios are subject to fluctuation in value and market risk, including loss of principal. Unregistered group variable annuities and registered group variable annuities that are solely available for use in qualified plans are rated and ranked based on their position within the bell curve of the open end fund peer group (a.k.a. category), rather than the variable annuity subaccount peer group. These ratings and ranks are calculated by using an overlay of the open end fund peer group break points and therefore do not contribute to the category average or number of funds within the peer group. For variable annuity subaccounts, standardized return is total return based on its inception date within the separate account and is adjusted to reflect recurring and non-recurring charges such as surrender fees, contract charges, maximum front-end load, maximum deferred load, maximum M&E risk charge, administration fees, and actual ongoing fund-level expenses. The benchmark used for each individual subaccount performance is an index that has been assigned to the particular manager or fund.

Mutual Fund Performance Information: Mutual Funds are sold by prospectus and you should carefully consider important information on the fund's investment objectives, risk, charges and expenses. Please read the prospectus and offering documents carefully before you invest. Your UBS Institutional Consultant can provide a copy of the prospectus. For current month-end returns: <http://advisor.morningstar.com/familyinfo.asp>. This analysis may incorporate mutual fund and exchange traded fund performance results. Analytics shown are calculated based on the fund's Net Asset Value, which may reflect the reinvestment of dividends and capital gains, as well as the deduction of 12b-1 fees and fund internal expenses (e.g. fund management fees). The analytics do not reflect the deduction of the sales load, where applicable, the UBS Consulting fee(s), where applicable, or the impact of taxes. Had the sales load, fee or taxes been included, the results used in this analysis would have been reduced.

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Wilshire Trust Universe Comparison Service Information: These reports may contain comparative peer performance data provided by Wilshire Associates Incorporated (Wilshire®), entitled "Quartile Ranking Comparison." Output will be presented as a universe organized by asset type, plan type, plan size or other basis. Wilshire®, the Wilshire Trust Universe Comparison Service® and TUCS® are service marks of Wilshire Associates Incorporated and have been licensed for use by UBS Financial Services Inc. All content of TUCS is ©2016 Wilshire Associates Incorporated, all rights reserved.

Policy Index: A point of reference for evaluating a portfolio's investment performance. A policy Index can be comprised of single or multiple benchmarks (weighted blend). Portfolios with multiple benchmarks will be depicted with a description of benchmarks and weights that comprise the policy.

Gain/(Loss) Information: When data is available from UBS, estimated unrealized gains/losses are calculated for individual security lots. For assets transferred from another financial institution, gain/loss information will be reflected only for the period of time the assets have been held at UBS entities. For assets held at other financial institutions, information provided by that entity, if any, is reflected. Total realized gain/loss information may include calculations based upon non-UBS entities cost basis information. UBS Financial Services Inc. does not independently verify or guarantee the accuracy or validity of any information provided by sources other than UBS Financial Services Inc. When original cost information is unavailable, gain/loss amounts will represent current market value and total gains/losses may be inaccurate. Date information for when a particular security was acquired, when available, appears on these reports. When no acquisition date is provided for a security, these reports reflect "N/A" and omit this information. As a result, these figures may not be accurate and are provided for informational purposes only.

Interest and Dividend Income: When shown on this report, information does not reflect your account's tax status or reporting requirements. You should use only official IRS forms for tax reporting purposes. The classification of private investment distributions can only be determined by referring to the official year-end tax-reporting document provided by the issuer.

Contributions and Withdrawals: When shown on a report, information regarding contributions and withdrawals may represent the net value of all cash and securities contributions and withdrawals, and may include program fees (including wrap fees) and other fees added to or subtracted from your accounts from the first day to the last day of the period covered by these reports. Program fees may be separately identified or included in withdrawals except when paid via an invoice or through a separate account billing arrangement.

Cash Flow: Cash Flow analysis is based on the historical dividend, coupon and interest payments you have received as of the Record Date in connection with the securities listed and assumes that you will continue to hold the securities for the periods for which cash flows are projected. This may or may not include principal paybacks for the securities listed. These potential cash flows are subject to change due to a variety of reasons, including but not limited to, contractual provisions, changes in corporate policies, changes in the value of the underlying securities and interest rate fluctuations. The effect of a call on any security(s) and the consequential impact on its potential cash flow(s) is not reflected in this report. Payments that occur in the same month in which the report is generated -- but prior to the report run ("As of") date -- are not reflected in this report. In determining the potential cash flows, UBS relies on information obtained from third party services it believes to be reliable but does not independently verify or guarantee the accuracy or validity of any information provided by third parties. Cash flows for mortgage-backed, asset-backed, factored, and other pass-through securities are based on the assumptions that the current face amount, principal pay-down, interest payment and payment frequency remain constant. Calculations may include principal payments, are intended to be an estimate of future projected interest cash flows and do not in any way guarantee accuracy. Important information about advisory & brokerage services: As a firm providing wealth management services to clients, we offer both investment advisory and brokerage services. These services are separate and distinct, differ in material ways and are governed by different laws and separate contracts. For more information on the distinctions between our brokerage and investment advisory services, please speak with your Financial Advisor or visit our website at

<http://ubs.com/workingwithus>. While we strive to make sure the nature of our services is clear in the materials we publish, if at any time you would like clarification on the nature of your accounts or the services you are receiving, please speak with your UBS Institutional Consultant.

The ACCESS, SWP, MAC and Institutional Consulting ("IC") programs offer some of the same Separately Manage Account ("SMA") Managers for different SMA Manager fees. The amount of the fee paid to each SMA Manager is a function of that SMA Manager's investment style and the fee negotiated with the SMA Manager either by UBS (in ACCESS, SWP) and by you in the MAC or IC Program. Depending on your asset level and ability to negotiate the investment management fee with the SMA Manager in the dual-contract structure of the MAC or IC program, you may find that the single-contract structure in ACCESS and SWP provides a more cost-effective option or vice versa. In addition, based on the combination of our fees and your SMA Manager's fees, the overall fee for your SMA account in ACCESS, SWP, MAC or IC may exceed 3% of the account value. Please review your options and overall costs carefully with your Financial Advisor before investing.

Calculation Definitions

Alpha: Alpha measures the difference between an investment's actual performance, and its expected performance as indicated by the returns of a selected market index. A positive Alpha indicates the risk-adjusted performance is above that index. In calculating Alpha, Standard Deviation (total risk) is used as risk measure. Alpha is often used to judge the value added or subtracted by a manager.

Appreciation/Depreciation: Appreciation or Depreciation is the change in market value minus net cash flows. The value indicates by how much the portfolio value has changed due to changes in asset values. Appreciation would be an increase, Depreciation would be a decrease.

Average Exposure: Average Exposure is generally, the average allocation to a segment or an asset. Calculated as the beginning market value plus the weighted net cash flows as a percentage of the total portfolio market value.

Beta: Beta is defined as a Manager's sensitivity to market movements and is used to evaluate market related, or systematic risk. Beta is a measure of the linear relationship, over time, of the Manager's returns and those of the Benchmark. Beta is computed by regressing the Manager's excess returns over the risk free rate (cash proxy) against the excess returns of the Benchmark over the risk free rate. An investment that is as equally volatile as the market will have a Beta of 1.0; an investment half as volatile as the market will have a Beta of 0.5; and so on. Thus, Betas higher than 1.0 indicate that the fund is more volatile than the market.

Composite Benchmark: The Composite Benchmark is a weighted average benchmark based on the allocation of funds within each of the portfolios in the composite and the risk index assigned to each portfolio.

Correlation (R): The Correlation represents the degree to which investments move in tandem with one another and is a critical component of diversified portfolio construction. The Correlation varies between a minimum of -1 (move in opposite direction) and a maximum of 1 (completely correlated). Lower Correlations enhance diversification and lead to better risk-adjusted returns within diversified portfolios. An R of less than 0.3 is often considered low Correlation.

Current Yield: This measure looks at the current price of a bond instead of its face value and represents the return an investor would expect if he or she purchased the bond and held it for a year. This measure is not an accurate reflection of the actual return that an investor will receive in all cases because bond and stock prices are constantly changing due to market factors.

Distribution of Excess Returns: Distribution of Excess Returns displays an arrangement of statistical data that exhibits the frequency of occurrence of the investment's returns in excess of the selected Market Index.

Down Market (Mkt) Capture Ratio: Down Market Capture Ratio is a measure of an investment's performance in down markets relative to the market itself. A down market is one in which the market's return is less than zero. The lower the investment's Down Market Capture Ratio, the better the investment protected capital during a market decline. A negative Down Market Capture Ratio indicates that an investment's returns rose while the market declined.

Downside Capture Return: The downside capture return is the cumulative performance of the portfolio in all periods during which the risk benchmark posted a negative return.

Downside Probability: The downside probability is the ratio of the number of periods during which the portfolio posted a negative return to the total number of periods under study. If, for example, during a 12 month span, the portfolio realized 5 months of negative returns, the downside probability would be equal to 5/12 or 42 percent. The sum of the downside and upside probabilities must equal 1.0. The downside probability does not consider the extent to which the portfolio will fail to exceed the target index. It merely considers the likelihood that the target will not be exceeded. It is important to bear in mind this point when comparing the downside probabilities of more than one portfolio. It is not necessarily correct, for example, to deem portfolio A riskier than portfolio B simply because A has a higher downside probability.

Downside Risk (Semi Standard Deviation, Semi Std Dev, or Downside Deviation): Downside Risk only identifies volatility on the down side. Downside Risk measures the variability of returns below zero, whereas Standard Deviation attributes volatility in either direction to risk. The Downside Risk method calculates the deviations below zero for each observed return. Each time a return falls below zero, the sum is divided by the number of observations and the square root is taken. This result is then shown on an annualized basis.

Dynamic Index: A weighted average blended benchmark of the risk indices assigned to each asset class, based on the asset allocation of the portfolio for a given period. The benchmark index weighting adjusts with changes to the asset allocation. A Dynamic Index should not be used when measuring against the client's *Investment Policy Statement*.

Effective Duration: A duration calculation for bonds with embedded options. Effective duration takes into account that expected cash flows will fluctuate as interest rates change.

Excess: Denotes that a statistic is being measured relative to the Market Index selected. The data set analyzed consists of the periodic differences between the investment's measure and the selected Market Index's definition.

Expense Ratio: Often referred to as the Net Expense Ratio, Morningstar pulls the net annual expense ratio from the fund's audited annual report. Annual-report expense ratios reflect the actual fees charged during a particular fiscal year. The annual report expense ratio for a fund of funds is the wrap or sponsor fee only. The expense ratio expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred by the fund. Portfolio transaction fees, or brokerage costs, as well as initial or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. If the fund's assets are small, its expense ratio can be quite high because the fund must meet its expenses from a restricted asset base. Conversely, as the net assets of the fund grow, the expense percentage should ideally diminish as expenses are spread across the wider base. Funds may also opt to waive all or a portion of the expenses that make up their overall expense ratio.

Gross Dollar Weighted Return: Gross Dollar Weighted Return is the internal rate of return, excluding money manager fees.

Gross Expense Ratio: Represents the total gross expenses (net expenses with waivers added back in) divided by the fund's average net assets. If it is not equal to the net expense ratio, the gross expense ratio portrays the fund's expenses had the fund not waived a portion, or all, of its fees. Thus, to some degree, it is an indication of fee contracts. Some fee waivers have an expiration date; other waivers are in place indefinitely.

Gross Time Weighted Return: Gross Time Weighted Return is the Modified Dietz return, excluding money manager fees.

Index Value: Index Value is the unit value series based on the return stream. It can be used to calculate rates of return between any two dates in the report.

Information Ratio: The Information Ratio is a measure of value added by an investment manager. It is the ratio of (annualized) excess return above the selected Market Index to (annualized) Tracking Error. Excess return is calculated by linking the difference of the manager's return for each period minus the selected Market Index return for each period, then annualizing the result.

Manager Capture Ratio: The Manager Capture Ratio is manager return divided by the selected Market Index return. It shows what portion of the market performance was captured by the manager under certain market conditions: up market, down market, or both.

Market Experience: Market Experience is the presumable market value of the portfolio if it and its cash flows had grown at the policy index rate of return. It lets the reader know if active management has aided or hurt the portfolio.

Net Cash Flow: For the total portfolio, net cash flow is aggregate contributions minus aggregate withdrawals. At the asset class level, net cash flow is aggregate purchases minus aggregate sales minus aggregate income. It is used in the numerator of the Modified Dietz return calculation. It is the same as "New Money" and "Flow".

Net Dollar Weighted Return: Net Dollar Weighted Returns is the internal rate of return, including money manager fees.

Net Time Weighted Return: Net Time Weighted Return is the Modified Dietz return, including money manager fees.

New Money: For the total portfolio, New Money is aggregate contributions minus aggregate withdrawals. At the asset class level, New Money is aggregate purchases minus aggregate sales minus aggregate income. It is

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used in the numerator of the Modified Dietz return calculation. It is the same as "Net Cash Flow" and "Flow".

Policy Index: A point of reference for evaluating a portfolio's investment performance. A policy Index can be comprised of single or multiple benchmarks (weighted blend). Portfolios with multiple benchmarks will be depicted with a description of benchmarks and weights that comprise the policy.

Rate of Return, ROR, Return %, ROI: All Return terms refer to the Modified Dietz return.

Relative Risk: Relative risk is simply the ratio of the standard deviation of the portfolio to the standard deviation of the risk index. The statistic reveals how much of the variation of the risk index is "shared" by the portfolio. A relative risk of 1.0 indicates that the portfolio has the same level of return variability as the risk index. A relative risk of less than 1.0 indicates that the portfolio has shown a lower dispersion of returns than the index. A relative risk in excess of 1.0 indicates that the portfolio returns have been more dispersed than those of the index.

Riskless Index: The theoretical rate of return of an investment with zero risk. The risk-free rate represents the interest an investor would expect from an absolutely risk-free investment over a specified period of time. The 3 month T-Bill is the usual index used for riskless.

R-Squared (R2): The diversification measure R2 indicates the percentage of volatility in portfolio returns which can be "explained" by market volatility. This statistic indicates the degree to which the observed values of one variable, such as the returns of a managed portfolio, can be explained by, or are associated with the values of another variable, such as a Market Index. It is especially helpful in assessing how likely it is that Alpha and Beta are

statistically significant. The R2 values generally range from 0.0 to 1.0. An investment with an R2 of 1.0 is perfectly correlated with the market whereas an investment with an R2 of 0.0 will behave independently of the market. An R2 of 0.95, for example, implies that 95% of the fluctuations in a portfolio are explained by fluctuations in the market.

Sector Allocations: The percentage a manager has allocated to specific economic sectors.

Sharpe Ratio: The Sharpe Ratio indicates the excess return per unit of total risk as measured by Standard Deviation. It is a ratio of the arithmetic average of excess returns over the risk free rate to the Standard Deviation.

The Sharpe Ratio is a measure of the premium earned for the risk incurred by the portfolio.

Sortino Ratio: The Sortino Ratio is a measure of reward per unit of risk. With Sortino, the numerator (i.e., reward) is defined as the incremental compounded average return over the minimum acceptable return (MAR). The denominator (i.e., risk) is defined as the downside deviation of the returns below the MAR. Since the downside deviation is the standard deviation of those returns which fail to exceed the MAR, the result of the Sortino Ratio is a measure of the average reward per unit of loss. As with Sharpe and Treynor, the Sortino Ratio only has value when it is used as the basis of comparison between portfolios. The higher the Sortino Ratio, the better.

Standard Deviation: A measure of the extent to which observations in a series vary from the arithmetic mean of the series. The Standard Deviation of a series of asset returns is a measure of volatility or risk of the asset.

Target Allocation: The Target Allocation is the allocation goal of the portfolio approaches and long- and short-term holding periods.

HFRI Relative Value: Equally weighted index of investment managers who maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative or other security types.

JP Morgan Global Ex-U.S. Bond Index: Consists of regularly traded, fixed-rate domestic government debt instruments from 12 international bond markets. Countries included are Austria, Belgium, Canada, Denmark, France, Germany, Italy, Japan, the Netherlands, Spain, Sweden and the United Kingdom.

MSCI AC World Index ex USA: Consists of approximately 2,000 securities across 47 markets, with emerging markets representing approximately 18%. MSCI attempts to capture approximately 85% of the market capitalization in each country.

MSCI EAFE Index (Europe, Australasia, Far East): A free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the U.S. and Canada. As of June 2007, the MSCI EAFE Index consisted of the following 21 developed market country indexes: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland and the United Kingdom.

MSCI Emerging Markets Index: A free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. As of November 2008, the MSCI Emerging Markets Index consisted of the following 24 emerging market country indexes: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Korea, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand and Turkey.

MSCI Europe Index: A free float-adjusted market capitalization-weighted index that is designed to measure the equity market performance of the developed markets in Europe. As of June 2007, the MSCI Europe Index consisted of the following 16 developed market country indexes: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

MSCI Japan Index: A free float-adjusted market capitalization-weighted index that is designed to measure the equity market performance of Japan.

NAREIT Index: Benchmarks the performance of the REIT industry since its inception in 1972. It was designed to provide a comprehensive assessment of overall industry performance. Some REITs available from over-the-counter markets are not included due to the lack of real-time pricing.

NCREIF Property Index (NPI): A quarterly time series composite total rate of return measure of investment performance of a large pool of individual commercial real estate properties acquired in the private market for investment purposes only. All properties in the NPI have been acquired, at least in part, on behalf of tax-exempt institutional investors - the great majority being pension funds. As such, all properties are held in a fiduciary environment.

Russell 1000® Index: Measures the performance of the large-cap segment of the U.S. equity universe. It is a subset of the Russell 3000® Index and includes approximately 1000 of the largest securities based on a combination of their market cap and current index membership. The Russell 1000 represents approximately 92% of the U.S. market.

Russell 1000® Growth Index: Measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 1000® Value Index: Measures the performance of the large-cap value segment of the U.S. equity universe. It includes those Russell 1000 companies with lower price-to-book ratios and lower expected growth values.

Russell 2000® Growth Index: Measures the performance of the small-cap growth segment of the U.S. equity universe. It includes those Russell 2000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 2000® Value Index: Measures the performance of the small-cap value segment of the U.S. equity universe. It includes those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values.

Russell Mid-Cap® Growth Index: Measures the performance of the mid-cap growth segment of the U.S. equity universe. It includes those Russell mid-cap companies with higher price-to-book ratios and higher forecasted growth values.

Russell Mid-Cap® Value Index: Measures the performance of the mid-cap value segment of the U.S. equity universe. It includes those Russell mid-cap companies with lower price-to-book ratios and lower forecasted growth values.

S&P 500 Index: Covers 500 large cap industrial, utility, transportation, and financial companies of the US markets. The index represents about 75% of NYSE market capitalization and 30% of NYSE issues. It is a

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capitalization weighted index calculated on a total return basis with dividends reinvested.

TASS Index of CTAs: Is a dollar-weighted index based on historical managed futures performance of CTAs with established track records.

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb OPEB
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Total Portfolio

Please contact your UBS Institutional Consultant if you have any questions regarding this report, if your financial situation, individual needs or investment objectives have changed, or if you would like to initiate or modify any investment restrictions on this account.

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Cobb OPEB
December 31, 2018

Accounts Included in this Report

UBS account statements represent the only official record of holdings, balances, transactions and security values of assets in your UBS Financial Services Inc. accounts and are not replaced, amended or superseded by any information presented in this report. As an accommodation to you, values of accounts that you hold at other financial institutions may be included as part of your UBS IC Consulting Services Agreement based on information, including valuation information, provided to us. This report does not include assets held in your UBS account(s) that are not a part of the Institutional Consulting program unless you have requested that those accounts be included in this report. UBS does not independently verify or guarantee the accuracy or validity of any information provided by sources other than UBS Financial Services Inc. Please see the 'Important Information' section at the end of this report for detailed valuation information.

Account Name	Account Number	Custodian Name
Richmond Capital Management	AXxxx92	UBS Financial Services
Multiple Funds	AXxxx57	UBS Financial Services
Eagle Capital Large Value	AXxxx00	UBS Financial Services
TCW Large Cap Growth	AXxxx93	UBS Financial Services
Westfield Capital Large Growth	AXxxx91	UBS Financial Services
Vaughan Nelson	AXxxx94	UBS Financial Services

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Performance Analysis

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Performance Analysis

The primary index comparison for your portfolio and each of its asset classes is listed below.

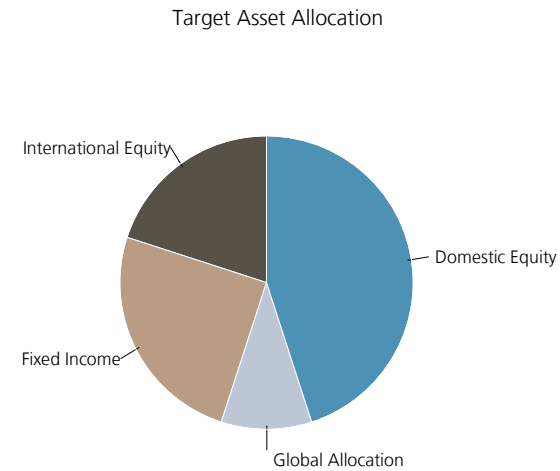
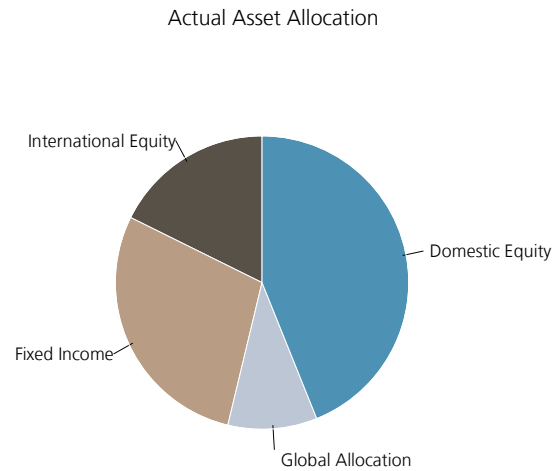
CONSOLIDATED PORTFOLIO BENCHMARK

09/30/2016 - Present

45%	Russell 3000
25%	Bloomberg Barclays Aggregate Bond
20%	MSCI ACWI ex US Net
10%	HFRX Global Hedge Fund Index

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Actual vs Target Asset Allocation As of December 31, 2018



	Market Value Actual	Percent Actual	Market Value Target	Percent Target	Market Value Difference	Percent Difference
Fixed Income	32,302,557.1	28.6%	28,274,420.6	25.0%	4,028,136.5	3.6%
Domestic Equity	49,669,313.6	43.9%	50,893,957.1	45.0%	(1,224,643.5)	(1.1%)
International Equity	20,006,392.4	17.7%	22,619,536.5	20.0%	(2,613,144.1)	(2.3%)
Global Allocation	11,119,419.3	9.8%	11,309,768.2	10.0%	(190,348.9)	(0.2%)
Total Fund	\$113,097,682.5	100.0%	\$113,097,682.5	100.0%	\$0.0	0.0%

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Performance Summary - Gross of Fees
Cobb OPEB
As of December 31, 2018

Account	Inception Date	12/31/2018 Market Value	Latest QTR	%tile Ranking	YTD	%tile Ranking	1 Year	%tile Ranking	3 Year	%tile Ranking	5 Year	%tile Ranking	7 Year	%tile Ranking	Inception
Composite	09/30/2016	\$113,097,682	-10.14%		-6.17%		-6.17%								4.99%
Policy Index			-8.94%		-5.71%		-5.71%								4.56%
Composite Benchmark Policy Index			-9.13%		-5.70%		-5.70%								
Fixed Income															
Richmond Capital Management	09/30/2017	\$14,934,473	1.52%	17	0.02%	20	0.02%	20							0.59%
BB Gov/Cr Bond			1.46%	21	-0.42%	40	-0.42%	40							0.05%
Blackrock Strategic Income I	09/30/2017	\$8,227,060	-0.47%	97	-0.59%	49	-0.59%	49							0.21%
BB Agg Bond			1.64%	10	0.01%	21	0.01%	21							0.32%
Delaware Diversified Income I	09/30/2017	\$9,141,024	0.04%	90	-2.17%	99	-2.17%	99							-1.29%
BB Agg Bond			1.64%	10	0.01%	21	0.01%	21							0.32%
Domestic Equity															
Eagle Capital Large Value	09/30/2017	\$11,504,940	-13.74%	58	-5.35%	19	-5.35%	19							0.90%
Russell 1000 Value			-11.72%	28	-8.27%	43	-8.27%	43							-2.71%
Vanguard 500 Index	09/30/2017	\$12,177,109	-13.53%	36	-4.42%	16	-4.42%	16							1.53%
S&P 500 Index			-13.52%	36	-4.38%	15	-4.38%	15							1.57%
TCW Large Cap Growth	09/30/2017	\$6,375,868	-15.70%	56	2.61%	16	2.61%	16							6.51%
Russell 1000 Growth			-15.89%	63	-1.51%	55	-1.51%	55							4.95%
Westfield Capital Large Growth	09/30/2017	\$7,147,820	-16.19%	66	-1.70%	55	-1.70%	55							3.30%
Russell 1000 Growth			-15.89%	63	-1.51%	55	-1.51%	55							4.95%
Vanguard Mid-Cap Index Fund Admiral	09/30/2017	\$6,393,842	-15.46%	29	-9.23%	18	-9.23%	18							-3.30%
Russell Midcap			-15.37%	28	-9.06%	17	-9.06%	17							-2.84%
Vaughan Nelson	09/30/2017	\$3,344,343	-18.20%	33	-14.26%	53	-14.26%	53							-8.92%
Russell 2000 Value			-18.67%	45	-12.86%	37	-12.86%	37							-8.97%
Eagle Small Cap Growth Fund	09/30/2017	\$2,725,391	-21.73%	70	-10.01%	90	-10.01%	90							-3.66%
Russell 2000 Growth			-21.65%	70	-9.31%	84	-9.31%	84							-4.14%
International Equity															
Vanguard Total International Stock Fund	09/30/2017	\$7,446,905	-11.63%	16	-14.36%	34	-14.36%	34							-8.23%
MSCI ACWI ex US Net			-11.40%	12	-14.14%	29	-14.14%	29							-7.95%
Dodge & Cox International Stock Fund	09/30/2017	\$5,965,187	-12.39%	33	-17.98%	85	-17.98%	85							-13.84%
MSCI ACWI ex US Net			-11.40%	12	-14.14%	29	-14.14%	29							-7.95%
Oppenheimer International Growth	09/30/2017	\$6,594,300	-14.61%	80	-19.29%	94	-19.29%	94							-13.29%
MSCI ACWI ex US Net			-11.40%	12	-14.14%	29	-14.14%	29							-7.95%

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Performance Summary - Gross of Fees
Cobb OPEB
As of December 31, 2018

Account	Inception Date	12/31/2018 Market Value	Latest QTR	%tile Ranking	YTD	%tile Ranking	1 Year	%tile Ranking	3 Year	%tile Ranking	5 Year	%tile Ranking	7 Year	%tile Ranking	Inception
Global Allocation															
Global Allocation	09/30/2017	\$11,119,419	-8.42%	58	-6.86%	31	-6.86%	31							-2.89%
HFRX Global Hedge			-5.56%	9	-6.72%	25	-6.72%	25							-4.28%

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Performance Summary - Net of Fees
Cobb OPEB
As of December 31, 2018

Account	Inception Date	12/31/2018 Market Value	Latest QTR	%tile Ranking	YTD	%tile Ranking	1 Year	%tile Ranking	3 Year	%tile Ranking	5 Year	%tile Ranking	7 Year	%tile Ranking	Inception
Composite	09/30/2016	\$113,097,682	-10.19%		-6.37%		-6.37%								4.84%
Policy Index			-8.94%		-5.71%		-5.71%								4.56%
Composite Benchmark Policy Index			-9.13%		-5.70%		-5.70%								
Fixed Income															
Richmond Capital Management	09/30/2017	\$14,934,473	1.47%	21	-0.18%	28	-0.18%	28							0.42%
BB Gov/Cr Bond			1.46%	21	-0.42%	40	-0.42%	40							0.05%
Blackrock Strategic Income I	09/30/2017	\$8,227,060	-0.47%	97	-0.59%	49	-0.59%	49							0.21%
BB Agg Bond			1.64%	10	0.01%	21	0.01%	21							0.32%
Delaware Diversified Income I	09/30/2017	\$9,141,024	0.04%	90	-2.17%	99	-2.17%	99							-1.29%
BB Agg Bond			1.64%	10	0.01%	21	0.01%	21							0.32%
Domestic Equity															
Eagle Capital Large Value	09/30/2017	\$11,504,940	-13.91%	53	-6.06%	17	-6.06%	17							0.28%
Russell 1000 Value			-11.72%	29	-8.27%	35	-8.27%	35							-2.71%
Vanguard 500 Index	09/30/2017	\$12,177,109	-13.53%	36	-4.42%	16	-4.42%	16							1.53%
S&P 500 Index			-13.52%	36	-4.38%	15	-4.38%	15							1.57%
TCW Large Cap Growth	09/30/2017	\$6,375,868	-15.85%	56	1.95%	16	1.95%	16							5.96%
Russell 1000 Growth			-15.89%	56	-1.51%	46	-1.51%	46							4.95%
Westfield Capital Large Growth	09/30/2017	\$7,147,820	-16.32%	64	-2.26%	53	-2.26%	53							2.82%
Russell 1000 Growth			-15.89%	56	-1.51%	46	-1.51%	46							4.95%
Vanguard Mid-Cap Index Fund Admiral	09/30/2017	\$6,393,842	-15.46%	29	-9.23%	18	-9.23%	18							-3.30%
Russell Midcap			-15.37%	28	-9.06%	17	-9.06%	17							-2.84%
Vaughan Nelson	09/30/2017	\$3,344,343	-18.43%	39	-15.12%	55	-15.12%	55							-9.84%
Russell 2000 Value			-18.67%	47	-12.86%	30	-12.86%	30							-8.97%
Eagle Small Cap Growth Fund	09/30/2017	\$2,725,391	-21.73%	71	-10.01%	84	-10.01%	84							-3.66%
Russell 2000 Growth			-21.65%	68	-9.31%	79	-9.31%	79							-4.14%
International Equity															
Vanguard Total International Stock Fund	09/30/2017	\$7,446,905	-11.63%	16	-14.36%	34	-14.36%	34							-8.23%
MSCI ACWI ex US Net			-11.40%	12	-14.14%	29	-14.14%	29							-7.95%
Dodge & Cox International Stock Fund	09/30/2017	\$5,965,187	-12.39%	33	-17.98%	85	-17.98%	85							-13.84%
MSCI ACWI ex US Net			-11.40%	12	-14.14%	29	-14.14%	29							-7.95%
Oppenheimer International Growth	09/30/2017	\$6,594,300	-14.61%	80	-19.29%	94	-19.29%	94							-13.29%
MSCI ACWI ex US Net			-11.40%	12	-14.14%	29	-14.14%	29							-7.95%

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Performance Summary - Net of Fees
Cobb OPEB
As of December 31, 2018

Account	Inception Date	12/31/2018 Market Value	Latest QTR	%tile Ranking	YTD	%tile Ranking	1 Year	%tile Ranking	3 Year	%tile Ranking	5 Year	%tile Ranking	7 Year	%tile Ranking	Inception
Global Allocation															
Global Allocation	09/30/2017	\$11,119,419	-8.42%	58	-6.86%	31	-6.86%	31							-2.89%
HFRX Global Hedge			-5.56%	9	-6.72%	25	-6.72%	25							-4.28%

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Cobb OPEB
Period Ending December 31, 2018

Account Values					
	Latest Quarter	Fiscal YTD	Year to Date	One Year	Since Inception
Beginning Mkt Value	\$124,919,110.78	\$116,148,394.04	\$116,148,394.04	\$116,148,394.04	N/A
Net Contributions	\$1,000,500.00	\$4,756,707.30	\$4,756,707.30	\$4,756,707.30	\$116,517,964.10
Investment Earnings	(\$12,821,928.32)	(\$7,807,418.88)	(\$7,807,418.88)	(\$7,807,418.88)	\$0.00
Ending Mkt Value	\$113,097,682.46	\$113,097,682.46	\$113,097,682.46	\$113,097,682.46	\$113,097,682.46

Returns								
	Latest Quarter	Fiscal YTD	Calendar YTD	One Year	Three Years	Five Years	Ten Years	Since Inception
Account	-10.14%	-6.17%	-6.17%	-6.17%				4.99%
Policy Index	-8.94%	-5.71%	-5.71%	-5.71%				4.56%
Difference	-1.20%	-0.46%	-0.46%	-0.46%				0.43%

Calendar Year Returns												
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Account	-6.17%	18.19%										
Policy Index	-5.71%	16.06%										
Difference	-0.46%	2.13%										

Policy Index: 45% Russell 3000, 25% Bloomberg Barclays Aggregate Bond, 20% MSCI ACWI ex US Net, 10% HFRX Global Hedge Fund Index

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Total Portfolio

Performance Summary Through December 31, 2018

	Quarter	YTD	1 Yr	2 Yr	Inception	Inception Date	Current Assets
Gross Time Weighted Return	-10.14	-6.17	-6.17	5.31	4.99	09/30/2016	\$113,097,682
Universe Median							
Policy Index	-8.94	-5.71	-5.71	4.61	4.56		
%-tile							
(45% Russell 3000, 25% Bloomberg Barclays Aggregate Bond, 20% MSCI ACWI ex US Net, 10% HFRX Global Hedge Fund Index, established 9/30/2016)							

Richmond Capital Management - (Total Portfolio)

Gross Time Weighted Return	1.52	0.02	0.02		0.59	09/30/2017	\$14,934,473
Universe Median	0.97	-0.59	-0.59		-0.21		
BB Gov/Cr Bond	1.46	-0.42	-0.42		0.05		
%-tile	17	20	20		7		
(100.00% BB Gov/Cr Bond; established 9/30/2017)							

Blackrock Strategic Income I - (Total Portfolio)

Gross Time Weighted Return	-0.47	-0.59	-0.59		0.21	09/30/2017	\$8,227,060
Universe Median	0.97	-0.59	-0.59		-0.21		
BB Agg Bond	1.64	0.01	0.01		0.32		
%-tile	97	49	49		22		
(100.00% BB Agg Bond; established 9/30/2017)							

Delaware Diversified Income I - (Total Portfolio)

Gross Time Weighted Return	0.04	-2.17	-2.17		-1.29	09/30/2017	\$9,141,024
Universe Median	0.97	-0.59	-0.59		-0.21		
BB Agg Bond	1.64	0.01	0.01		0.32		
%-tile	90	99	99		94		
(100.00% BB Agg Bond; established 9/30/2017)							

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Total Portfolio

Performance Summary Through December 31, 2018

	Quarter	YTD	1 Yr	2 Yr	Inception	Inception Date	Current Assets
Eagle Capital Large Value - (Total Portfolio)							
Gross Time Weighted Return	-13.74	-5.35	-5.35		0.90	09/30/2017	\$11,504,940
Universe Median	-13.24	-9.47	-9.47		-3.19		
Russell 1000 Value	-11.72	-8.27	-8.27		-2.71		
%-tile	58	19	19		14		

(100.00% Russell 1000 Value; established 9/30/2017)

Vanguard 500 Index - (Total Portfolio)

Gross Time Weighted Return	-13.53	-4.42	-4.42		1.53	09/30/2017	\$12,177,109
Universe Median	-13.77	-6.03	-6.03		0.03		
S&P 500 Index	-13.52	-4.38	-4.38		1.57		
%-tile	36	16	16		17		

(100.00% S&P 500 Index; established 9/30/2017)

TCW Large Cap Growth - (Total Portfolio)

Gross Time Weighted Return	-15.70	2.61	2.61		6.51	09/30/2017	\$6,375,868
Universe Median	-15.38	-0.82	-0.82		4.58		
Russell 1000 Growth	-15.89	-1.51	-1.51		4.95		
%-tile	56	16	16		30		

(100.00% Russell 1000 Growth; established 9/30/2017)

Westfield Capital Large Growth - (Total Portfolio)

Gross Time Weighted Return	-16.19	-1.70	-1.70		3.30	09/30/2017	\$7,147,820
Universe Median	-15.38	-0.82	-0.82		4.58		
Russell 1000 Growth	-15.89	-1.51	-1.51		4.95		
%-tile	66	55	55		68		

(100.00% Russell 1000 Growth; established 9/30/2017)

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Total Portfolio

Performance Summary Through December 31, 2018

	Quarter	YTD	1 Yr	2 Yr	Inception	Inception Date	Current Assets
Vanguard Mid-Cap Index Fund Admiral - (Total Portfolio)							
Gross Time Weighted Return	-15.46	-9.23	-9.23		-3.30	09/30/2017	\$6,393,842
Universe Median	-16.76	-11.56	-11.56		-5.35		
Russell Midcap	-15.37	-9.06	-9.06		-2.84		
%-tile	29	18	18		18		

(100.00% Russell Midcap; established 9/30/2017)

Vaughan Nelson - (Total Portfolio)

Gross Time Weighted Return	-18.20	-14.26	-14.26		-8.92	09/30/2017	\$3,344,343
Universe Median	-18.84	-13.98	-13.98		-8.95		
Russell 2000 Value	-18.67	-12.86	-12.86		-8.97		
%-tile	33	53	53		50		

(100.00% Russell 2000 Value; established 9/30/2017)

Eagle Small Cap Growth Fund - (Total Portfolio)

Gross Time Weighted Return	-21.73	-10.01	-10.01		-3.66	09/30/2017	\$2,725,391
Universe Median	-20.61	-4.29	-4.29		0.09		
Russell 2000 Growth	-21.65	-9.31	-9.31		-4.14		
%-tile	70	90	90		79		

(100.00% Russell 2000 Growth; established 9/30/2017)

Vanguard Total International Stock Fund - (Total Portfolio)

Gross Time Weighted Return	-11.63	-14.36	-14.36		-8.23	09/30/2017	\$7,446,905
Universe Median	-13.04	-15.19	-15.19		-9.67		
MSCI ACWI ex US Net	-11.40	-14.14	-14.14		-7.95		
%-tile	16	34	34		19		

(100.00% MSCI ACWI ex US Net; established 9/30/2017)

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Total Portfolio

Performance Summary Through December 31, 2018

	Quarter	YTD	1 Yr	2 Yr	Inception	Inception Date	Current Assets
Dodge & Cox International Stock Fund - (Total Portfolio)							
Gross Time Weighted Return	-12.39	-17.98	-17.98		-13.84	09/30/2017	\$5,965,187
Universe Median	-13.04	-15.19	-15.19		-9.67		
MSCI ACWI ex US Net	-11.40	-14.14	-14.14		-7.95		
%-tile	33	85	85		96		

(100.00% MSCI ACWI ex US Net; established 9/30/2017)

Oppenheimer International Growth - (Total Portfolio)

Gross Time Weighted Return	-14.61	-19.29	-19.29		-13.29	09/30/2017	\$6,594,300
Universe Median	-13.04	-15.19	-15.19		-9.67		
MSCI ACWI ex US Net	-11.40	-14.14	-14.14		-7.95		
%-tile	80	94	94		93		

(100.00% MSCI ACWI ex US Net; established 9/30/2017)

Loomis Sayles Global Equity and Income Fund - (Total Portfolio)

Gross Time Weighted Return	-9.29	-5.04	-5.04		-0.55	09/30/2017	\$3,996,799
Universe Median	-7.59	-7.65	-7.65		-3.91		
HFRX Global Hedge	-5.56	-6.72	-6.72		-4.28		
%-tile	72	1	1		1		

(100.00% HFRX Global Hedge; established 9/30/2017)

First Eagle Global Funds Class I - (Total Portfolio)

Gross Time Weighted Return	-8.43	-8.26	-8.26		-4.22	09/30/2017	\$3,803,691
Universe Median	-7.59	-7.65	-7.65		-3.91		
HFRX Global Hedge	-5.56	-6.72	-6.72		-4.28		
%-tile	58	61	61		57		

(100.00% HFRX Global Hedge; established 9/30/2017)

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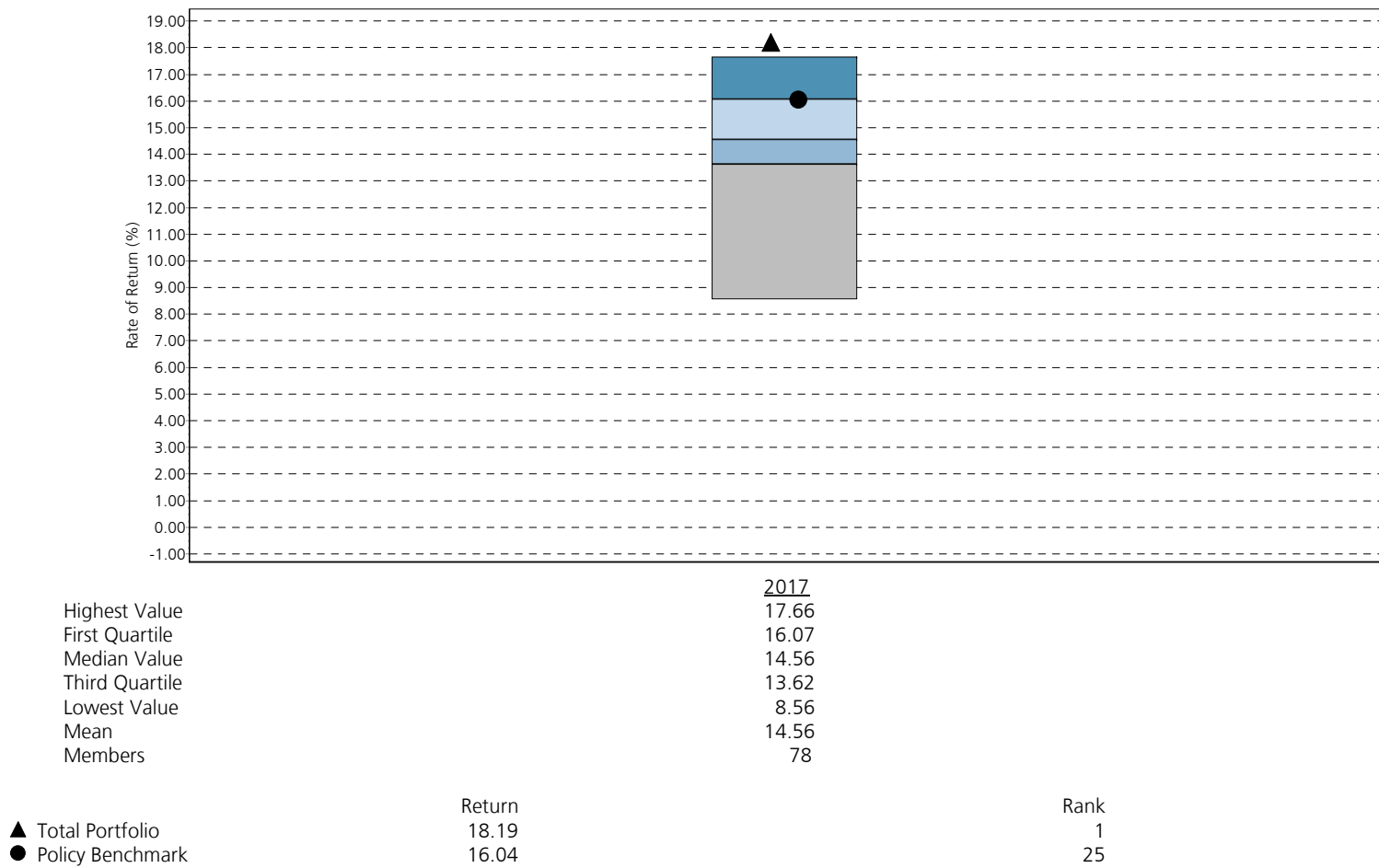
Total Portfolio
Performance Summary Through December 31, 2018

	Quarter	YTD	1 Yr	2 Yr	Inception	Inception Date	Current Assets
Blackrock Global Allocation Fund - (Total Portfolio)							
Gross Time Weighted Return	-7.35	-7.37	-7.37		-4.08	09/30/2017	\$3,318,929
Universe Median	-7.59	-7.65	-7.65		-3.91		
HFRX Global Hedge	-5.56	-6.72	-6.72		-4.28		
%-tile	43	45	45		54		

(100.00% HFRX Global Hedge; established 9/30/2017)

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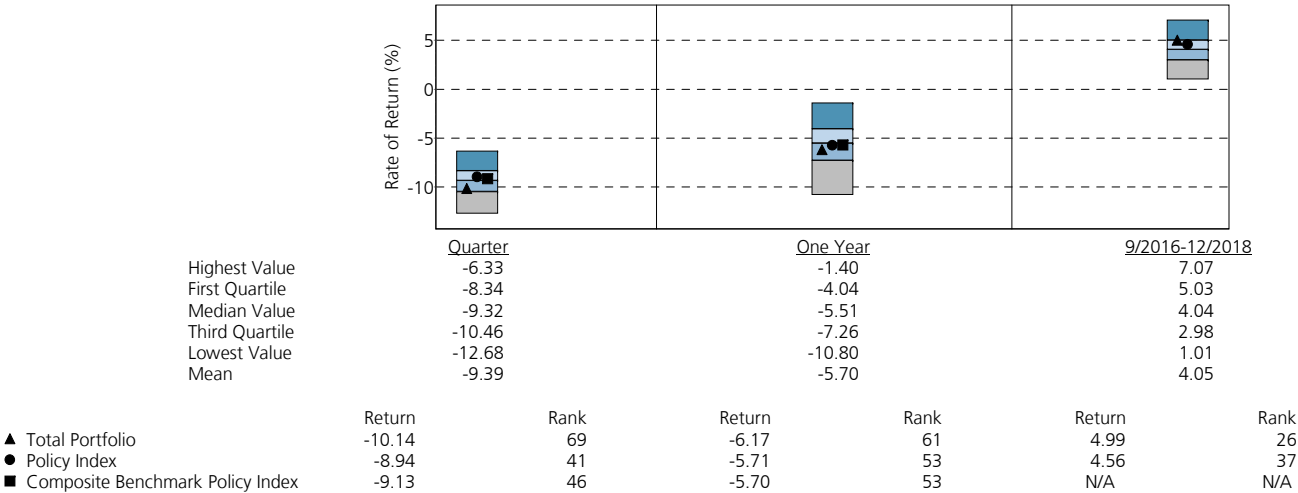
Consolidated Portfolio vs Master Trusts - Public : Plans < \$1 Billion Managers
 December 31, 2003 Through December 31, 2018



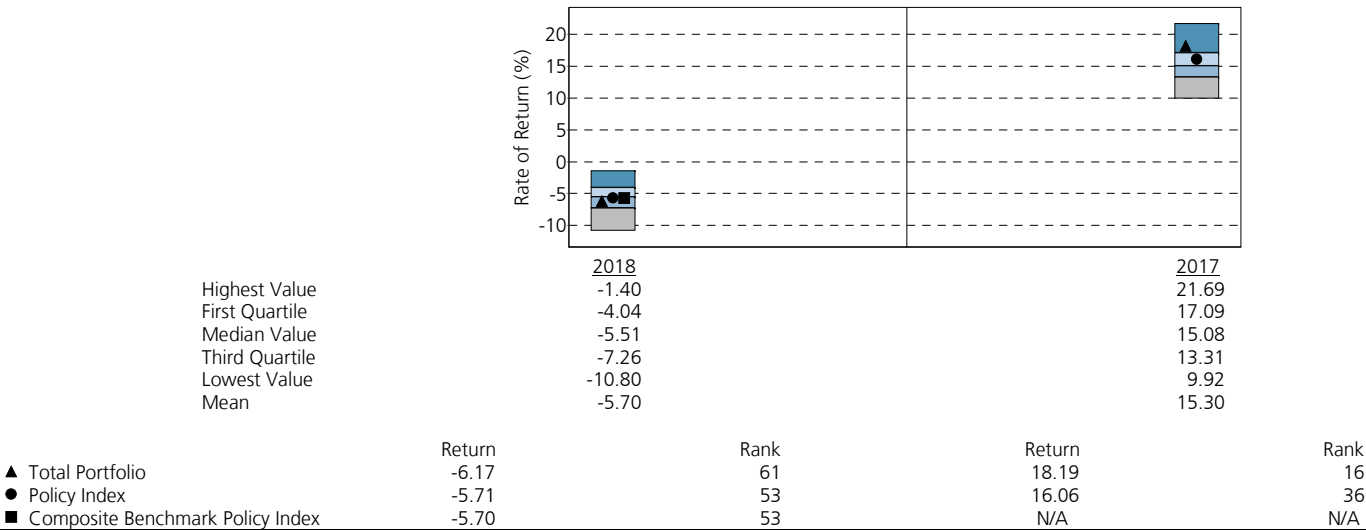
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Consolidated Portfolio Peer Universe Comparison versus 50% Equity, 35% Fixed, 15% International Managers

Trailing Periods



Annual Periods



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Performance Profile
September 30, 2016 Through December 31, 2018

	Ended	Return
Best Quarter	3/2017	5.23
Worst Quarter	12/2018	-10.14
Best 4 Quarters	12/2017	18.19
Worst 4 Quarters	12/2018	-6.17

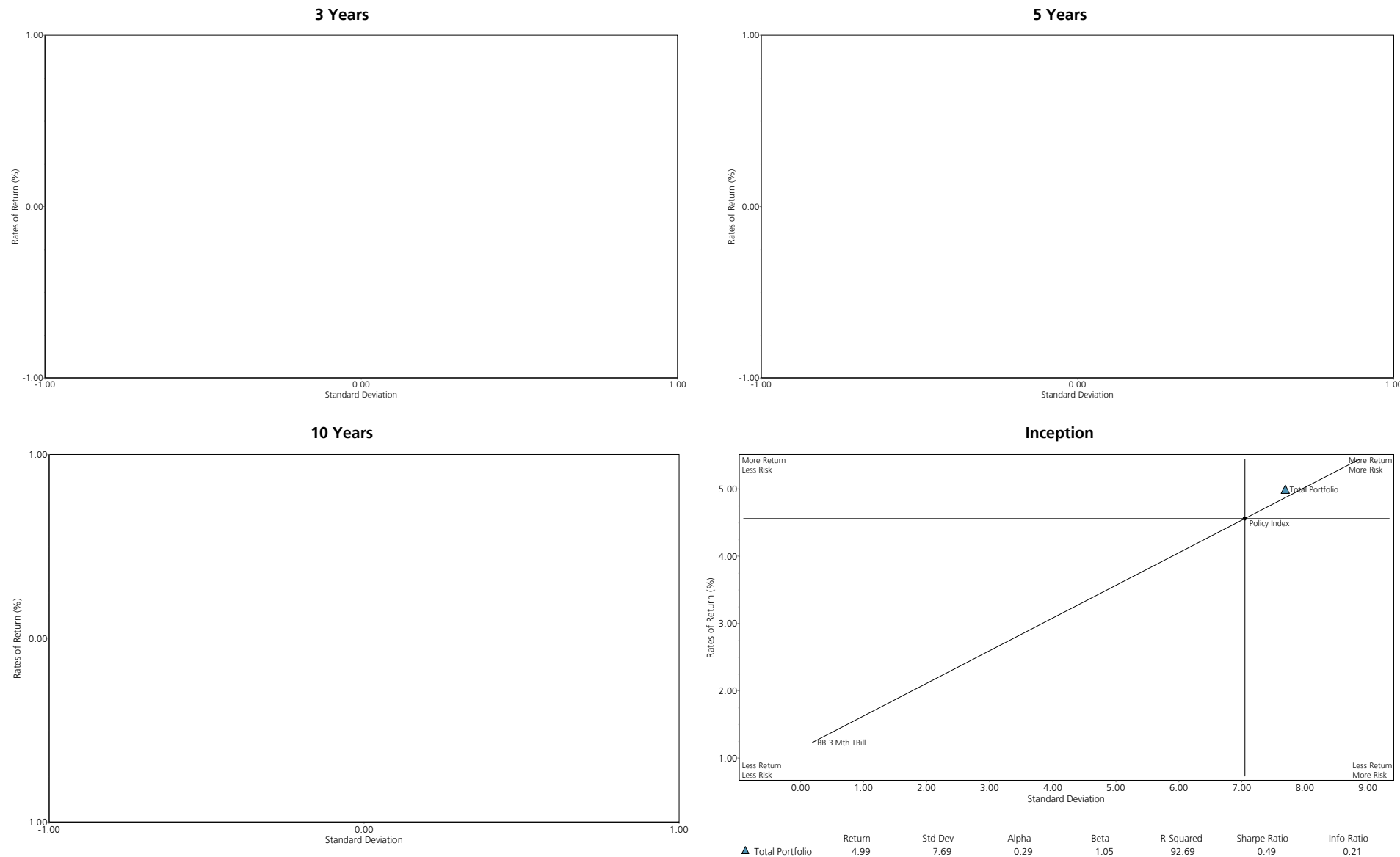
Total # of Periods: 27
of Positive Periods: 20
of Negative Periods: 7

	Latest Month	Latest Quarter	One Year	Two Years	Since Inception
Consolidated Portfolio	-5.52	-10.14	-6.17	5.31	4.99
Policy Index	-4.82	-8.94	-5.71	4.61	4.56
Excess	-0.70	-1.20	-0.46	0.70	0.43
Riskless Index	0.19	0.57	1.88	1.35	1.24
Real ROR	-5.22	-9.78	-8.02	3.24	3.20
CPI	-0.30	-0.40	2.01	2.01	1.74

Period	Return	Std Dev	Sharpe Ratio	Alpha	Beta	R-Squared	Relative Risk	Track Error	Treynor Ratio	Info Ratio
One Year	-6.17	10.12	-0.80	0.49	1.12	99.51	1.12	1.29	-7.19	-0.30
Two Years	5.31	8.00	0.49	0.38	1.10	97.44	1.12	1.49	3.59	0.49
Since Inception	4.99	7.55	0.50	0.29	1.05	92.69	1.09	2.09	3.58	0.21

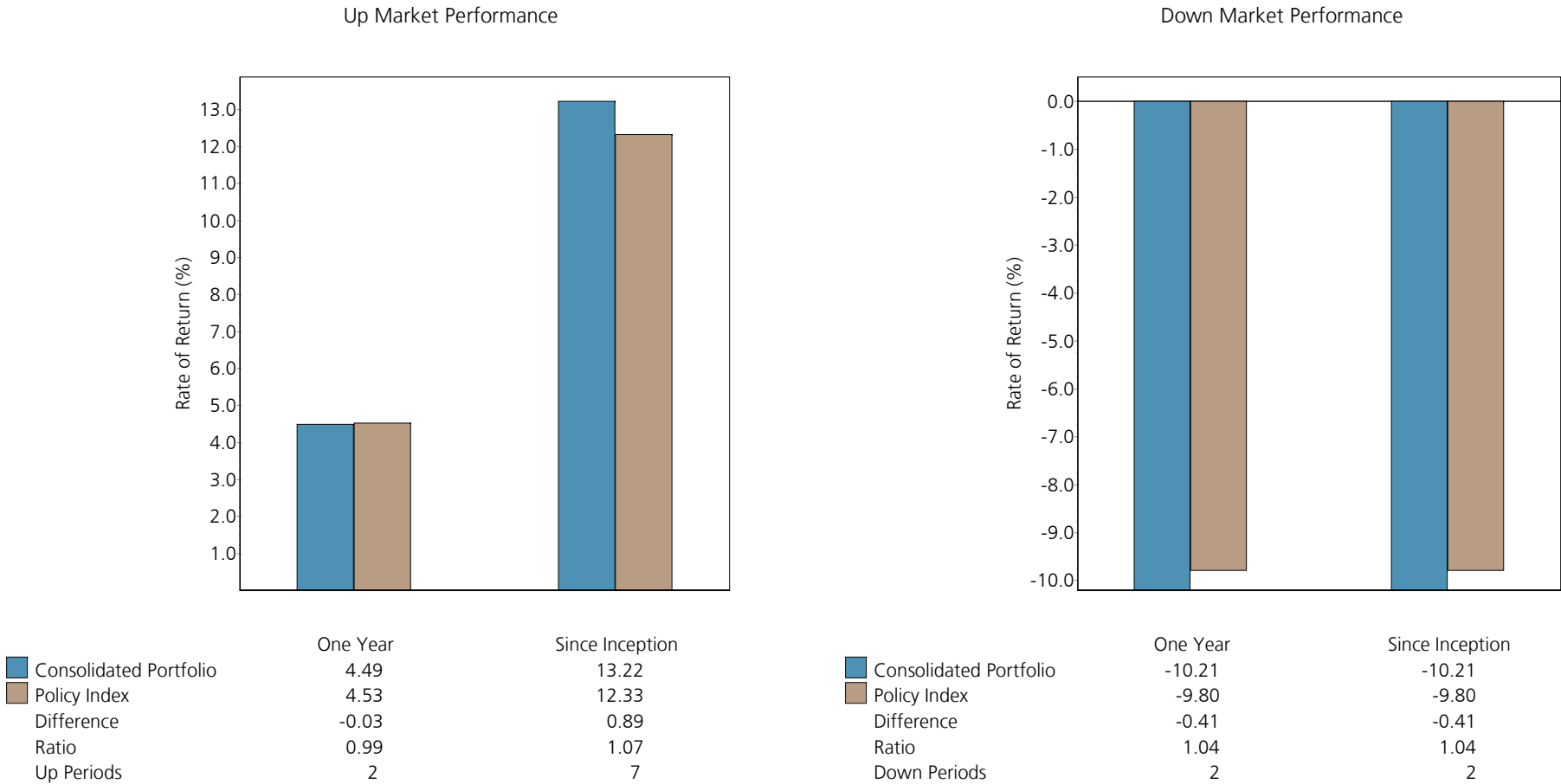
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Risk vs Reward Analysis September 30, 2016 Through December 31, 2018



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Performance in Rising and Declining Markets
September 30, 2016 Through December 31, 2018



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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb OPEB
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Richmond Capital Management

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Performance Analysis

The primary index comparison for your portfolio and each of its asset classes is listed below.

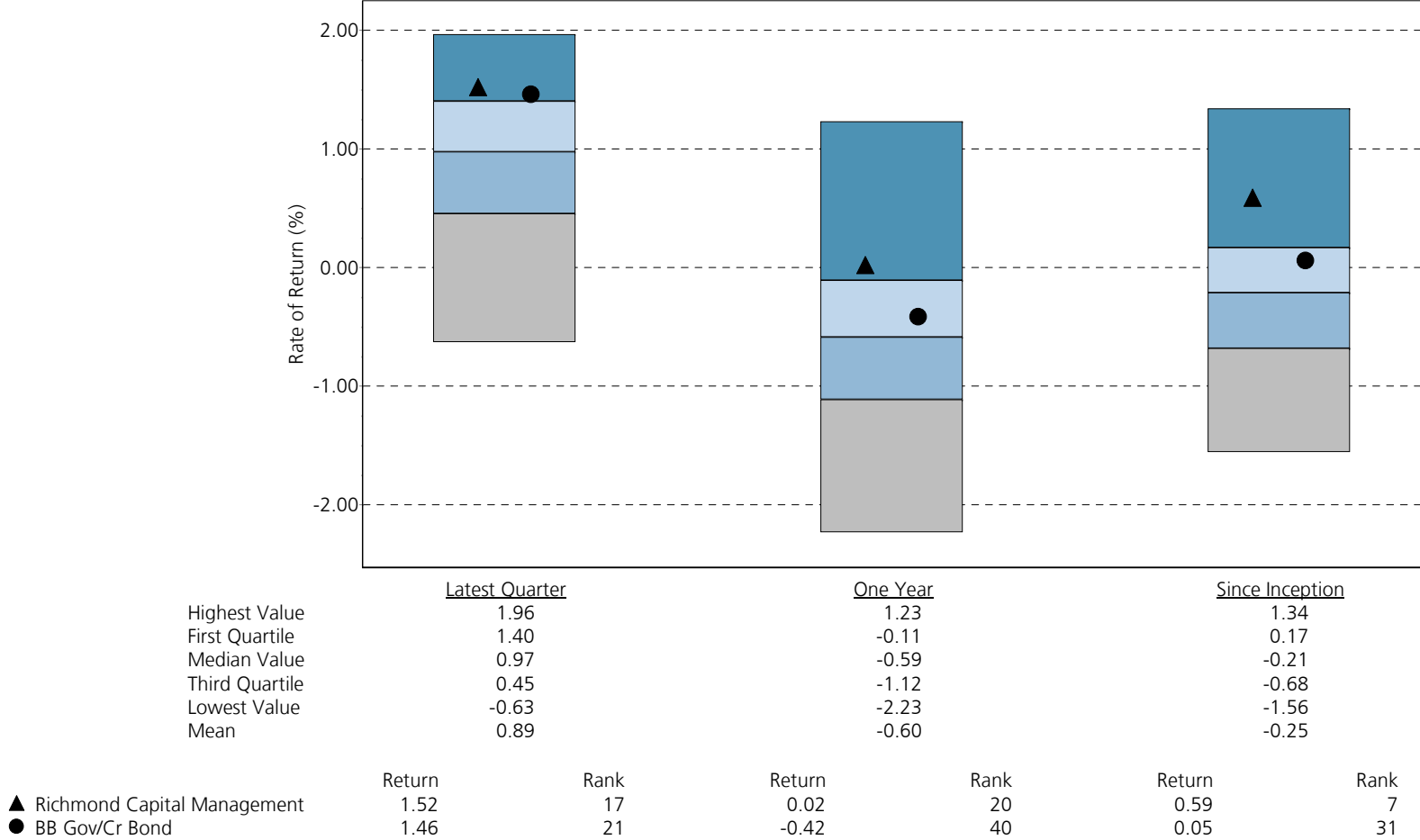
TOTAL FUND BENCHMARK

9/30/2017 - Present

100% Bloomberg Barclays Government/Credit Bond

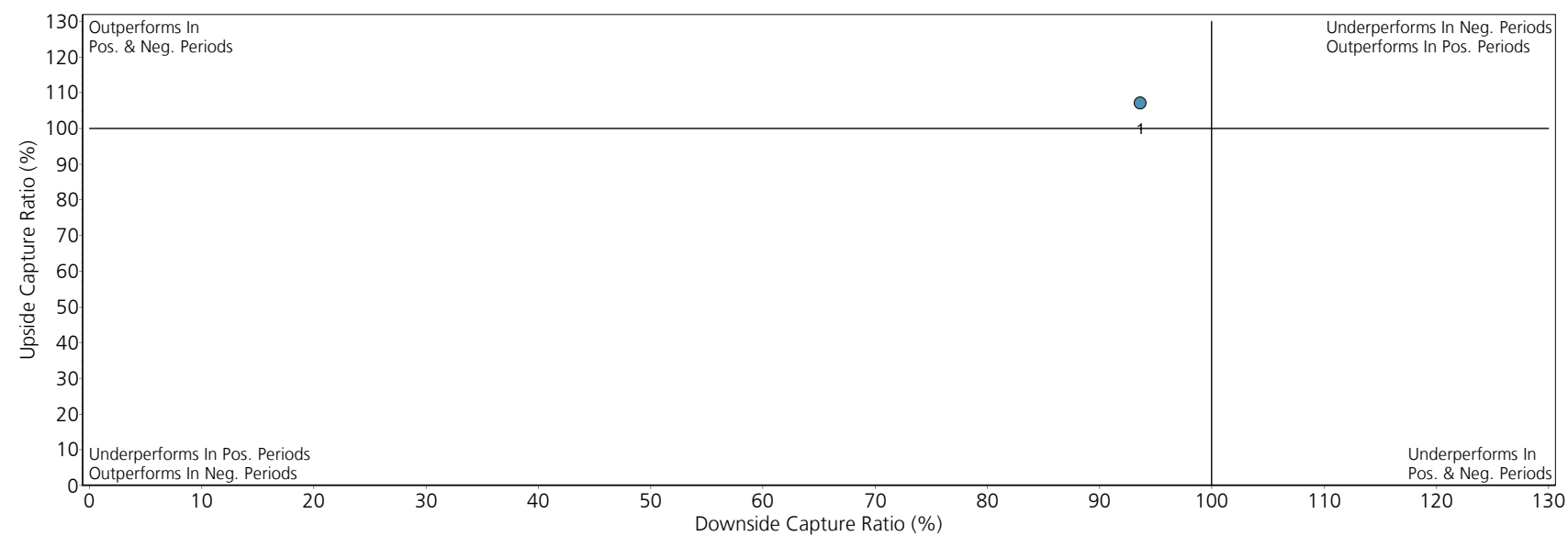
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TOTAL FUND versus Intermediate Bond Managers
September 30, 2017 Through December 31, 2018



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Capture Ratio
September 30, 2017 Through December 31, 2017



	1
	9/2017-12/2018
Up Periods	8.00
Upside Capture ROR	5.51
BB Gov/Cr Bond	5.14
% Of Capture	107.02
Down Periods	7.00
Downside Capture ROR	-4.52
BB Gov/Cr Bond	-4.83
% Of Capture	93.64

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb OPEB
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Blackrock Strategic Income I

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Performance Analysis

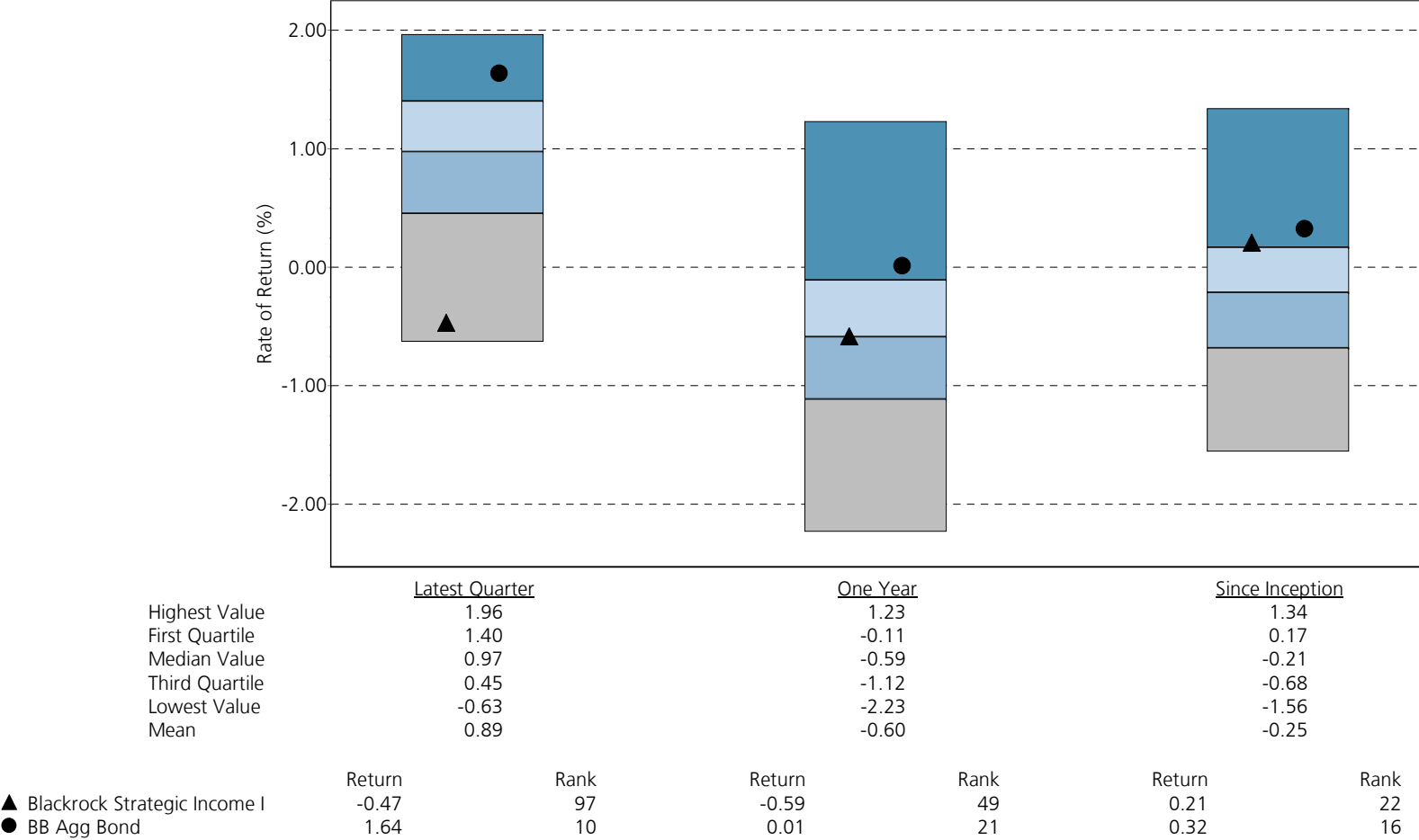
The primary index comparison for your portfolio and each of its asset classes is listed below.

TOTAL FUND BENCHMARK

9/30/2017 - Present

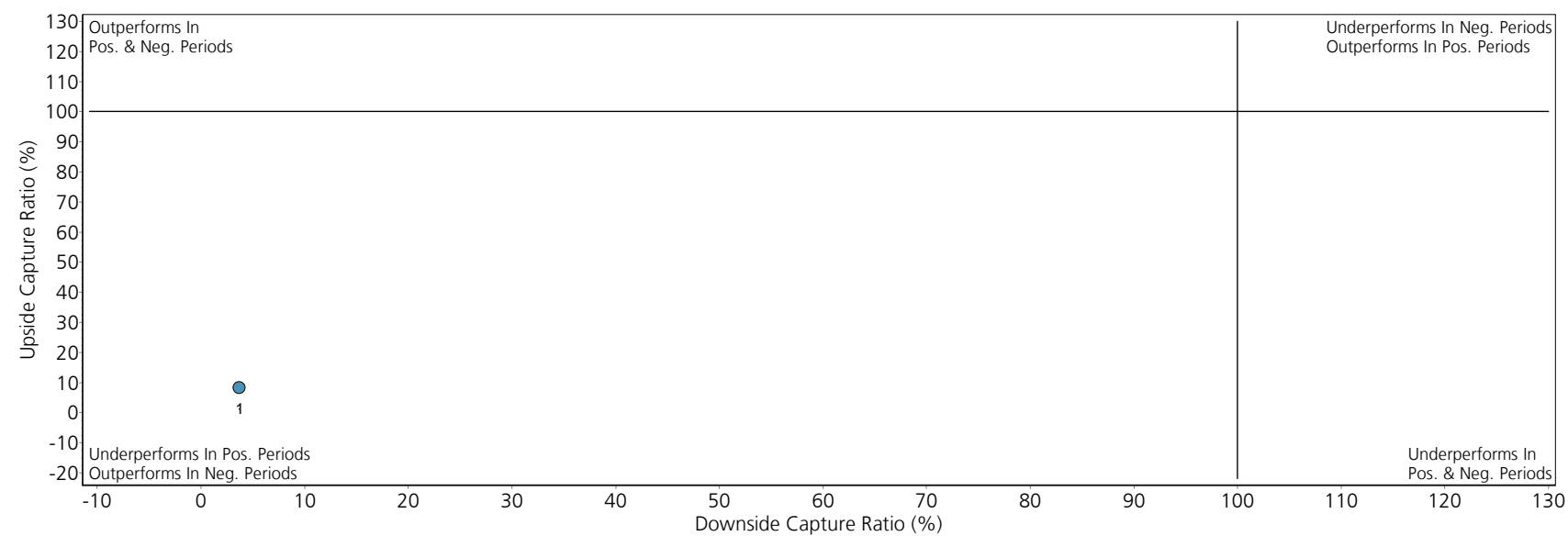
100% Bloomberg Barclays Aggregate Bond

TOTAL FUND versus Intermediate Bond Managers
September 30, 2017 Through December 31, 2018



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Capture Ratio
September 30, 2017 Through December 31, 2017



	1
	9/2017-12/2018
Up Periods	8.00
Upside Capture ROR	0.42
BB Agg Bond	5.07
% Of Capture	8.32
Down Periods	7.00
Downside Capture ROR	-0.16
BB Agg Bond	-4.45
% Of Capture	3.69

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb OPEB
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Delaware Diversified Income I

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Performance Analysis

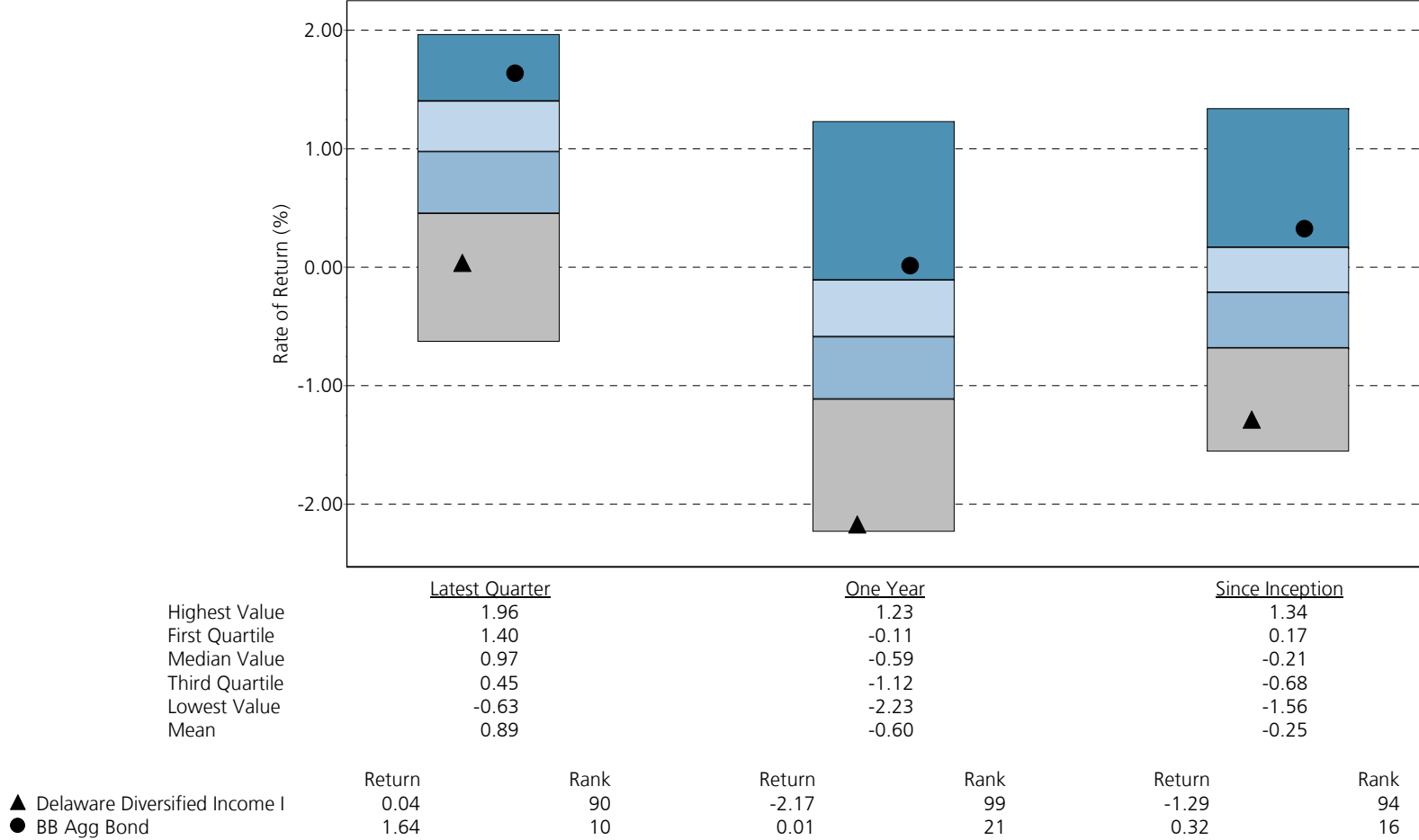
The primary index comparison for your portfolio and each of its asset classes is listed below.

TOTAL FUND BENCHMARK

9/30/2017 - Present

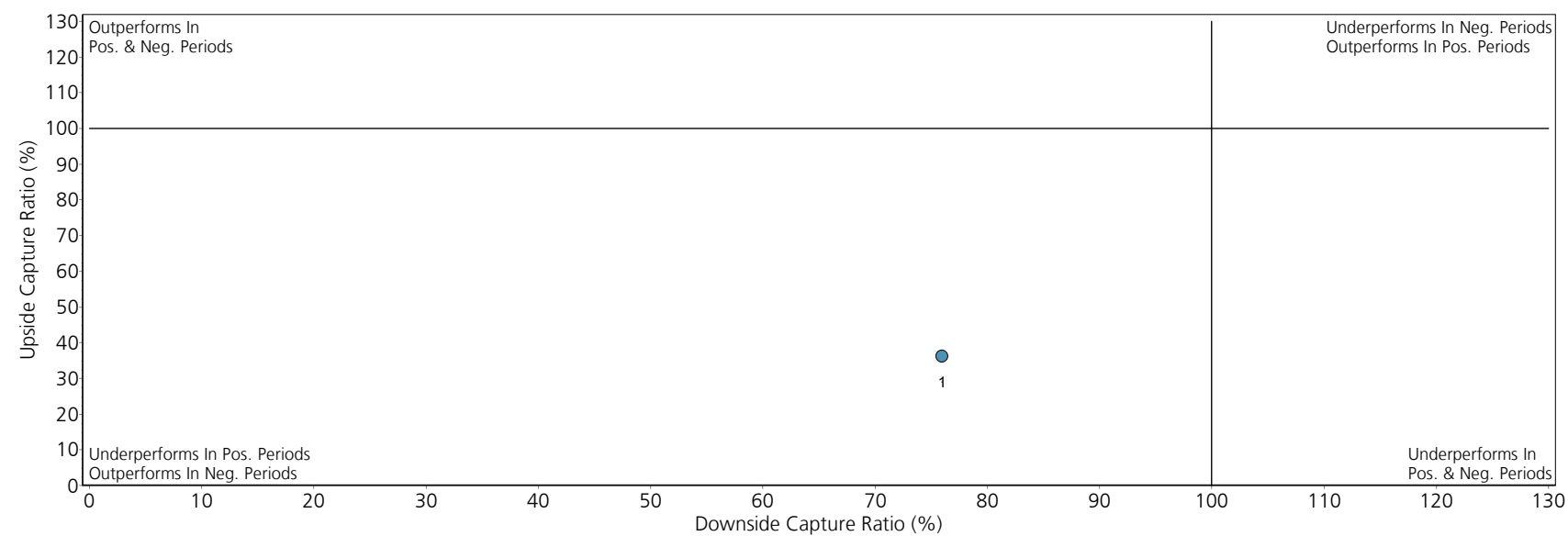
100% Bloomberg Barclays Aggregate Bond

TOTAL FUND versus Intermediate Bond Managers
September 30, 2017 Through December 31, 2018



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Capture Ratio
September 30, 2017 Through December 31, 2017



	1
	9/2017-12/2018
Up Periods	8.00
Upside Capture ROR	1.83
BB Agg Bond	5.07
% Of Capture	36.11
Down Periods	7.00
Downside Capture ROR	-3.38
BB Agg Bond	-4.45
% Of Capture	75.99

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb OPEB
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Eagle Capital Large Value

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Performance Analysis

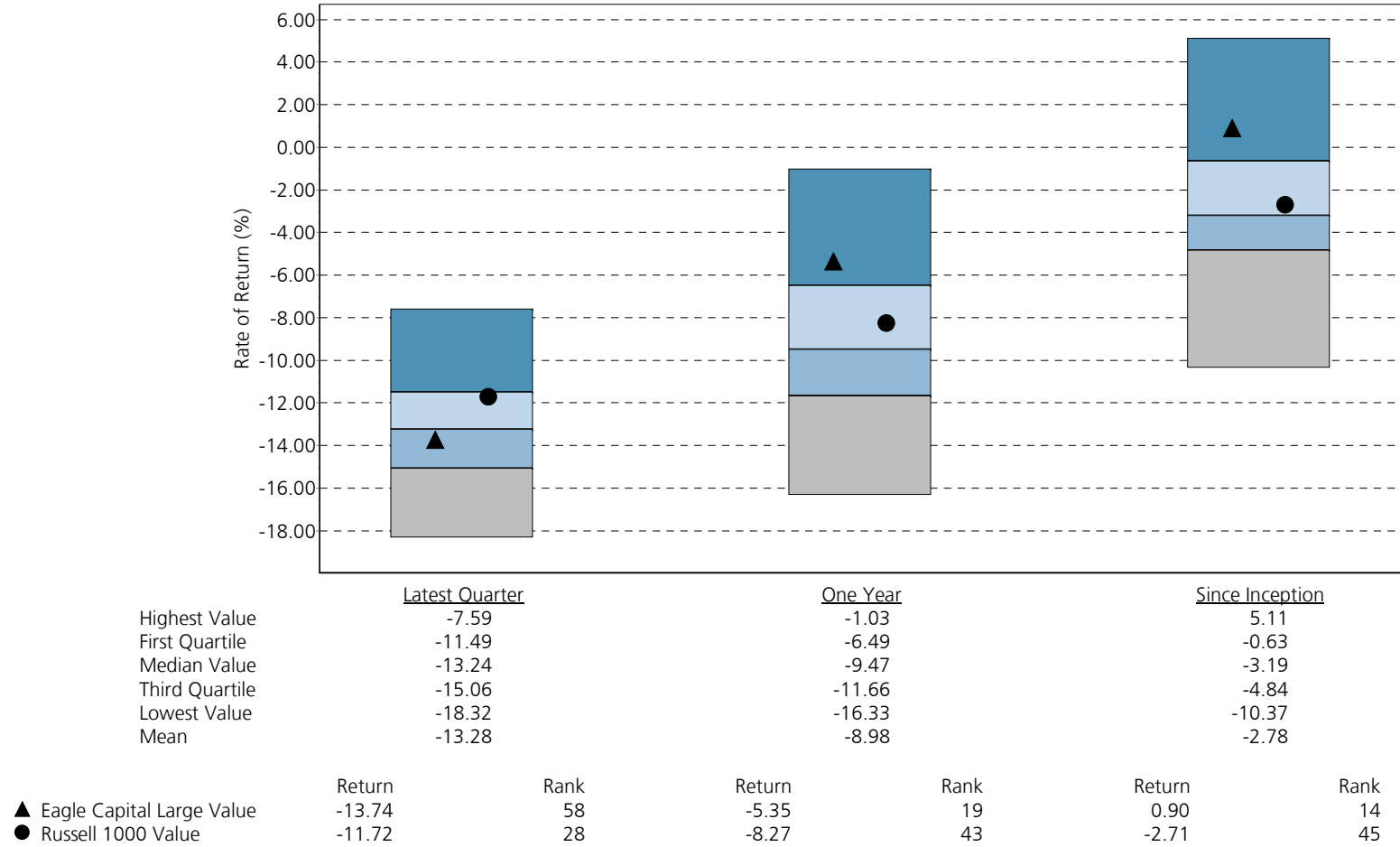
The primary index comparison for your portfolio and each of its asset classes is listed below.

TOTAL FUND BENCHMARK

9/30/2017 - Present
100% Russell 1000 Value

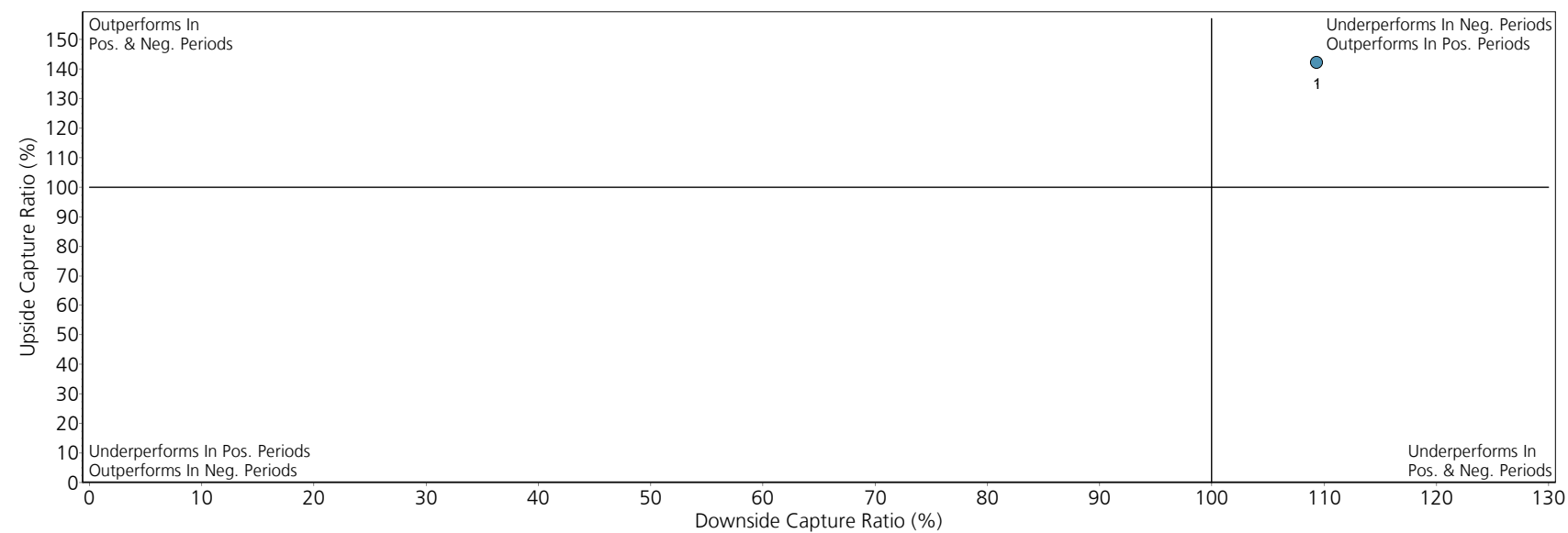
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TOTAL FUND versus Large Cap Value Managers
September 30, 2017 Through December 31, 2018



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Capture Ratio
September 30, 2017 Through December 31, 2017



	1
	9/2017-12/2018
Up Periods	11.00
Upside Capture ROR	29.11
Russell 1000 Value	20.49
% Of Capture	142.06
Down Periods	4.00
Downside Capture ROR	-21.67
Russell 1000 Value	-19.81
% Of Capture	109.37

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb OPEB
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Vanguard 500 Index

Please contact your UBS Institutional Consultant if you have any questions regarding this report, if your financial situation, individual needs or investment objectives have changed, or if you would like to initiate or modify any investment restrictions on this account.

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Performance Analysis

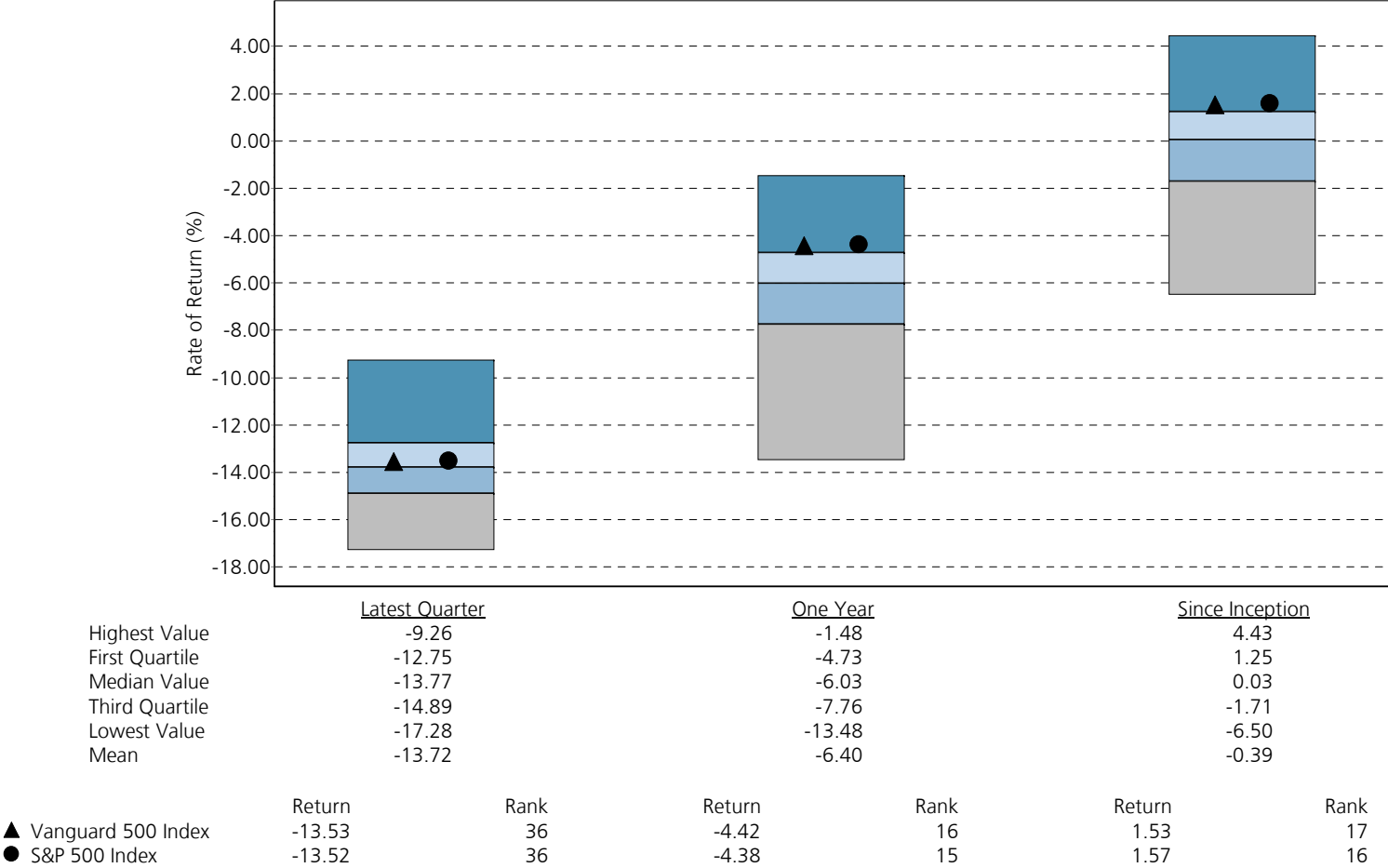
The primary index comparison for your portfolio and each of its asset classes is listed below.

TOTAL FUND BENCHMARK

9/30/2017 - Present
100% S&P 500 Index

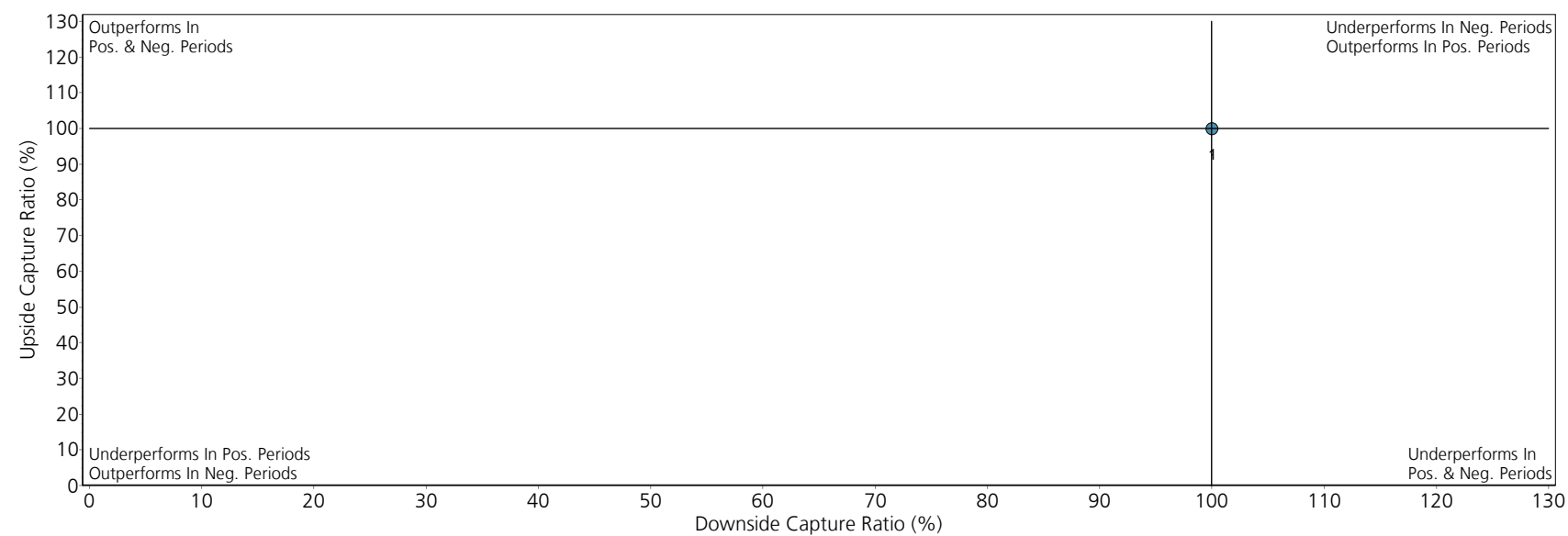
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TOTAL FUND versus Large Blend Managers
September 30, 2017 Through December 31, 2018



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Capture Ratio
September 30, 2017 Through December 31, 2017



	1
	9/2017-12/2018
Up Periods	11.00
Upside Capture ROR	28.13
S&P 500 Index	28.17
% Of Capture	99.84
Down Periods	4.00
Downside Capture ROR	-20.46
S&P 500 Index	-20.45
% Of Capture	100.07

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb OPEB
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

TCW Large Cap Growth

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Performance Analysis

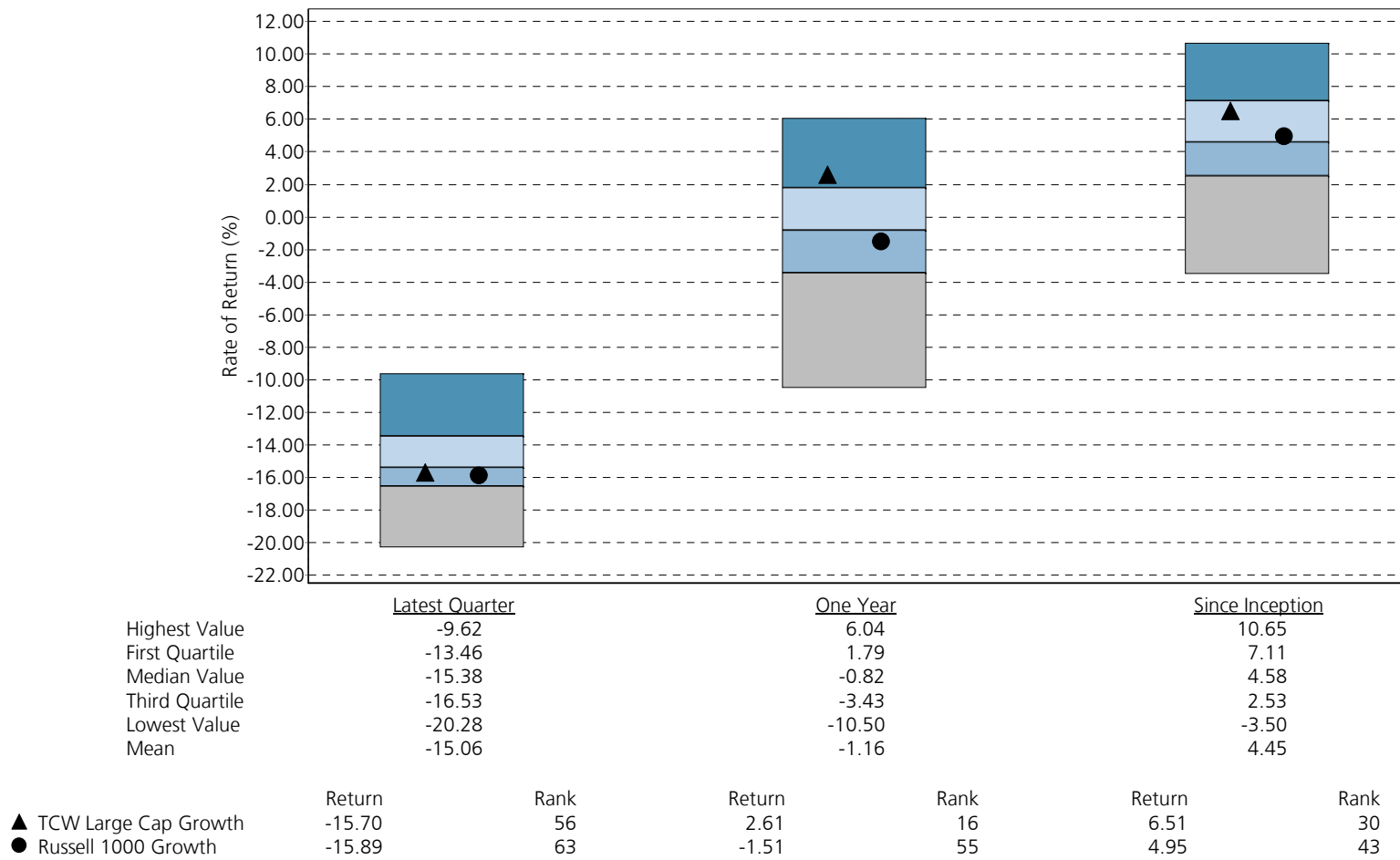
The primary index comparison for your portfolio and each of its asset classes is listed below.

TOTAL FUND BENCHMARK

9/30/2017 - Present
100% Russell 1000 Growth

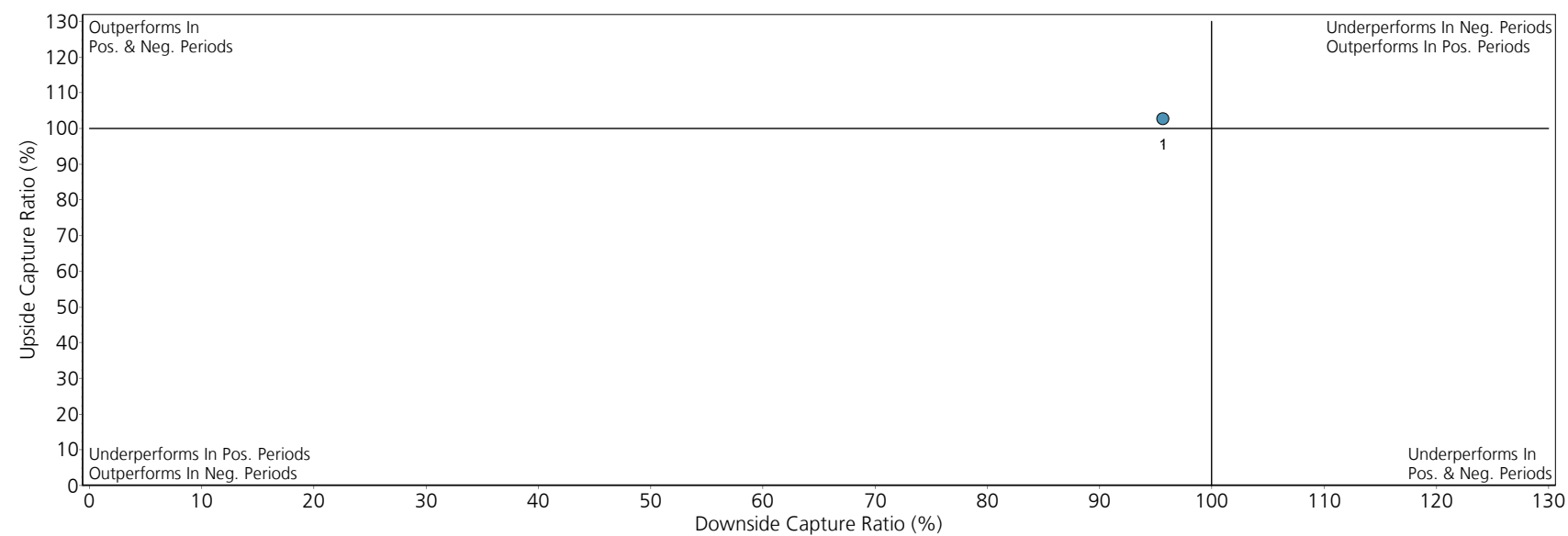
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TOTAL FUND versus Large Cap Growth Managers
September 30, 2017 Through December 31, 2018



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Capture Ratio
September 30, 2017 Through December 31, 2017



	1
	9/2017-12/2018
Up Periods	11.00
Upside Capture ROR	35.70
Russell 1000 Growth	34.77
% Of Capture	102.67
Down Periods	4.00
Downside Capture ROR	-20.26
Russell 1000 Growth	-21.18
% Of Capture	95.67

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb OPEB
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Westfield Capital Large Growth

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Performance Analysis

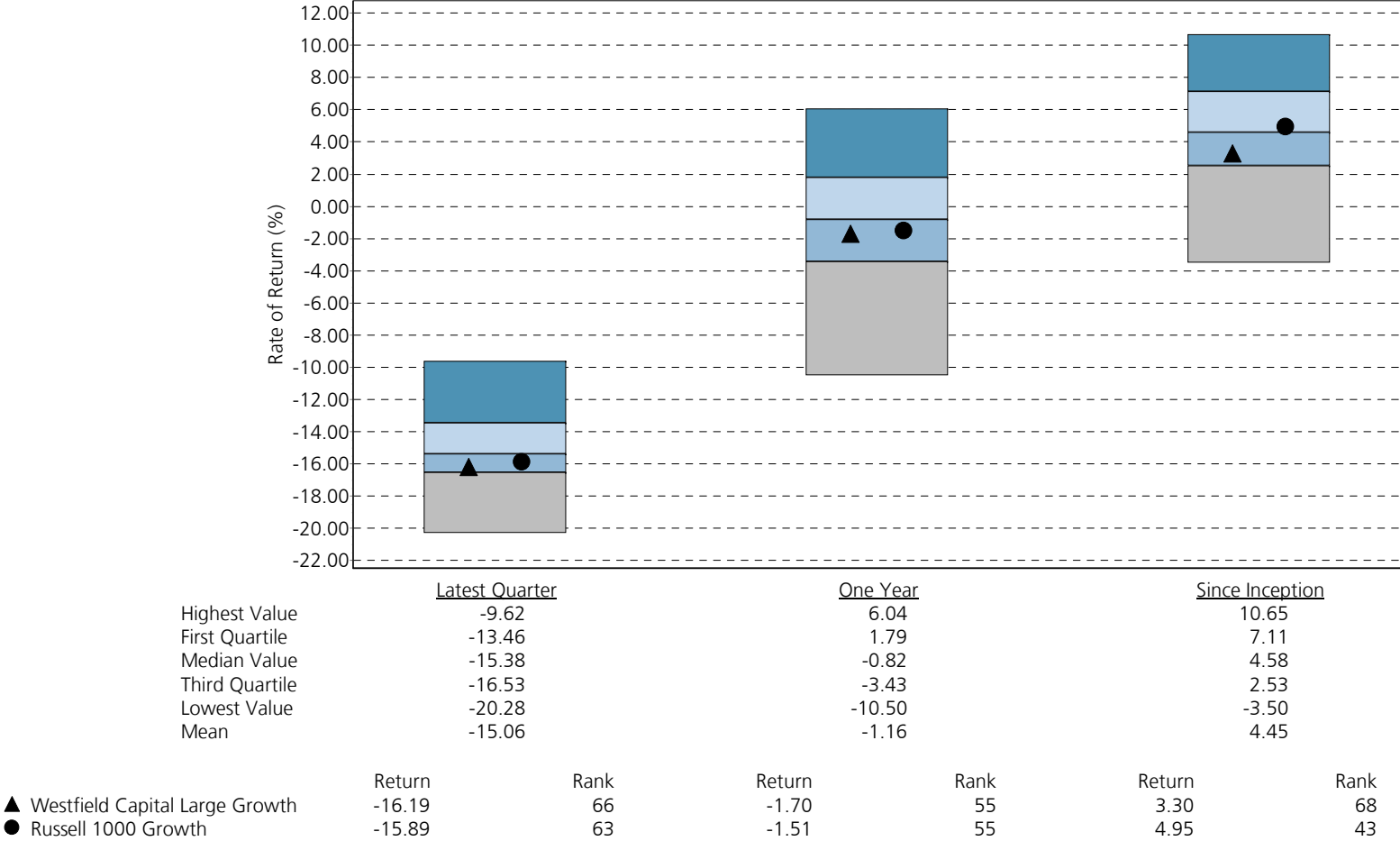
The primary index comparison for your portfolio and each of its asset classes is listed below.

TOTAL FUND BENCHMARK

9/30/2017 - Present
100% Russell 1000 Growth

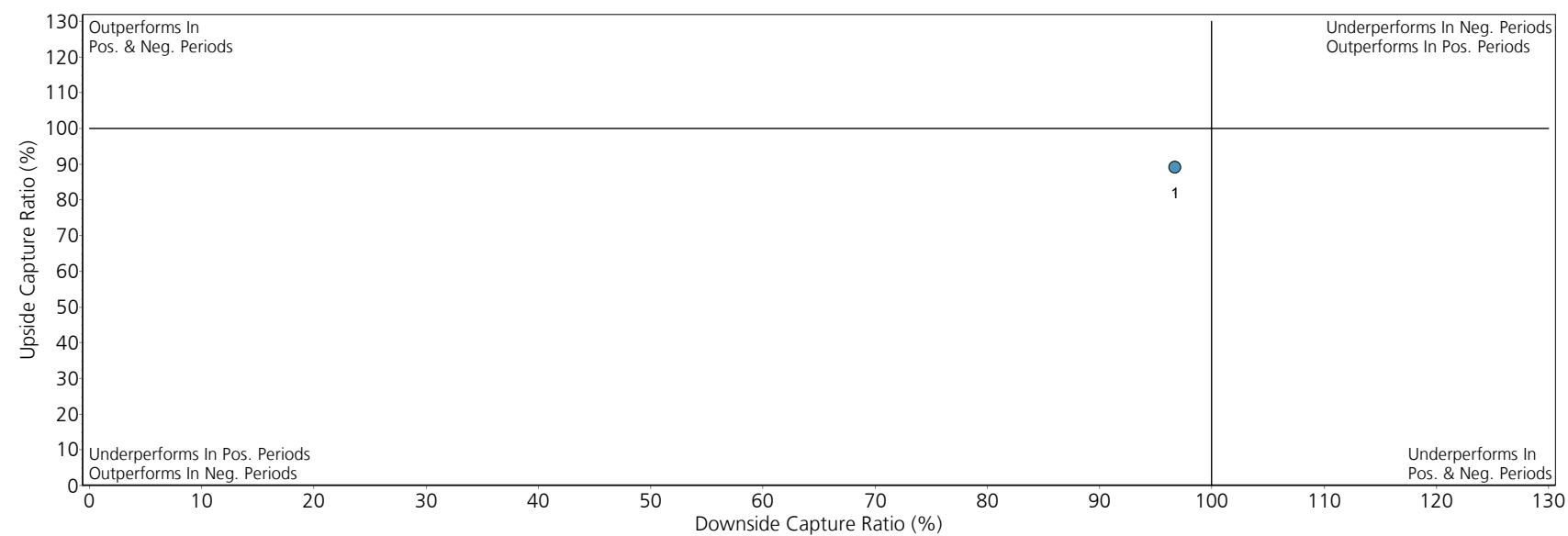
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TOTAL FUND versus Large Cap Growth Managers
September 30, 2017 Through December 31, 2018



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Capture Ratio
September 30, 2017 Through December 31, 2017



	1
	9/2017-12/2018
Up Periods	11.00
Upside Capture ROR	30.97
Russell 1000 Growth	34.77
% Of Capture	89.06
Down Periods	4.00
Downside Capture ROR	-20.48
Russell 1000 Growth	-21.18
% Of Capture	96.73

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb OPEB
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Vanguard Mid-Cap Index Fund Admiral

Please contact your UBS Institutional Consultant if you have any questions regarding this report, if your financial situation, individual needs or investment objectives have changed, or if you would like to initiate or modify any investment restrictions on this account.

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Performance Analysis

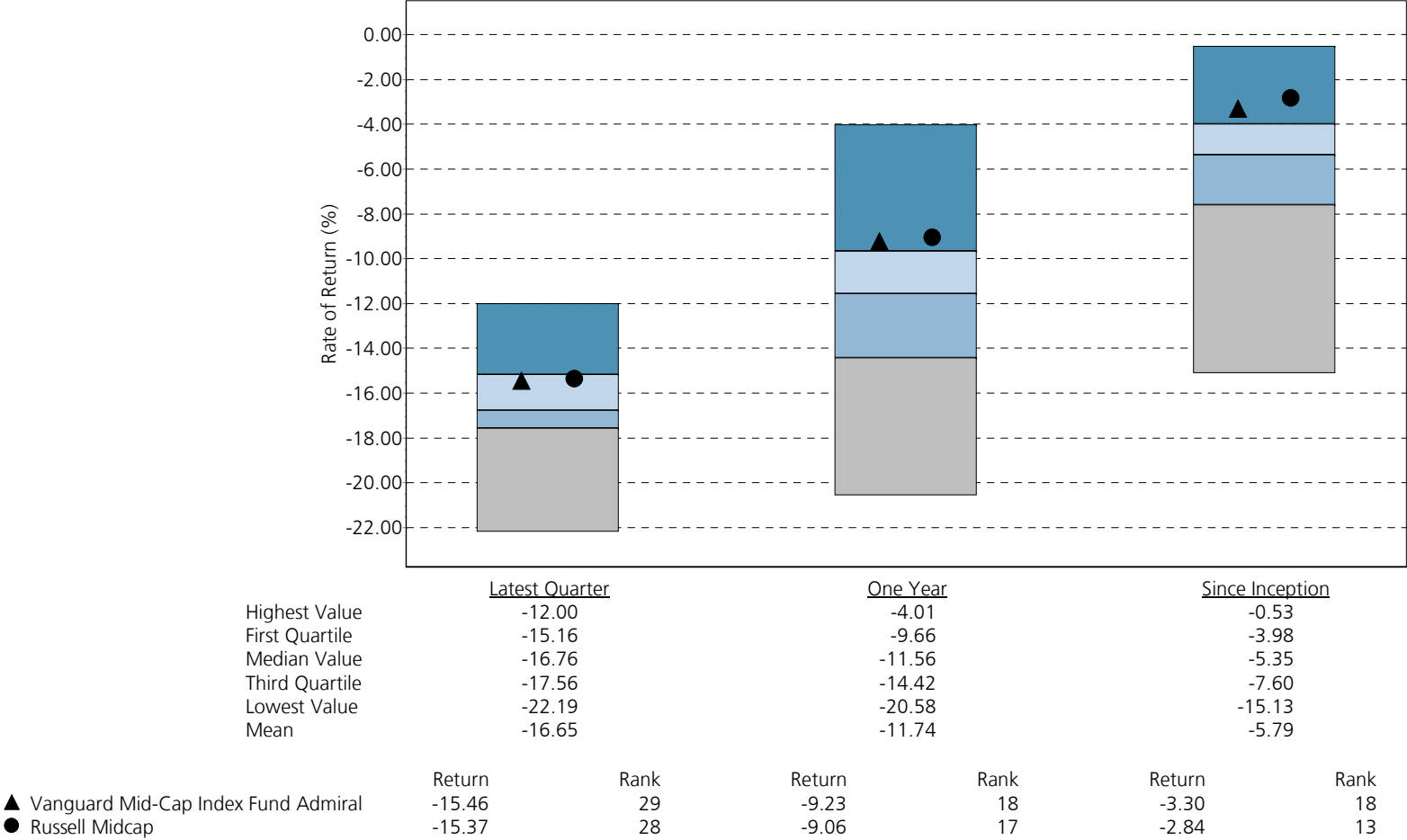
The primary index comparison for your portfolio and each of its asset classes is listed below.

TOTAL FUND BENCHMARK

9/30/2017 - Present
100% Russell Midcap

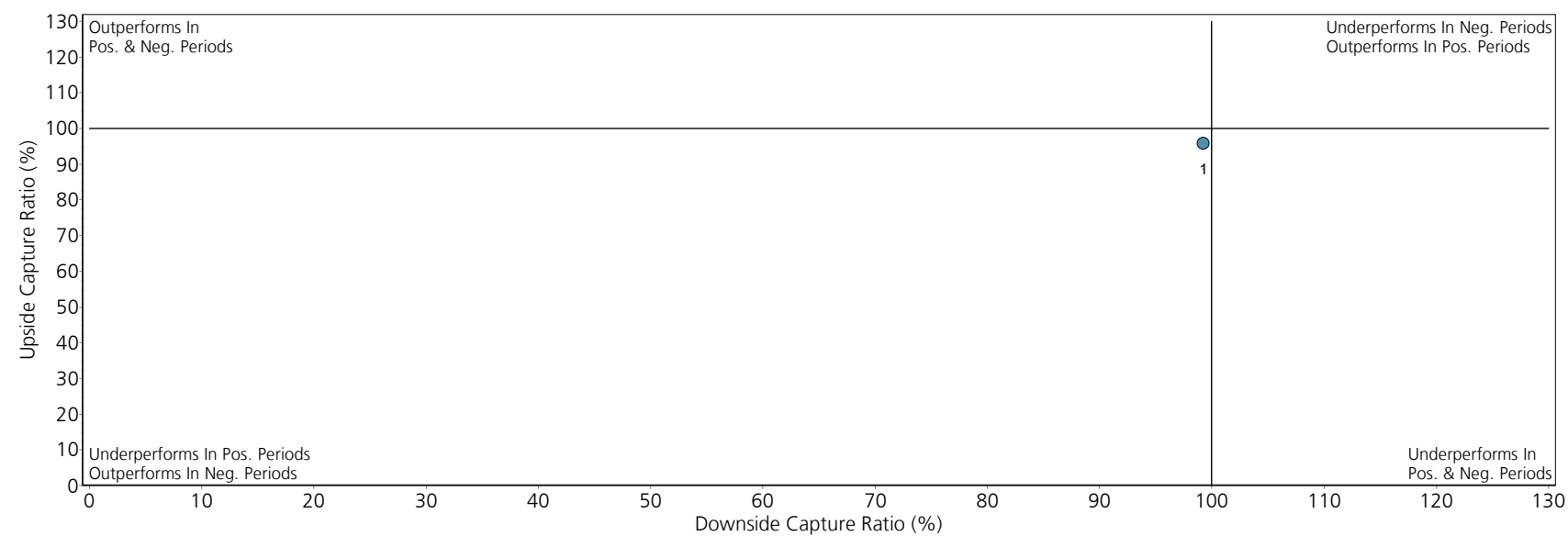
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TOTAL FUND versus Mid Cap Blend Managers
September 30, 2017 Through December 31, 2018



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Capture Ratio
September 30, 2017 Through December 31, 2017



	1
	9/2017-12/2018
Up Periods	10.00
Upside Capture ROR	21.82
Russell Midcap	22.79
% Of Capture	95.76
Down Periods	5.00
Downside Capture ROR	-21.28
Russell Midcap	-21.44
% Of Capture	99.27

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb OPEB
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Vaughan Nelson

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Performance Analysis

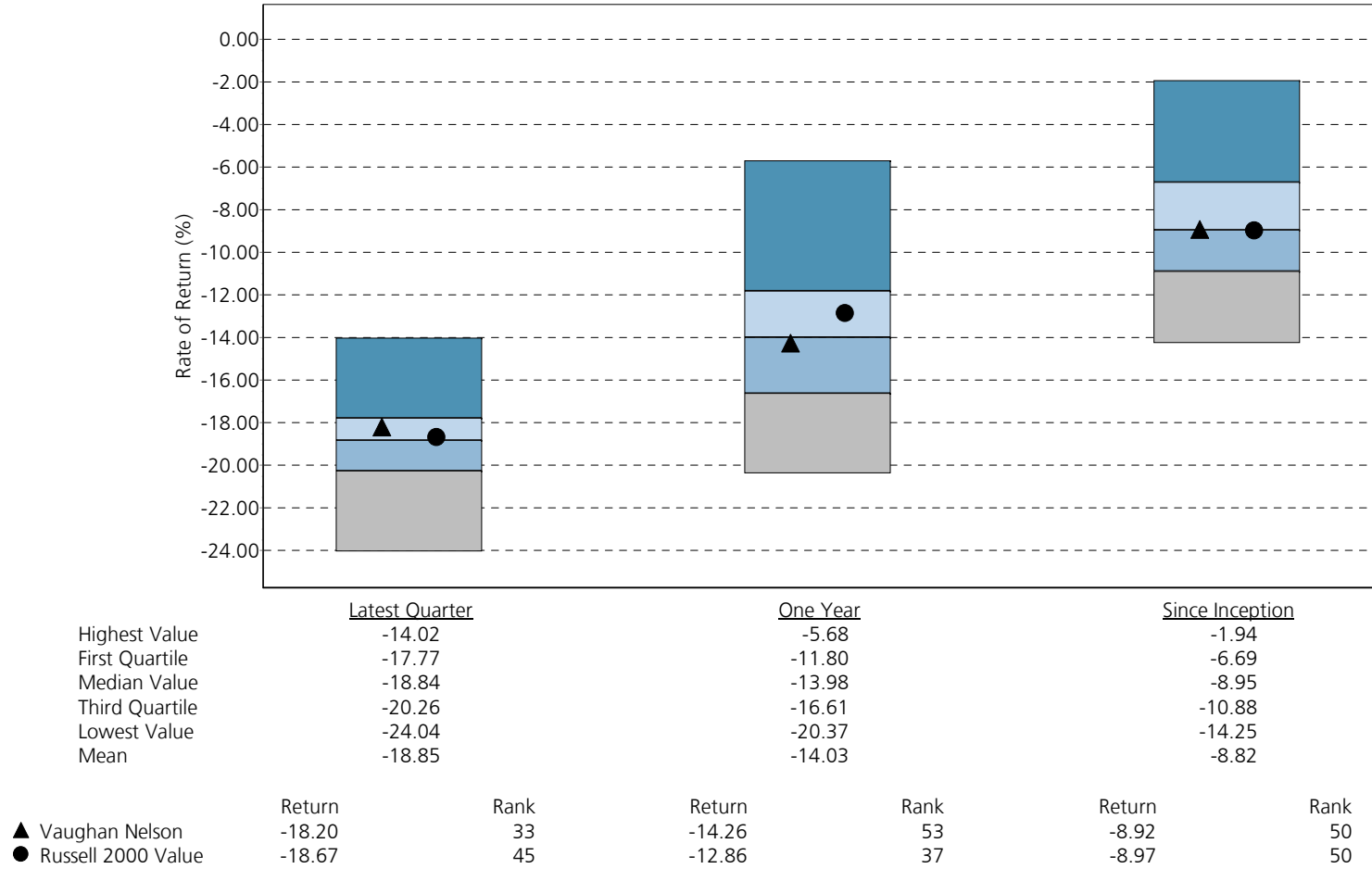
The primary index comparison for your portfolio and each of its asset classes is listed below.

TOTAL FUND BENCHMARK

9/30/2017 - Present
100% Russell 2000 Value

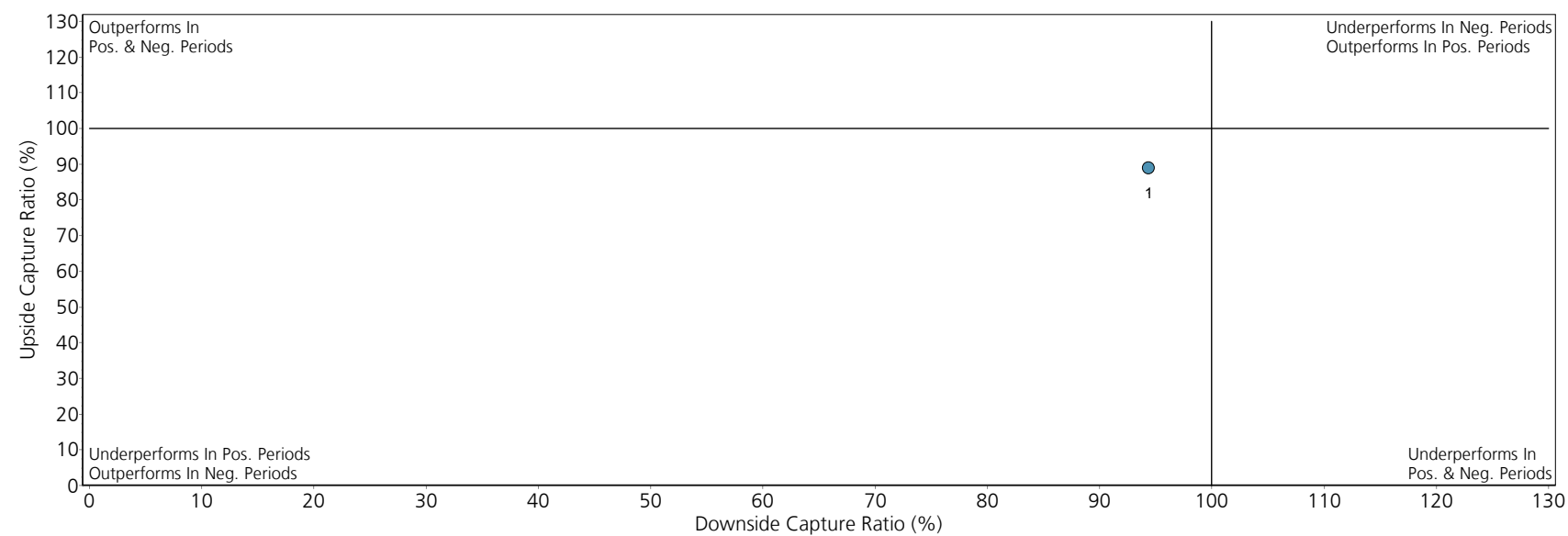
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TOTAL FUND versus Small Cap Value Managers
September 30, 2017 Through December 31, 2018



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Capture Ratio
September 30, 2017 Through December 31, 2017



	1
	9/2017-12/2018
Up Periods	10.00
Upside Capture ROR	18.74
Russell 2000 Value	21.07
% Of Capture	88.97
Down Periods	5.00
Downside Capture ROR	-25.06
Russell 2000 Value	-26.55
% Of Capture	94.39

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb OPEB
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Eagle Small Cap Growth Fund

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Performance Analysis

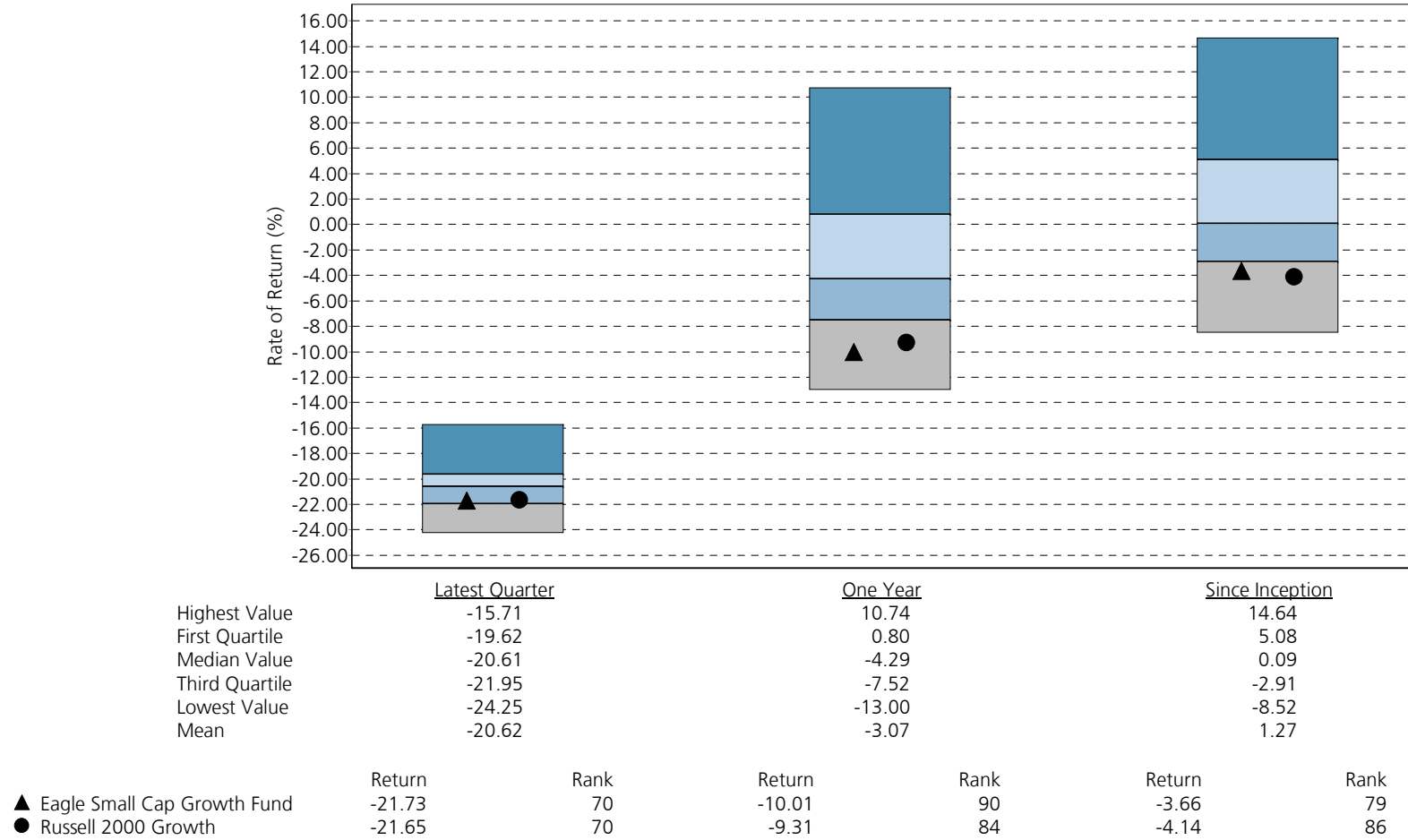
The primary index comparison for your portfolio and each of its asset classes is listed below.

TOTAL FUND BENCHMARK

9/30/2017 - Present
100% Russell 2000 Growth

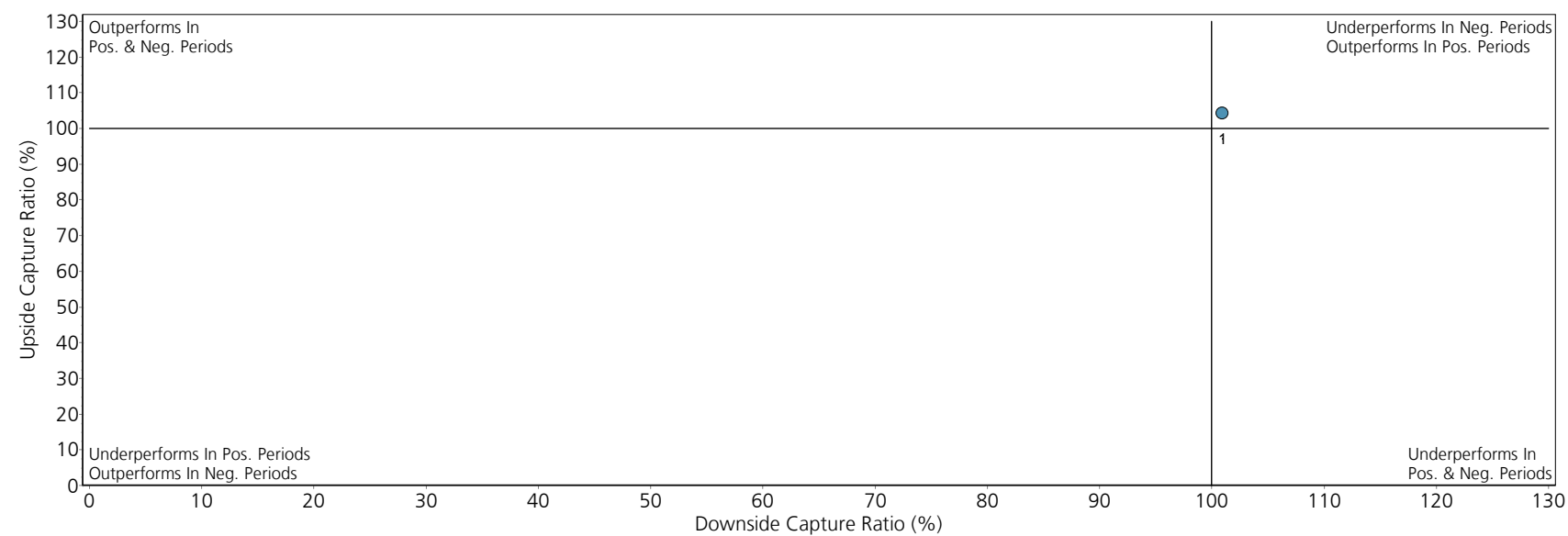
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TOTAL FUND versus Small Cap Growth Managers
September 30, 2017 Through December 31, 2018



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Capture Ratio
September 30, 2017 Through December 31, 2017



	1
	9/2017-12/2018
Up Periods	11.00
Upside Capture ROR	30.86
Russell 2000 Growth	29.59
% Of Capture	104.26
Down Periods	4.00
Downside Capture ROR	-27.06
Russell 2000 Growth	-26.81
% Of Capture	100.94

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb OPEB
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Vanguard Total International Stock Fund

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Performance Analysis

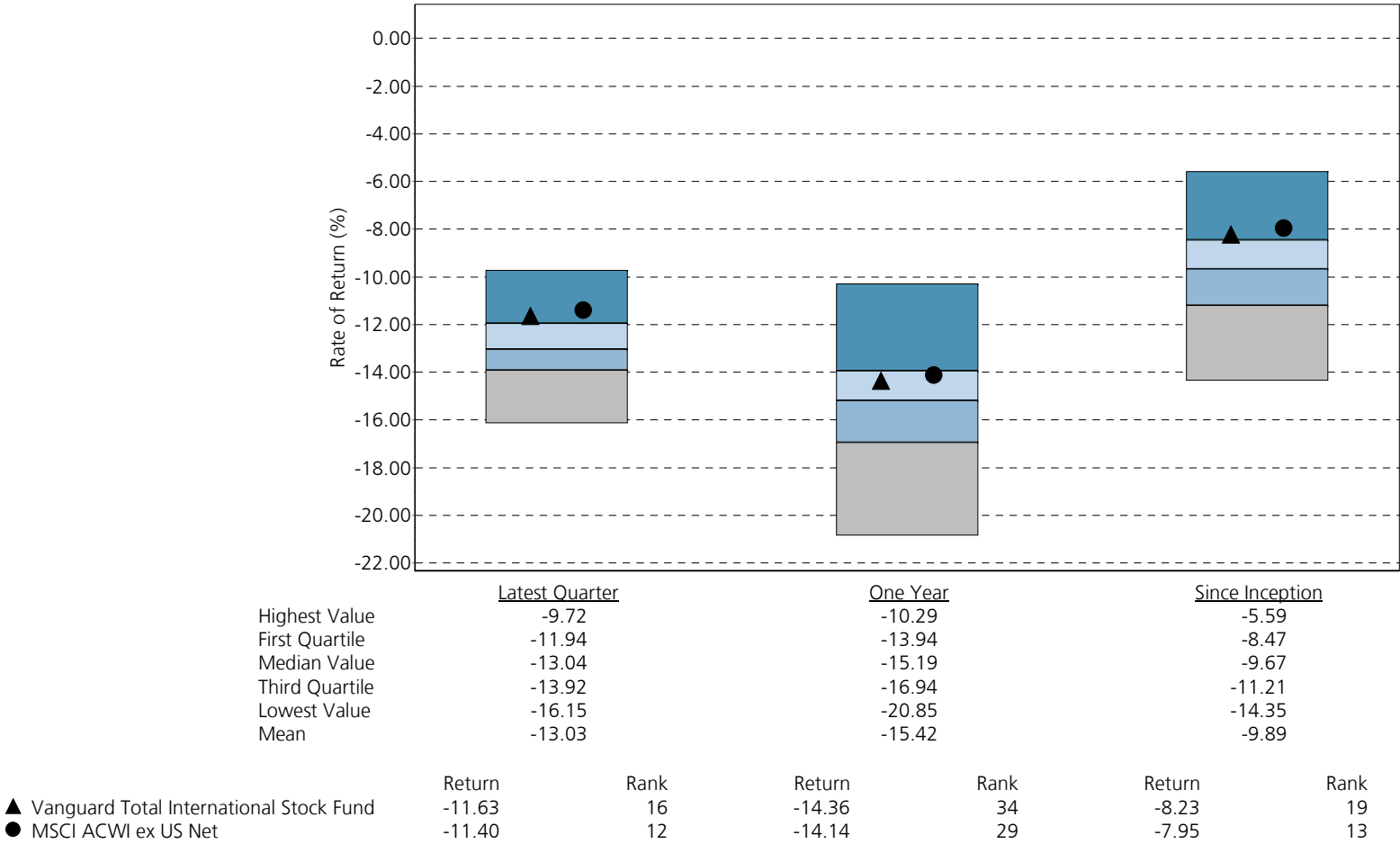
The primary index comparison for your portfolio and each of its asset classes is listed below.

TOTAL FUND BENCHMARK

9/30/2017 - Present
100% MSCI ACWI ex US Net

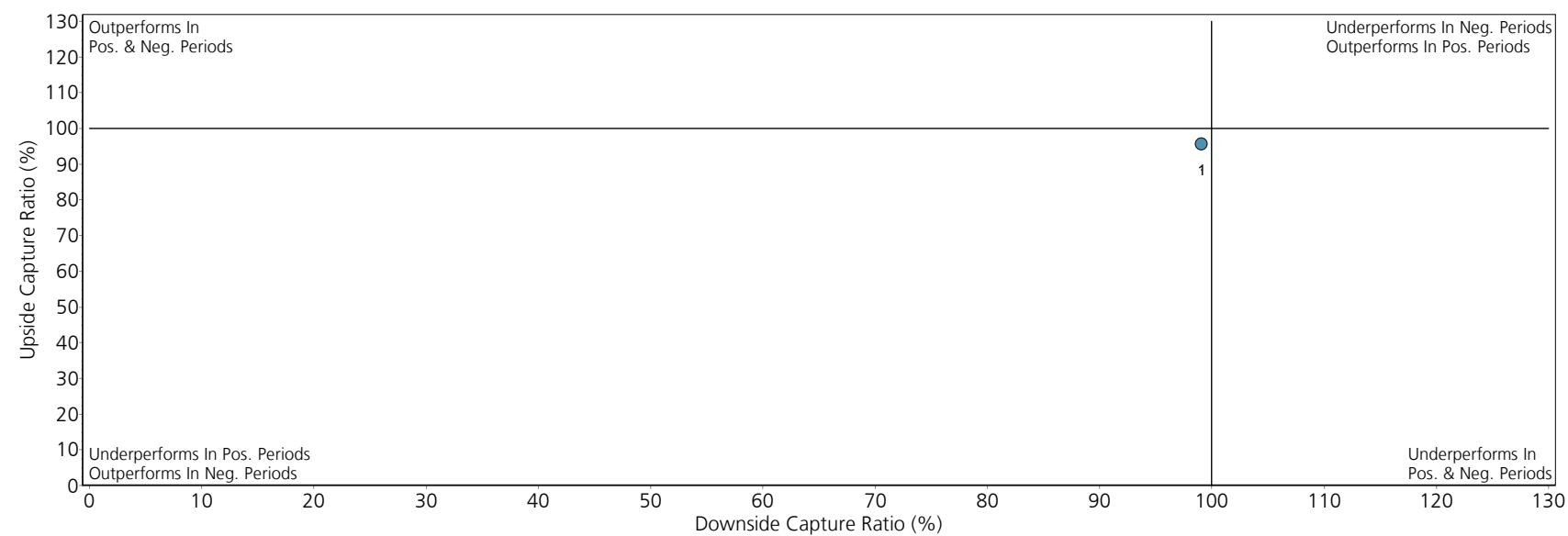
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TOTAL FUND versus Foreign Large Blend Managers
September 30, 2017 Through December 31, 2018



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Capture Ratio
September 30, 2017 Through December 31, 2017



	1
	9/2017-12/2018
Up Periods	8.00
Upside Capture ROR	16.19
MSCI ACWI ex US Net	16.94
% Of Capture	95.55
Down Periods	7.00
Downside Capture ROR	-22.70
MSCI ACWI ex US Net	-22.90
% Of Capture	99.10

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb OPEB
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Dodge & Cox International Stock Fund

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Performance Analysis

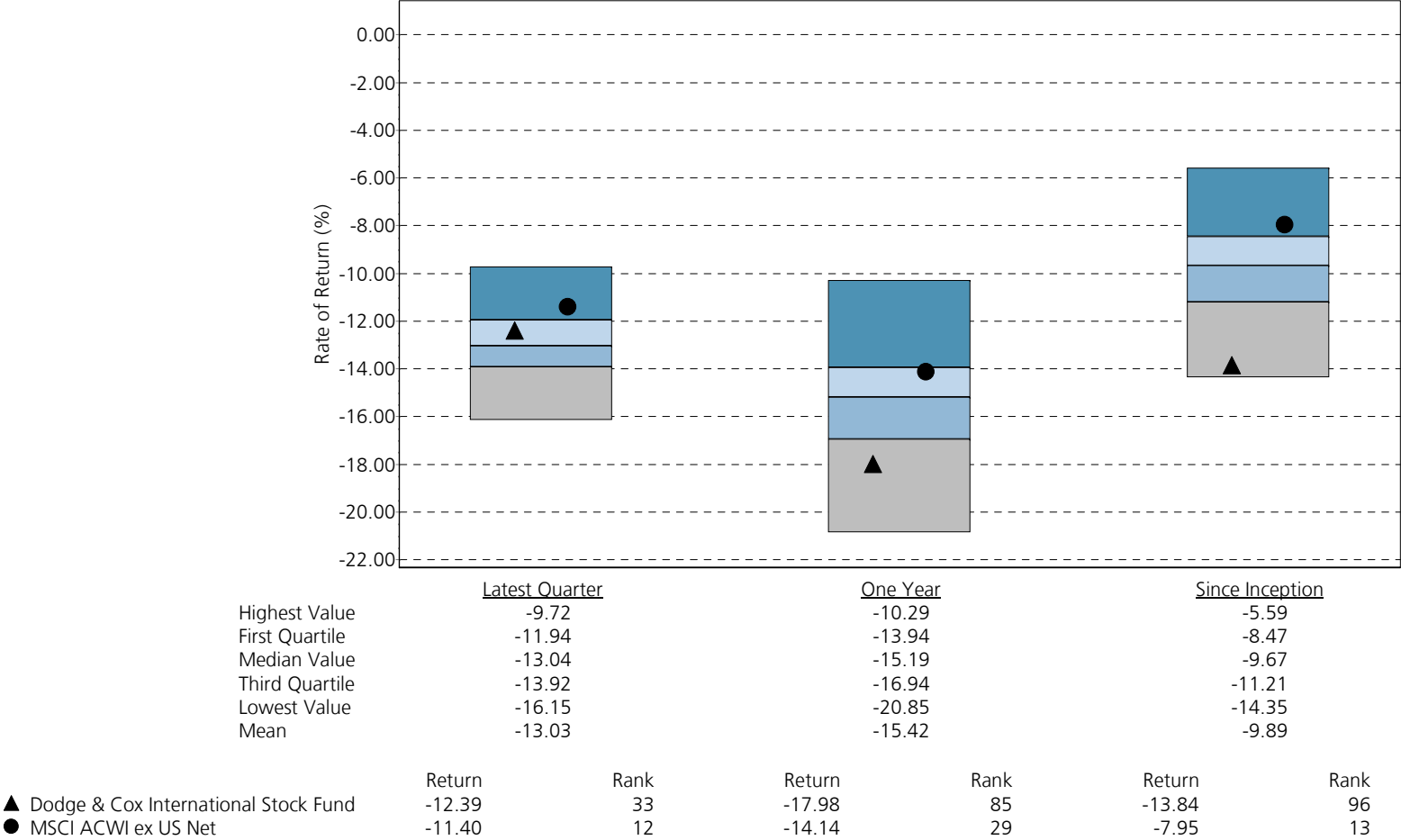
The primary index comparison for your portfolio and each of its asset classes is listed below.

TOTAL FUND BENCHMARK

9/30/2017 - Present
100% MSCI ACWI ex US Net

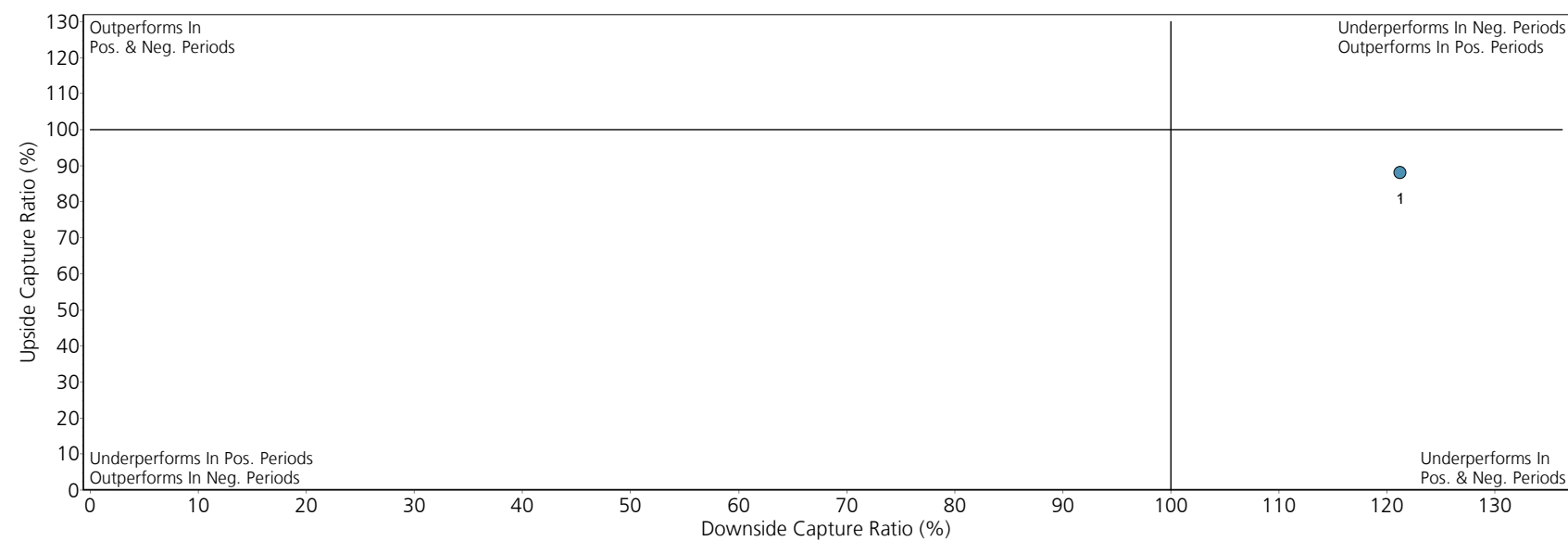
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TOTAL FUND versus Foreign Large Blend Managers
September 30, 2017 Through December 31, 2018



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Capture Ratio
September 30, 2017 Through December 31, 2017



	1
	9/2017-12/2018
Up Periods	8.00
Upside Capture ROR	14.90
MSCI ACWI ex US Net	16.94
% Of Capture	87.98
Down Periods	7.00
Downside Capture ROR	-27.76
MSCI ACWI ex US Net	-22.90
% Of Capture	121.22

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb OPEB
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Oppenheimer International Growth

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Performance Analysis

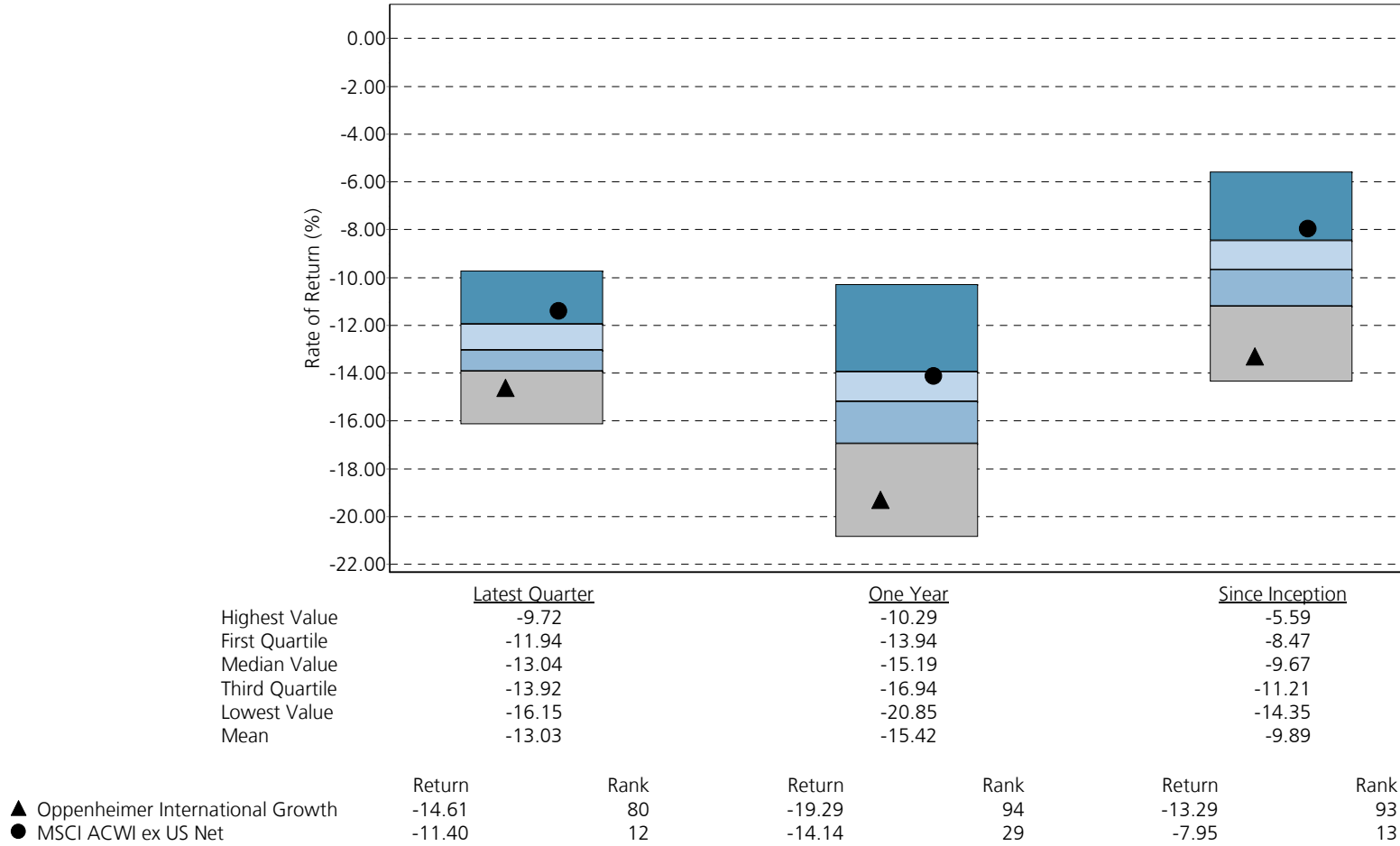
The primary index comparison for your portfolio and each of its asset classes is listed below.

TOTAL FUND BENCHMARK

9/30/2017 - Present
100% MSCI ACWI ex US Net

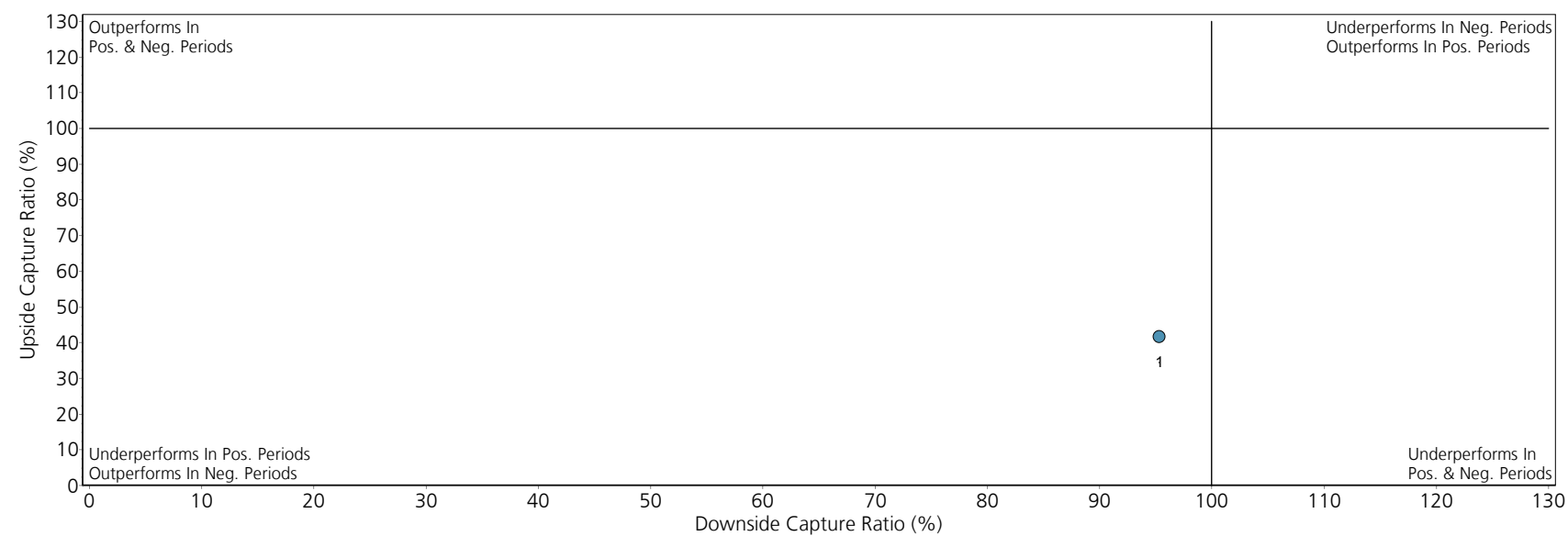
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TOTAL FUND versus Foreign Large Blend Managers
September 30, 2017 Through December 31, 2018



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Capture Ratio
September 30, 2017 Through December 31, 2017



	1
	9/2017-12/2018
Up Periods	8.00
Upside Capture ROR	7.04
MSCI ACWI ex US Net	16.94
% Of Capture	41.59
Down Periods	7.00
Downside Capture ROR	-21.84
MSCI ACWI ex US Net	-22.90
% Of Capture	95.35

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb OPEB
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Loomis Sayles Global Equity and Income Fund

Please contact your UBS Institutional Consultant if you have any questions regarding this report, if your financial situation, individual needs or investment objectives have changed, or if you would like to initiate or modify any investment restrictions on this account.

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Performance Analysis

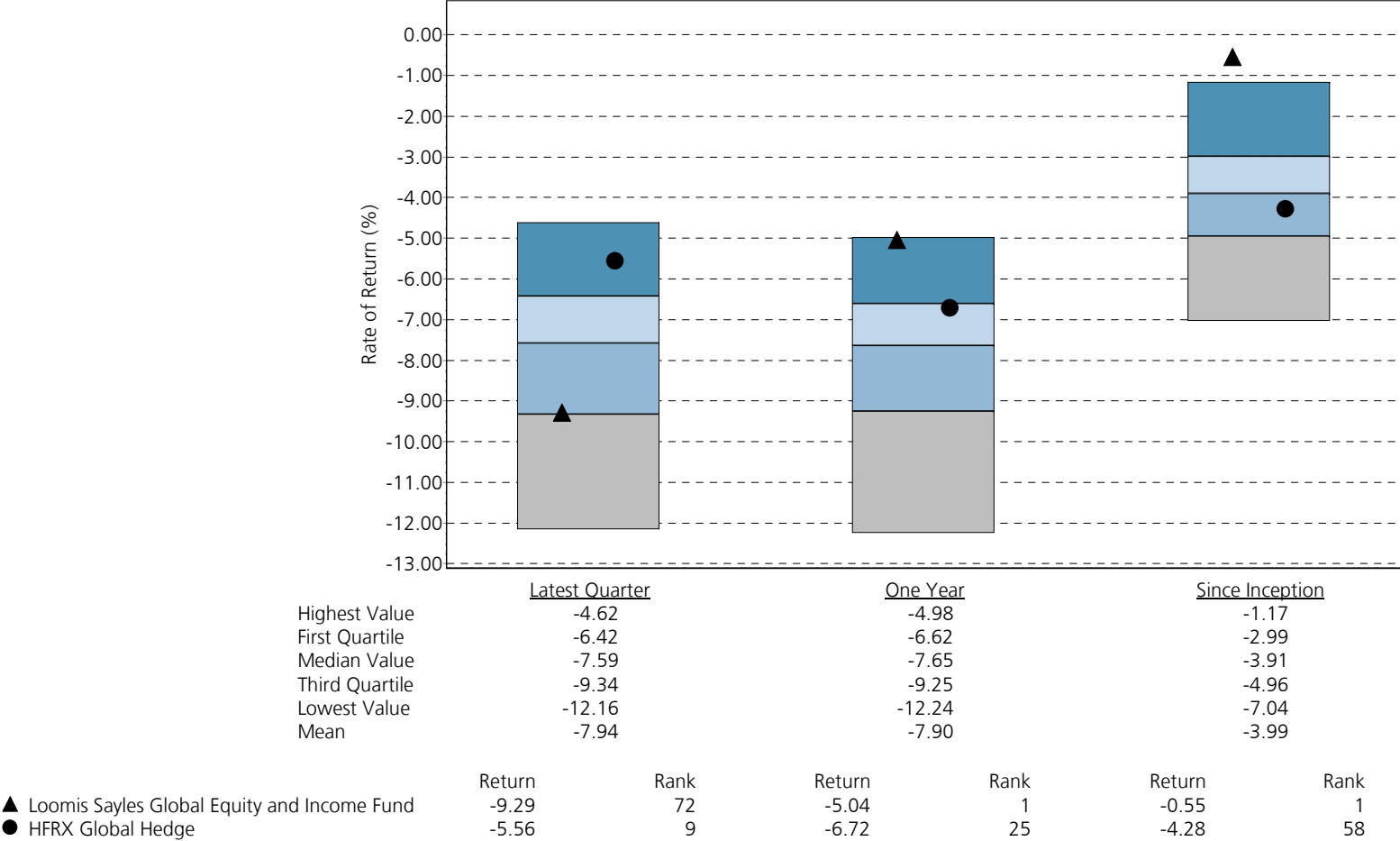
The primary index comparison for your portfolio and each of its asset classes is listed below.

TOTAL FUND BENCHMARK

9/30/2017 - Present
100% HFRX Global Hedge Fund Index

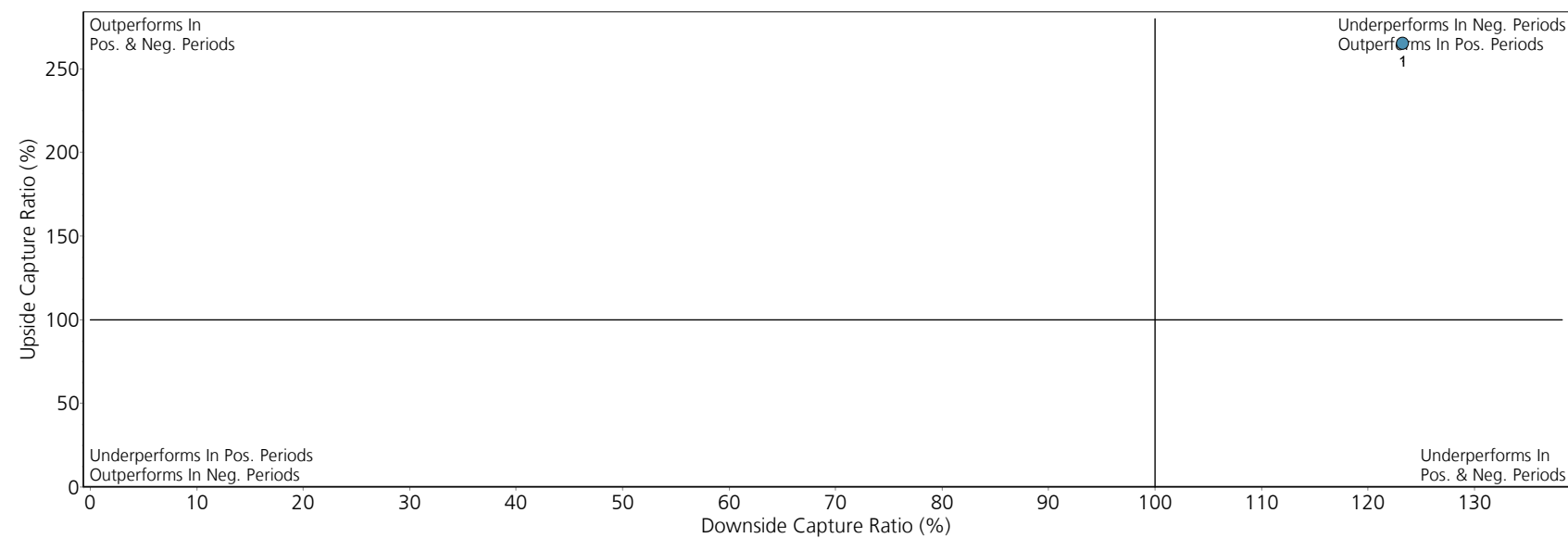
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TOTAL FUND versus World Allocation Managers
September 30, 2017 Through December 31, 2018



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Capture Ratio
September 30, 2017 Through December 31, 2017



	1
	9/2017-12/2018
Up Periods	7.00
Upside Capture ROR	12.77
HFRX Global Hedge	4.82
% Of Capture	264.89
Down Periods	8.00
Downside Capture ROR	-11.93
HFRX Global Hedge	-9.68
% Of Capture	123.25

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb OPEB
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

First Eagle Global Funds Class I

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Performance Analysis

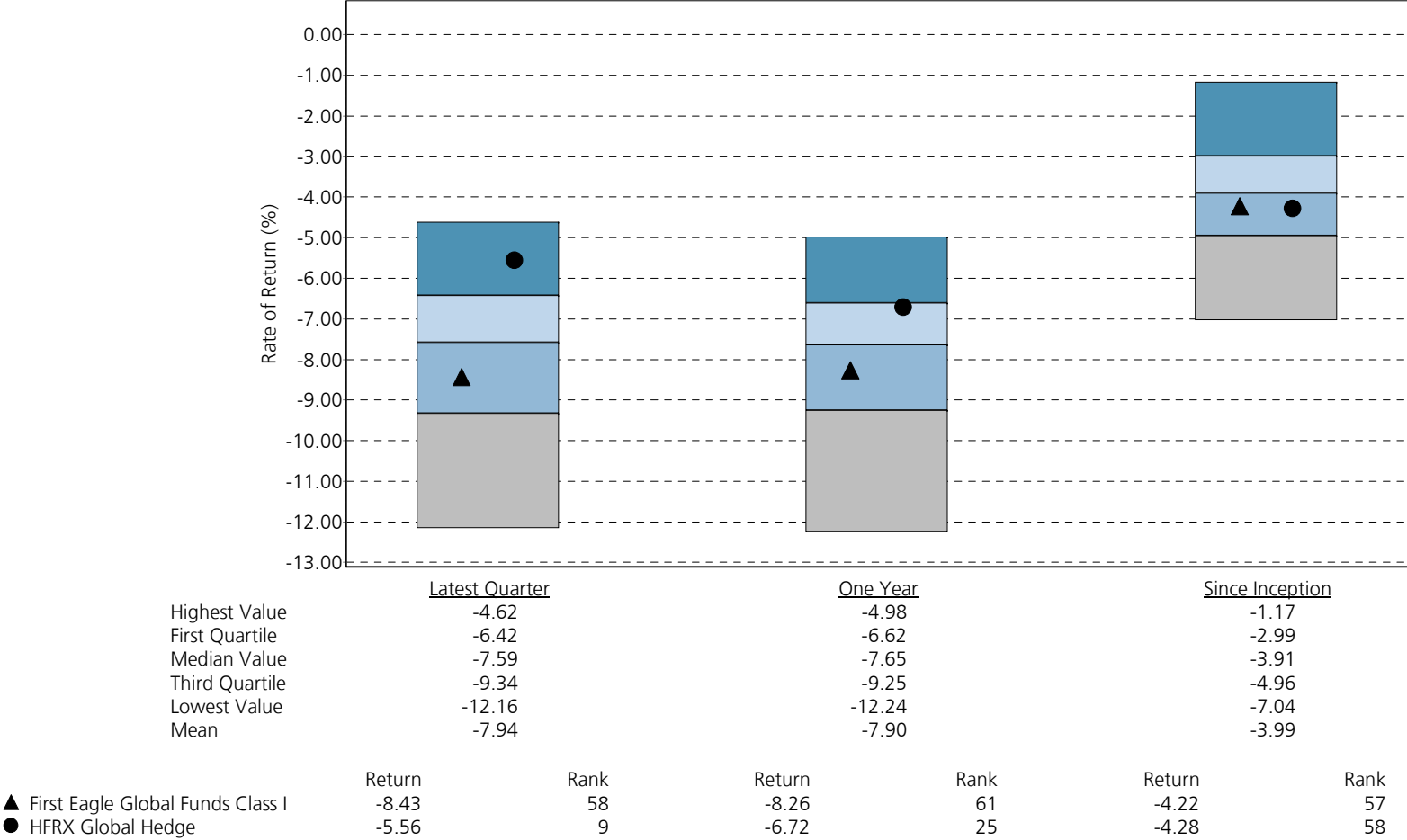
The primary index comparison for your portfolio and each of its asset classes is listed below.

TOTAL FUND BENCHMARK

9/30/2017 - Present
100% HFRX Global Hedge Fund Index

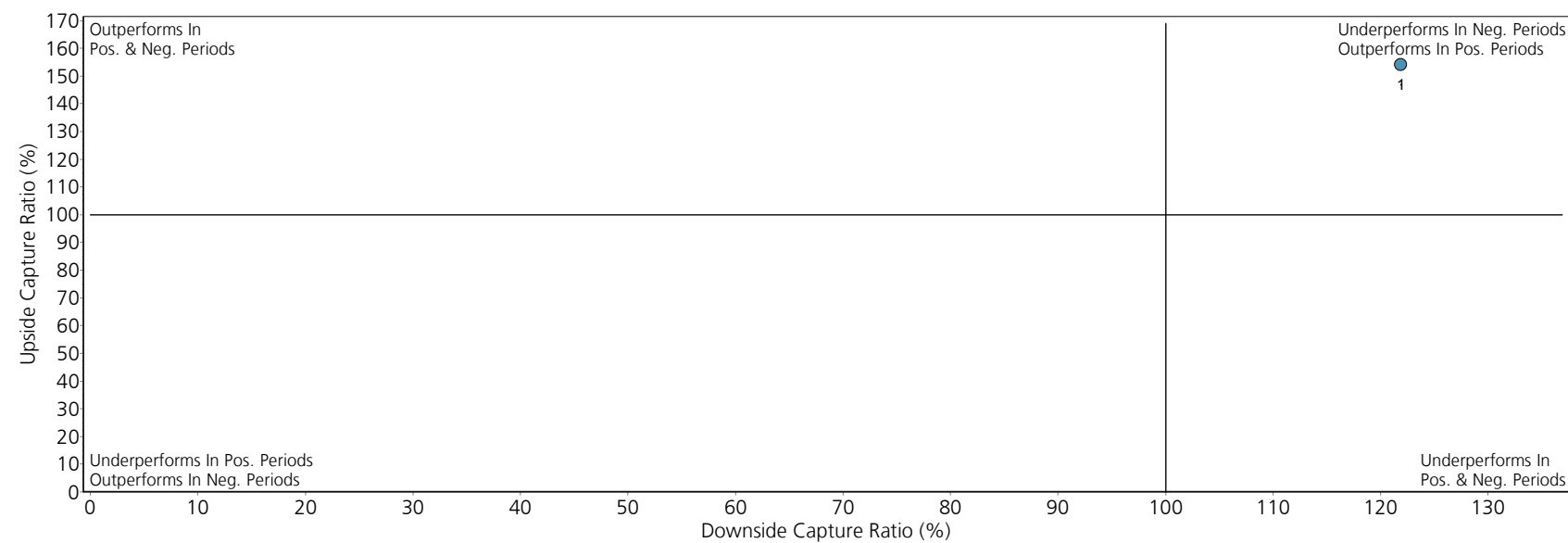
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TOTAL FUND versus World Allocation Managers
September 30, 2017 Through December 31, 2018



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Capture Ratio
September 30, 2017 Through December 31, 2017



	1
	9/2017-12/2018
Up Periods	7.00
Upside Capture ROR	7.42
HFRX Global Hedge	4.82
% Of Capture	153.97
Down Periods	8.00
Downside Capture ROR	-11.80
HFRX Global Hedge	-9.68
% Of Capture	121.89

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Investment Performance

Period Ending December 31, 2018

Prepared for:
Cobb OPEB
January 17, 2019

Prepared by:
Earle Dodd, Van Price, Allen Wright

Blackrock Global Allocation Fund

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Performance Analysis

The primary index comparison for your portfolio and each of its asset classes is listed below.

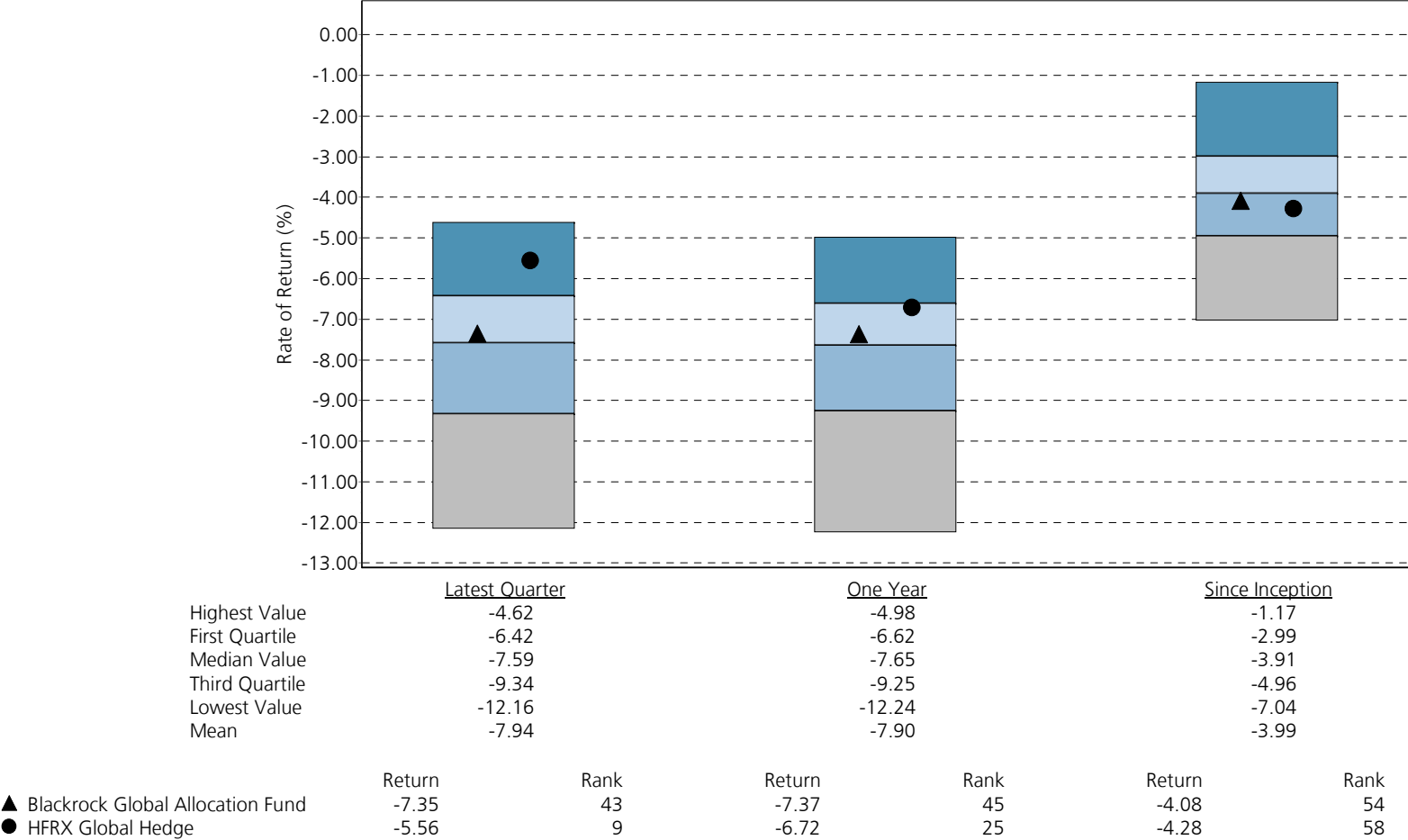
TOTAL FUND BENCHMARK

9/30/2017 - Present

100% HFRX Global Hedge Fund Index

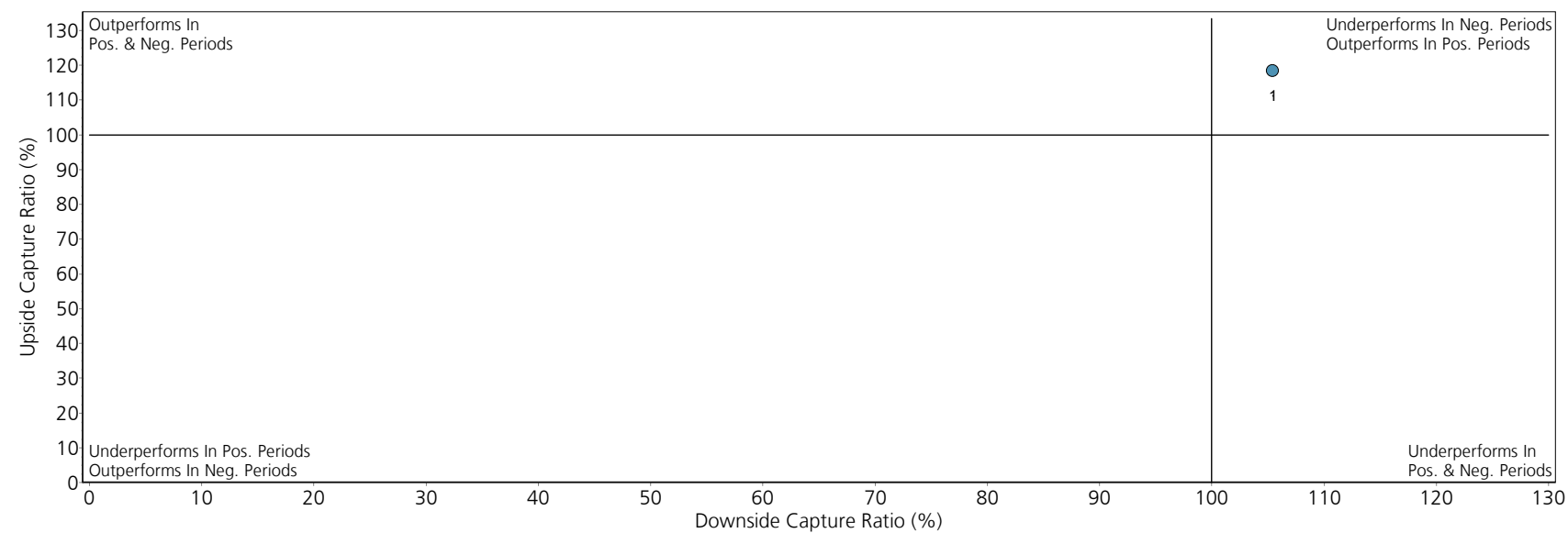
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TOTAL FUND versus World Allocation Managers
September 30, 2017 Through December 31, 2018



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Capture Ratio
September 30, 2017 Through December 31, 2017



	1
	9/2017-12/2018
Up Periods	7.00
Upside Capture ROR	5.71
HFRX Global Hedge	4.82
% Of Capture	118.43
Down Periods	8.00
Downside Capture ROR	-10.21
HFRX Global Hedge	-9.68
% Of Capture	105.45

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Cobb OPEB - Investments Not Reviewed by UBS

The firm (UBS) does not currently conduct due diligence and has not otherwise reviewed the following investments or strategies, which are included in this report at your request. The inclusion does not constitute an endorsement that you continue to hold these investments. Please see "Important Information" for additional details.

At the time of report creation, all investments in your portfolio are reviewed.

Cash and Money Market Funds are not included in this analysis. UBS does not research any money market mutual funds, other than those offered by UBS and its affiliates.

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Performance Reconciliation Adjustments

This section provides a record of differences between information reported by your custodian and information used to create this performance report, whether at your direction or as prescribed by your Institutional Consultant on your behalf.

Scenario	Description	Net Adjustment (+/-)

No differences in information were used in the creation of this performance report.

IMPORTANT INFORMATION

This report is provided for informational purposes only, does not constitute an offer to buy or sell securities or investment products, does not constitute a recommendation that you buy, sell or hold securities or investment products, and is current as of the date shown. It may include information regarding your Institutional Consulting accounts held at various UBS entities including UBS Financial Services Inc., UBS Securities LLC and UBS AG (collectively, "UBS" or "UBS entities"), as well as accounts you hold at other financial institutions. Accounts included in this report are identified at the beginning of the report. Also, information may be shown for individual accounts or as one or more combined portfolios; the accounts included in each portfolio are also identified at the beginning of the report.

Investment Monitoring: Neither UBS nor any of its employees will track or monitor specific investments you make to determine whether they complement your Investment Policy, unless you have engaged UBS for such services.

Accounts and Assets Included: UBS account statements are the only official records of holdings, balances, transactions, and security values of assets held in UBS accounts and are not replaced, amended or superseded by any of the information presented in this report. If assets that you hold at other financial institutions are included in this report, they are being provided as part of your UBS IC Consulting Services Agreement or you have asked us to include those assets as an accommodation but they are not included as part of your UBS IC Consulting Services Agreement with us. In either situation, the inclusion of those assets is based on information, including valuation and transactional information, furnished to UBS by your custodian. Because custodians vary in the information they provide to us, reflection of fees within this report will include your investment manager fees and your UBS fees only when your custodian has identified and provided this information to us. This report is not intended to provide you with consolidated information or reporting regarding your holdings at other firms. You should review and maintain the original documents for those assets, such as account statements for individual accounts held away from UBS. Those documents may contain their record of holdings, balances, transactions, and security values of assets held in those accounts, as well as notices, disclosures and other information important to you, and may also serve as a reference should questions arise regarding the accuracy of the information in this report. UBS Financial Services Inc. SIPC coverage would only apply to those assets respectively held at UBS Financial Services Inc. You should contact your financial representative at any other financial institution where you hold an account to determine the availability of SIPC coverage, if any. UBS has not verified and is not responsible for the accuracy or completeness of information regarding assets held at other financial institutions. We require that you hold and purchase only eligible managed assets in your UBS advisory accounts. Please contact your UBS Institutional Consultant for a list of the eligible assets in your program. These reports may provide performance information for eligible and ineligible assets in a fee-based program. Since ineligible assets are not considered Institutional Consulting program assets, the inclusion of such securities will distort the actual performance of your advisory assets. Neither UBS nor your UBS Institutional Consultant will act as your investment adviser with respect to ineligible assets. The investment advisory programs and brokerage accounts we offer are separate and distinct and each is governed by different laws and separate contracts with you.

Valuation: Values shown are not inclusive of margin balances. Every reasonable effort has been made to accurately price securities; however, we make no guarantee with respect to any security's price. To determine the value of securities in your account, we generally rely on third party quotation services. If a price is unavailable or believed to be unreliable, we may determine the price in good faith and may use other sources such as the last recorded transaction. We will generally rely on the value provided by you, the custodian or issuer of that security, when (i) securities are held at another custodian; (ii) investments not available through UBS or that our systems do not recognize. To obtain current quotations, when available, contact your Institutional Consultant. Prices may or may not represent current or future market value. Such pricing may affect the performance information provided in these reports. The services UBS provides to you may be based on and/or include information obtained from third-party sources. UBS will not independently verify pricing information obtained from third-party sources and cannot guarantee the accuracy of such third-party information. If pricing is indicated as "NA", the required data for that field was not provided by the other financial institution or you; this will affect the performance information provided in these reports.

Performance Analytics: Unless otherwise noted, performance shown is based on Time Weighted Rate of Return. Periods greater than one year have been annualized, but annual performance may not represent a full calendar year depending on the inception date of the first account included in these reports. Standard deviations are shown only for periods of 12 months or longer. This report may reflect performance before the deduction of manager fees and UBS Institutional Consulting advisory fees, unless your custodian provides that information to us or you custody your assets at UBS and the performance is reflected as net of those fees. The payment of fees and expenses will reduce the performance of the account and the reduction in performance will have a cumulative effect over time. The net effect of the payment of fees on the annualized performance, and the compounded or cumulative effect over time, is dependent on the amount of the fee and the account's investment performance. For example, an account that experiences an annual gross performance of 10% but incurs a 2.8% annual fee that is deducted quarterly on a prorated basis, will experience net annual performance of 7.1%, a reduction of 2.9% per year. Compounding will similarly affect the account's performance on a cumulative basis.

Performance information incorporates data as of the date your accounts became available for these reports, not as of your initial acquisition of a particular investment unless performance history is imported at client's request. For reports that reflect combined account information, the Performance Start Date will be the earliest performance start date of any of the individual accounts selected for the consolidation time period. If an individual account's performance information is not available for a full reporting time period (month to date, quarter to date, year to date or performance to date), that account's information will only be included for the period when available. For consolidated accounts that include different account Performance Start Dates, the consolidated Additions/Withdrawals, Income Earned and Investment Appreciation/ Depreciation will include all activity that occurred during the consolidated reporting time period. Accounts that hold or held insurance products will be reported on from the month end date of when insurance and annuity activity could be obtained from the carrier. To the extent that your historical data contains a mixture of net and gross performance history related to manager or advisory fees, those distinctions will impact your performance reports to the extent that the different methods of reporting are blended. Note that various factors, including unpriced securities and certain holdings, adjustments or activity may cause the results shown in this report to differ from actual performance (see the Performance Reconciliation Adjustments section for detail on differences between your Custodial statement and information used to create this performance report). Note that these results may differ from other performance reports provided to you by UBS. Performance information may be impacted by the different ways each UBS entity or third party financial institution respectively records trade executions. Past performance is no guarantee of future results. Neither the UBS entities nor any of their respective representatives provide tax or legal advice. You must consult with your legal or tax advisors regarding your personal circumstances.

You have discussed the receipt of this individually customized report with your Financial Advisor. Your UBS account statements and trade confirmation are the official records of your accounts at UBS. We assign index benchmarks to our asset allocations, strategies in our separately managed accounts and discretionary programs based on our understanding of the allocation, strategy, the investment style and our research. The benchmarks included in this report can differ from those assigned through our research process. As a result, you may find that the performance comparisons may differ, sometimes significantly, from that presented in performance reports and other materials that are prepared and delivered centrally by the Firm. Depending upon the composition of your portfolio and your investment objectives, the indexes used in this report may not be an appropriate measure for comparison purposes, and as such, are represented for illustration only. Your portfolio holdings and performance may vary significantly from the index. Your financial advisor can provide additional information about how benchmarks within this report were selected.

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Benchmark Index Information:

For comparison purposes, these reports may contain a number of general broad market indices, which were selected to demonstrate the performance of broad market indicators that are readily recognized, rather than for direct performance comparisons, and do not reflect the performance of actual investments. The selection and use of benchmarks is not a promise or guarantee that your accounts will meet or exceed the stated benchmarks. Benchmark information is illustrative and relates to historical performance of market indexes and not the performance of actual investments. Indexes are not available for direct investment and reflect an unmanaged universe of securities. Indices assume no management, custody, transaction fees or expenses that would lower the performance results, and assume reinvestment of dividends and capital gains. Information about indices is based on information obtained from sources believed to be reliable, but no independent verification has been made. UBS does not guarantee the accuracy or completeness of any index information presented. Market index data is subject to review and revision, and UBS reserves the right to substitute indices or display only those indices for which current updated information is available. Information regarding the indexes shown in this report can be found at the end of this report.

Risk Considerations: Some of the general risk considerations associated with the investment options included in this report are described below. The descriptions are not meant to be a complete list of all investment risks. For more complete information regarding fees, expenses, risks and restrictions associated with these investments please review the offering documents and marketing materials. Investors should consult their tax advisor about their specific tax situation before investing in any securities. In addition, clients should familiarize themselves with the particular market risks and the other risks associated with the specific investment. All investments contain risk and may lose value.

- **Cash and cash alternatives:** Cash and cash alternatives typically include money market securities or three-month T-Bills. These securities have short maturity dates and they typically provide a stable investment value as compared to other investments and current interest income. These investments may be subject to credit risks and inflation risks. Treasuries also carry liquidity risks for sales prior to maturity. Investments in money market funds are neither insured nor guaranteed by the Federal Deposit Insurance Corporation ("FDIC"), the U.S. government or any other government agency. There can be no assurance that the funds will be able to maintain a stable net asset value at \$1.00 per share or unit.
- **Alternative Investments:** Non-traditional asset classes are alternative investments that include hedge funds, private equity, and private real estate (collectively, non-traditional or alternative investments). These investments can be subject to substantial risks (including the risks associated with limited liquidity, the use of leverage, short-sales and concentrated positions), may involve complex tax structures and strategies, and may not be easily valued. The risks of alternative investments should be carefully considered in light of your investment objectives, risk tolerance and net worth. Alternative investments are speculative and entail substantial risks, which may place your capital at risk. Alternative investments may not have been registered with the Securities and Exchange Commission or under any state securities laws. The market for such investments may be highly illiquid and subjectively valued, and these reports provide values for informational purposes only. Accuracy is not guaranteed. These values may differ substantially from prices, if any, at which a unit may be bought or sold and do not necessarily represent the value you would receive from the issuer upon liquidation. Issuer estimated values, if any, are generally updated on a regular (annual or semi-annual) basis and are supplied to us by the issuer, but may be calculated based on different information from what is used by third parties to derive their estimated values.
- **U.S. Fixed Income:** Fixed income represents exposure (whether direct or indirect) to debt issued by private corporations, governments or federal agencies. Historically, fixed income has higher return than cash investments but their value can fluctuate dramatically as they are subject to risks including market, interest rate, issuer, credit, default and inflation risk. An investment in a portfolio may be worth more or less than its original cost when redeemed. In addition, fixed income generally has less volatility and long-term return than equities. U.S. fixed income may be further classified as high yield. These investments are high yielding but may also carry more risk. A bond funds yield and value of its portfolio fluctuate and can be affected by changes in interest rates, general market conditions and other political, social and economic developments.
- **U.S. Equity:** Equities represent exposure (whether direct or indirect) to ownership interest in a corporation. Historically, equities are more risky than fixed income or cash investments as they experience greater volatility risk, which is the risk that the value of your investment may fluctuate over time. However, they have had higher returns. Investments in small and medium company stocks can be more volatile over the short term than investments in large company stocks, however, they may offer greater potential for appreciation.
- **Non-U.S. equity and fixed income:** Non-U.S. equity and fixed income represent exposure (whether direct or indirect) to ownership interests and debt, respectively, of foreign governments and corporations that can be sub-divided into those from countries that have developed markets or emerging markets. Further, non-U.S. companies not reporting with the SEC may be subject to accounting, auditing, and financial reporting standards and requirements that differ from companies reporting with the SEC and may have less publicly available information about them than companies reporting with the SEC.
- **International:** Investors in securities of issuers located outside of the United States should be aware that even for securities denominated in U.S. dollars, changes in the exchange rate between the U.S. dollar and the issues "home" currency can have unexpected effects on the market value and liquidity of those securities. Those securities may also be affected by other risks (such as political, economic or regulatory changes) that may not be readily known to a U.S. investor.
- **Variable Annuities:** A variable deferred annuity is a long-term financial product designed for retirement purposes. It is a contractual agreement in which payment(s) are made to an insurance company, which agrees to pay out an income or a lump sum amount at a later date. There are fees and charges associated with a variable annuity contract, which include, but are not limited to, operations charges, sales and surrender charges, administrative fees, and additional charges for optional benefits. Variable annuities are sold by prospectus and you should carefully consider important information on the sub-accounts' investment objectives, risk, charges and expenses. Please read the prospectus and offering documents carefully before you invest. Your Financial Advisor can provide a copy of the prospectus. For current month-end returns: <http://advisor.morningstar.com/familyinfo.asp>. Withdrawals from an annuity contract are taxable as ordinary income, not as capital gains and, if made prior to age 59 and 1/2, may be subject to an additional 10% federal income tax penalty. Withdrawals may also be subject to surrender charges. Withdrawals will reduce the death benefit, living benefits and cash surrender value. For tax purposes, withdrawals will come from any gain in the contract first. Please see the prospectus for complete details. Amounts in the annuity's variable investment portfolios are subject to fluctuation in value and market risk, including loss of principal. Unregistered group variable annuities and registered group variable annuities that are solely available for use in qualified plans are rated and ranked based on their position within the bell curve of the open end fund peer group (a.k.a. category), rather than the variable annuity subaccount peer group. These ratings and ranks are calculated by using an overlay of the open end fund peer group break points and therefore do not contribute to the category average or number of funds within the peer group. For variable annuity subaccounts, standardized return is total return based on its inception date within the separate account and is adjusted to reflect recurring and non-recurring charges such as surrender fees, contract charges, maximum front-end load, maximum deferred load, maximum M&E risk charge, administration fees, and actual ongoing fund-level expenses. The benchmark used for each individual subaccount performance is an index that has been assigned to the particular manager or fund.

Mutual Fund Performance Information: Mutual Funds are sold by prospectus and you should carefully consider important information on the fund's investment objectives, risk, charges and expenses. Please read the prospectus and offering documents carefully before you invest. Your UBS Institutional Consultant can provide a copy of the prospectus. For current month-end returns: <http://advisor.morningstar.com/familyinfo.asp>. This analysis may incorporate mutual fund and exchange traded fund performance results. Analytics shown are calculated based on the fund's Net Asset Value, which may reflect the reinvestment of dividends and capital gains, as well as the deduction of 12b-1 fees and fund internal expenses (e.g. fund management fees). The analytics do not reflect the deduction of the sales load, where applicable, the UBS Consulting fee(s), where applicable, or the impact of taxes. Had the sales load, fee or taxes been included, the results used in this analysis would have been reduced.

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Policy Index: A point of reference for evaluating a portfolio's investment performance. A policy Index can be comprised of single or multiple benchmarks (weighted blend). Portfolios with multiple benchmarks will be depicted with a description of benchmarks and weights that comprise the policy.

Gain/(Loss) Information: When data is available from UBS, estimated unrealized gains/losses are calculated for individual security lots. For assets transferred from another financial institution, gain/loss information will be reflected only for the period of time the assets have been held at UBS entities. For assets held at other financial institutions, information provided by that entity, if any, is reflected. Total realized gain/loss information may include calculations based upon non-UBS entities cost basis information. UBS Financial Services Inc. does not independently verify or guarantee the accuracy or validity of any information provided by sources other than UBS Financial Services Inc. When original cost information is unavailable, gain/loss amounts will represent current market value and total gains/losses may be inaccurate. Date information for when a particular security was acquired, when available, appears on these reports. When no acquisition date is provided for a security, these reports reflect "N/A" and omit this information. As a result, these figures may not be accurate and are provided for informational purposes only.

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Contributions and Withdrawals: When shown on a report, information regarding contributions and withdrawals may represent the net value of all cash and securities contributions and withdrawals, and may include program fees (including wrap fees) and other fees added to or subtracted from your accounts from the first day to the last day of the period covered by these reports. Program fees may be separately identified or included in withdrawals except when paid via an invoice or through a separate account billing arrangement.

Cash Flow: Cash Flow analysis is based on the historical dividend, coupon and interest payments you have received as of the Record Date in connection with the securities listed and assumes that you will continue to hold the securities for the periods for which cash flows are projected. This may or may not include principal paybacks for the securities listed. These potential cash flows are subject to change due to a variety of reasons, including but not limited to, contractual provisions, changes in corporate policies, changes in the value of the underlying securities and interest rate fluctuations. The effect of a call on any security(s) and the consequential impact on its potential cash flow(s) is not reflected in this report. Payments that occur in the same month in which the report is generated -- but prior to the report run ("As of") date -- are not reflected in this report. In determining the potential cash flows, UBS relies on information obtained from third party services it believes to be reliable but does not independently verify or guarantee the accuracy or validity of any information provided by third parties. Cash flows for mortgage-backed, asset-backed, factored, and other pass-through securities are based on the assumptions that the current face amount, principal pay-down, interest payment and payment frequency remain constant.

Calculations may include principal payments, are intended to be an estimate of future projected interest cash flows and do not in any way guarantee accuracy. Important information about advisory & brokerage services: As a firm providing wealth management services to clients, we offer both investment advisory and brokerage services. These services are separate and distinct, differ in material ways and are governed by different laws and

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The ACCESS, SWP, MAC and Institutional Consulting ("IC") programs offer some of the same Separately Manage Account ("SMA") Managers for different SMA Manager fees. The amount of the fee paid to each SMA Manager is a function of that SMA Manager's investment style and the fee negotiated with the SMA Manager either by UBS (in ACCESS, SWP) and by you in the MAC or IC Program. Depending on your asset level and ability to negotiate the investment management fee with the SMA Manager in the dual-contract structure of the MAC or IC program, you may find that the single-contract structure in ACCESS and SWP provides a more cost-effective option or vice versa. In addition, based on the combination of our fees and your SMA Manager's fees, the overall fee for your SMA account in ACCESS, SWP, MAC or IC may exceed 3% of the account value. Please review your options and overall costs carefully with your Financial Advisor before investing.

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Calculation Definitions

Alpha: Alpha measures the difference between an investment's actual performance, and its expected performance as indicated by the returns of a selected market index. A positive Alpha indicates the risk-adjusted performance is above that index. In calculating Alpha, Standard Deviation (total risk) is used as risk measure. Alpha is often used to judge the value added or subtracted by a manager.

Appreciation/Depreciation: Appreciation or Depreciation is the change in market value minus net cash flows. The value indicates by how much the portfolio value has changed due to changes in asset values. Appreciation would be an increase, Depreciation would be a decrease.

Average Exposure: Average Exposure is generally, the average allocation to a segment or an asset. Calculated as the beginning market value plus the weighted net cash flows as a percentage of the total portfolio market value.

Beta: Beta is defined as a Manager's sensitivity to market movements and is used to evaluate market related, or systematic risk. Beta is a measure of the linear relationship, over time, of the Manager's returns and those of the Benchmark. Beta is computed by regressing the Manager's excess returns over the risk free rate (cash proxy) against the excess returns of the Benchmark over the risk free rate. An investment that is as equally volatile as the market will have a Beta of 1.0; an investment half as volatile as the market will have a Beta of 0.5; and so on. Thus, Betas higher than 1.0 indicate that the fund is more volatile than the market.

Composite Benchmark: The Composite Benchmark is a weighted average benchmark based on the allocation of funds within each of the portfolios in the composite and the risk index assigned to each portfolio.

Correlation (R): The Correlation represents the degree to which investments move in tandem with one another and is a critical component of diversified portfolio construction. The Correlation varies between a minimum of -1 (move in opposite direction) and a maximum of 1 (completely correlated). Lower Correlations enhance diversification and lead to better risk-adjusted returns within diversified portfolios. An R of less than 0.3 is often considered low Correlation.

Current Yield: This measure looks at the current price of a bond instead of its face value and represents the return an investor would expect if he or she purchased the bond and held it for a year. This measure is not an accurate reflection of the actual return that an investor will receive in all cases because bond and stock prices are constantly changing due to market factors.

Distribution of Excess Returns: Distribution of Excess Returns displays an arrangement of statistical data that exhibits the frequency of occurrence of the investment's returns in excess of the selected Market Index.

Down Market (Mkt) Capture Ratio: Down Market Capture Ratio is a measure of an investment's performance in down markets relative to the market itself. A down market is one in which the market's return is less than zero. The lower the investment's Down Market Capture Ratio, the better the investment protected capital during a market decline. A negative Down Market Capture Ratio indicates that an investment's returns rose while the market declined.

Downside Capture Return: The downside capture return is the cumulative performance of the portfolio in all periods during which the risk benchmark posted a negative return.

Downside Probability: The downside probability is the ratio of the number of periods during which the portfolio posted a negative return to the total number of periods under study. If, for example, during a 12 month span, the portfolio realized 5 months of negative returns, the downside probability would be equal to 5/12 or 42 percent. The sum of the downside and upside probabilities must equal 1.0. The downside probability does not consider the extent to which the portfolio will fail to exceed the target index. It merely considers the likelihood that the target will not be exceeded. It is important to bear in mind this point when comparing the downside probabilities of more than one portfolio. It is not necessarily correct, for example, to deem portfolio A riskier than portfolio B simply because A has a higher downside probability.

Downside Risk (Semi Standard Deviation, Semi Std Dev, or Downside Deviation): Downside Risk only identifies volatility on the down side. Downside Risk measures the variability of returns below zero, whereas Standard Deviation attributes volatility in either direction to risk. The Downside Risk method calculates the deviations below zero for each observed return. Each time a return falls below zero, the sum is divided by the number of observations and the square root is taken. This result is then shown on an annualized basis.

Dynamic Index: A weighted average blended benchmark of the risk indices assigned to each asset class, based on the asset allocation of the portfolio for a given period. The benchmark index weighting adjusts with changes to the asset allocation. A Dynamic Index should not be used when measuring against the client's *Investment Policy Statement*.

Effective Duration: A duration calculation for bonds with embedded options. Effective duration takes into account that expected cash flows will fluctuate as interest rates change.

Excess: Denotes that a statistic is being measured relative to the Market Index selected. The data set analyzed consists of the periodic differences between the investment's measure and the selected Market Index's definition.

Expense Ratio: Often referred to as the Net Expense Ratio, Morningstar pulls the net annual expense ratio from the fund's audited annual report. Annual-report expense ratios reflect the actual fees charged during a particular fiscal year. The annual report expense ratio for a fund of funds is the wrap or sponsor fee only. The expense ratio expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred by the fund. Portfolio transaction fees, or brokerage costs, as well as initial or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. If the fund's assets are small, its expense ratio can be quite high because the fund must meet its expenses from a restricted asset base. Conversely, as the net assets of the fund grow, the expense percentage should ideally diminish as expenses are spread across the wider base. Funds may also opt to waive all or a portion of the expenses that make up their overall expense ratio.

Gross Dollar Weighted Return: Gross Dollar Weighted Return is the internal rate of return, excluding money manager fees.

Gross Expense Ratio: Represents the total gross expenses (net expenses with waivers added back in) divided by the fund's average net assets. If it is not equal to the net expense ratio, the gross expense ratio portrays the fund's expenses had the fund not waived a portion, or all, of its fees. Thus, to some degree, it is an indication of fee contracts. Some fee waivers have an expiration date; other waivers are in place indefinitely.

Gross Time Weighted Return: Gross Time Weighted Return is the Modified Dietz return, excluding money manager fees.

Index Value: Index Value is the unit value series based on the return stream. It can be used to calculate rates of return between any two dates in the report.

Information Ratio: The Information Ratio is a measure of value added by an investment manager. It is the ratio of (annualized) excess return above the selected Market Index to (annualized) Tracking Error. Excess return is calculated by linking the difference of the manager's return for each period minus the selected Market Index return for each period, then annualizing the result.

Manager Capture Ratio: The Manager Capture Ratio is manager return divided by the selected Market Index return. It shows what portion of the market performance was captured by the manager under certain market conditions: up market, down market, or both.

Market Experience: Market Experience is the presumable market value of the portfolio if it and its cash flows had grown at the policy index rate of return. It lets the reader know if active management has aided or hurt the portfolio.

Net Cash Flow: For the total portfolio, net cash flow is aggregate contributions minus aggregate withdrawals. At the asset class level, net cash flow is aggregate purchases minus aggregate sales minus aggregate income. It is used in the numerator of the Modified Dietz return calculation. It is the same as "New Money" and "Flow".

Net Dollar Weighted Return: Net Dollar Weighted Returns is the internal rate of return, including money manager fees.

Net Time Weighted Return: Net Time Weighted Return is the Modified Dietz return, including money manager fees.

New Money: For the total portfolio, New Money is aggregate contributions minus aggregate withdrawals. At the asset class level, New Money is aggregate purchases minus aggregate sales minus aggregate income. It is used in the numerator of the Modified Dietz return calculation. It is the same as "Net Cash Flow" and "Flow".

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Policy Index: A point of reference for evaluating a portfolio's investment performance. A policy Index can be comprised of single or multiple benchmarks (weighted blend). Portfolios with multiple benchmarks will be depicted with a description of benchmarks and weights that comprise the policy.

Rate of Return, ROR, Return %, ROI: All Return terms refer to the Modified Dietz return.

Relative Risk: Relative risk is simply the ratio of the standard deviation of the portfolio to the standard deviation of the risk index. The statistic reveals how much of the variation of the risk index is "shared" by the portfolio. A relative risk of 1.0 indicates that the portfolio has the same level of return variability as the risk index. A relative risk of less than 1.0 indicates that the portfolio has shown a lower dispersion of returns than the index. A relative risk in excess of 1.0 indicates that the portfolio returns have been more dispersed than those of the index.

Riskless Index: The theoretical rate of return of an investment with zero risk. The risk-free rate represents the interest an investor would expect from an absolutely risk-free investment over a specified period of time. The 3 month T-Bill is the usual index used for riskless.

R-Squared (R2): The diversification measure R2 indicates the percentage of volatility in portfolio returns which can be "explained" by market volatility. This statistic indicates the degree to which the observed values of one variable, such as the returns of a managed portfolio, can be explained by, or are associated with the values of another variable, such as a Market Index. It is especially helpful in assessing how likely it is that Alpha and Beta are statistically significant. The R2 values generally range from 0.0 to 1.0. An investment with an R2 of 1.0 is perfectly correlated with the market whereas an investment with an R2 of 0.0 will behave independently of the market. An R2 of 0.95, for example, implies that 95% of the fluctuations in a portfolio are explained by fluctuations in the market.

Sector Allocations: The percentage a manager has allocated to specific economic sectors.

Sharpe Ratio: The Sharpe Ratio indicates the excess return per unit of total risk as measured by Standard Deviation. It is a ratio of the arithmetic average of excess returns over the risk free rate to the Standard Deviation. The Sharpe Ratio is a measure of the premium earned for the risk incurred by the portfolio.

Sortino Ratio: The Sortino Ratio is a measure of reward per unit of risk. With Sortino, the numerator (i.e., reward) is defined as the incremental compounded average return over the minimum acceptable return (MAR). The denominator (i.e., risk) is defined as the downside deviation of the returns below the MAR. Since the downside deviation is the standard deviation of those returns which fail to exceed the MAR, the result of the Sortino Ratio is a measure of the average reward per unit of loss. As with Sharpe and Treynor, the Sortino Ratio only has value when it is used as the basis of comparison between portfolios. The higher the Sortino Ratio, the better.

Standard Deviation: A measure of the extent to which observations in a series vary from the arithmetic mean of the series. The Standard Deviation of a series of asset returns is a measure of volatility or risk of the asset.

Target Allocation: The Target Allocation is the allocation goal of the portfolio approaches and long- and short-term holding periods.

HFRRI Relative Value: Equally weighted index of investment managers who maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative or other security types.

JP Morgan Global Ex-U.S. Bond Index: Consists of regularly traded, fixed-rate domestic government debt instruments from 12 international bond markets. Countries included are Austria, Belgium, Canada, Denmark, France, Germany, Italy, Japan, the Netherlands, Spain, Sweden and the United Kingdom.

MSCI AC World Index ex USA: Consists of approximately 2,000 securities across 47 markets, with emerging markets representing approximately 18%. MSCI attempts to capture approximately 85% of the market capitalization in each country.

MSCI EAFE Index (Europe, Australasia, Far East): A free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the U.S. and Canada. As of June 2007, the MSCI EAFE Index consisted of the following 21 developed market country indexes: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland and the United Kingdom.

MSCI Emerging Markets Index: A free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. As of November 2008, the MSCI Emerging Markets Index consisted of the following 24 emerging market country indexes: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Korea, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand and Turkey.

MSCI Europe Index: A free float-adjusted market capitalization-weighted index that is designed to measure the equity market performance of the developed markets in Europe. As of June 2007, the MSCI Europe Index consisted of the following 16 developed market country indexes: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

MSCI Japan Index: A free float-adjusted market capitalization-weighted index that is designed to measure the equity market performance of Japan.

NAREIT Index: Benchmarks the performance of the REIT industry since its inception in 1972. It was designed to provide a comprehensive assessment of overall industry performance. Some REITs available from over-the-counter markets are not included due to the lack of real-time pricing.

NCREIF Property Index (NPI): A quarterly time series composite total rate of return measure of investment performance of a large pool of individual commercial real estate properties acquired in the private market for investment purposes only. All properties in the NPI have been acquired, at least in part, on behalf of tax-exempt institutional investors - the great majority being pension funds. As such, all properties are held in a fiduciary environment.

Russell 1000® Index: Measures the performance of the large-cap segment of the U.S. equity universe. It is a subset of the Russell 3000® Index and includes approximately 1000 of the largest securities based on a combination of their market cap and current index membership. The Russell 1000 represents approximately 92% of the U.S. market.

Russell 1000® Growth Index: Measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 1000® Value Index: Measures the performance of the large-cap value segment of the U.S. equity universe. It includes those Russell 1000 companies with lower price-to-book ratios and lower expected growth values.

Russell 2000® Growth Index: Measures the performance of the small-cap growth segment of the U.S. equity universe. It includes those Russell 2000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 2000® Value Index: Measures the performance of the small-cap value segment of the U.S. equity universe. It includes those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values.

Russell Mid-Cap® Growth Index: Measures the performance of the mid-cap growth segment of the U.S. equity universe. It includes those Russell mid-cap companies with higher price-to-book ratios and higher forecasted growth values.

Russell Mid-Cap® Value Index: Measures the performance of the mid-cap value segment of the U.S. equity universe. It includes those Russell mid-cap companies with lower price-to-book ratios and lower forecasted growth values.

S&P 500 Index: Covers 500 large cap industrial, utility, transportation, and financial companies of the US markets. The index represents about 75% of NYSE market capitalization and 30% of NYSE issues. It is a capitalization weighted index calculated on a total return basis with dividends reinvested.

TASS Index of CTAs: Is a dollar-weighted index based on historical managed futures performance of CTAs with established track records.

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Index Flash Report

December 31, 2018

Created on 01/02/2019	THRU 12/31/18		2018 QUARTERLY RETURNS					ANNUALIZED RETURNS ENDING 12/31/2018										CALENDAR YEAR RETURNS									
INDEX	MONTH	YTD	Q1	Q2	Q3	Q4	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	15 Yrs	20 Yrs	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008				
S&P 500	(9.03)	(4.38)	(0.76)	3.43	7.71	(13.52)	(4.38)	9.26	8.49	12.70	13.12	7.77	5.62	21.83	11.96	1.38	13.69	32.39	16.00	2.11	15.06	26.46	(37.00)				
S&P Mid Cap	(11.32)	(11.08)	(0.77)	4.29	3.86	(17.28)	(11.08)	7.66	6.03	11.25	13.68	8.90	8.97	16.24	20.74	(2.18)	9.77	33.50	17.88	(1.73)	26.64	37.38	(36.23)				
S&P 500 Growth	(8.62)	(0.01)	1.93	5.25	9.28	(14.71)	(0.01)	10.85	10.55	14.07	14.81	8.49	5.45	27.44	6.89	5.52	14.89	32.75	14.61	4.65	15.05	31.57	(34.92)				
S&P 500 Value	(9.48)	(8.95)	(3.57)	1.40	5.86	(12.04)	(8.95)	7.23	6.06	11.06	11.21	6.87	5.32	15.36	17.40	(3.13)	12.36	31.99	17.68	(0.48)	15.10	21.18	(39.22)				
S&P 500 Equal Weighted	(9.72)	(7.64)	(1.01)	2.80	5.42	(13.90)	(7.64)	8.03	7.14	12.36	14.95	8.93	8.48	18.90	14.80	(2.20)	14.49	36.16	17.65	(0.11)	21.91	46.31	(39.72)				
DJIA	(8.59)	(3.48)	(1.96)	1.26	9.63	(11.31)	(3.48)	12.94	9.70	12.43	13.16	8.18	7.26	28.11	16.50	0.21	10.04	29.65	10.24	8.38	14.06	22.68	(31.93)				
NASDAQ Comp	(9.40)	(2.84)	2.59	6.61	7.41	(17.29)	(2.84)	11.10	10.97	15.67	16.77	9.40	6.58	29.64	8.87	6.96	14.75	40.12	17.45	(0.83)	18.02	45.36	(39.98)				
Wilshire 5000	(9.30)	(5.27)	(0.76)	3.83	7.27	(14.29)	(5.27)	9.12	8.07	12.47	13.20	8.00	6.06	20.99	13.37	0.67	12.71	33.06	16.06	0.98	17.16	28.30	(37.23)				
Russell 3000	(9.31)	(5.24)	(0.64)	3.89	7.12	(14.30)	(5.24)	8.97	7.91	12.46	13.18	7.89	5.96	21.13	12.74	0.48	12.56	33.55	16.42	1.03	16.93	28.34	(37.31)				
Russell 3000G	(8.83)	(2.12)	1.48	5.87	8.88	(16.33)	(2.12)	10.85	9.99	13.92	15.15	8.63	5.13	29.59	7.39	5.09	12.44	34.23	15.21	2.18	17.64	37.01	(38.44)				
Russell 3000V	(9.78)	(8.58)	(2.82)	1.71	5.39	(12.24)	(8.58)	7.01	5.77	10.91	11.12	7.03	6.30	13.19	18.40	(4.13)	12.70	32.69	17.55	(0.10)	16.23	19.76	(36.25)				
Russell 1000	(9.11)	(4.78)	(0.69)	3.57	7.42	(13.82)	(4.78)	9.09	8.21	12.63	13.28	7.93	5.85	21.69	12.05	0.92	13.24	33.11	16.42	1.50	16.10	28.43	(37.60)				
Russell 1000G	(8.60)	(1.51)	1.42	5.76	9.17	(15.89)	(1.51)	11.15	10.40	14.14	15.29	8.68	5.05	30.21	7.08	5.67	13.05	33.48	15.26	2.64	16.71	37.21	(38.44)				
Russell 1000V	(9.60)	(8.27)	(2.83)	1.18	5.70	(11.72)	(8.27)	6.95	5.95	11.02	11.18	7.04	6.16	13.66	17.34	(3.83)	13.45	32.53	17.51	0.39	15.51	19.69	(36.85)				
Russell 2000	(11.88)	(11.01)	(0.08)	7.75	3.58	(20.20)	(11.01)	7.36	4.41	10.44	11.97	7.50	7.40	14.65	21.31	(4.41)	4.89	38.82	16.35	(4.18)	26.85	27.16	(33.79)				
Russell 2000G	(11.68)	(9.31)	2.30	7.23	5.52	(21.65)	(9.31)	7.24	5.13	11.25	13.52	7.96	6.14	22.17	11.32	(1.38)	5.60	43.30	14.59	(2.91)	29.09	34.47	(38.54)				
Russell 2000V	(12.09)	(12.86)	(2.64)	8.30	1.60	(18.67)	(12.86)	7.37	3.61	9.57	10.40	6.91	8.23	7.84	31.74	(7.47)	4.22	34.52	18.05	(5.50)	24.50	20.55	(28.92)				
Russell 2500	(10.96)	(10.00)	(0.24)	5.71	4.70	(18.49)	(10.00)	7.32	5.15	10.97	13.15	8.23	8.52	16.81	17.59	(2.90)	7.07	36.80	17.88	(2.51)	26.71	34.38	(36.79)				
Russell 2500G	(10.85)	(7.47)	2.38	5.53	7.17	(20.08)	(7.47)	8.11	6.19	11.96	14.76	8.79	7.53	24.46	9.73	(0.19)	7.05	40.65	16.13	(1.57)	28.86	41.65	(41.50)				
Russell 2500V	(11.05)	(12.36)	(2.65)	5.80	2.67	(17.12)	(12.36)	6.59	4.16	10.00	11.61	7.55	8.63	10.36	25.20	(5.49)	7.11	33.32	19.21	(3.36)	24.82	27.67	(31.99)				
Russell Mid Cap	(9.92)	(9.06)	(0.46)	2.82	5.00	(15.37)	(9.06)	7.04	6.26	11.49	14.03	8.89	8.47	18.52	13.80	(2.44)	13.22	34.76	17.28	(1.55)	25.47	40.48	(41.46)				
Russell Mid CapG	(9.07)	(4.75)	2.17	3.16	7.57	(15.99)	(4.75)	8.59	7.42	12.27	15.12	8.98	7.19	25.27	7.33	(0.20)	11.90	35.74	15.81	(1.65)	26.38	46.29	(44.32)				
Russell Mid CapV	(10.50)	(12.29)	(2.50)	2.41	3.30	(14.95)	(12.29)	6.06	5.44	10.89	13.03	8.63	8.65	13.34	20.00	(4.78)	14.75	33.46	18.51	(1.38)	24.75	34.21	(38.44)				
EAFE	(4.83)	(13.36)	(1.41)	(0.97)	1.42	(12.50)	(13.36)	3.38	1.00	6.24	6.81	5.22	3.96	25.62	1.51	(0.39)	(4.48)	23.29	17.90	(11.73)	8.21	32.46	(43.06)				
EAFE Net	(4.85)	(13.79)	(1.53)	(1.24)	1.35	(12.54)	(13.79)	2.87	0.53	5.75	6.32	4.74	3.52	25.03	1.00	(0.81)	(4.90)	22.78	17.32	(12.14)	7.75	31.78	(43.38)				
EAFE Ex-Japan	(4.23)	(13.61)	(2.17)	(0.38)	0.66	(11.94)	(13.61)	3.24	0.31	5.93	7.18	5.56	4.22	25.98	1.11	(3.18)	(4.71)	22.29	20.54	(11.04)	6.28	41.33	(46.58)				
MSCI World	(7.57)	(8.20)	(1.15)	1.93	5.10	(13.31)	(8.20)	6.91	5.14	9.66	10.29	6.75	4.91	23.07	8.15	(0.32)	5.50	27.37	16.54	(5.02)	12.34	30.79	(40.33)				
MSCI World Net	(7.60)	(8.71)	(1.28)	1.73	4.98	(13.42)	(8.71)	6.30	4.56	9.05	9.67	6.16	4.39	22.40	7.51	(0.87)	4.94	26.68	15.83	(5.54)	11.76	29.99	(40.71)				
MSCI World xUS Net	(5.17)	(14.09)	(2.04)	(0.75)	1.31	(12.78)	(14.09)	3.11	0.34	5.27	6.24	4.78	3.68	24.21	2.75	(3.04)	(4.32)	21.02	16.41	(12.21)	8.95	33.67	(43.56)				
MSCI Emerging Mkts	(2.60)	(14.25)	1.47	(7.86)	(0.95)	(7.40)	(14.25)	9.65	2.03	3.61	8.39	8.26	8.85	37.75	11.60	(14.60)	(1.82)	(2.27)	18.64	(18.17)	19.20	79.02	(53.18)				
MSCI Emerging Mkts Net	(2.66)	(14.58)	1.42	(7.96)	(1.09)	(7.47)	(14.58)	9.25	1.65	3.23	8.02	7.90	8.52	37.28	11.19	(14.92)	(2.19)	(2.60)	18.23	(18.42)	18.88	78.51	(53.34)				
MSCI ACWI	(7.00)	(8.93)	(0.84)	0.72	4.40	(12.65)	(8.93)	7.18	4.82	8.97	10.05	6.75	5.02	24.62	8.48	(1.84)	4.71	23.44	16.80	(6.86)	13.21	35.41	(41.85)				
MSCI ACWI Net	(7.04)	(9.42)	(0.96)	0.53	4.28	(12.75)	(9.42)	6.60	4.26	8.38	9.46	6.19	#N/A	23.97	7.86	(2.36)	4.16	22.80	16.13	(7.35)	12.67	34.63	(42.19)				
MSCI ACWI xUS	(4.49)	(13.78)	(1.08)	(2.39)	0.80	(11.41)	(13.78)	4.98	1.14	5.33	7.06	5.69	4.64	27.77	5.01	(5.25)	(3.44)	15.78	17.39	(13.33)	11.60	42.14	(45.24)				
MSCI ACWI xUS Net	(4.53)	(14.20)	(1.18)	(2.61)	0.71	(11.46)	(14.20)	4.48	0.68	4.85	6.57	5.22	4.21	27.19	4.50	(5.66)	(3.87)	15.29	16.83	(13.71)	11.15	41.45	(45.52)				
EURO STOXX 50	(4.37)	(16.25)	(1.47)	(2.28)	(0.17)	(12.87)	(16.25)	1.58	(1.77)	4.84	3.15	2.84	1.93	24.27	0.70	(4.47)	(8.66)	26.99	19.90	(16.88)	(9.13)	29.69	(45.24)				
Barclay CTA Index	(0.02)	(3.07)	(1.80)	(0.38)	0.54	(1.45)	(3.07)	(1.21)	0.43	(0.14)	0.26	2.13	2.98	0.70	(1.23)	(1.50)	7.61	(1.42)	(1.70)	(3.09)	7.05	(0.10)	14.09				
Alerian MLP	(9.36)	(12.42)	(11.12)	11.80	6.57	(17.30)	(12.42)	(1.06)	(7.31)	(1.26)	9.58	7.05	10.59	(6.52)	18.31	(32.59)	4.80	27.58	4.80	13.88	35.85	76.41	(36.91)				
HFRI Equity Hedge (Total) Index	#N/A	#N/A	0.31	0.85	0.33	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	13.29	5.47	(0.97)	1.81	14.28	7.41	(8.38)	10.45	24.57	(26.65)				
HFRI Fund of Funds Composite Index	#N/A	#N/A	0.27	0.46	0.25	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	7.77	0.51	(0.27)	3.37	8.96	4.79	(5.72)	5.70	11.47	(21.37)				
HFRI Fund Weighted Composite Index	#N/A	#N/A	(0.04)	0.86	0.51	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	8.59	5.44	(1.12)	2.98	9.13	6.36	(5.25)	10.25	19.98	(19.03)				

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UBS Financial Services Inc.

Index Flash Report

December 31, 2018

Created on 01/02/2019	THRU 12/31/18		2018 QUARTERLY RETURNS					ANNUALIZED RETURNS ENDING 12/31/2018										CALENDAR YEAR RETURNS									
INDEX	MONTH	YTD	Q1	Q2	Q3	Q4	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	15 Yrs	20 Yrs	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008				
ML Preferred Stock Fixed Rate	(0.92)	(4.34)	(1.00)	1.05	0.19	(4.56)	(4.34)	2.67	6.09	5.67	7.65	3.14	4.22	10.58	2.32	7.58	15.44	(3.65)	13.60	4.11	13.66	20.07	(25.20)				
BoA-ML All Convertible x-144a	(5.04)	(1.41)	2.26	3.22	3.24	(9.53)	(1.41)	7.59	5.72	9.48	11.82	6.49	#N/A	13.77	11.04	(3.37)	9.70	24.26	14.88	(5.53)	15.81	48.22	(35.78)				
NAREIT (EQ)	(7.89)	(4.04)	(6.66)	8.50	0.87	(6.06)	(4.04)	4.24	8.32	9.07	12.53	8.51	9.94	8.67	8.63	2.83	28.03	2.86	19.70	8.28	27.95	27.99	(37.73)				
DJ US Select REIT	(8.59)	(4.22)	(7.43)	9.99	0.72	(6.61)	(4.22)	1.97	7.89	8.17	12.05	8.11	9.83	3.76	6.68	4.48	32.00	1.22	17.12	9.37	28.07	28.46	(39.20)				
BC Aggregate	1.84	0.01	(1.46)	(0.16)	0.02	1.64	0.01	2.06	2.52	2.10	3.48	3.87	4.55	3.54	2.65	0.55	5.97	(2.02)	4.21	7.84	6.54	5.93	5.24				
BC Int Aggregate	1.50	0.92	(1.05)	0.09	0.11	1.80	0.92	1.72	2.09	1.85	3.13	3.56	4.33	2.27	1.97	1.21	4.12	(1.02)	3.56	5.97	6.15	6.46	4.86				
CG Broad Inv Grd	1.86	(0.01)	(1.48)	(0.18)	0.03	1.64	(0.01)	2.07	2.51	2.09	3.36	3.94	4.60	3.60	2.66	0.53	5.91	(2.04)	4.23	7.85	6.30	5.06	7.02				
BoA-ML C/G 1-3 yr	0.76	1.63	(0.19)	0.29	0.35	1.17	1.63	1.26	1.04	1.06	1.56	2.28	3.13	0.86	1.29	0.67	0.78	0.70	1.48	1.56	2.82	3.84	4.68				
BC Int G/C	1.34	0.86	(1.00)	0.01	0.20	1.66	0.86	1.68	1.85	1.74	2.90	3.34	4.16	2.10	2.08	1.14	3.10	(0.84)	3.79	5.91	5.89	5.24	5.08				
BC Gov Int	1.49	1.43	(0.73)	0.06	(0.11)	2.22	1.43	1.21	1.46	1.11	1.83	2.97	3.77	1.14	1.05	1.18	2.52	(1.25)	1.73	6.08	4.98	(0.32)	10.43				
BC GC	1.86	(0.42)	(1.58)	(0.33)	0.06	1.46	(0.42)	2.19	2.53	2.14	3.46	3.85	4.54	4.00	3.05	0.15	6.01	(2.35)	4.82	8.74	6.59	4.52	5.70				
BC US Tips	0.55	(1.26)	(0.79)	0.77	(0.82)	(0.42)	(1.26)	2.11	1.69	0.88	3.64	3.79	5.21	3.01	4.68	(1.44)	3.64	(8.61)	6.98	13.56	6.31	11.41	(2.35)				
BC US Treasury	2.15	0.86	(1.18)	0.10	(0.59)	2.57	0.86	1.40	2.01	1.31	2.08	3.48	4.15	2.31	1.04	0.84	5.05	(2.75)	1.99	9.81	5.87	(3.57)	13.74				
BC Gov	2.13	0.88	(1.15)	0.10	(0.57)	2.54	0.88	1.41	1.99	1.33	2.12	3.42	4.12	2.30	1.05	0.86	4.92	(2.60)	2.02	9.02	5.52	(2.20)	12.39				
BC US Credit	1.50	(2.11)	(2.13)	(0.88)	0.89	0.01	(2.11)	3.16	3.22	3.30	5.52	4.56	5.19	6.18	5.63	(0.77)	7.53	(2.01)	9.37	8.35	8.47	16.04	(3.08)				
BC Global Aggregate xUS	2.22	(2.15)	3.62	(4.76)	(1.74)	0.91	(2.15)	3.15	(0.01)	0.12	1.74	2.88	3.22	10.51	1.49	(6.02)	(3.08)	(3.08)	4.09	4.36	4.95	7.53	4.40				
BC Global Aggregate	2.02	(1.20)	1.36	(2.78)	(0.92)	1.20	(1.20)	2.70	1.08	1.00	2.49	3.32	3.84	7.39	2.09	(3.15)	0.59	(2.60)	4.32	5.64	5.54	6.93	4.79				
BC EM Sovereign	1.61	(3.86)	(1.84)	(3.63)	2.26	(0.61)	(3.86)	4.68	4.48	4.70	7.94	7.24	9.48	9.23	9.24	1.29	7.12	(6.34)	18.32	8.80	12.12	27.59	(9.15)				
BC Muni	1.20	1.28	(1.11)	0.87	(0.15)	1.69	1.28	2.30	3.82	3.30	4.85	4.13	4.55	5.45	0.25	3.30	9.05	(2.55)	6.78	10.70	2.38	12.91	(2.47)				
BC 3 yr Muni	0.66	1.76	0.11	0.64	(0.12)	1.11	1.76	1.13	1.16	1.28	1.99	2.40	3.00	1.56	0.08	1.18	1.22	1.33	1.86	3.46	1.81	5.78	5.53				
BC 5 yr Muni	0.97	1.69	(0.57)	0.87	(0.20)	1.58	1.69	1.47	2.00	1.97	3.13	3.28	3.85	3.14	(0.39)	2.43	3.19	0.81	2.96	6.93	3.40	7.40	5.78				
BC 7 yr Muni	1.21	1.66	(1.20)	0.97	(0.11)	2.02	1.66	1.86	2.98	2.58	4.01	3.91	4.40	4.49	(0.50)	3.26	6.09	(0.97)	4.20	10.14	4.63	7.61	4.59				
BC 10 yr Muni	1.36	1.41	(1.61)	0.90	0.06	2.09	1.41	2.34	3.87	3.24	4.85	4.39	4.77	5.83	(0.12)	3.76	8.72	(2.17)	5.70	12.32	4.05	9.85	1.52				
BC HY Muni	0.86	4.76	0.58	3.06	0.76	0.30	4.76	5.78	6.53	6.27	9.12	5.61	5.38	9.69	2.99	1.81	13.84	(5.51)	18.14	9.25	7.79	32.74	(27.01)				
BC Agency	1.42	1.34	(0.53)	0.00	(0.01)	1.90	1.34	1.60	1.87	1.44	2.07	3.17	4.00	2.06	1.39	1.01	3.58	(1.38)	2.16	4.82	4.36	1.53	9.26				
BC Mortgages	1.81	0.99	(1.19)	0.24	(0.12)	2.08	0.99	1.71	2.53	1.97	3.11	3.91	4.57	2.47	1.67	1.51	6.08	(1.41)	2.59	6.23	5.37	5.89	8.34				
BC ABS	0.79	1.77	(0.39)	0.42	0.49	1.25	1.77	1.78	1.69	1.61	4.16	2.91	2.17	1.55	2.03	1.25	1.85	(0.51)	3.34	5.26	5.61	20.92	(8.58)				
BC HY	(2.14)	(2.08)	(0.86)	1.03	2.40	(4.53)	(2.08)	7.23	3.83	5.98	11.12	7.00	6.55	7.50	17.13	(4.47)	2.45	7.44	15.81	4.98	15.12	58.21	(26.16)				
BoA-ML High Yield	(2.19)	(2.26)	(0.94)	1.00	2.44	(4.64)	(2.26)	7.22	3.81	5.90	10.89	6.83	6.49	7.48	17.34	(4.55)	2.45	7.38	15.44	4.50	15.24	56.28	(26.23)				
BoA-ML Treasury 1-5 yr	1.11	1.52	(0.38)	0.13	0.05	1.72	1.52	1.09	1.09	0.88	1.33	2.42	#N/A	0.65	1.09	0.98	1.24	(0.19)	0.91	3.36	3.61	0.23	8.73				
CG T-Bill (90 Day)	0.20	1.86	0.35	0.44	0.50	0.57	1.86	0.99	0.60	0.45	0.35	1.26	1.81	0.84	0.27	0.03	0.03	0.05	0.07	0.08	0.13	0.16	1.80				
IFC Invest Comp	(2.51)	(14.22)	1.28	(7.49)	(1.59)	(6.96)	(14.22)	9.43	2.57	4.29	9.03	8.92	9.65	37.89	10.78	(12.38)	(1.12)	(0.58)	18.89	(19.03)	20.64	81.03	(53.74)				
CG Wld Gov Bond	2.39	(0.84)	2.50	(3.35)	(1.62)	1.75	(0.84)	2.69	0.77	0.20	1.52	3.01	3.69	7.49	1.60	(3.57)	(0.48)	(4.00)	1.65	6.35	5.17	2.55	10.89				
CG Wld Gov Bond xUS	2.54	(1.82)	4.42	(5.11)	(2.19)	1.31	(1.82)	3.32	0.28	(0.26)	1.27	2.81	3.41	10.33	1.81	(5.54)	(2.68)	(4.56)	1.51	5.17	5.21	4.38	10.11				
Bloomberg Commodity Total Return	(6.89)	(11.25)	(0.40)	0.40	(2.02)	(9.41)	(11.25)	0.30	(8.81)	(7.86)	(3.84)	(3.50)	0.09	1.70	11.77	(24.67)	(17.04)	(9.58)	(1.14)	(13.37)	16.67	18.72	(36.61)				

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UBS Financial Services Inc.

Index Flash Report

December 31, 2018

Created on 01/02/2019	THRU 12/31/18		2018 QUARTERLY RETURNS					ANNUALIZED RETURNS ENDING 12/31/2018							CALENDAR YEAR RETURNS									
INDEX	MONTH	YTD	Q1	Q2	Q3	Q4	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	15 Yrs	20 Yrs	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	
70S&P/30BCAGG	(5.77)	(2.82)	(0.90)	2.35	5.37	(9.06)	(2.82)	7.21	6.82	9.56	10.37	6.80	5.56	16.08	9.23	1.34	11.39	21.12	12.49	4.08	12.92	20.44	(26.03)	
70S&P/30BCIGC	(5.92)	(2.57)	(0.76)	2.40	5.43	(9.06)	(2.57)	7.09	6.61	9.44	10.18	6.64	5.44	15.61	9.04	1.49	10.49	21.54	12.37	3.46	12.70	20.22	(26.03)	
60S&P/40BCIGC	(4.88)	(2.02)	(0.78)	2.05	4.67	(7.55)	(2.02)	6.34	5.96	8.35	9.18	6.22	5.33	13.58	8.06	1.52	9.41	18.11	11.12	3.91	11.84	18.11	(22.08)	
50S&P/50BCIGC	(3.85)	(1.49)	(0.80)	1.71	3.92	(6.04)	(1.49)	5.59	5.30	7.25	8.16	5.79	5.19	11.59	7.08	1.51	8.35	14.75	9.89	4.30	10.93	15.98	(17.96)	
40S&P/60BCIGC	(2.81)	(0.97)	(0.83)	1.37	3.17	(4.52)	(0.97)	4.82	4.63	6.15	7.13	5.33	5.03	9.64	6.08	1.47	7.30	11.48	8.67	4.67	9.99	13.85	(13.69)	
60S&P/40 BCAGG	(4.68)	(2.35)	(0.97)	1.99	4.59	(7.56)	(2.35)	6.50	6.24	8.51	9.42	6.44	5.48	14.21	8.31	1.28	10.62	17.56	11.31	4.69	12.13	18.40	(22.06)	
50S&P/20EAFE (net)/30BC AGG	(4.93)	(4.79)	(1.06)	1.43	4.11	(8.87)	(4.79)	5.95	5.24	8.22	9.07	6.25	5.19	16.70	7.06	0.92	7.52	19.36	12.84	1.08	11.54	21.53	(27.46)	
70 MSCI ACWI(net) / 30 Citi WBIG	(4.33)	(6.87)	(0.27)	(0.44)	2.71	(8.68)	(6.87)	5.52	3.42	6.26	7.46	5.55	#N/A	18.79	6.20	(2.44)	3.21	14.87	12.56	(3.37)	10.47	25.74	(29.78)	
60 MSCI ACWI(net) / 40 Citi WBIG	(3.42)	(6.04)	(0.04)	(0.77)	2.19	(7.31)	(6.04)	5.14	3.12	5.54	6.76	5.30	#N/A	17.11	5.63	(2.50)	2.88	12.32	11.36	(2.05)	9.68	22.81	(25.23)	
50 MSCI ACWI(net) / 50 Citi WBIG	(2.52)	(5.23)	0.18	(1.09)	1.67	(5.92)	(5.23)	4.75	2.80	4.81	6.05	5.03	#N/A	15.45	5.04	(2.58)	2.55	9.82	10.16	(0.75)	8.86	19.91	(20.44)	
70 MSCI ACWI(net) / 30 BC AGG	(4.38)	(6.48)	(1.05)	0.33	2.99	(8.54)	(6.48)	5.36	3.87	6.61	7.88	5.74	#N/A	17.50	6.42	(1.30)	4.77	14.87	12.66	(2.67)	11.31	25.93	(30.17)	
60 MSCI ACWI(net) / 40 BC AGG	(3.49)	(5.52)	(1.09)	0.26	2.56	(7.11)	(5.52)	4.92	3.72	5.99	7.31	5.55	#N/A	15.41	5.92	(0.98)	4.96	12.32	11.48	(1.13)	10.77	23.03	(25.77)	
S&P Target Risk Aggressive	(5.50)	(7.65)	(0.52)	0.03	3.40	(10.25)	(7.65)	6.08	4.68	8.53	9.96	#N/A	#N/A	20.06	7.66	(0.79)	6.11	22.52	15.19	(1.58)	17.08	26.48	(35.12)	
S&P Target Risk Conservative	(1.15)	(2.73)	(0.82)	(0.14)	1.44	(3.17)	(2.73)	3.89	2.90	3.95	4.85	#N/A	#N/A	9.70	5.09	(1.06)	3.97	6.71	6.59	4.35	7.28	9.38	(9.28)	
S&P Target Risk Growth	(3.78)	(5.69)	(0.64)	(0.03)	2.61	(7.47)	(5.69)	5.26	4.19	6.83	7.86	#N/A	#N/A	15.93	6.67	(0.94)	6.30	16.03	11.44	1.30	11.18	19.15	(26.33)	
S&P Target Risk Moderate	(2.03)	(3.72)	(0.76)	(0.11)	1.83	(4.63)	(3.72)	4.37	3.28	5.03	5.91	#N/A	#N/A	11.78	5.63	(1.06)	4.49	10.47	8.59	2.26	8.22	13.81	(17.58)	

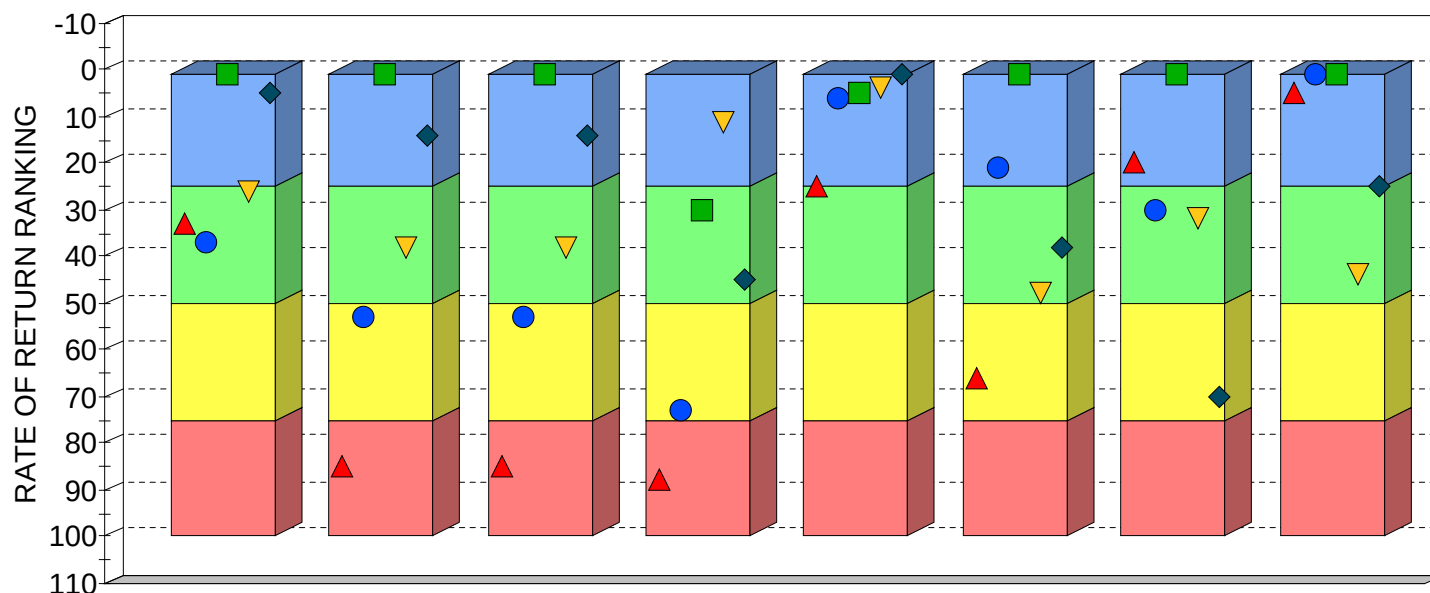
	THRU 11/30/18		2018 QUARTERLY RETURNS				ANNUALIZED RETURNS ENDING 11/30/2018								CALENDAR YEAR RETURNS									
	MONTH	YTD	Q1	Q2	Q3	Q4	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	15 Yrs	20 Yrs	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	
CPI (1 month lag, Seasonally Adjusted)	0.02	1.98	0.60	0.56	0.45		2.13	2.03	1.57	1.52	1.72	2.11	2.19	2.03	2.18	0.67	1.49	1.76	3.02	1.43	2.82	(0.02)	4.11	

This document is prepared by UBS Financial Services Inc. and is for informational purposes only. The information contained herein has been obtained from Morningstar, Bureau of Labor Statistics and has not been independently verified by UBS Financial Services Inc. Index information relates to historical performance of market indexes and not the performance of actual strategies. The past performance of the indexes is not a guarantee of future results because each index reflects an unmanaged universe of securities and does not include any deduction for advisory fees or other expenses that would reduce actual returns. Individuals cannot invest directly in any index. This does not constitute a solicitation for the purchase or sale of any security.

QUARTILE RANKING ANALYSIS

FOREIGN LARGE BLEND UNIVERSE

TRAILING PERIODS ENDING DECEMBER 31, 2018



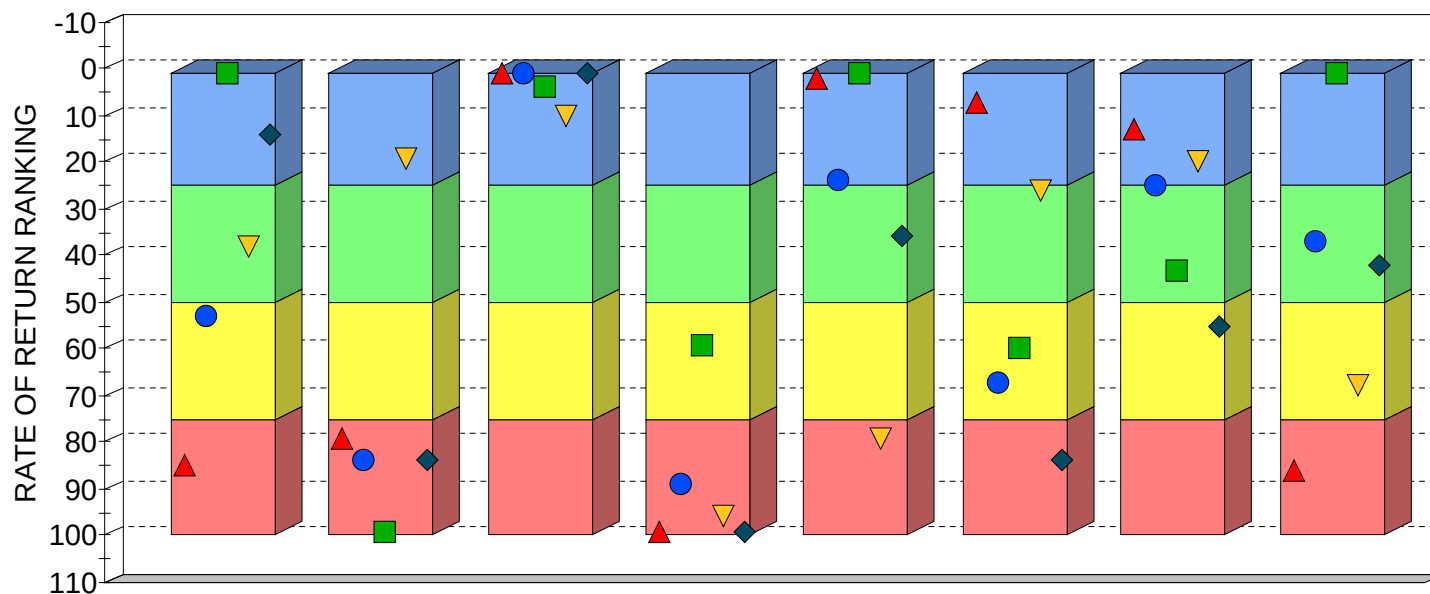
	Latest Quarter	Year To Date	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
HIGH (0.05)	-9.72	-10.29	-10.29	6.46	4.85	2.29	7.02	8.88
FIRST QUARTILE	-11.94	-13.94	-13.94	3.98	3.25	0.62	5.76	6.57
MEDIAN	-13.04	-15.17	-15.17	3.18	2.44	-0.07	5.21	5.90
THIRD QUARTILE	-13.92	-16.94	-16.94	1.94	1.27	-0.74	4.51	5.17
LOW (0.95)	-16.15	-20.85	-20.85	-0.42	-0.71	-2.30	2.64	3.72
MEAN	-13.03	-15.42	-15.42	2.94	2.28	-0.08	5.08	5.91
VALID COUNT	649	636	636	629	608	544	525	466

	Latest Quarter		Year To Date		1 Year		2 Years		3 Years		5 Years		7 Years		10 Years	
	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK
▲ Dodge & Cox International Stock+	-12.39	33	-17.98	85	-17.98	85	0.82	88	3.24	25	-0.48	66	5.89	20	7.72	5
● Hartford Schroders Intl Multi-Cp Val I+	-12.57	37	-15.41	53	-15.41	53	2.13	73	4.30	6	0.72	21	5.64	30	8.55	1
■ Tweedy, Browne Global Value+	-8.82	1	-6.67	1	-6.67	1	3.79	30	4.40	5	2.62	1	7.06	1	9.26	1
▼ Vanguard International Value Inv+	-12.01	26	-14.52	38	-14.52	38	4.58	11	4.54	4	-0.05	48	5.60	32	6.03	44
◆ MSCI AC World Index ex US Value	-10.63	5	-13.45	14	-13.45	14	3.33	45	5.37	1	0.18	38	4.64	70	6.55	25

QUARTILE RANKING ANALYSIS

FOREIGN LARGE BLEND UNIVERSE

CALENDAR PERIODS ENDING DECEMBER 31, 2018

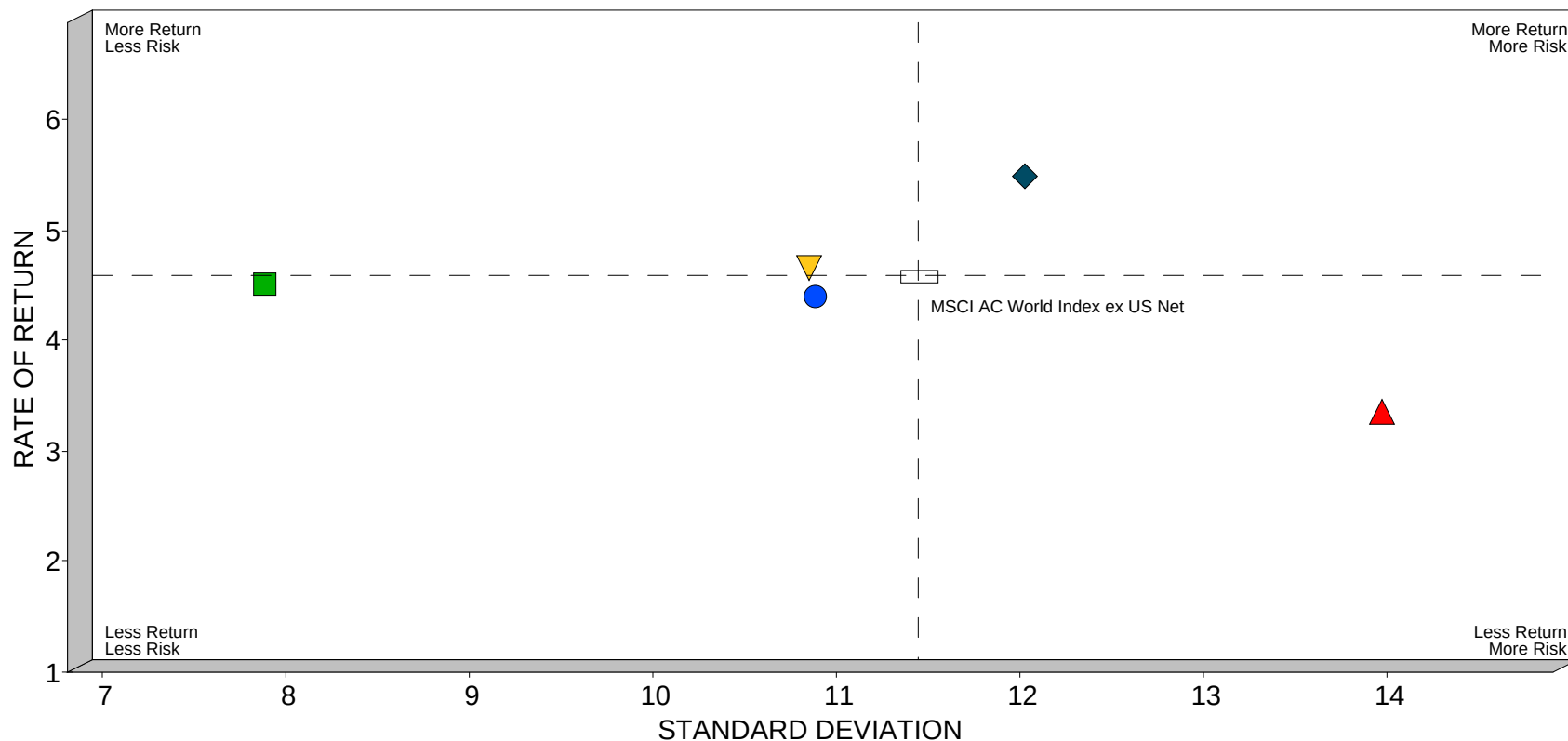


	2018	2017	2016	2015	2014	2013	2012	2011
HIGH (0.05)	-10.29	30.54	6.48	5.71	0.98	28.13	26.76	-6.27
FIRST QUARTILE	-13.94	27.30	2.56	0.58	-4.07	22.25	19.53	-11.54
MEDIAN	-15.17	25.38	0.93	-1.00	-5.41	20.59	18.02	-13.33
THIRD QUARTILE	-16.94	24.24	-0.82	-2.79	-6.42	17.74	16.27	-15.06
LOW (0.95)	-20.85	19.20	-3.79	-8.80	-9.79	11.68	12.67	-21.84
MEAN	-15.42	25.64	0.98	-1.31	-5.04	20.12	18.04	-13.19
VALID COUNT	636	629	608	560	544	540	525	490

	2018		2017		2016		2015		2014		2013		2012		2011	
	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK
▲ Dodge & Cox International Stock+	-17.98	85	23.94	79	8.26	1	-11.35	99	0.08	2	26.31	7	21.03	13	-15.97	86
● Hartford Schroders Intl Multi-Cp Val I+	-15.41	53	23.29	84	8.80	1	-4.82	89	-4.04	24	18.57	67	19.45	25	-12.40	37
■ Tweedy, Browne Global Value+	-6.67	1	15.43	99	5.62	4	-1.46	59	1.51	1	19.62	60	18.38	43	-4.13	1
▼ Vanguard International Value Inv+	-14.52	38	27.96	19	4.46	10	-6.44	96	-6.69	79	22.15	26	20.18	20	-14.58	68
◆ MSCI AC World Index ex US Value	-13.45	14	23.35	84	9.59	1	-9.59	99	-4.60	36	15.65	84	17.68	55	-12.71	42

3 YEAR TOTAL RISK REWARD

DECEMBER 31, 2015 TO DECEMBER 31, 2018



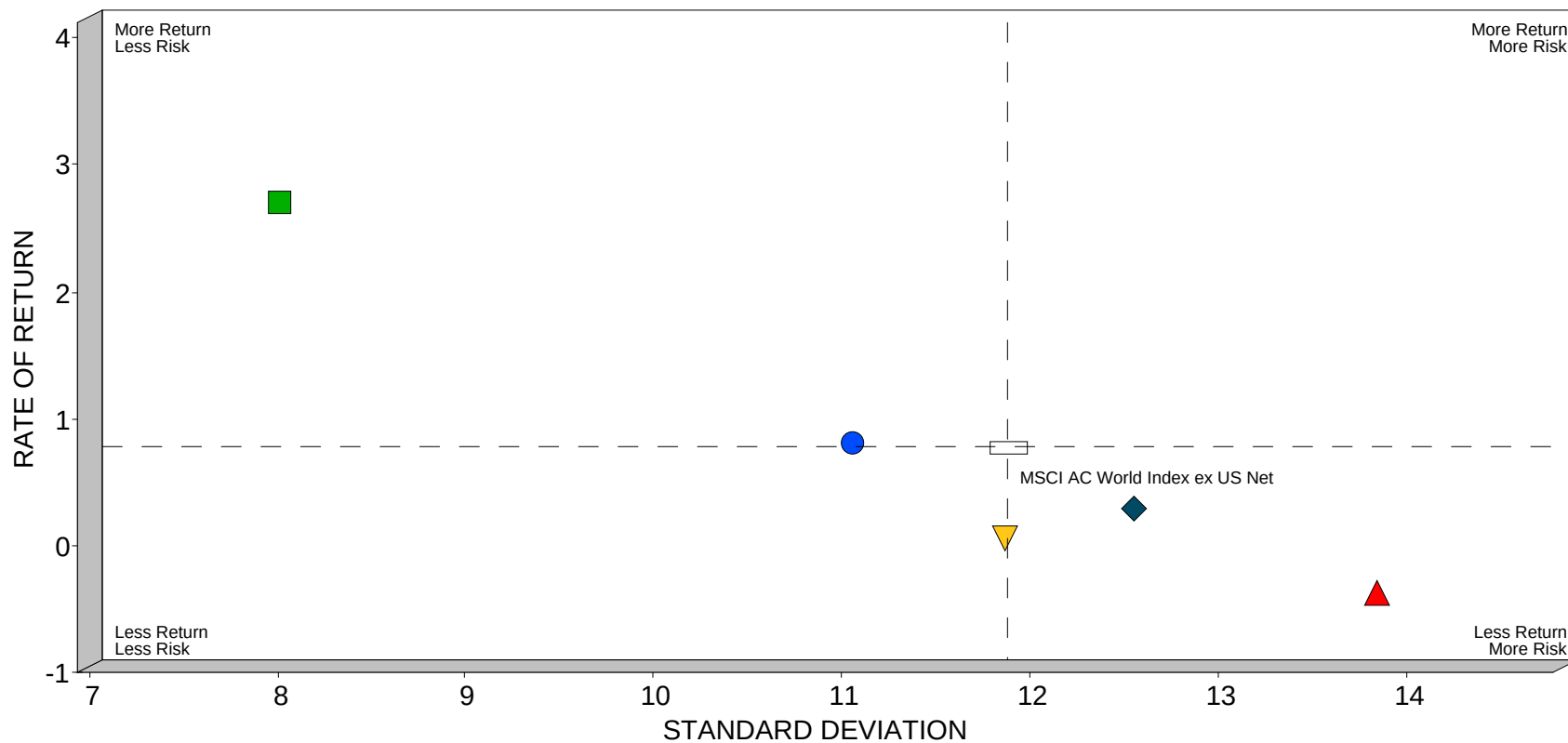
	ROR	Std Dev Pop	Alpha	Info Ratio Pop	R-Squared
▲ Dodge & Cox International Stock+	3.24	13.91	-1.41	-0.23	0.87
● Hartford Schroders Intl Multi-Cp Val I+	4.30	10.81	0.04	-0.07	0.95
■ Tweedy, Browne Global Value+	4.40	7.80	1.19	-0.01	0.75
▼ Vanguard International Value Inv+	4.54	10.79	0.28	0.03	0.96
◆ MSCI AC World Index ex US Value	5.37	11.96	0.85	0.31	0.94

RISK BENCHMARK USED FOR THIS ANALYSIS: MSCI AC WORLD INDEX EX US NET

+ THIS INVESTMENT OR STRATEGY IS NOT AVAILABLE THROUGH UBS. SEE "IMPORTANT INFORMATION" SECTION FOR ADDITIONAL INFORMATION.

5 YEAR TOTAL RISK REWARD

DECEMBER 31, 2013 TO DECEMBER 31, 2018



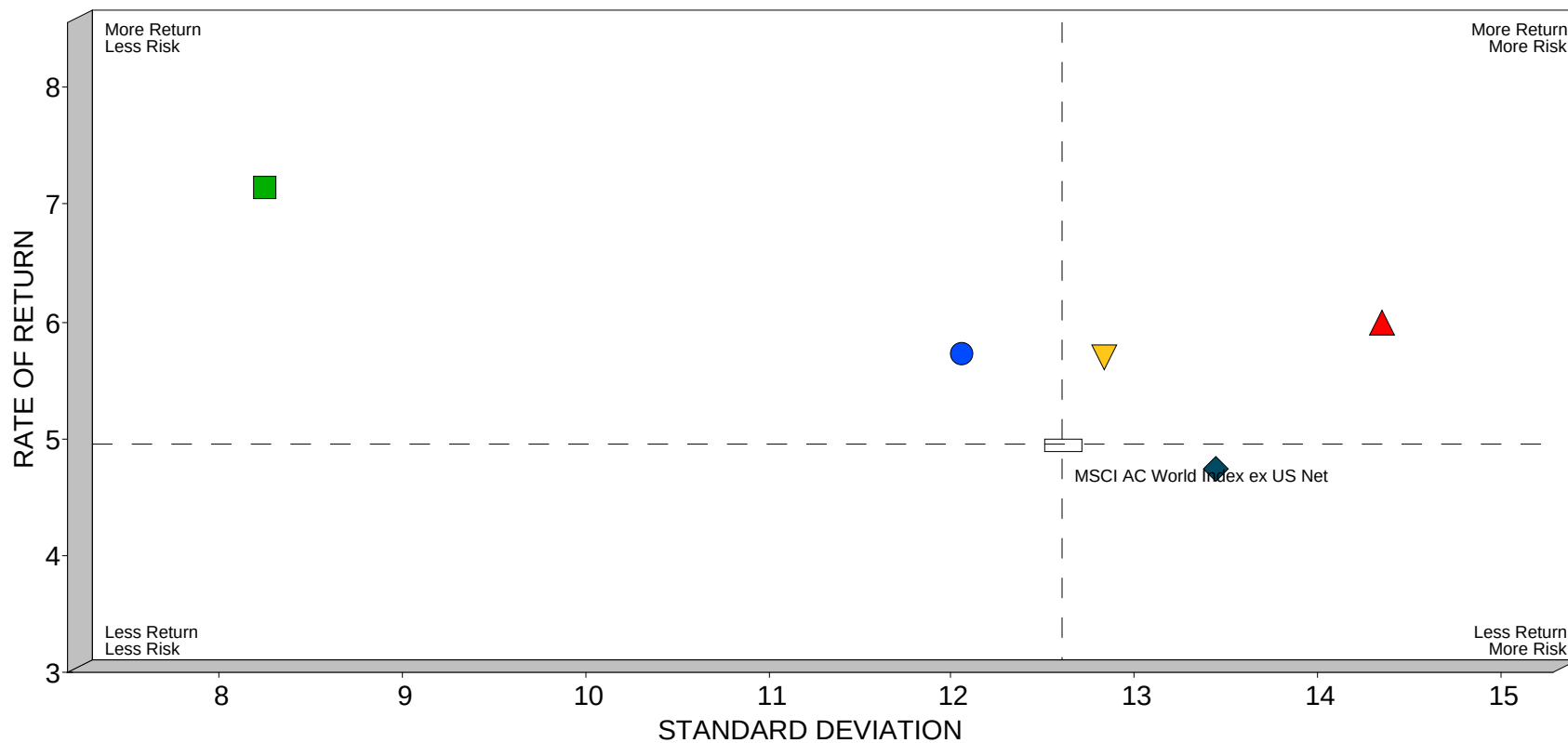
	ROR	Std Dev Pop	Alpha	Info Ratio Pop	R-Squared
▲ Dodge & Cox International Stock+	-0.48	13.78	-0.97	-0.24	0.89
● Hartford Schroders Intl Multi-Cp Val I+	0.72	10.98	0.01	0.02	0.96
■ Tweedy, Browne Global Value+	2.62	7.94	1.83	0.32	0.77
▼ Vanguard International Value Inv+	-0.05	11.80	-0.71	-0.29	0.96
◆ MSCI AC World Index ex US Value	0.18	12.48	-0.43	-0.20	0.96

RISK BENCHMARK USED FOR THIS ANALYSIS: MSCI AC WORLD INDEX EX US NET

+ THIS INVESTMENT OR STRATEGY IS NOT AVAILABLE THROUGH UBS. SEE "IMPORTANT INFORMATION" SECTION FOR ADDITIONAL INFORMATION.

7 YEAR TOTAL RISK REWARD

DECEMBER 31, 2011 TO DECEMBER 31, 2018



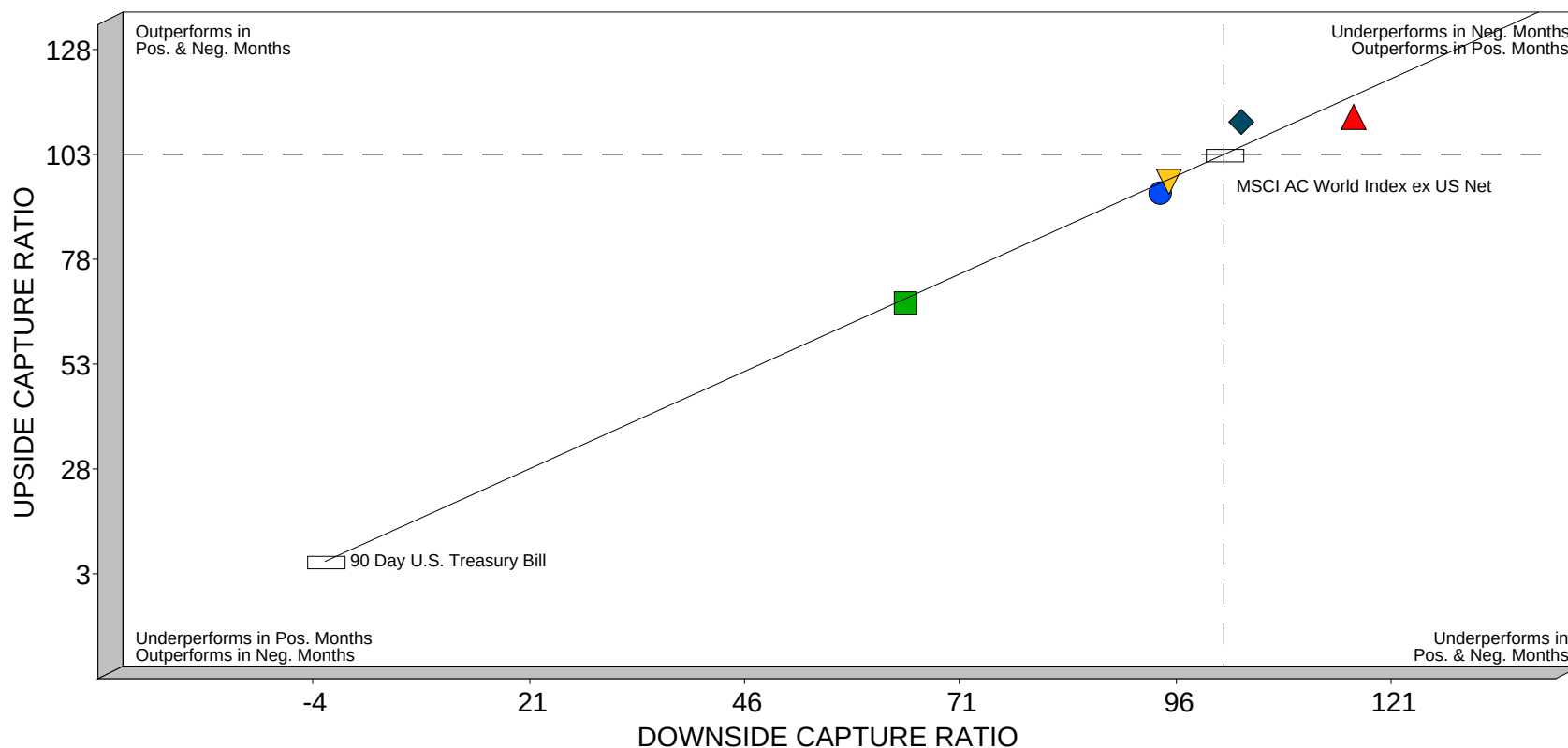
	ROR	Std Dev Pop	Alpha	Info Ratio Pop	R-Squared
▲ Dodge & Cox International Stock+	5.89	14.29	0.81	0.23	0.90
● Hartford Schroders Intl Multi-Cp Val I+	5.64	11.99	0.98	0.34	0.97
■ Tweedy, Browne Global Value+	7.06	8.17	3.86	0.33	0.77
▼ Vanguard International Value Inv+	5.60	12.77	0.75	0.30	0.96
◆ MSCI AC World Index ex US Value	4.64	13.38	-0.35	-0.09	0.97

RISK BENCHMARK USED FOR THIS ANALYSIS: MSCI AC WORLD INDEX EX US NET

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UPSIDE VS. DOWNSIDE MARKET CAPTURE ANALYSIS

3 YEAR PERIOD ENDING DECEMBER 31, 2018



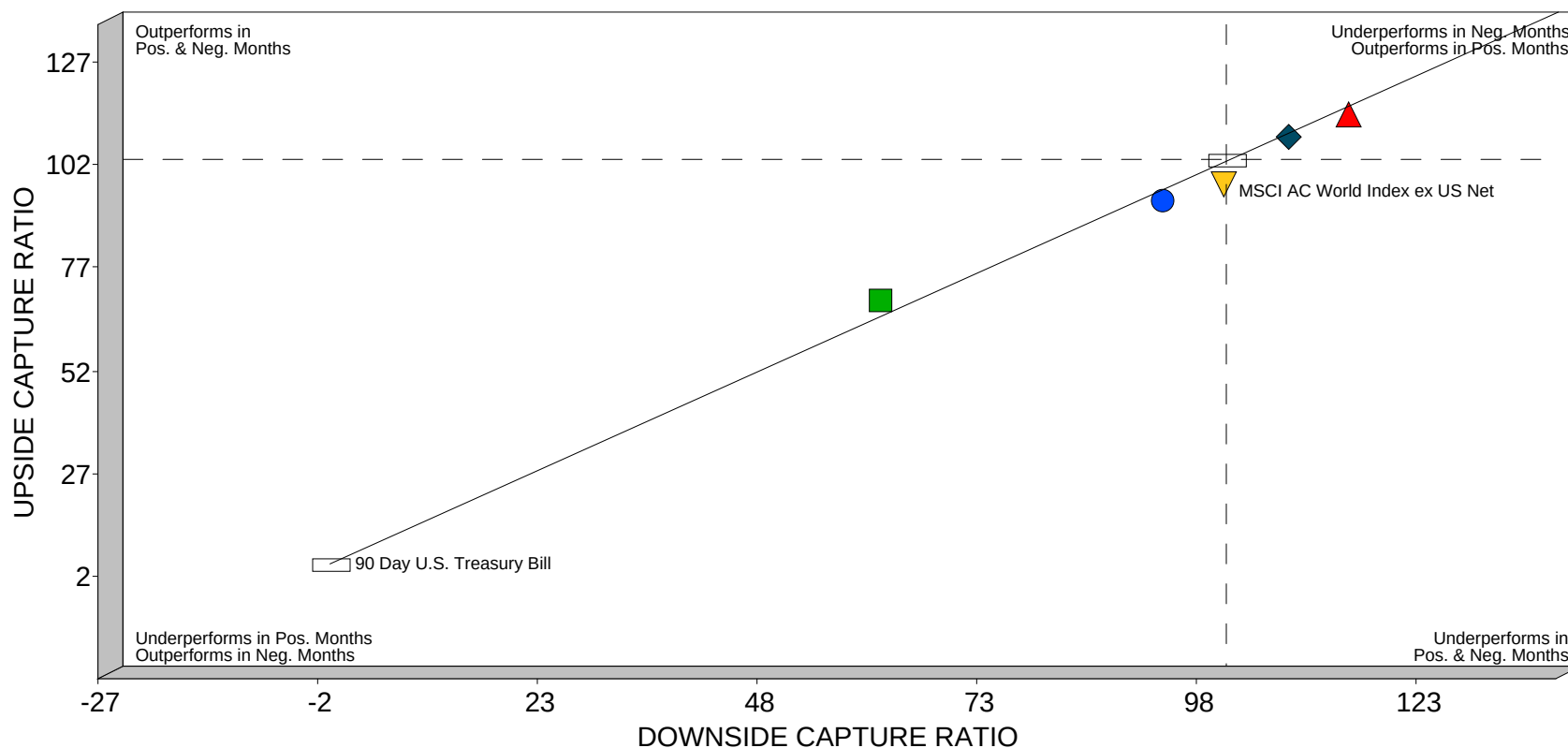
	ROR	Upside Mkt Cap Return	Dnside Cap Return	Upside Cap Ratio	Dnside Cap Ratio
▲ Dodge & Cox International Stock+	3.24	35.84	-36.46	109.10	115.01
● Hartford Schrodgers Intl Multi-Cp Val I+	4.30	29.96	-29.31	91.19	92.47
■ Tweedy, Browne Global Value+	4.40	21.36	-20.01	65.01	63.11
▼ Vanguard International Value Inv+	4.54	30.80	-29.68	93.78	93.62
◆ MSCI AC World Index ex US Value	5.37	35.38	-32.36	107.72	102.09

RISK BENCHMARK USED FOR THIS ANALYSIS: MSCI AC WORLD INDEX EX US NET

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UPSIDE VS. DOWNSIDE MARKET CAPTURE ANALYSIS

5 YEAR PERIOD ENDING DECEMBER 31, 2018



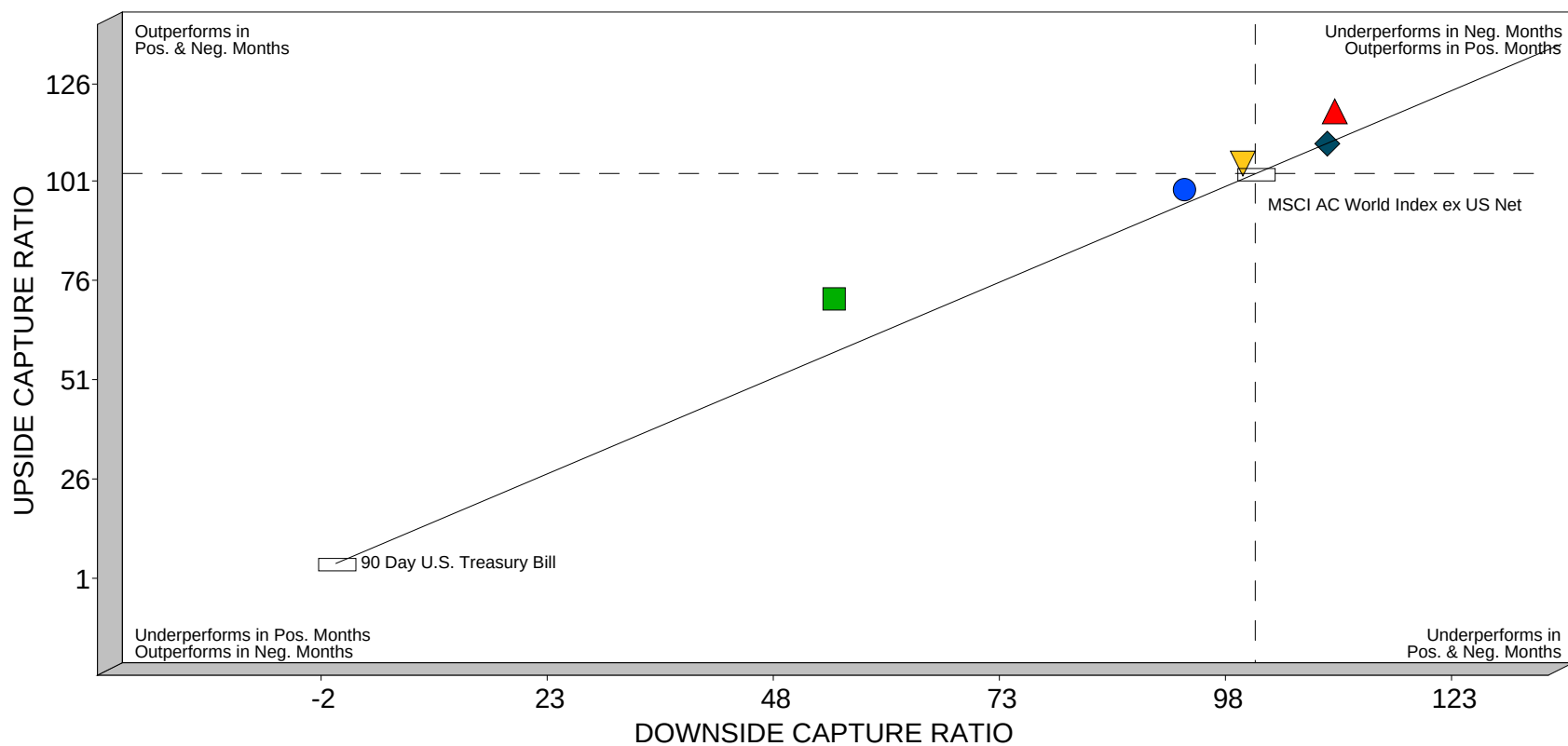
	ROR	Upside Mkt Cap Return	Dnside Cap Return	Upside Cap Ratio	Dnside Cap Ratio
▲ Dodge & Cox International Stock+	-0.48	39.18	-33.95	111.08	113.78
● Hartford Schroders Intl Multi-Cp Val I+	0.72	31.89	-27.56	90.40	92.37
■ Tweedy, Browne Global Value+	2.62	23.32	-18.02	66.11	60.40
▼ Vanguard International Value Inv+	-0.05	33.32	-29.71	94.45	99.59
◆ MSCI AC World Index ex US Value	0.18	37.39	-31.90	105.99	106.91

RISK BENCHMARK USED FOR THIS ANALYSIS: MSCI AC WORLD INDEX EX US NET

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UPSIDE VS. DOWNSIDE MARKET CAPTURE ANALYSIS

7 YEAR PERIOD ENDING DECEMBER 31, 2018



	ROR	Upside Mkt Cap Return	Dnside Cap Return	Upside Cap Ratio	Dnside Cap Ratio
▲ Dodge & Cox International Stock+	5.89	45.12	-33.39	115.78	108.69
● Hartford Schrodgers Intl Multi-Cp Val I+	5.64	37.41	-28.24	95.99	91.93
■ Tweedy, Browne Global Value+	7.06	26.64	-16.38	68.35	53.31
▼ Vanguard International Value Inv+	5.60	40.00	-30.25	102.63	98.47
◆ MSCI AC World Index ex US Value	4.64	41.84	-33.10	107.36	107.76

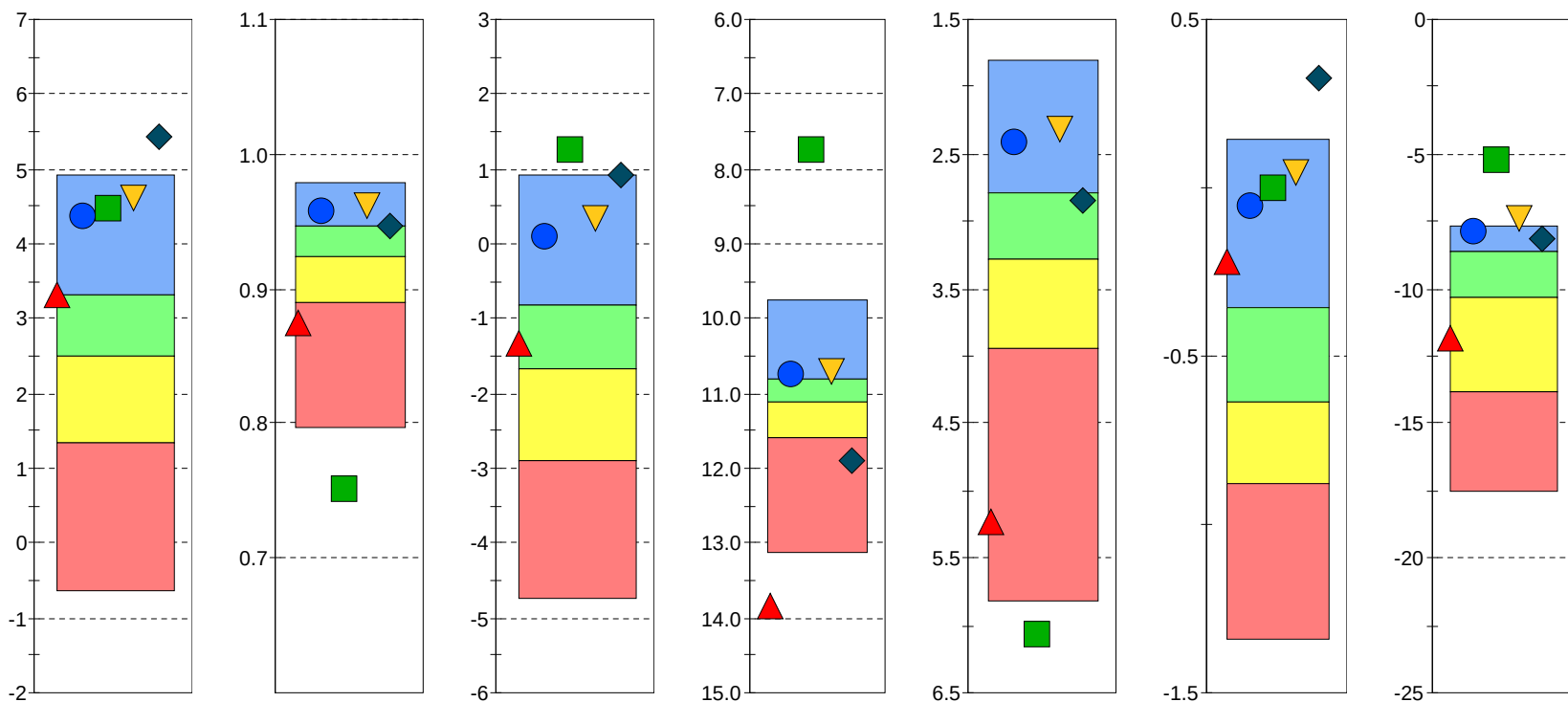
RISK BENCHMARK USED FOR THIS ANALYSIS: MSCI AC WORLD INDEX EX US NET

+ THIS INVESTMENT OR STRATEGY IS NOT AVAILABLE THROUGH UBS. SEE "IMPORTANT INFORMATION" SECTION FOR ADDITIONAL INFORMATION.

MULTI-STATISTIC QUARTILE RANKING BAR

FOREIGN LARGE BLEND UNIVERSE

DECEMBER 31, 2015 TO DECEMBER 31, 2018

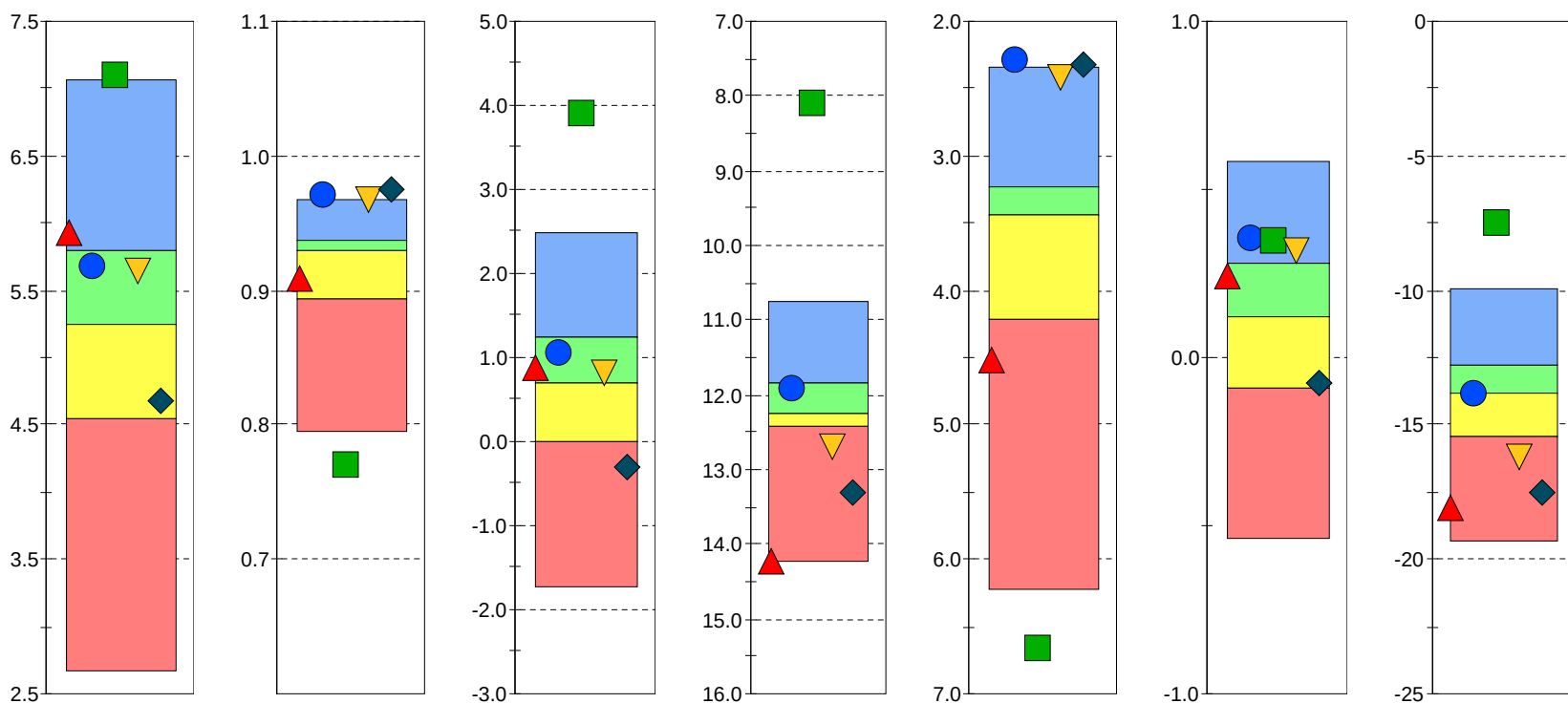


	ROR	R-Squared	Alpha	Std Dev Pop	Tracking Error Pop	Info Ratio Pop	Max Ddown%
HIGH (0.95)	4.85	0.97	0.86	9.82	1.84	0.13	-7.82
FIRST QUART	3.25	0.94	-0.89	10.89	2.83	-0.37	-8.84
MEDIAN	2.44	0.92	-1.73	11.19	3.32	-0.65	-10.51
THIRD QUART	1.27	0.89	-2.95	11.66	3.98	-0.90	-13.99
LOW (0.05)	-0.71	0.79	-4.82	13.19	5.85	-1.36	-17.75
MEAN	2.28	0.91	-1.90	11.27	3.49	-0.63	-11.64
VALID COUNT	608	608	608	608	608	608	608

	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK
▲ Dodge & Cox International St	3.24	25	0.87	84	-1.41	39	13.91	99	5.26	96	-0.23	16	-12.01	57
● Hartford Schrodgers Intl Multi-	4.30	6	0.95	6	0.04	8	10.81	18	2.46	7	-0.07	8	-8.01	1
■ Tweedy, Browne Global Valu	4.40	5	0.75	99	1.19	1	7.80	1	6.10	99	-0.01	5	-5.42	1
▼ Vanguard International Value	4.54	4	0.96	2	0.28	4	10.79	17	2.36	3	0.03	3	-7.62	1
◆ MSCI AC World Index ex US	5.37	1	0.94	25	0.85	1	11.96	84	2.88	28	0.31	1	-8.35	9

+ THIS INVESTMENT OR STRATEGY IS NOT AVAILABLE THROUGH UBS. SEE "IMPORTANT INFORMATION" SECTION FOR ADDITIONAL INFORMATION.

MULTI-STATISTIC QUARTILE RANKING BAR FOREIGN LARGE BLEND UNIVERSE DECEMBER 31, 2011 TO DECEMBER 31, 2018



	ROR	R-Squared	Alpha	Std Dev Pop	Tracking Error Pop	Info Ratio Pop	Max Ddown%
HIGH (0.95)	7.02	0.96	2.44	10.82	2.38	0.57	-10.09
FIRST QUART	5.76	0.93	1.19	11.92	3.26	0.26	-12.93
MEDIAN	5.21	0.92	0.64	12.33	3.48	0.10	-13.98
THIRD QUART	4.51	0.89	-0.07	12.50	4.25	-0.10	-15.60
LOW (0.05)	2.64	0.79	-1.79	14.31	6.26	-0.55	-19.54
MEAN	5.08	0.91	0.52	12.25	3.74	0.07	-14.27
VALID COUNT	525	525	525	525	525	525	525

	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK
▲ Dodge & Cox International St	5.89	20	0.90	69	0.81	42	14.29	99	4.56	82	0.23	30	-18.31	96
● Hartford Schrodgers Intl Multi-	5.64	30	0.97	1	0.98	32	11.99	30	2.31	1	0.34	14	-13.98	49
■ Tweedy, Browne Global Valu	7.06	1	0.77	99	3.86	1	8.17	1	6.70	99	0.33	15	-7.71	1
▼ Vanguard International Value	5.60	32	0.96	1	0.75	44	12.77	82	2.46	1	0.30	18	-16.42	82
◆ MSCI AC World Index ex US	4.64	70	0.97	1	-0.35	82	13.38	99	2.36	1	-0.09	73	-17.67	93

+ THIS INVESTMENT OR STRATEGY IS NOT AVAILABLE THROUGH UBS. SEE "IMPORTANT INFORMATION" SECTION FOR ADDITIONAL INFORMATION.



DODGE & COX DODGE & COX INTERNATIONAL STOCK

OVERALL RANKING:

μ μ μ μ

Product Type: Open Ended Mutual Fund
Mgmt. Co. Name: Dodge & Cox
Mgmt. Co. Address: Dodge & Cox Funds

40 Th Floor
San Francisco, CA 94104
USA

Phone: 800-621-3979

Website: www.dodgeandcox.com

Inception Date: 5/2001

CUSIP: 256206103

Ticker: DODFX

Share Class Type: No Load

Total Net Assets (11/2018): \$53,449,742,420

NAV (12/2018): 36.91

Yield: 2.93

Equity Style: Large Value

Fix Income Style: --

Morningstar Category: Foreign Large Value

Fund Objective: Foreign Stock

Portfolio Turnover: 0.63

Open to New Investors: Yes

Init. Min. Purchase (\$): 2500.00

Subsequent Purchase (\$): 100.00

Init. IRA Min. Purchase (\$): 1000.00

Portfolio Managers: Diana Strandberg

Tenure (yrs): 17.68

	MRQ	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	Incept
Manager	-12.3	-17.98	23.94	8.26	-11.35	0.08	26.31	21.03	-15.97	13.69	47.46	6.64
Benchmark	-11.4	-14.20	27.19	4.50	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	5.09
Excess	-0.92	-3.79	-3.25	3.77	-5.69	3.94	11.03	4.20	-2.26	2.54	6.01	1.55
90 TBILL	0.59	2.00	0.96	0.33	0.06	0.03	0.05	0.08	0.06	0.14	0.15	1.30

PERIOD	ROR	STDEV	ALPHA	BETA	RSQR	TRCKERR	SHARPE	INFORATIO
3 Yrs	3.24	12.41	-1.35	1.10	0.86	4.80	0.17	-0.26
4 Yrs	-0.62	13.50	-2.36	1.13	0.90	4.54	-0.11	-0.54
5 Yrs	-0.48	12.57	-0.99	1.09	0.88	4.43	-0.09	-0.26
6 Yrs	3.56	12.68	0.53	1.09	0.87	4.69	0.24	0.12
7 Yrs	5.89	13.53	0.75	1.10	0.90	4.53	0.40	0.23
8 Yrs	2.87	15.10	0.54	1.10	0.93	4.32	0.16	0.13
9 Yrs	4.02	16.32	0.65	1.10	0.94	4.20	0.22	0.18
10 Yrs	7.72	20.29	0.52	1.14	0.96	4.67	0.36	0.24
Inception	6.64	21.80	1.40	1.12	0.95	5.38	0.24	0.29

FEES AND EXPENSES

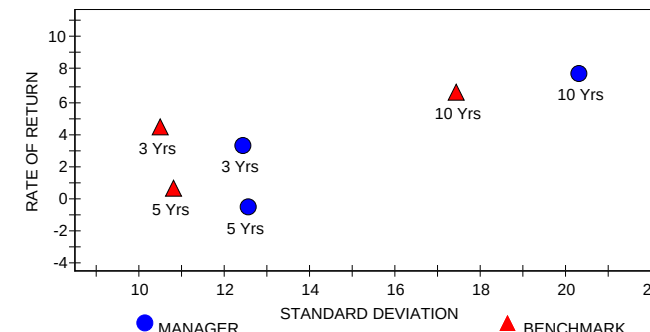
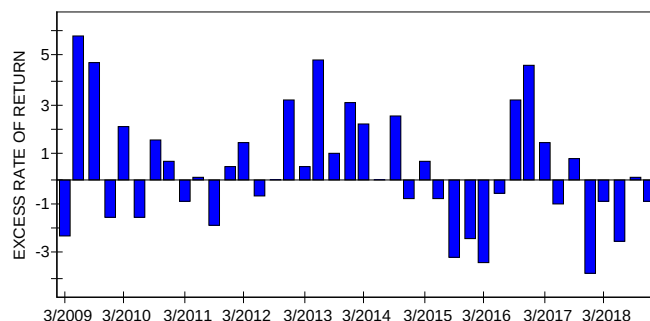
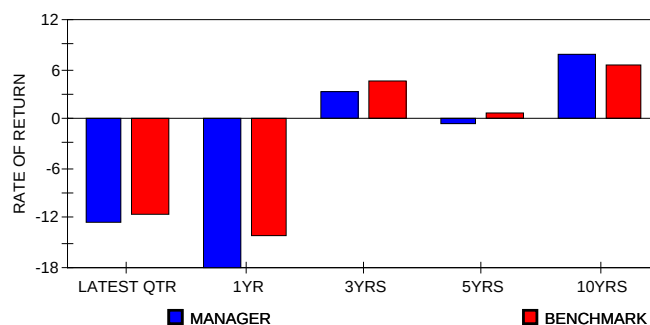
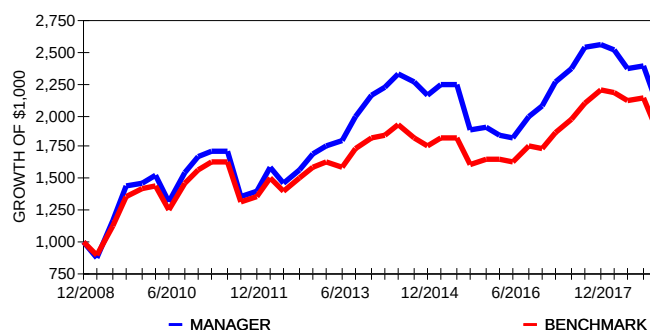
Deferred Load (%):	--	Cash (%)	1.34
Front Load (%):	--	Convertible (%)	0.00
Actual 12B-1 (%):	--	Non-US Bonds (%)	0.00
Expense Ratio (%):	0.63	Non-US Stocks (%)	89.30
Management Fee (%):	0.60	Preferred (%)	0.62
Redemption Fee (%):	--	US Bonds (%)	8.00
Admin Fee (%):	--	US Stocks (%)	8.74
		Other (%)	0.00

STYLE BREAKDOWN

Equity Large Value (%):	51.69	Cap Giant (%)	54.20
Equity Large Blend (%):	33.91	Cap Large (%)	39.50
Equity Large Growth (%):	10.02	Cap Medium (%)	5.63
Equity Mid Value (%):	0.98	Cap Small (%)	0.67
Equity Mid Blend (%):	2.05	Cap Micro (%)	0.00
Equity Mid Growth (%):	0.72		
Equity Small Value (%):	0.17		
Equity Small Blend (%):	0.11		
Equity Small Growth (%):	0.35		

FIXED-INCOME STATISTICS

Avg Eff/Mat/Duration (yrs):	--	Price/Earning Ratio (%)	14.18
Avg Weighted Coupon (%):	--	Price/Book Ratio (%)	1.28
Avg Credit Quality:		Price/Sales Ratio (%)	1.24
		Price/Cash Ratio (%)	7.79



RATE OF RETURN				GROWTH OF \$1,000		
PERIOD	MANAGER	BENCHMARK	EXCESS	MANAGER	BENCHMARK	PREMIUM
1 Yr	-17.98	-14.20	-3.79	\$820	\$858	-\$38
2 Yrs	0.82	4.47	-3.64	\$1,017	\$1,091	-\$75
3 Yrs	3.24	4.48	-1.23	\$1,101	\$1,140	-\$40
4 Yrs	-0.62	1.84	-2.46	\$976	\$1,076	-\$100
5 Yrs	-0.48	0.68	-1.15	\$976	\$1,034	-\$58
6 Yrs	3.56	2.98	0.58	\$1,233	\$1,192	\$41
7 Yrs	5.89	4.85	1.04	\$1,493	\$1,393	\$100
8 Yrs	2.87	2.33	0.54	\$1,254	\$1,202	\$52
9 Yrs	4.02	3.27	0.75	\$1,426	\$1,336	\$90
10 Yrs	7.72	6.57	1.14	\$2,103	\$1,890	\$213
Inception	6.64	5.09	1.55	\$3,078	\$2,382	\$696

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PERIODS ENDING: December 31, 2018

SINCE INCEPTION: June 30, 2001

BENCHMARK: MSCI ACWI x US Net



HARTFORD MUTUAL FUNDS

HARTFORD SCHRODERS INTL MULTI-CP VAL I

OVERALL RANKING:

μ μ μ μ μ

Product Type: Open Ended Mutual Fund
Mgmt. Co. Name: Hartford Mutual Funds
Mgmt. Co. Address: Hartford Mutual Funds II Inc
P O Box 2999
Hartford CT 06104-2999
USA

Phone: 888-843-7824
Website: www.hartfordfunds.com

Inception Date: 8/2006
CUSIP: 41665H417
Ticker: SIDNX

Share Class Type: Inv
Total Net Assets (12/2018): \$723,700,776
NAV (12/2018): 8.21
Yield: 3.12

Equity Style: Large Value
Fix Income Style: --
Morningstar Category: Foreign Large Value
Fund Objective: Foreign Stock

Portfolio Turnover: 63.00
Open to New Investors: Yes
Init. Min. Purchase (\$): 2000.00
Subsequent Purchase (\$): 50.00
Init. IRA Min. Purchase (\$): --

Portfolio Managers: Justin Abercrombie
Tenure (yrs): 12.35

	MRQ	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	Incept
Manager	-12.5	-15.41	23.29	8.80	-4.82	-4.04	18.57	19.45	-12.40	16.82	51.26	3.79
Benchmark	-11.4	-14.20	27.19	4.50	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	2.39
Excess	-1.11	-1.21	-3.90	4.30	0.85	-0.18	3.28	2.62	1.31	5.67	9.81	1.40
90 TBILL	0.59	2.00	0.96	0.33	0.06	0.03	0.05	0.08	0.06	0.14	0.15	0.88

PERIOD	ROR	STDEV	ALPHA	BETA	RSQR	TRCKERR	SHARPE	INFORATIO
3 Yrs	4.30	10.75	-0.13	1.00	0.94	2.59	0.30	-0.07
4 Yrs	1.94	10.99	0.15	0.95	0.95	2.55	0.10	0.04
5 Yrs	0.72	10.68	0.05	0.96	0.95	2.50	0.00	0.02
6 Yrs	3.49	11.16	0.53	1.00	0.95	2.46	0.26	0.21
7 Yrs	5.64	11.86	0.78	1.00	0.96	2.30	0.43	0.34
8 Yrs	3.19	13.29	0.88	0.99	0.97	2.25	0.21	0.38
9 Yrs	4.63	14.29	1.37	0.98	0.98	2.28	0.29	0.59
10 Yrs	8.55	18.92	1.55	1.07	0.97	3.49	0.43	0.57
Inception	3.79	20.19	1.40	1.04	0.96	4.08	0.14	0.34

FEES AND EXPENSES

Deferred Load (%):	--	Cash (%)	3.12
Front Load (%):	--	Convertible (%)	0.00
Actual 12B-1 (%):	--	Non-US Bonds (%)	0.00
Expense Ratio (%):	0.82	Non-US Stocks (%)	96.37
Management Fee (%):	0.72	Preferred (%)	0.19
Redemption Fee (%):	--	US Bonds (%)	0.00
Admin Fee (%):	--	US Stocks (%)	0.04
		Other (%)	0.27

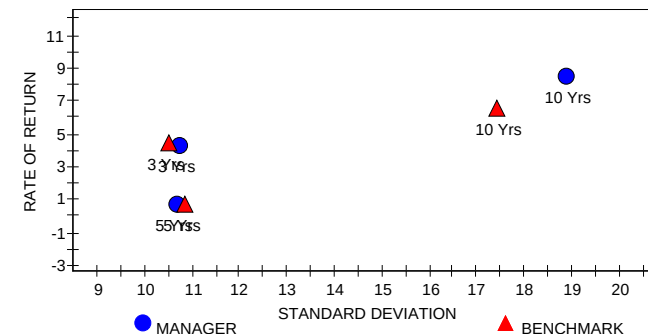
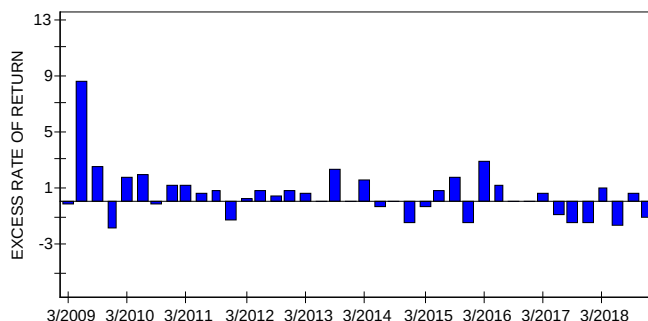
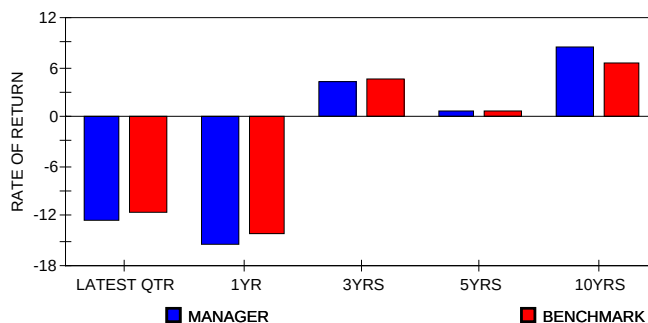
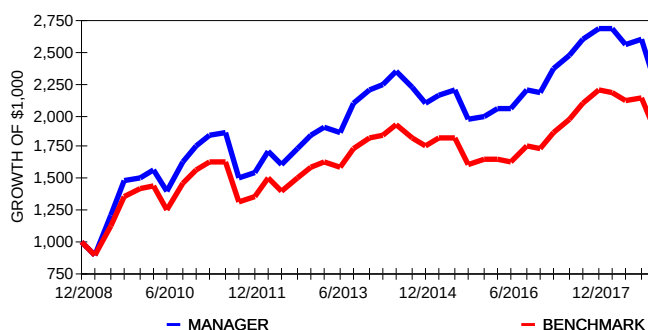
STYLE BREAKDOWN

Equity Large Value (%):	28.88	Cap Giant (%)	35.91
Equity Large Blend (%):	27.17	Cap Large (%)	29.60
Equity Large Growth (%):	9.88	Cap Medium (%)	24.63
Equity Mid Value (%):	12.06	Cap Small (%)	8.88
Equity Mid Blend (%):	8.89	Cap Micro (%)	0.97
Equity Mid Growth (%):	3.48		
Equity Small Value (%):	4.62		
Equity Small Blend (%):	3.74		
Equity Small Growth (%):	1.28		

FIXED-INCOME STATISTICS

Avg Eff/Mat/Duration (yrs):	--	Price/Earning Ratio (%)	10.29
Avg Weighted Coupon (%):	--	Price/Book Ratio (%)	1.37
Avg Credit Quality:		Price/Sales Ratio (%)	1.16
		Price/Cash Ratio (%)	6.93

EQUITY STATISTICS



	RATE OF RETURN			GROWTH OF \$1,000		
PERIOD	MANAGER	BENCHMARK	EXCESS	MANAGER	BENCHMARK	PREMIUM
1 Yr	-15.41	-14.20	-1.21	\$846	\$858	-\$12
2 Yrs	2.13	4.47	-2.34	\$1,043	\$1,091	-\$48
3 Yrs	4.30	4.48	-0.17	\$1,135	\$1,140	-\$6
4 Yrs	1.94	1.84	0.10	\$1,080	\$1,076	\$4
5 Yrs	0.72	0.68	0.04	\$1,036	\$1,034	\$2
6 Yrs	3.49	2.98	0.52	\$1,229	\$1,192	\$37
7 Yrs	5.64	4.85	0.79	\$1,468	\$1,393	\$75
8 Yrs	3.19	2.33	0.87	\$1,286	\$1,202	\$84
9 Yrs	4.63	3.27	1.35	\$1,502	\$1,336	\$166
10 Yrs	8.55	6.57	1.98	\$2,272	\$1,890	\$382
Inception	3.79	2.39	1.40	\$1,578	\$1,335	\$243

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PERIODS ENDING: December 31, 2018
SINCE INCEPTION: September 30, 2006
BENCHMARK: MSCI ACWI x US Net



TWEEDY, BROWNE TWEEDY, BROWNE GLOBAL VALUE

OVERALL RANKING:

μ μ μ μ μ

Product Type: Open Ended Mutual Fund
Mgmt. Co. Name: Tweedy, Browne
Mgmt. Co. Address: Tweedy Browne Fund Inc
350 Park Ave 9th Fl
New York, NY 10022
USA

Phone: 800-432-4789
Website: www.tweedy.com

Inception Date: 6/1993
CUSIP: 901165100

Ticker: TBGVX
Share Class Type: Other

Total Net Assets (12/2018): \$8,220,521,313
NAV (12/2018): 24.88

Yield: 1.49
Equity Style: Large Blend

Fix Income Style: --
Morningstar Category: Foreign Large Value

Fund Objective: Foreign Stock

Portfolio Turnover: 5.00

Open to New Investors: Yes

Init. Min. Purchase (\$): 2500.00

Subsequent Purchase (\$): 200.00

Init. IRA Min. Purchase (\$): 500.00

Portfolio Managers: William Browne

Tenure (yrs): 25.56

	MRQ	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	Incept
Manager	-8.82	-6.67	15.43	5.62	-1.46	1.51	19.62	18.38	-4.13	13.82	37.85	8.83
Benchmark	-11.4	-14.20	27.19	4.50	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	--
Excess	2.65	7.53	-11.76	1.13	4.20	5.37	4.33	1.55	9.58	2.66	-3.60	--
90 TBILL	0.59	2.00	0.96	0.33	0.06	0.03	0.05	0.08	0.06	0.14	0.15	2.43

PERIOD	ROR	STDEV	ALPHA	BETA	RSQR	TRCKERR	SHARPE	INFORATIO
3 Yrs	4.40	7.56	1.17	0.61	0.71	5.88	0.44	-0.01
4 Yrs	2.90	7.57	1.38	0.58	0.73	6.25	0.27	0.17
5 Yrs	2.62	7.03	1.85	0.56	0.74	5.97	0.28	0.33
6 Yrs	5.28	7.54	3.17	0.59	0.72	6.04	0.62	0.38
7 Yrs	7.06	7.82	3.82	0.59	0.76	6.19	0.84	0.36
8 Yrs	5.59	8.99	3.78	0.62	0.82	6.36	0.57	0.51
9 Yrs	6.47	9.37	4.09	0.60	0.84	6.96	0.65	0.46
10 Yrs	9.26	12.38	4.34	0.67	0.88	7.14	0.72	0.38
Inception	8.83	14.04	--	--	--	--	0.46	--

FEES AND EXPENSES

Deferred Load (%):	--	Cash (%)	6.88
Front Load (%):	--	Convertible (%)	0.00
Actual 12B-1 (%):	--	Non-US Bonds (%)	0.00
Expense Ratio (%):	1.36	Non-US Stocks (%)	79.49
Management Fee (%):	1.25	Preferred (%)	0.12
Redemption Fee (%):	2.00	US Bonds (%)	3.15
Admin Fee (%):	0.03	US Stocks (%)	10.37
		Other (%)	0.00

STYLE BREAKDOWN

Equity Large Value (%):	28.61	Cap Giant (%)	57.83
Equity Large Blend (%):	32.76	Cap Large (%)	21.89
Equity Large Growth (%):	18.50	Cap Medium (%)	15.66
Equity Mid Value (%):	2.07	Cap Small (%)	3.08
Equity Mid Blend (%):	13.49	Cap Micro (%)	1.53
Equity Mid Growth (%):	0.00		
Equity Small Value (%):	1.97		
Equity Small Blend (%):	1.07		
Equity Small Growth (%):	1.53		

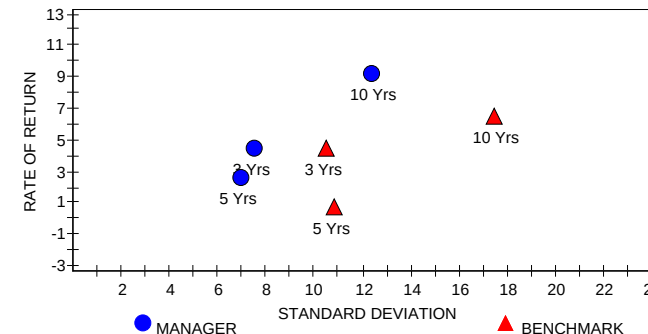
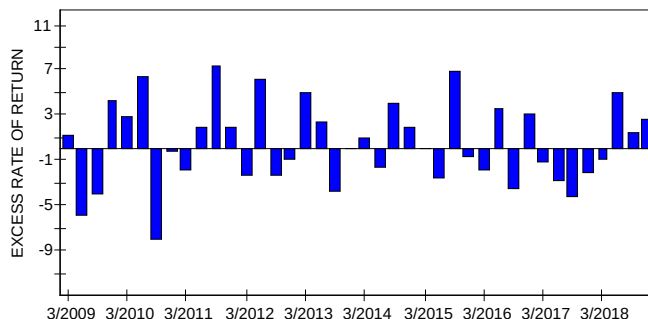
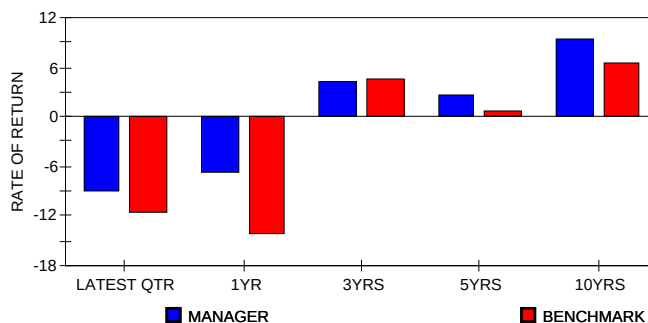
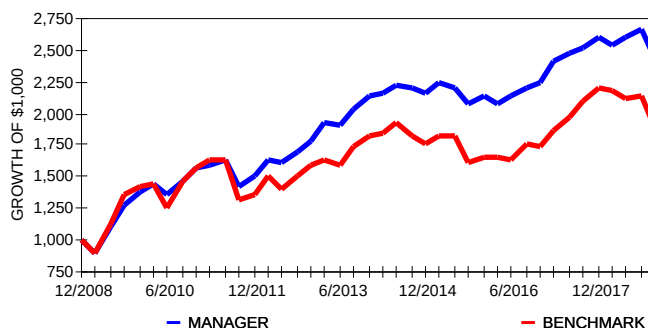
FIXED-INCOME STATISTICS

Avg Eff/Mat/Duration (yrs):	--	Price/Earning Ratio (%)	16.73
Avg Weighted Coupon (%):	--	Price/Book Ratio (%)	1.67
Avg Credit Quality:		Price/Sales Ratio (%)	1.13
		Price/Cash Ratio (%)	10.72

COMPOSITION OF ASSETS

MARKET CAP BREAKDOWN

EQUITY STATISTICS



	RATE OF RETURN			GROWTH OF \$1,000		
PERIOD	MANAGER	BENCHMARK	EXCESS	MANAGER	BENCHMARK	PREMIUM
1 Yr	-6.67	-14.20	7.53	\$933	\$858	\$75
2 Yrs	3.79	4.47	-0.67	\$1,077	\$1,091	-\$14
3 Yrs	4.40	4.48	-0.08	\$1,138	\$1,140	-\$2
4 Yrs	2.90	1.84	1.06	\$1,121	\$1,076	\$45
5 Yrs	2.62	0.68	1.95	\$1,138	\$1,034	\$104
6 Yrs	5.28	2.98	2.30	\$1,361	\$1,192	\$169
7 Yrs	7.06	4.85	2.21	\$1,612	\$1,393	\$219
8 Yrs	5.59	2.33	3.26	\$1,545	\$1,202	\$343
9 Yrs	6.47	3.27	3.20	\$1,759	\$1,336	\$423
10 Yrs	9.26	6.57	2.69	\$2,424	\$1,890	\$535
Inception	8.83	--	--	\$8,645	--	--

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PERIODS ENDING: December 31, 2018

SINCE INCEPTION: June 30, 1993

BENCHMARK: MSCI ACWI x US Net



VANGUARD VANGUARD INTERNATIONAL VALUE INV

OVERALL RANKING:

μ μ μ μ

Product Type: Open Ended Mutual Fund
Mgmt. Co. Name: Vanguard
Mgmt. Co. Address: Vanguard Trustees' Equity Fund
Po Box 2600 V26
Valley Forge PA 19482
USA

Phone: 800-662-7447
Website: www.vanguard.com

Inception Date: 5/1983
CUSIP: 921939203

Ticker: VTRIX
Share Class Type: Inv

Total Net Assets (12/2018): \$8,929,865,595

NAV (12/2018): 32.10

Yield: 2.84

Equity Style: Large Blend

Fix Income Style: --

Morningstar Category: Foreign Large Value

Fund Objective: Foreign Stock

Portfolio Turnover: 34.00

Open to New Investors: Yes

Init. Min. Purchase (\$): 3000.00

Subsequent Purchase (\$): 1.00

Init. IRA Min. Purchase (\$): --

Portfolio Managers: Sandy Nairn

Tenure (yrs): 10.63

	MRQ	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	Incept
Manager	-12.0	-14.52	27.96	4.46	-6.44	-6.69	22.15	20.18	-14.58	7.31	33.77	8.39
Benchmark	-11.4	-14.20	27.19	4.50	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	--
Excess	-0.54	-0.32	0.77	-0.04	-0.78	-2.82	6.86	3.35	-0.87	-3.84	-7.68	--
90 TBILL	0.59	2.00	0.96	0.33	0.06	0.03	0.05	0.08	0.06	0.14	0.15	3.63

PERIOD	ROR	STDEV	ALPHA	BETA	RSQR	TRCKERR	SHARPE	INFORATIO
3 Yrs	4.54	10.68	0.03	1.01	0.99	0.97	0.32	0.07
4 Yrs	1.68	11.84	-0.16	1.04	0.99	1.21	0.07	-0.13
5 Yrs	-0.05	11.46	-0.68	1.05	0.99	1.36	-0.06	-0.53
6 Yrs	3.35	11.73	0.28	1.06	0.97	2.15	0.24	0.17
7 Yrs	5.60	12.60	0.51	1.07	0.97	2.20	0.40	0.34
8 Yrs	2.84	14.19	0.47	1.06	0.98	2.22	0.17	0.23
9 Yrs	3.32	15.70	-0.05	1.08	0.98	2.47	0.19	0.02
10 Yrs	6.03	18.29	-0.64	1.04	0.98	2.67	0.31	-0.20
Inception	8.39	17.61	--	--	--	--	0.27	--

FEES AND EXPENSES

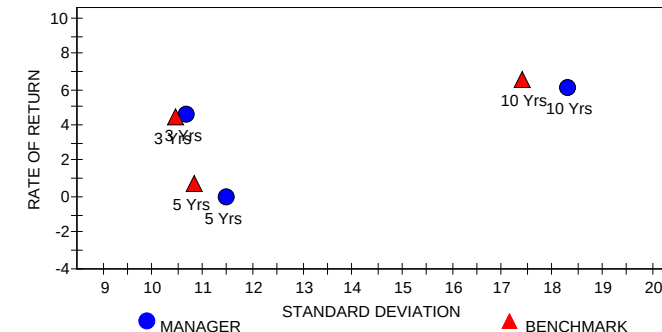
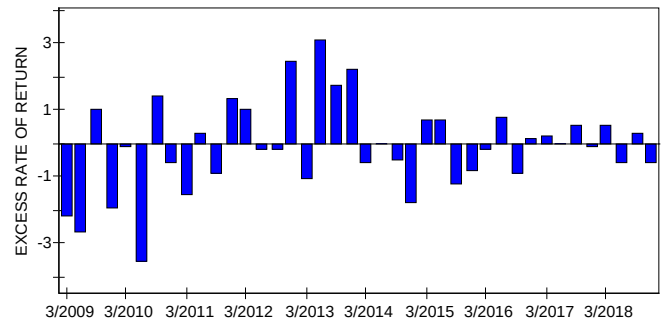
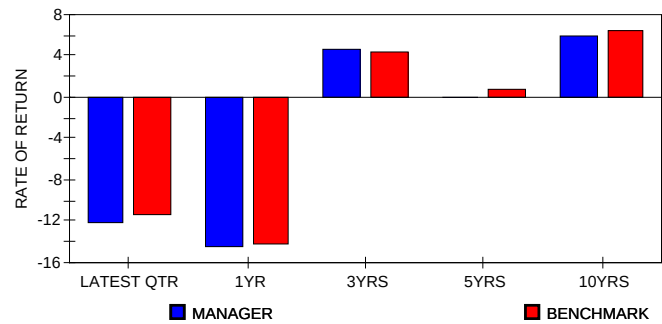
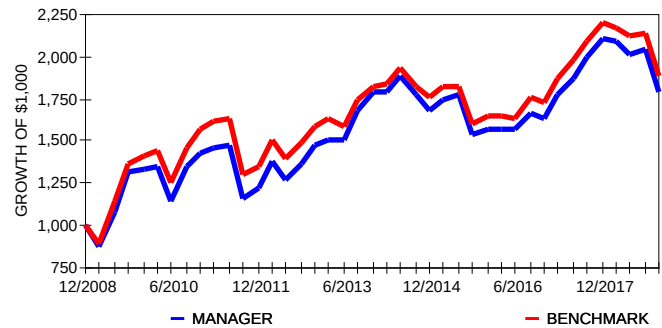
Deferred Load (%):	--	Cash (%)	4.45
Front Load (%):	--	Convertible (%)	0.00
Actual 12B-1 (%):	--	Non-US Bonds (%)	0.44
Expense Ratio (%):	0.40	Non-US Stocks (%)	88.05
Management Fee (%):	0.37	Preferred (%)	0.00
Redemption Fee (%):	--	US Bonds (%)	0.06
Admin Fee (%):	--	US Stocks (%)	5.35
		Other (%)	1.66

STYLE BREAKDOWN

Equity Large Value (%):	33.18	Cap Giant (%)	52.54
Equity Large Blend (%):	36.46	Cap Large (%)	36.25
Equity Large Growth (%):	19.77	Cap Medium (%)	11.12
Equity Mid Value (%):	7.17	Cap Small (%)	0.09
Equity Mid Blend (%):	1.73	Cap Micro (%)	0.00
Equity Mid Growth (%):	1.60		
Equity Small Value (%):	0.09		
Equity Small Blend (%):	0.00		
Equity Small Growth (%):	0.00		

FIXED-INCOME STATISTICS

Avg Eff/Mat/Duration (yrs):	--	Price/Earning Ratio (%)	13.73
Avg Weighted Coupon (%):	--	Price/Book Ratio (%)	1.50
Avg Credit Quality:		Price/Sales Ratio (%)	1.17
		Price/Cash Ratio (%)	9.71



PERIOD	RATE OF RETURN			GROWTH OF \$1,000		
	MANAGER	BENCHMARK	EXCESS	MANAGER	BENCHMARK	PREMIUM
1 Yr	-14.52	-14.20	-0.32	\$855	\$858	-\$3
2 Yrs	4.58	4.47	0.12	\$1,094	\$1,091	\$2
3 Yrs	4.54	4.48	0.07	\$1,143	\$1,140	\$2
4 Yrs	1.68	1.84	-0.16	\$1,069	\$1,076	-\$7
5 Yrs	-0.05	0.68	-0.73	\$997	\$1,034	-\$37
6 Yrs	3.35	2.98	0.37	\$1,218	\$1,192	\$26
7 Yrs	5.60	4.85	0.75	\$1,464	\$1,393	\$71
8 Yrs	2.84	2.33	0.51	\$1,251	\$1,202	\$49
9 Yrs	3.32	3.27	0.05	\$1,342	\$1,336	\$6
10 Yrs	6.03	6.57	-0.55	\$1,795	\$1,890	-\$95
Inception	8.39	--	--	\$17,489	--	--

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PERIODS ENDING: December 31, 2018
SINCE INCEPTION: June 30, 1983
BENCHMARK: MSCI ACWI x US Net

Important Information about this Report

This report includes presentations of managers' performance on a gross fee basis. Since the effects of management fees reduce performance, this report is intended only for one-on-one presentations to institutional and high net worth individuals who understand how the payment of fees, compounded over time, will reduce performance results and have indicated such accreditation in the MEPS questionnaire.

This report is intended as a general guide for your investment plans and is for your use only. This report provides, among other things, a preliminary comparison to various market indexes of the hypothetical investment performance that might have been achieved if the investment managers identified had managed an investor's account in accordance with the asset allocations and investment styles specified. It is not intended to provide and should not be construed as providing tax or legal advice.

The information contained in this report reflects a collaborative process between you and your Financial Advisor. Any recommendations are based upon our understanding of your responses to the profile questions and are current only as of the date printed on the front cover. Unless you make a specific request for an update, this report will not be updated to reflect any changes in any of the accounts covered, your investment objectives, risk tolerances or market conditions.

You should note that UBS Financial Services ("the Firm") has a variety of products and services that provide portfolio review and analysis. The recommendations and types of analyses provided (including recommended asset allocation strategies) may vary depending on the asset allocation model and program used.

This report may cover a number of your existing portfolio, each with potentially different investment objectives and risk parameters. As you instructed, the assets in these accounts have been considered as a whole in developing an overall asset allocation strategy that addresses your specific investment goal.

Investment Manager Performance

Performance results for investment managers that are included in our ACCESS program, which are indicated throughout the report, are based upon the ACCESS manager's time weighted rates of return of fully discretionary ACCESS accounts managed for at least one full calendar quarter. Performance results for non-ACCESS participating investment managers are obtained from Informa Investment Solutions' Plan Sponsor Network (PSN) as reported by each investment manager and do not reflect actual UBS Financial Services account performance. Your returns may vary from these results shown due to timing and other individual account factors. These

results are generally net of commissions on securities transactions but do not reflect the deduction of the investment manager's fee or UBS Financial Services' fee. The payment of these fees and expenses will reduce your return. The net effect of the deduction of fees on annualized performance, including the compounded effect over time, is determined by the relative size of the fee and the account's investment performance. For example, for an account with a 2.8% annual fee deducted quarterly, if the gross performance is 10% on an annual basis, the quarterly compounding effect of the fees will result in a final performance of approximately 7.1% per year, a reduction of 2.9% per year. Compounding will similarly affect the account's performance on a cumulative basis. It should also be noted that where your gross returns are compared to an index, the index performance also does not reflect any transaction costs or management fees.

Some investment managers presented in the strategies may have individual performance track records that are longer than the period shown in the report. Individual investment managers' performance records for longer time periods, if applicable, are available through your Financial Advisor. For complete information regarding these investment managers, their fees and performance, contact your UBSIC Consultant and see the manager's Form ADV, Part II.

Important Information Regarding Simulated Performance

The strategy is a new strategy and does not have a track record. The performance information presented is simulated, backtested and was created by applying the same investment perspectives and quantitative analysis of valuation, quality and sentiment that are employed in existing strategies managed by the investment manager, though differences exist in portfolio construction. Any improvements that were incorporated into the current investment process and quantitative models were assumed to exist for the entire simulation period. Implementation of the live strategy versus the simulated strategy will be virtually identical with the exception of intramonth trading. The hypothetical performance results for the model shown reflect the investment returns that an investor might have achieved by investing in the strategy for the entire period indicated. It assumes that, since inception, no cash was added to or assets withdrawn from the account and that all dividends, gains and other earnings in the account were reinvested. The simulation assumed once a month trading but trading for the live strategy will likely occur more frequently. Returns are simulated for the entire period and assume 1.0% transaction costs. The testing methodology used both internally and Factset provided data and applications to generate simulated historical portfolios. The results shown do not represent the results of actual trading using client assets, but were achieved by means of the

retroactive application of a model that was designed with the benefit of hindsight. The simulated performance was compiled after the end of the period depicted and does not represent the actual investment decisions of the advisor. These results do not reflect the effect of material economic and market factors on decision-making. As a result, there is no reason to believe that your portfolio will perform in a similar manner or that the investment manager would have made the same investment recommendations or achieved the same level of performance if it had been managing the strategy for the entire period for actual clients and charging fees for the advice, with the knowledge that clients would rely on the advice and in light of then-current market conditions. The strategy did not exist during the period presented. In addition, if investors had actually invested based on the strategy, their results would have differed from those shown because of differences in the timing and amounts of their investments. Past performance is never an indicator of future results.

Index Information

An actual investment in the securities included in the index would require an investor to incur transaction costs, which would lower the performance results. Please keep in mind that index information is for illustrative purposes and relates to historical performance of market indexes and not the performance of actual strategies or managers presented. The past performance of the indexes is not a guarantee of future results because each index reflects an unmanaged universe of securities and does not include any deduction for advisory fees or other expenses that would reduce actual returns. The performance shown should not be considered indicative of the performance of an actively managed portfolio for the same time period. Most managers are not restricted to investment in the same securities or security weightings as the corresponding indexes, so performance will vary. Finally, the performance of the indexes reflects the reinvestment of all income and dividends. A description of each index can be found in the Definitions section at the end of this report.

Recommended Strategies

The Manager Recommendations included in this Report are limited to those managers and strategies in our ACCESS, MAC Researched, and UBSIC Reviewed programs. While the due diligence process encompasses managers in each program, the frequency and depth of our due diligence reviews varies depending on which program the manager participates in. The level of due diligence encompasses a quantitative review of composite and actual performance data and portfolio analytics (including responses to a detailed questionnaire) and may also include on-site visits by one or more of our Investment Manager Research Analysts to each manager. For ACCESS managers, on-site visits occur on average at least once every 12 months. On-site visits to MAC Researched managers occur on average at least every 2 years. UBSIC Reviewed managers are subject to in-depth review on average at least every 2 years, but no on-site visits are conducted. The evaluation criteria covered in on-

site visits are the same for managers in both programs. In addition, for ACCESS managers, a detailed review of portfolio performance and attribution is performed on a quarterly basis to ensure that portfolios continue to be invested consistent with the manager's stated investment style. Portfolio attribution analysis is performed prior to on-site visits and may be done during periods of poor relative performance, but is not systematically performed on a quarterly basis. T

he strategies presented are hypothetical portfolios, and have not been tracked by UBS Financial Services. They were created as of the date of this report with the benefit of hindsight. The past performance of each recommended investment manager was known to UBS Financial Services when it developed the strategies and was a key factor in the Firm's decision to include each investment manager in a recommended strategy. There is no reason to believe that UBS Financial Services would have been able to develop this same strategy without knowing in advance how the recommended investment managers and the markets would perform, and these results are not an indicator that UBS Financial Services will be able to do so in the future.

The past performance results for the recommended strategy are hypothetical. They reflect the theoretical investment returns that an investor might have achieved by investing the amount and on the dates indicated on the investment profile section of this report, and by following the recommendation for initially allocating, and then reallocating from time to time, the account's assets among the different recommended investment managers. It assumes that, after establishing the account, the investor would not have added any cash to or withdrawn assets from the account and that all dividends, gains and other earnings in the account would have been reinvested in accordance with the Firm's recommendations. The recommended strategy in this format may not have existed as of the dates for which performance is shown. In addition, some of the investment managers recommended may not have been part of any UBS Financial Services sponsored program at that time. Actual assets of actual clients may not have been invested in accordance with these strategies during the time periods shown.

Past performance can never guarantee future results.

Assets Held at Other Financial Institutions

At your direction, we may also have considered assets that you hold at other financial institutions. Information about these assets is based solely on the information you have provided to us. We have not verified, and are not responsible for, the accuracy or completeness of this information.

You have provided the names of investment managers managing your assets at other financial institutions. This report provides performance information derived from a third party database, which is believed to be reliable, but which UBS Financial Services has not verified. The managers listed are in comparative portfolios and are for illustrative purposes. You may not have received the performance returns

presented here because they are gross of any management fees and other charges that have been assessed to your account. Therefore, any evaluation or analysis provided in this report regarding separate account managers, which includes assets

Please note that any discrepancies between the information you provided and the actual value of those assets at the time you choose to implement the strategy may also affect the outcome of the asset allocation strategy we discuss with you. As such, the results may differ from any illustrations shown on this report.

Taxes Implementing any strategy presented, including changing any strategy may result in incurring gains or losses for income tax purposes. UBS Financial Services does not provide tax advice. We recommend that you evaluate this report with your legal and/or tax advisor before taking any action because of the significance and complexity of tax considerations.

Periodic Reviews Since this report is based on information provided as of the date indicated on the cover, assumptions and estimates may change. For this reason, with your Financial Advisor, you should periodically revisit your current financial situation, your current strategy, and the assumptions it contains.

Definitions

General Definitions

Alpha – A measure of the difference between a fund's actual returns and its expected performance, given its level of risk as measured by beta. A positive alpha figure indicates the fund has performed better than its beta would predict. In contrast, a negative alpha indicates the fund's underperformance, given the expectations established by the fund's beta. All MPT statistics (alpha, beta, and R-squared) are based on a least-squared regression of the fund's return over Treasury bills.

Beta – A measure of a fund's sensitivity to market movements. The beta of the market is 1.00 by definition. Morningstar calculates beta by comparing a fund's excess return over T-bills to the market's excess return over T-bills, so a beta of 1.10 shows that the fund has performed 10% better than its benchmark index in up markets and 10% worse in down markets, assuming all other factors remain constant. Conversely, a beta of 0.85 indicates that the fund's excess return is expected to perform 15% worse than the market's excess return during up markets and 15% better during down markets.

Blend – A Blend is several managers allocated to percentages of a whole. The performance of the managers is weighted to create the blended performance.

Downside Risk – Downside Risk, or Semi-variance is the standard deviation (see Standard Deviation) of the portfolio's negative returns. Many consultants find the statistic extremely useful since it measures volatility in undesirable situations. The higher the value, the greater the historical Downside Risk.

Down Market Capture Ratio – A measure of managers' performance in down markets relative to the market itself. A down market is one in which the market's quarterly return is less than zero. The lower the manager's down-market capture ratio, the better the manager protected capital during a market decline. A value of 90 suggests that a manager's losses were 90% of the market loss when the market was down.

Information Ratio – The ratio of annualized expected residual return to residual risk. To calculate the IR the active return and tracking error must be annualized.

R-Squared – Reflects the percentage of a strategy's movements that can be explained by movements in its benchmark index. An R-squared of 100 indicates that all movements of a fund can be explained by movements in the index. Thus, portfolios invested in S&P 500 stocks will typically have an R-squared close to 100. Conversely, a low R-squared indicates that very few of the fund's movements can be explained by movements in its benchmark index. An R-squared measure of 35, for example, means that movements in the benchmark index can explain only 35% of the portfolio's movements.

Sharpe-Ratio – A risk-adjusted measure developed by Nobel Laureate William Sharpe. It is calculated by using standard deviation and excess return to determine reward per unit of risk. The higher the Sharpe Ratio, the better the portfolio's historical risk-adjusted performance is. The Sharpe Ratio is calculated for the past 36-month period by dividing a portfolio's annualized excess returns by its annualized standard deviation. Since this ratio uses standard deviation as its risk measure, it is most appropriately applied when analyzing a portfolio that is an investor's sole holding. The Sharpe Ratio can be used to compare two portfolios directly on how much risk a fund has to bear to earn excess return over the risk-free rate.

Standard Deviation – A measure of risk. A statistical measurement of dispersion about an average, which, for a portfolio, depicts how widely the returns varied over a certain period of time. Investors use the standard deviation of historical performance to try to predict the range of returns that are most likely for a given portfolio. When a portfolio has a high standard deviation, the predicted range of performance is wide, implying greater risk and volatility.

Tracking Error – Measures the divergence between the price behavior of a portfolio to the price behavior of a benchmark.

Up Market Capture Ratio – Up-market capture ratio is a measure of managers' performance in up markets relative to the market itself. An up market is one in which the market's quarterly return is greater than or equal to zero. The higher the manager's up-market capture ratio, the better the manager capitalized on a rising market. For example, a value of 110 suggests that the manager captured 110% of the up market (performed ten percent better than the market) when the market was up.

Index Definitions

First Boston Convertible Securities (FBCB) This is a performance benchmark for convertible accounts. This index generally includes 250 to 300 issues. To be included, convertible bonds and preferreds must be rated B- or better by Standard & Poor's (quality-related adjustments are made at the end of each calendar year), convertibles must have a minimum issue size of \$50 million (new issues are added in the month following their issuance), and preferreds must have a minimum of 500,000 shares outstanding. Eurobonds are also included if they are issued by US-domiciled companies, rated B- or higher by Standard & Poor's, and have an issue size greater than \$100 million.

Barclays Capital Aggregate Bond Index (BCAG) Composed of securities from Barclays Capital Brothers government/corporate bond index, mortgage-backed securities index, and the asset-backed securities index. Total return comprises price appreciation/depreciation and income as a percentage of the original investment. Indexes are rebalanced monthly by market capitalization.

Barclays Capital Corporate Int (BCIC) A subset of the Barclays Capital Corporate Bond Index covering all corporate, publicly issued, fixed-rate, nonconvertible US debt issues rated at least Baa with at least \$50 million principal outstanding and maturity less than 10 years.

Barclays Capital Corporate Long Term (BCLTC) A subset of the Barclays Capital Corporate Bond Index covering all corporate, publicly issued, fixed-rate, nonconvertible US debt issues rated at least Baa with at least \$50 million principal outstanding and maturity greater than 10 years.

Barclays Capital Government Corporate Bond Index (BCGC) Composed of all bonds that are investment grade (rated Baa or higher by Moody's or BBB or highest by S&P, if unrated by Moody's). Issues must have at least one year to maturity. Total return comprises price appreciation/depreciation and income as a percentage of the original investment. Indexes are rebalanced monthly by market capitalization.

Barclays Capital Government/Corporate Int (BCIGC) Composed of all bonds covered by the Barclays Capital Government/Corporate Bond Index with maturities between one and 9.99 years. Total return comprises price appreciation/depreciation and income as a percentage of the original investment. Indexes are rebalanced monthly by market capitalization.

Barclays Capital Government/Corporate Long Term (BCLTGC) Composed of all bonds covered by the Barclays Capital Government/Corporate Bond Index with maturities of 10 years or greater. Total return comprises price appreciation/depreciation and income as a percentage of the original investment. Indexes are rebalanced monthly by market capitalization.

Barclays Capital Mortgage Backed (BCMBS) Composed of all fixed-rate, securitized mortgage pools by GNMA, FNMA, and FHLMC, including GNMA graduated payment mortgages. The minimum principal amount required for inclusion is \$50 million. Total return comprises price appreciation/depreciation and income as a percentage of the original investment. Indexes are rebalanced monthly by market capitalization.

Barclays Capital Municipal Bond (BCM) Computed twice monthly from prices on approximately 1,100 bonds. Prices are supplied by Kenny Information Systems, Inc. The index is composed of approximately 60% revenue bonds and 40% state government obligations.

Barclays Capital Municipal 5 Year (BCMB) A subset of the Barclays Capital Municipal Bond Index where the average maturity of the bonds are five years.

MSCI (EAFE) An arithmetic, market value-weighted average of the performance of over 900 securities listed on the stock exchanges of the following countries in Europe, Australia and the Far East: Australia, Hong Kong, Norway, Austria, Ireland, Singapore, Belgium, Italy, Spain, Denmark, Japan, Sweden, Finland, Malaysia, Switzerland, France, Netherlands, United Kingdom, Germany, New Zealand.

MSCI Emerging Markets (EMF) The MSCI Emerging Markets (EMF) is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. As of April 2002 the MSCI EMF Index consisted of the following 26 emerging market country indexes: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Jordan, Korea, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, Turkey and Venezuela.

MSCI World S/B Net (MSCIW) The MSCI World Index is a free float-adjusted market capitalization index that is designed to measure global developed market equity performance. As of April 2002 the MSCI World Index consisted of the following 23 developed market country indexes: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom and the United States.

S&P 500 (SWPI) Covers 500 industrial, utility, transportation, and financial companies of the US markets (mostly NYSE issues). The index represents about 75% of NYSE market capitalization and 30% of NYSE issues. It is a capitalization-weighted index calculated on a total return basis with dividends reinvested.

Russell 1000 (R1000) Consists of the 1,000 largest securities in the Russell 3000 index. This large cap (market-oriented) index represents the universe of stocks from which most active money managers typically select. The Russell 1000 is highly correlated with the S&P 500 index.

Russell 1000 Growth (R1000G) Contains those Russell 1000 securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-earnings ratios, lower dividend yields and higher forecasted growth values than the value universe.

Russell 1000 Value (R1000V) Contains those Russell 1000 securities with a less-than-average growth orientation. It represents the universe of stocks from which value managers typically select. Securities in this index tend to exhibit low price-to-book and price-earnings ratios, higher dividend yields and lower forecasted growth values than the growth universe.

Russell 2000 (R2000) Consists of the smallest 2,000 securities in the Russell 3000 index, representing approximately 11% of the Russell 3000 total market capitalization. This index is widely regarded in the industry as the premier measure of small cap stocks.

Russell 2000 Growth (R2000G) Contains those Russell 2000 securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-earnings ratios, lower dividend yields and higher forecasted growth values than the value universe.

Russell 2000 Value (R2000V) Contains those Russell 2000 securities with a less-than-average growth orientation. Securities in this index tend to exhibit lower price-to-book and price-earnings ratios, higher dividend yields and lower forecasted growth values than the growth universe.

Russell 2500 (R2500) Consists of the bottom 500 securities in the Russell 1000 index and all 2,000 securities in the Russell 2000 index, representing approximately 23% of the Russell 3000 total market capitalization. This index is a good measure of small to medium-small stock performance.

Russell 2500 Growth (R2500G) Measures the performance of those Russell 2500 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 2500 Value (R2500V) Measures the performance of those Russell 2500 companies with lower price-to-book ratios and lower forecasted growth values.

Russell 3000 (R3000) Measures the performance of the 3,000 largest US companies based on total market capitalization, which represents approximately 98% of the investable US equity market.

Russell 3000 Growth (R3000G) Measures the performance of those Russell 3000® Index companies with higher price-to-book ratios and higher forecasted growth values. The stocks in this index are also members of either the Russell 1000® Growth or the Russell 2000® Growth indexes.

Russell 3000 Value (R3000V) Measures the performance of those Russell 3000® Index companies with lower price-to-book ratios and lower forecasted growth

values. The stocks in this index are also members of either the Russell 1000® Value or the Russell 2000® Value indexes.

Russell Midcap (RMID) Consists of the smallest 800 securities in the Russell 1000 index, as ranked by total market capitalization. This index accurately captures the medium-sized universe of securities and represents approximately 35% of the Russell 1000 total market capitalization.

Russell Midcap Growth (RMIDG) Contains those Russell Midcap securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-earnings ratios, lower dividend yields and higher forecasted growth values than the value universe. The stocks are also members of the Russell 1000 Growth Index.

Russell Midcap Value (RMIDV) Contains those Russell Midcap securities with a less-than-average growth orientation. Securities in this index tend to exhibit low price-to-book and price-earnings ratios, higher dividend yields and lower forecasted growth values than the growth universe. The stocks are also members of the Russell 1000 Value Index.

Salomon Brothers World Government Bond (SWGB) A market capitalization-weighted index consisting of government bond markets of the following countries: Australia, Austria, Belgium, Canada, Denmark, France, Germany, Italy, Japan, Netherlands, Spain, Sweden, United Kingdom, United States.

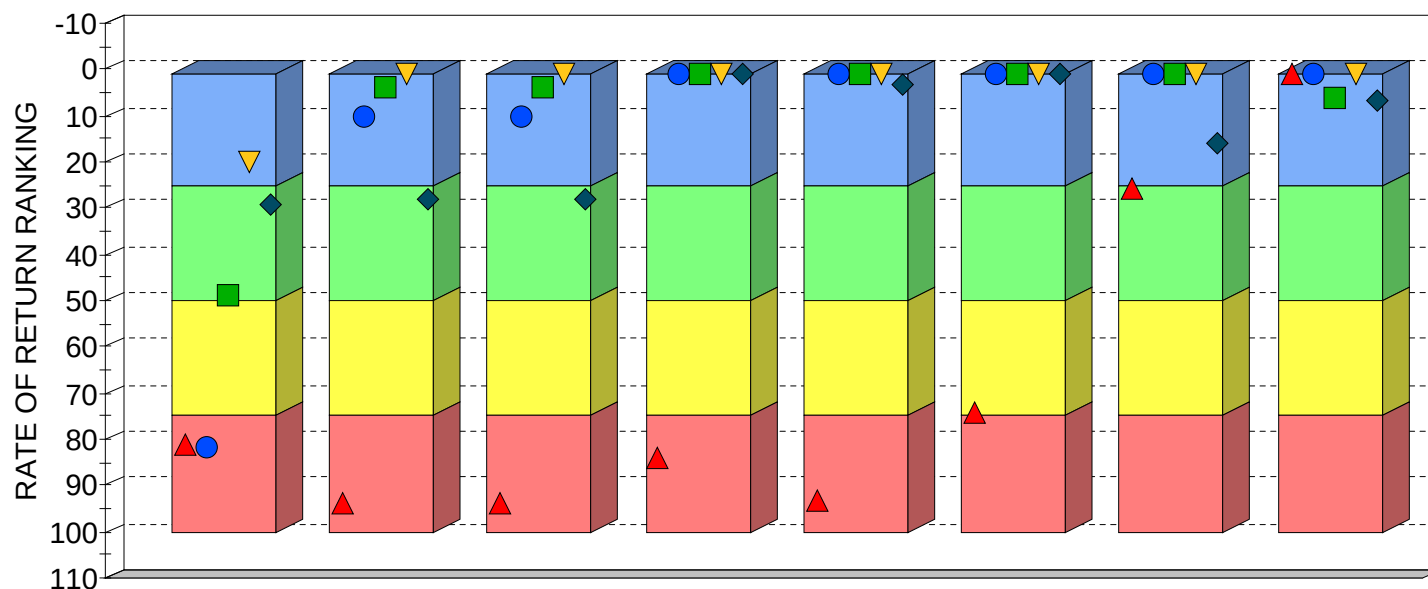
U.S. Treasury Bill (USTB): Represents 90-day return for Treasury Bills issued by the United States government.

Wilshire RE Securities Index (WRESI) A broad measure of the performance of publicly traded real estate securities, such as Real Estate Investment Trusts (REITs) and Real Estate Operating Companies (REOCs). The index is capitalization-weighted. The beginning date, January 1, 1978, was selected because it coincides with the Russell/NCREIF Property Index start date. The Index is rebalanced monthly, and returns are calculated on a buy and hold basis.

QUARTILE RANKING ANALYSIS

FOREIGN LARGE BLEND UNIVERSE

TRAILING PERIODS ENDING DECEMBER 31, 2018



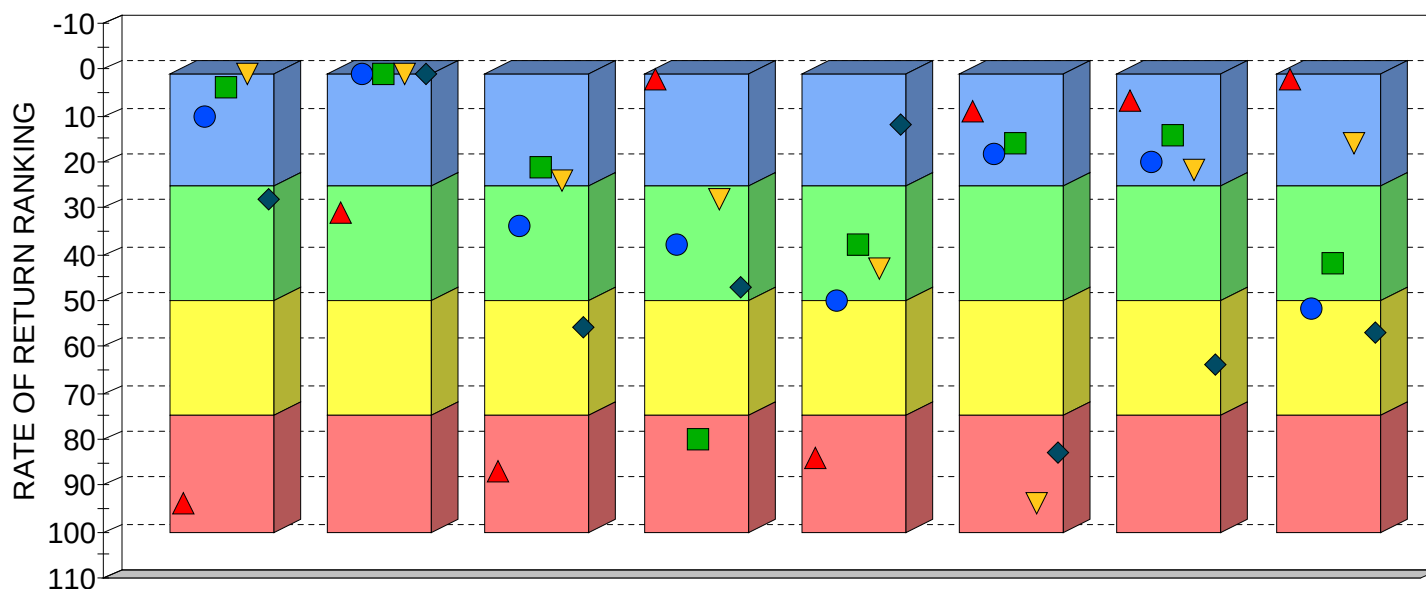
	Latest Quarter	Year To Date	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
HIGH (0.05)	-9.72	-10.29	-10.29	6.46	4.85	2.29	7.02	8.88
FIRST QUARTILE	-11.94	-13.94	-13.94	3.98	3.25	0.62	5.76	6.57
MEDIAN	-13.04	-15.17	-15.17	3.18	2.44	-0.07	5.21	5.90
THIRD QUARTILE	-13.92	-16.94	-16.94	1.94	1.27	-0.74	4.51	5.17
LOW (0.95)	-16.15	-20.85	-20.85	-0.42	-0.71	-2.30	2.64	3.72
MEAN	-13.03	-15.42	-15.42	2.94	2.28	-0.08	5.08	5.91
VALID COUNT	649	636	636	629	608	544	525	466

	Latest Quarter		Year To Date		1 Year		2 Years		3 Years		5 Years		7 Years		10 Years	
	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK
▲ Oppenheimer International Growth Y+	-14.68	81	-19.36	94	-19.36	94	1.16	84	0.08	93	-0.72	74	5.73	26	8.14	1
● Vanguard International Growth Adm+	-14.76	82	-12.58	10	-12.58	10	11.87	1	8.42	1	3.68	1	8.52	1	9.67	1
■ Capital Group Inter'l Equity*	-13.03	49	-11.26	4	-11.26	4	8.06	1	6.31	1	2.01	1	7.43	1	7.63	6
▼ MFS International Growth I+	-11.75	20	-8.86	1	-8.86	1	9.87	1	7.41	1	3.35	1	7.01	1	8.62	1
◆ MSCI AC World Index ex US Growth	-12.16	29	-14.10	28	-14.10	28	6.67	1	4.57	3	2.06	1	5.98	16	7.52	7

QUARTILE RANKING ANALYSIS

FOREIGN LARGE BLEND UNIVERSE

CALENDAR PERIODS ENDING DECEMBER 31, 2018

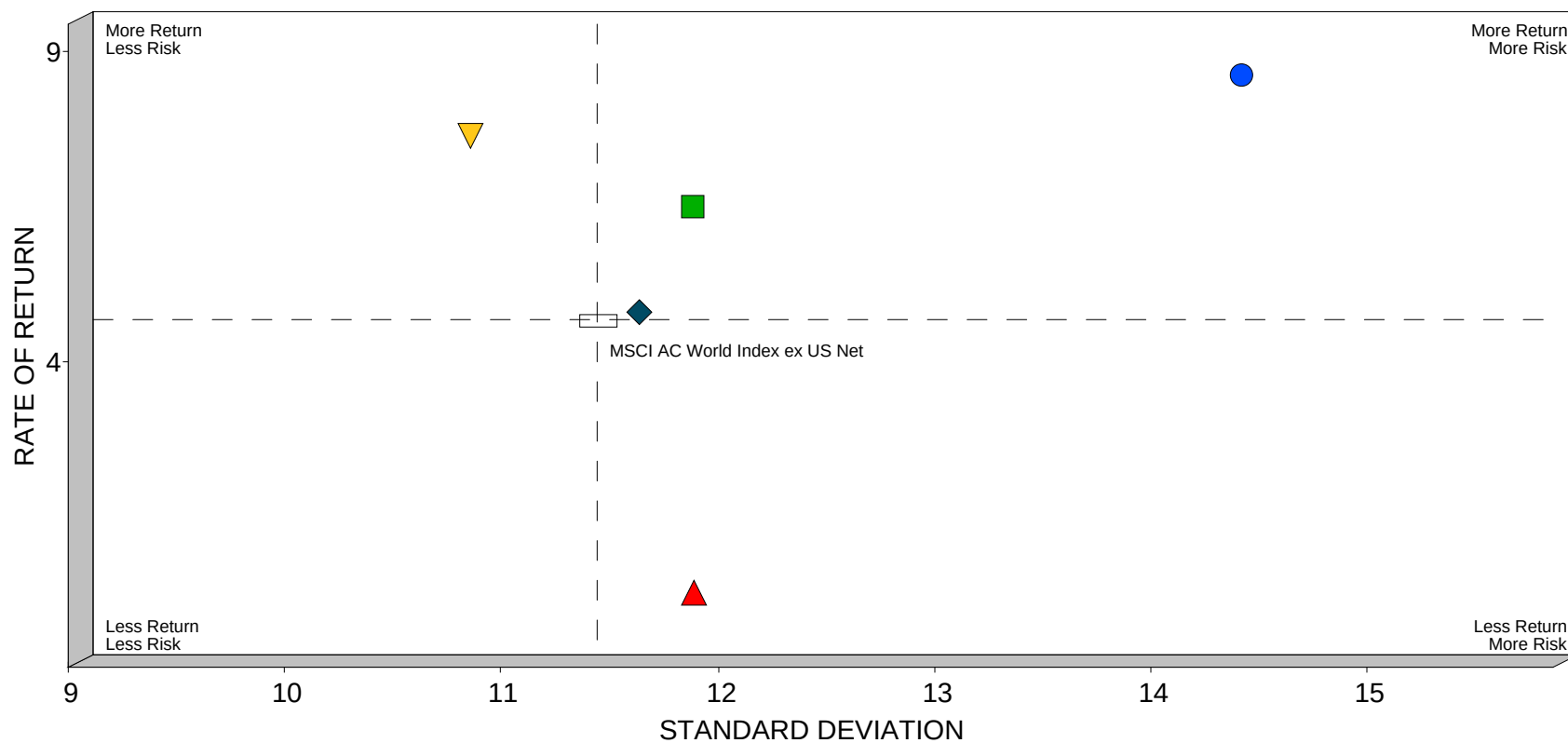


	2018	2017	2016	2015	2014	2013	2012	2011
HIGH (0.05)	-10.29	30.54	6.48	5.71	0.98	28.13	26.76	-6.27
FIRST QUARTILE	-13.94	27.30	2.56	0.58	-4.07	22.25	19.53	-11.54
MEDIAN	-15.17	25.38	0.93	-1.00	-5.41	20.59	18.02	-13.33
THIRD QUARTILE	-16.94	24.24	-0.82	-2.79	-6.42	17.74	16.27	-15.06
LOW (0.95)	-20.85	19.20	-3.79	-8.80	-9.79	11.68	12.67	-21.84
MEAN	-15.42	25.64	0.98	-1.31	-5.04	20.12	18.04	-13.19
VALID COUNT	636	629	608	560	544	540	525	490

	2018		2017		2016		2015		2014		2013		2012		2011	
	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK
▲ Oppenheimer International Growth Y+	-19.36	94	26.90	31	-2.06	87	3.44	2	-6.99	84	25.46	9	22.10	7	-7.31	2
● Vanguard International Growth Adm+	-12.58	10	43.16	1	1.84	34	-0.54	38	-5.51	50	23.12	18	20.18	20	-13.58	52
■ Capital Group Inter'l Equity*	-11.26	4	31.57	1	2.90	21	-3.47	80	-4.75	38	23.58	16	20.97	14	-12.75	42
▼ MFS International Growth I+	-8.86	1	32.46	1	2.64	24	0.30	28	-5.10	43	13.84	94	19.71	22	-10.62	16
◆ MSCI AC World Index ex US Growth	-14.10	28	32.47	1	0.50	56	-0.91	47	-2.29	12	15.86	83	17.07	64	-13.93	57

3 YEAR TOTAL RISK REWARD

DECEMBER 31, 2015 TO DECEMBER 31, 2018



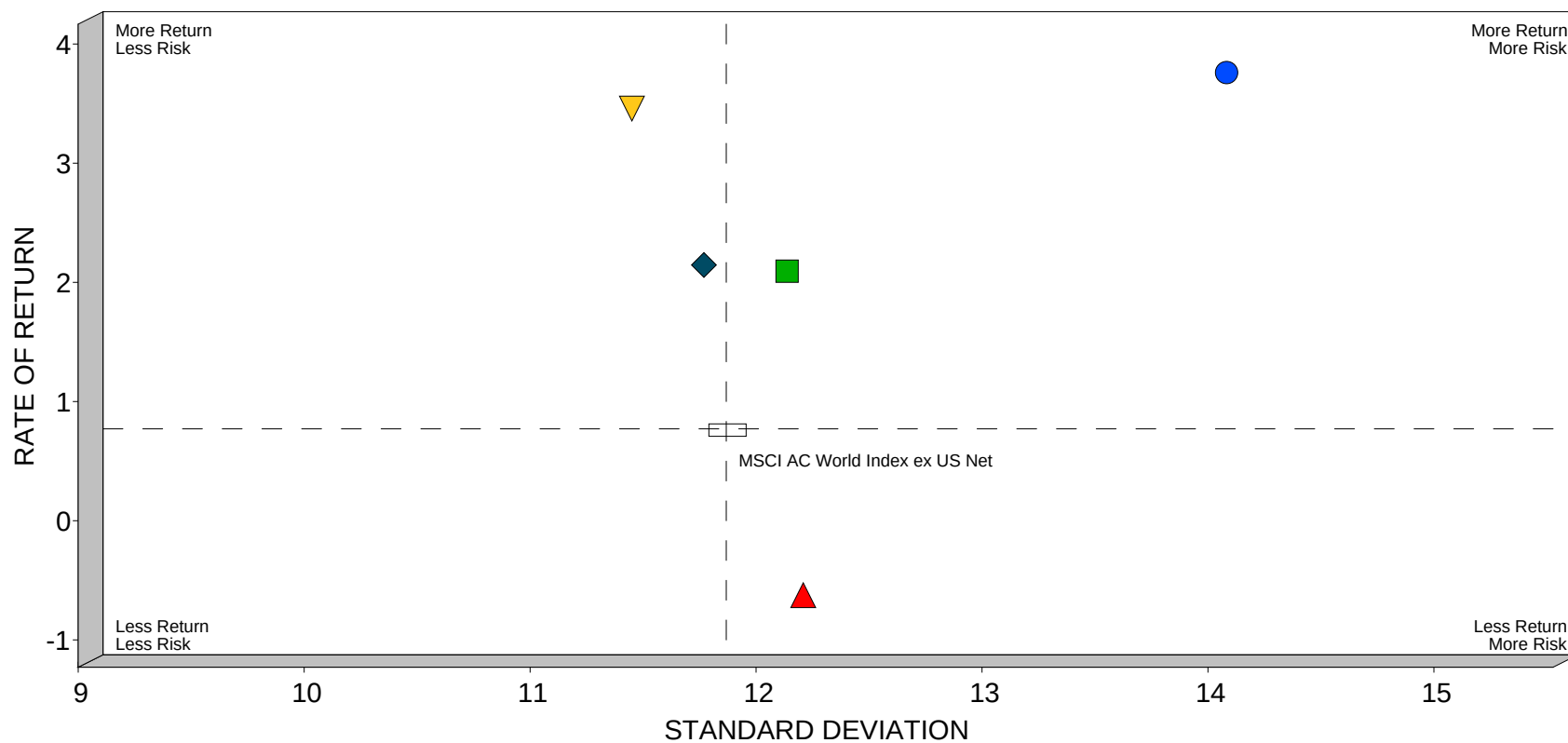
	ROR	Std Dev Pop	Alpha	Info Ratio Pop	R-Squared
▲ Oppenheimer International Growth Y+	0.08	11.83	-4.01	-0.94	0.85
● Vanguard International Growth Adm+	8.42	14.36	3.51	0.69	0.86
■ Capital Group Inter'l Equity*	6.31	11.82	1.81	0.59	0.93
▼ MFS International Growth I+	7.41	10.80	3.26	0.66	0.85
◆ MSCI AC World Index ex US Growth	4.57	11.57	0.18	0.03	0.94

RISK BENCHMARK USED FOR THIS ANALYSIS: MSCI AC WORLD INDEX EX US NET

* MANAGER STYLE OR INVESTMENT STRATEGY REVIEWED BY UBS FS. PLEASE READ "IMPORTANT INFORMATION" SECTION. + THIS INVESTMENT OR STRATEGY IS NOT AVAILABLE THROUGH UBS. SEE "IMPORTANT INFORMATION" SECTION FOR ADDITIONAL INFORMATION.

5 YEAR TOTAL RISK REWARD

DECEMBER 31, 2013 TO DECEMBER 31, 2018



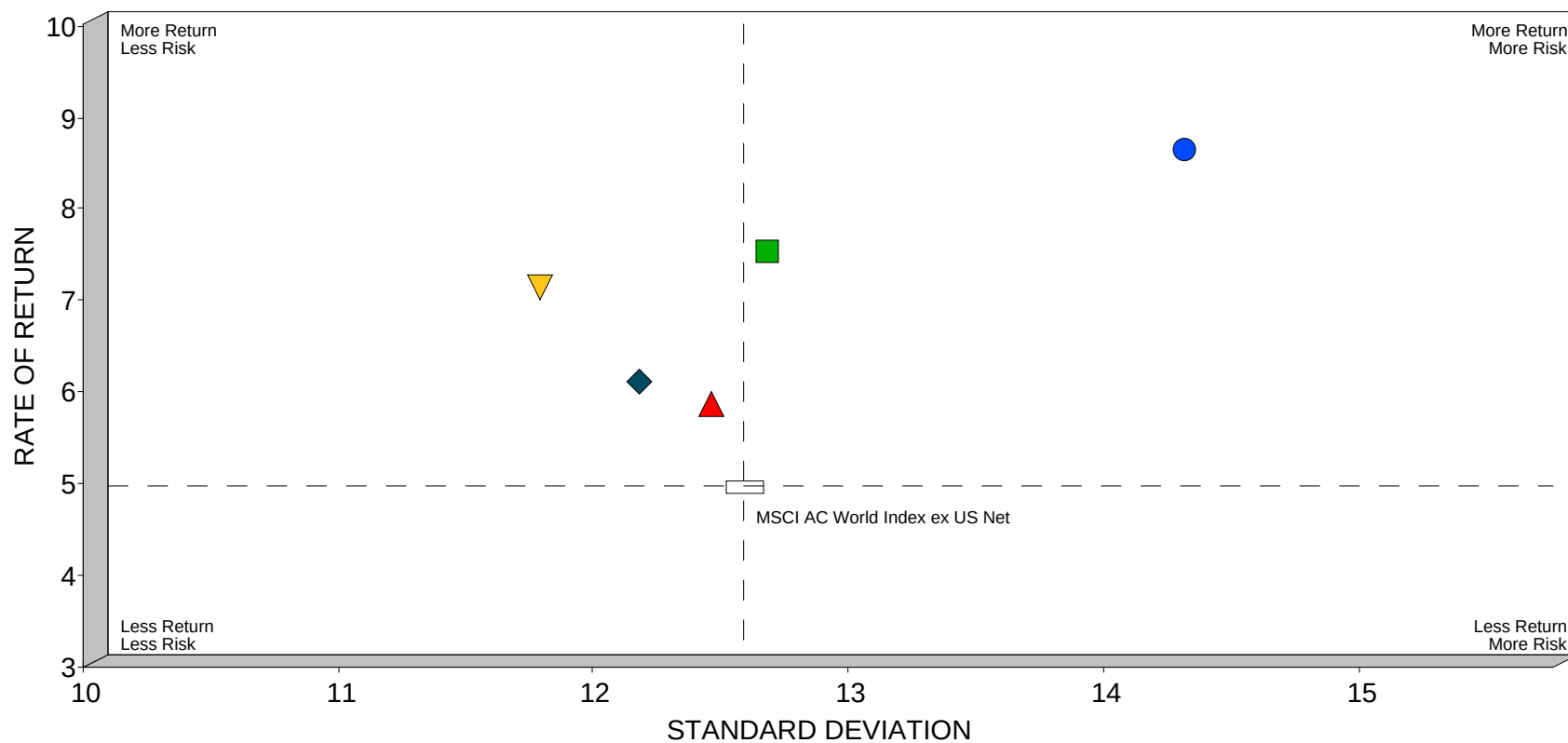
	ROR	Std Dev Pop	Alpha	Info Ratio Pop	R-Squared
▲ Oppenheimer International Growth Y+	-0.72	12.15	-1.31	-0.29	0.84
● Vanguard International Growth Adm+	3.68	14.03	3.19	0.61	0.89
■ Capital Group Inter'l Equity*	2.01	12.08	1.37	0.43	0.94
▼ MFS International Growth I+	3.35	11.39	2.69	0.65	0.88
◆ MSCI AC World Index ex US Growth	2.06	11.71	1.39	0.55	0.96

RISK BENCHMARK USED FOR THIS ANALYSIS: MSCI AC WORLD INDEX EX US NET

* MANAGER STYLE OR INVESTMENT STRATEGY REVIEWED BY UBS FS. PLEASE READ "IMPORTANT INFORMATION" SECTION. + THIS INVESTMENT OR STRATEGY IS NOT AVAILABLE THROUGH UBS. SEE "IMPORTANT INFORMATION" SECTION FOR ADDITIONAL INFORMATION.

7 YEAR TOTAL RISK REWARD

DECEMBER 31, 2011 TO DECEMBER 31, 2018



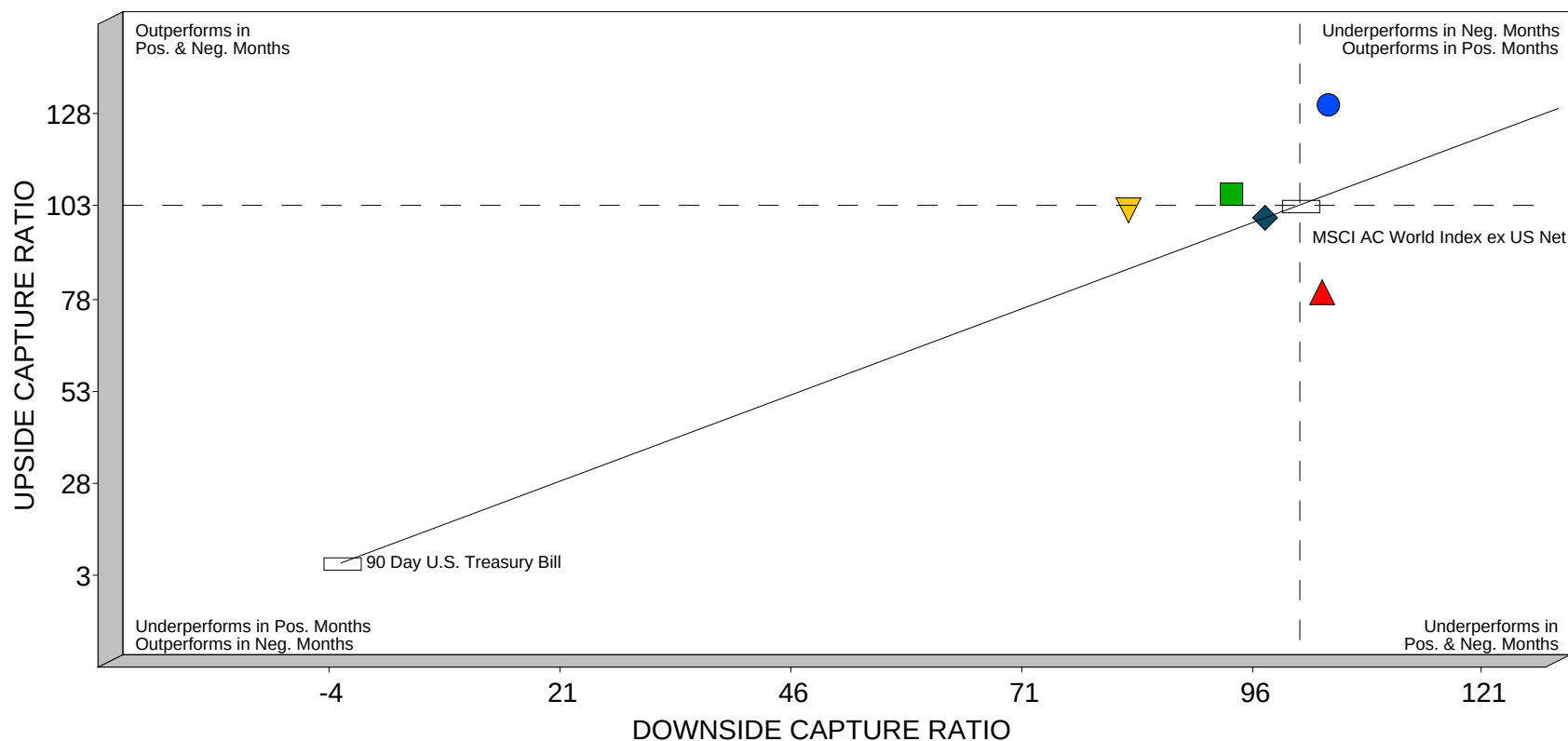
	ROR	Std Dev Pop	Alpha	Info Ratio Pop	R-Squared
▲ Oppenheimer International Growth Y+	5.73	12.42	1.25	0.18	0.86
● Vanguard International Growth Adm+	8.52	14.26	3.33	0.82	0.91
■ Capital Group Inter'l Equity*	7.43	12.63	2.60	0.85	0.94
▼ MFS International Growth I+	7.01	11.75	2.55	0.54	0.90
◆ MSCI AC World Index ex US Growth	5.98	12.13	1.29	0.48	0.96

RISK BENCHMARK USED FOR THIS ANALYSIS: MSCI AC WORLD INDEX EX US NET

* MANAGER STYLE OR INVESTMENT STRATEGY REVIEWED BY UBS FS. PLEASE READ "IMPORTANT INFORMATION" SECTION. + THIS INVESTMENT OR STRATEGY IS NOT AVAILABLE THROUGH UBS. SEE "IMPORTANT INFORMATION" SECTION FOR ADDITIONAL INFORMATION.

UPSIDE VS. DOWNSIDE MARKET CAPTURE ANALYSIS

3 YEAR PERIOD ENDING DECEMBER 31, 2018



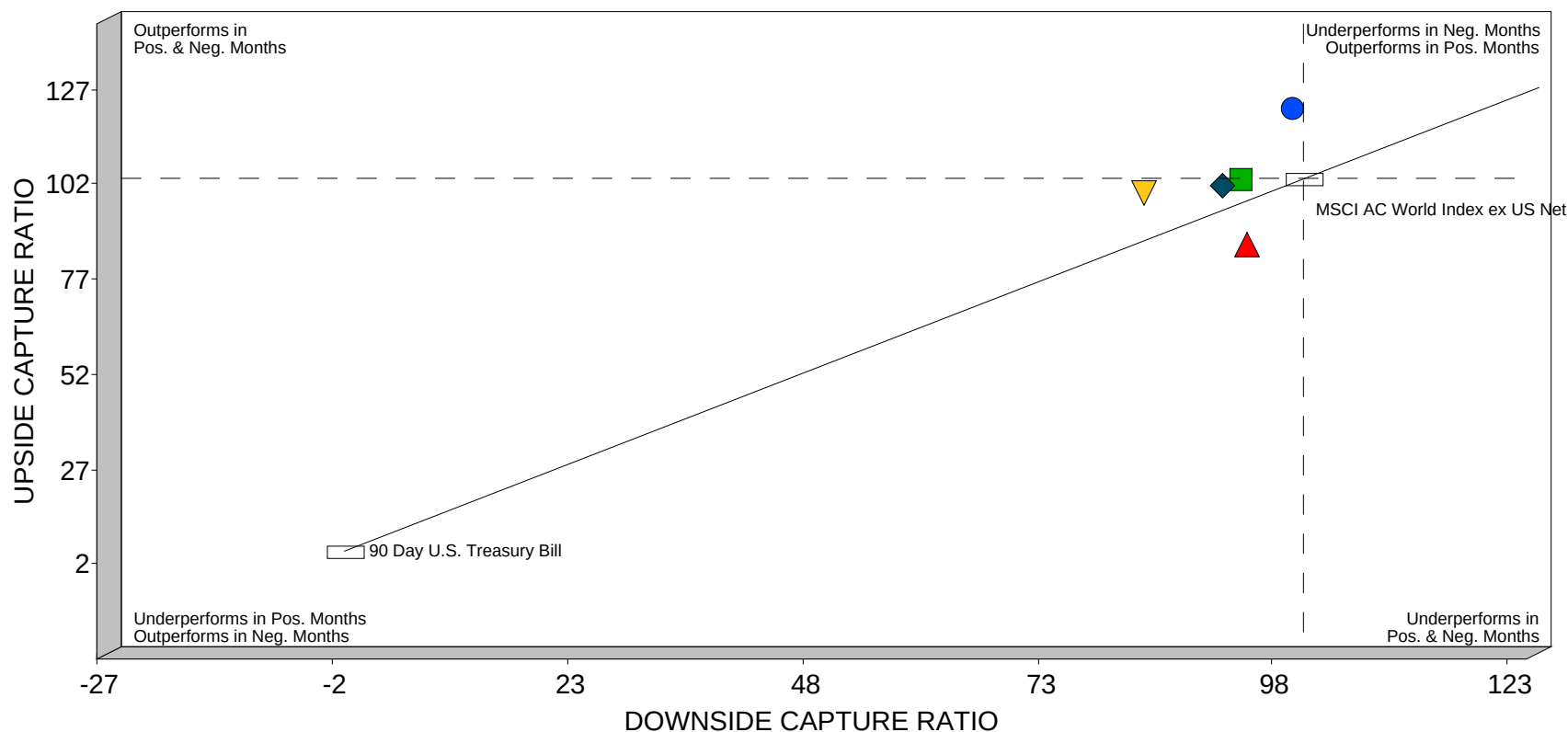
	ROR	Upside Mkt Cap Return	Dnside Cap Return	Upside Cap Ratio	Dnside Cap Ratio
▲ Oppenheimer International Growth Y+	0.08	24.99	-32.46	76.07	102.40
● Vanguard International Growth Adm+	8.42	41.85	-32.61	127.41	102.86
■ Capital Group Inter'l Equity*	6.31	33.87	-29.30	103.11	92.42
▼ MFS International Growth I+	7.41	32.35	-25.78	98.50	81.31
◆ MSCI AC World Index ex US Growth	4.57	31.72	-30.49	96.58	96.17

RISK BENCHMARK USED FOR THIS ANALYSIS: MSCI AC WORLD INDEX EX US NET

* MANAGER STYLE OR INVESTMENT STRATEGY REVIEWED BY UBS FS. PLEASE READ "IMPORTANT INFORMATION" SECTION. + THIS INVESTMENT OR STRATEGY IS NOT AVAILABLE THROUGH UBS. SEE "IMPORTANT INFORMATION" SECTION FOR ADDITIONAL INFORMATION.

UPSIDE VS. DOWNSIDE MARKET CAPTURE ANALYSIS

5 YEAR PERIOD ENDING DECEMBER 31, 2018



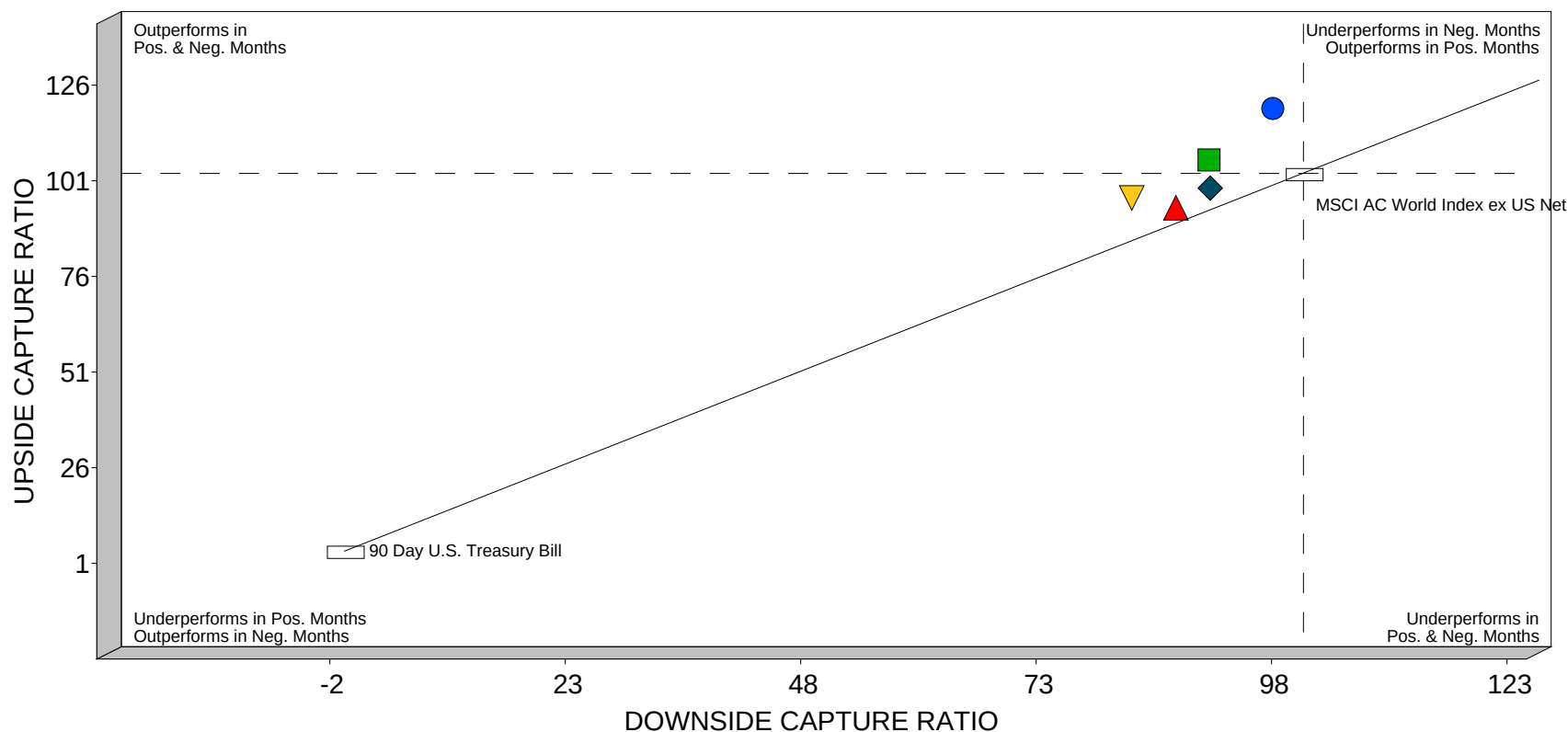
	ROR	Upside Mkt Cap Return	Dnside Cap Return	Upside Cap Ratio	Dnside Cap Ratio
▲ Oppenheimer International Growth Y+	-0.72	29.18	-28.04	82.71	93.98
● Vanguard International Growth Adm+	3.68	42.03	-29.43	119.14	98.65
■ Capital Group Inter'l Equity*	2.01	35.30	-27.77	100.07	93.07
▼ MFS International Growth I+	3.35	34.06	-24.79	96.54	83.09
◆ MSCI AC World Index ex US Growth	2.06	34.59	-27.22	98.04	91.24

RISK BENCHMARK USED FOR THIS ANALYSIS: MSCI AC WORLD INDEX EX US NET

* MANAGER STYLE OR INVESTMENT STRATEGY REVIEWED BY UBS FS. PLEASE READ "IMPORTANT INFORMATION" SECTION. + THIS INVESTMENT OR STRATEGY IS NOT AVAILABLE THROUGH UBS. SEE "IMPORTANT INFORMATION" SECTION FOR ADDITIONAL INFORMATION.

UPSIDE VS. DOWNSIDE MARKET CAPTURE ANALYSIS

7 YEAR PERIOD ENDING DECEMBER 31, 2018

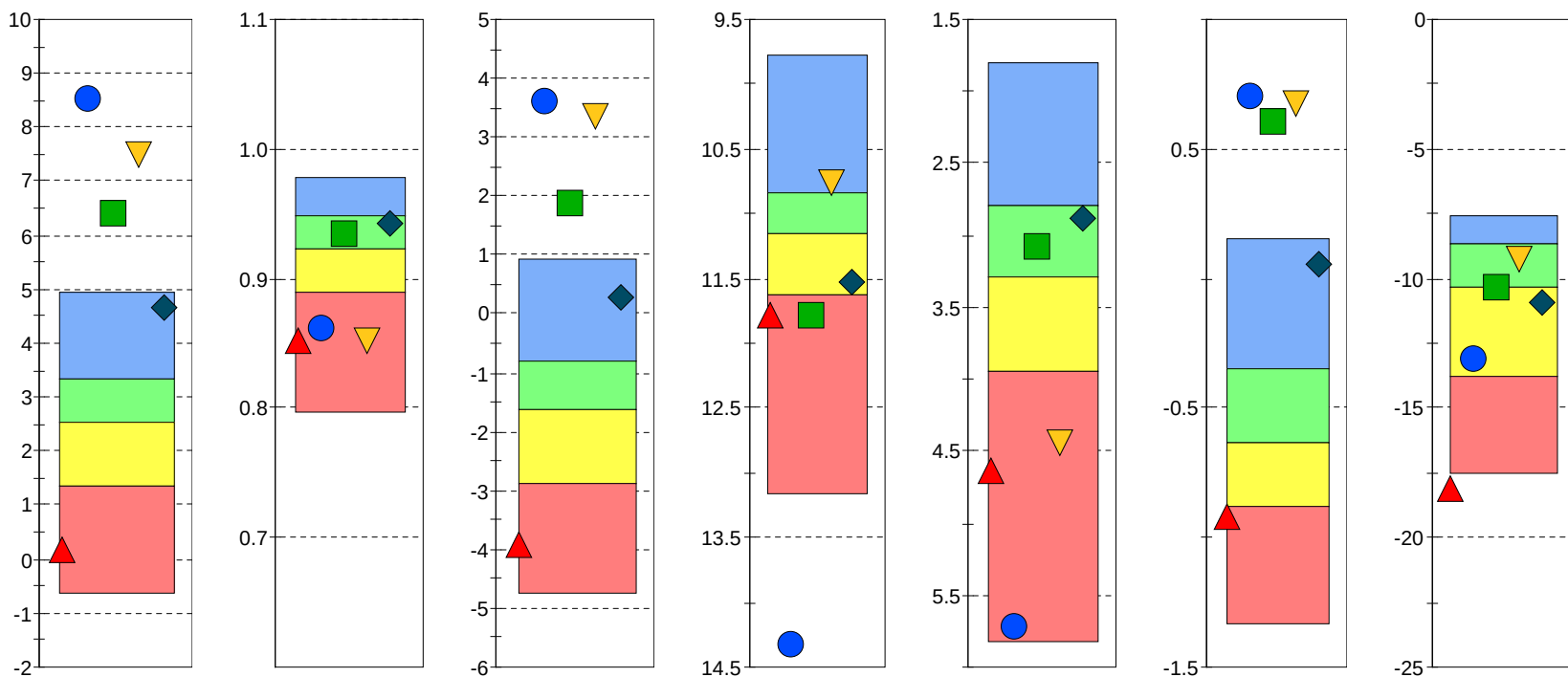


	ROR	Upside Mkt Cap Return	Dnside Cap Return	Upside Cap Ratio	Dnside Cap Ratio
▲ Oppenheimer International Growth Y+	5.73	35.44	-26.54	90.94	86.41
● Vanguard International Growth Adm+	8.52	45.73	-29.66	117.33	96.55
■ Capital Group Inter'l Equity*	7.43	40.47	-27.58	103.84	89.78
▼ MFS International Growth I+	7.01	36.40	-25.10	93.39	81.70
◆ MSCI AC World Index ex US Growth	5.98	37.41	-27.66	95.99	90.05

RISK BENCHMARK USED FOR THIS ANALYSIS: MSCI AC WORLD INDEX EX US NET

* MANAGER STYLE OR INVESTMENT STRATEGY REVIEWED BY UBS FS. PLEASE READ "IMPORTANT INFORMATION" SECTION. + THIS INVESTMENT OR STRATEGY IS NOT AVAILABLE THROUGH UBS. SEE "IMPORTANT INFORMATION" SECTION FOR ADDITIONAL INFORMATION.

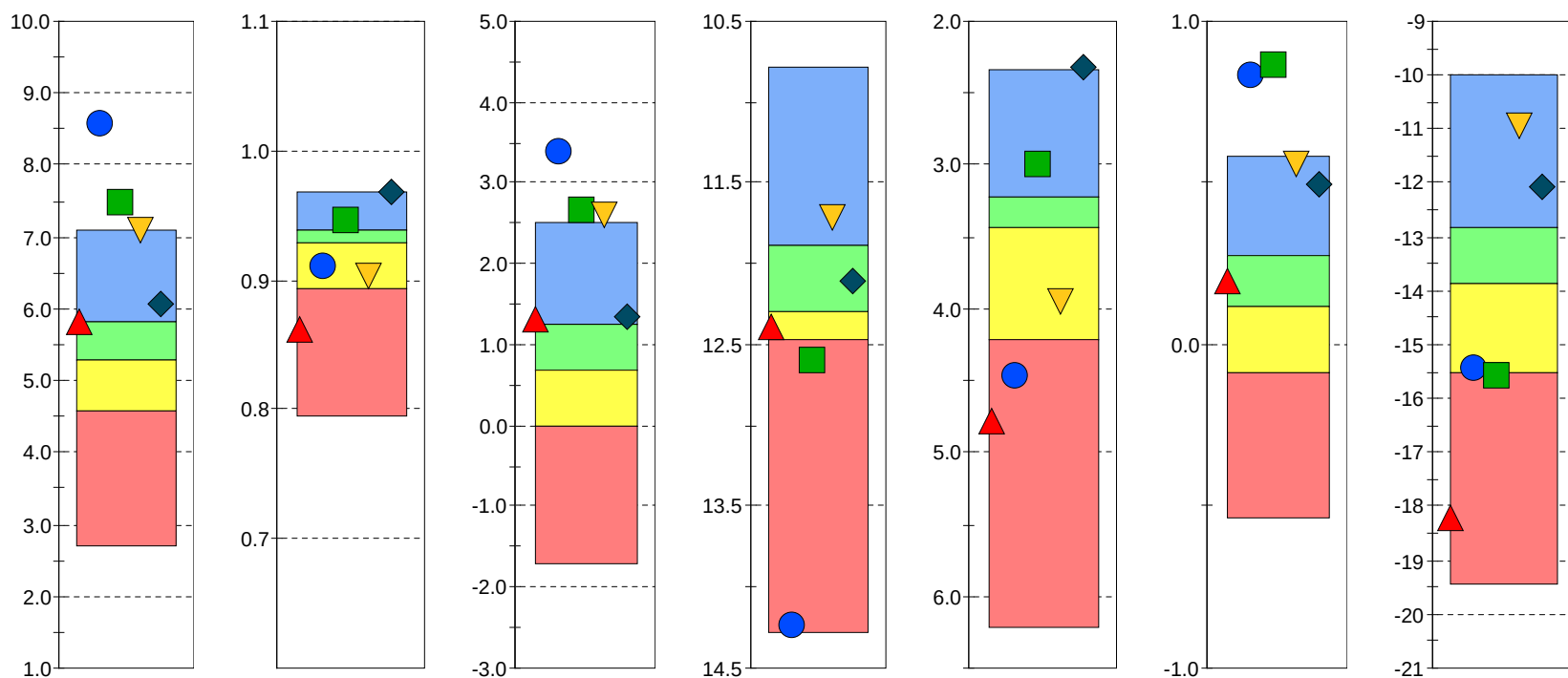
MULTI-STATISTIC QUARTILE RANKING BAR **FOREIGN LARGE BLEND UNIVERSE** **DECEMBER 31, 2015 TO DECEMBER 31, 2018**



	ROR	R-Squared	Alpha	Std Dev Pop	Tracking Error Pop	Info Ratio Pop	Max Ddown%
HIGH (0.95)	4.85	0.97	0.86	9.82	1.84	0.13	-7.82
FIRST QUART	3.25	0.94	-0.89	10.89	2.83	-0.37	-8.84
MEDIAN	2.44	0.92	-1.73	11.19	3.32	-0.65	-10.51
THIRD QUART	1.27	0.89	-2.95	11.66	3.98	-0.90	-13.99
LOW (0.05)	-0.71	0.79	-4.82	13.19	5.85	-1.36	-17.75
MEAN	2.28	0.91	-1.90	11.27	3.49	-0.63	-11.64
VALID COUNT	608	608	608	608	608	608	608

	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK
▲ Oppenheimer International G	0.08	93	0.85	92	-4.01	92	11.83	80	4.67	88	-0.94	78	-18.31	99
● Vanguard International Growt	8.42	1	0.86	90	3.51	1	14.36	99	5.75	99	0.69	1	-13.28	65
■ Capital Group Inter'l Equity*	6.31	1	0.93	38	1.81	1	11.82	80	3.11	37	0.59	1	-10.54	50
▼ MFS International Growth I+	7.41	1	0.85	92	3.26	1	10.80	18	4.47	87	0.66	1	-9.49	38
◆ MSCI AC World Index ex US	4.57	3	0.94	28	0.18	5	11.57	75	2.91	29	0.03	3	-11.07	51

MULTI-STATISTIC QUARTILE RANKING BAR **FOREIGN LARGE BLEND UNIVERSE** **DECEMBER 31, 2011 TO DECEMBER 31, 2018**



	ROR	R-Squared	Alpha	Std Dev Pop	Tracking Error Pop	Info Ratio Pop	Max Ddown%
HIGH (0.95)	7.02	0.96	2.44	10.82	2.38	0.57	-10.09
FIRST QUART	5.76	0.93	1.19	11.92	3.26	0.26	-12.93
MEDIAN	5.21	0.92	0.64	12.33	3.48	0.10	-13.98
THIRD QUART	4.51	0.89	-0.07	12.50	4.25	-0.10	-15.60
LOW (0.05)	2.64	0.79	-1.79	14.31	6.26	-0.55	-19.54
MEAN	5.08	0.91	0.52	12.25	3.74	0.07	-14.27
VALID COUNT	525	525	525	525	525	525	525

	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK	VALUE	RANK
▲ Oppenheimer International G	5.73	26	0.86	93	1.25	22	12.42	66	4.81	89	0.18	37	-18.31	96
● Vanguard International Growt	8.52	1	0.91	68	3.33	1	14.26	99	4.50	82	0.82	1	-15.52	73
■ Capital Group Inter'l Equity*	7.43	1	0.94	20	2.60	1	12.63	80	3.03	22	0.85	1	-15.65	75
▼ MFS International Growth I+	7.01	1	0.90	71	2.55	1	11.75	17	3.99	70	0.54	1	-11.03	7
◆ MSCI AC World Index ex US	5.98	16	0.96	1	1.29	21	12.13	40	2.36	1	0.48	3	-12.15	16

OVERALL RANKING:

μ μ μ

Product Type: Open Ended Mutual Fund
Mgmt. Co. Name: OppenheimerFunds
Mgmt. Co. Address: Oppenheimer International Growth Fund
6803 South Tucson Way
Centennial CO 80112-3924
USA

Phone: 800-225-5677
Website: www.oppenheimerfunds.com

Inception Date: 9/2005
CUSIP: 68380L407

Ticker: OIGYX

Share Class Type: Inst
Total Net Assets (12/2018): \$8,305,955,985

NAV (12/2018): 34.69

Yield: 1.44

Equity Style: Large Growth

Fix Income Style: --

Morningstar Category: Foreign Large Growth

Fund Objective: Foreign Stock

Portfolio Turnover: 22.00

Open to New Investors: Yes

Init. Min. Purchase (\$): 0.00

Subsequent Purchase (\$): --

Init. IRA Min. Purchase (\$): --

Portfolio Managers: George Evans

Tenure (yrs): 22.78

	MRQ	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	Incept
Manager	-14.6	-19.36	26.90	-2.06	3.44	-6.99	25.46	22.10	-7.31	15.35	38.44	7.22
Benchmark	-11.4	-14.20	27.19	4.50	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	--
Excess	-3.22	-5.16	-0.30	-6.55	9.10	-3.12	10.17	5.27	6.39	4.20	-3.01	--
90 TBILL	0.59	2.00	0.96	0.33	0.06	0.03	0.05	0.08	0.06	0.14	0.15	2.16

PERIOD	ROR	STDEV	ALPHA	BETA	RSQR	TRCKERR	SHARPE	INFORATIO
3 Yrs	0.08	12.55	-4.56	1.15	0.93	3.81	-0.08	-1.15
4 Yrs	0.91	12.14	-0.83	1.00	0.87	4.50	0.01	-0.21
5 Yrs	-0.72	11.52	-1.30	0.98	0.84	4.69	-0.12	-0.30
6 Yrs	3.22	11.85	0.35	1.00	0.84	4.73	0.22	0.05
7 Yrs	5.73	12.71	0.86	1.02	0.88	4.47	0.41	0.20
8 Yrs	4.00	13.79	1.74	0.99	0.90	4.39	0.26	0.38
9 Yrs	5.21	14.68	2.00	0.98	0.92	4.21	0.33	0.46
10 Yrs	8.14	16.60	1.95	0.92	0.93	4.51	0.47	0.35
Inception	7.22	22.64	--	--	--	--	0.22	--

FEES AND EXPENSES

Deferred Load (%):	--	Cash (%)	6.37
Front Load (%):	--	Convertible (%)	0.00
Actual 12B-1 (%):	--	Non-US Bonds (%)	0.00
Expense Ratio (%):	0.86	Non-US Stocks (%)	89.48
Management Fee (%):	0.80	Preferred (%)	0.01
Redemption Fee (%):	--	US Bonds (%)	0.00
Admin Fee (%):	--	US Stocks (%)	4.14
		Other (%)	0.00

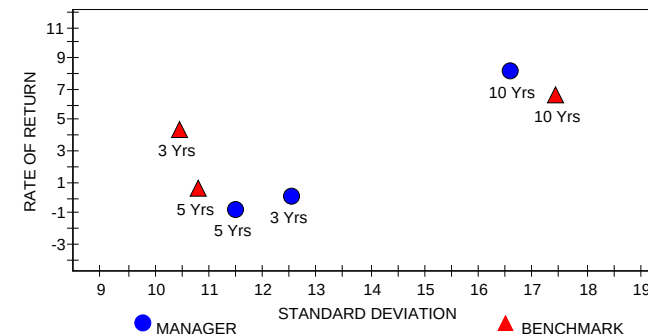
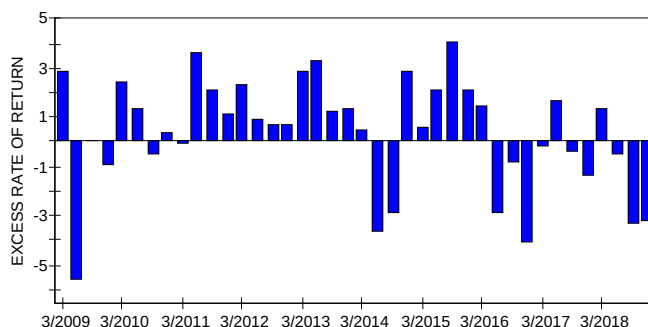
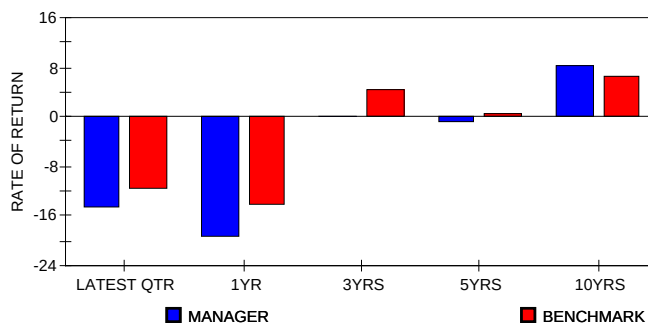
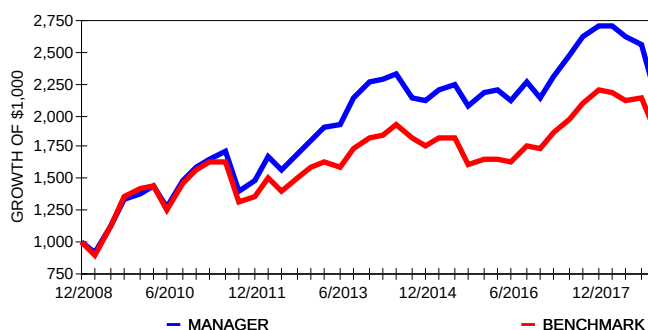
STYLE BREAKDOWN

Equity Large Value (%):	10.00	Cap Giant (%)	32.25
Equity Large Blend (%):	13.24	Cap Large (%)	37.96
Equity Large Growth (%):	46.39	Cap Medium (%)	28.35
Equity Mid Value (%):	4.85	Cap Small (%)	1.44
Equity Mid Blend (%):	6.59	Cap Micro (%)	0.00
Equity Mid Growth (%):	17.41		
Equity Small Value (%):	0.00		
Equity Small Blend (%):	0.78		
Equity Small Growth (%):	0.75		

FIXED-INCOME STATISTICS

Avg Eff/Mat/Duration (yrs):	--	Price/Earning Ratio (%)	18.58
Avg Weighted Coupon (%):	--	Price/Book Ratio (%)	2.80
Avg Credit Quality:		Price/Sales Ratio (%)	1.58
		Price/Cash Ratio (%)	13.38

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PERIOD	RATE OF RETURN			GROWTH OF \$1,000		
	MANAGER	BENCHMARK	EXCESS	MANAGER	BENCHMARK	PREMIUM
1 Yr	-19.36	-14.20	-5.16	\$806	\$858	-\$52
2 Yrs	1.16	4.47	-3.31	\$1,023	\$1,091	-\$68
3 Yrs	0.08	4.48	-4.40	\$1,002	\$1,140	-\$138
4 Yrs	0.91	1.84	-0.94	\$1,037	\$1,076	-\$39
5 Yrs	-0.72	0.68	-1.40	\$964	\$1,034	-\$70
6 Yrs	3.22	2.98	0.25	\$1,210	\$1,192	\$17
7 Yrs	5.73	4.85	0.88	\$1,477	\$1,393	\$84
8 Yrs	4.00	2.33	1.68	\$1,369	\$1,202	\$167
9 Yrs	5.21	3.27	1.94	\$1,579	\$1,336	\$243
10 Yrs	8.14	6.57	1.56	\$2,186	\$1,890	\$296
Inception	7.22	--	--	\$4,884	--	--

PERIODS ENDING: December 31, 2018

SINCE INCEPTION: March 31, 1996

BENCHMARK: MSCI ACWI x US Net



VANGUARD VANGUARD INTERNATIONAL GROWTH ADM

OVERALL RANKING:

μ μ μ μ

Product Type: Open Ended Mutual Fund
Mgmt. Co. Name: Vanguard
Mgmt. Co. Address: Vanguard World Fund
Po Box 2600 V26
Valley Forge PA 19482
USA

Phone: 800-662-7447
Website: www.vanguard.com

Inception Date: 8/2001
CUSIP: 921910501
Ticker: VWILX

Share Class Type: Inst
Total Net Assets (12/2018): \$24,574,277,439
NAV (12/2018): 79.22
Yield: 1.73

Equity Style: Large Growth
Fix Income Style: --
Morningstar Category: Foreign Large Growth
Fund Objective: Foreign Stock
Portfolio Turnover: 16.00
Open to New Investors: Yes
Init. Min. Purchase (\$): 50000.00
Subsequent Purchase (\$): 1.00
Init. IRA Min. Purchase (\$): --
Portfolio Managers: James Anderson
Tenure (yrs): 15.91

	MRQ	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	Incept
Manager	-14.7	-12.58	43.16	1.84	-0.54	-5.51	23.12	20.18	-13.58	15.81	41.88	10.17
Benchmark	-11.4	-14.20	27.19	4.50	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	--
Excess	-3.29	1.62	15.97	-2.65	5.12	-1.64	7.83	3.35	0.13	4.65	0.43	--
90 TBILL	0.59	2.00	0.96	0.33	0.06	0.03	0.05	0.08	0.06	0.14	0.15	3.95

PERIOD	ROR	STDEV	ALPHA	BETA	RSQR	TRCKERR	SHARPE	INFORATIO
3 Yrs	8.42	15.59	3.03	1.37	0.87	6.98	0.47	0.57
4 Yrs	6.11	15.76	4.30	1.31	0.89	6.29	0.33	0.68
5 Yrs	3.68	14.57	3.31	1.26	0.87	5.87	0.21	0.51
6 Yrs	6.69	14.48	3.33	1.25	0.89	5.52	0.42	0.67
7 Yrs	8.52	14.85	2.91	1.21	0.91	5.20	0.54	0.71
8 Yrs	5.47	16.40	3.04	1.19	0.93	5.05	0.31	0.62
9 Yrs	6.57	17.33	3.04	1.17	0.94	4.84	0.36	0.68
10 Yrs	9.67	19.39	2.69	1.08	0.95	4.63	0.48	0.67
Inception	10.17	18.85	--	--	--	--	0.33	--

FEES AND EXPENSES

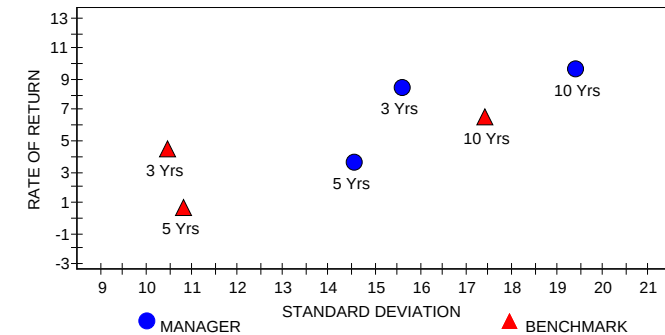
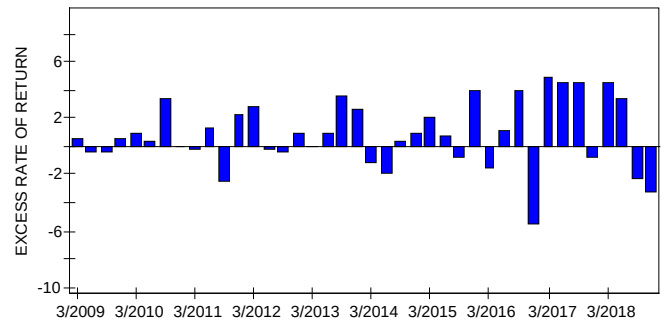
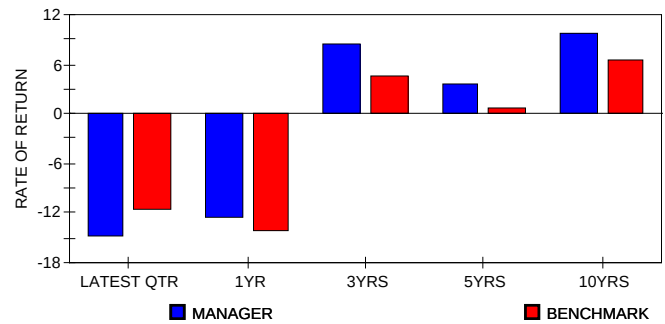
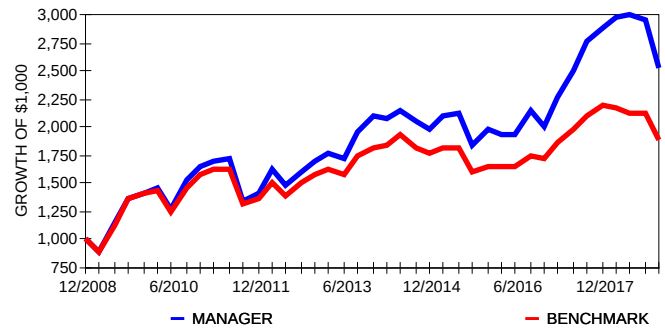
Deferred Load (%):	--	Cash (%)	3.41
Front Load (%):	--	Convertible (%)	0.00
Actual 12B-1 (%):	--	Non-US Bonds (%)	0.00
Expense Ratio (%):	0.32	Non-US Stocks (%)	83.27
Management Fee (%):	0.30	Preferred (%)	0.00
Redemption Fee (%):	--	US Bonds (%)	0.00
Admin Fee (%):	--	US Stocks (%)	11.67
		Other (%)	1.65

STYLE BREAKDOWN

Equity Large Value (%):	15.31	Cap Giant (%)	57.32
Equity Large Blend (%):	14.89	Cap Large (%)	33.72
Equity Large Growth (%):	60.98	Cap Medium (%)	8.34
Equity Mid Value (%):	0.68	Cap Small (%)	0.56
Equity Mid Blend (%):	2.43	Cap Micro (%)	0.06
Equity Mid Growth (%):	5.51		
Equity Small Value (%):	0.10		
Equity Small Blend (%):	0.00		
Equity Small Growth (%):	0.10		

FIXED-INCOME STATISTICS

Avg Eff/Mat/Duration (yrs):	--	Price/Earning Ratio (%)	20.33
Avg Weighted Coupon (%):	--	Price/Book Ratio (%)	3.22
Avg Credit Quality:		Price/Sales Ratio (%)	2.35
		Price/Cash Ratio (%)	15.79



RATE OF RETURN				GROWTH OF \$1,000		
PERIOD	MANAGER	BENCHMARK	EXCESS	MANAGER	BENCHMARK	PREMIUM
1 Yr	-12.58	-14.20	1.62	\$874	\$858	\$16
2 Yrs	11.87	4.47	7.40	\$1,251	\$1,091	\$160
3 Yrs	8.42	4.48	3.95	\$1,275	\$1,140	\$134
4 Yrs	6.11	1.84	4.26	\$1,268	\$1,076	\$192
5 Yrs	3.68	0.68	3.00	\$1,198	\$1,034	\$164
6 Yrs	6.69	2.98	3.71	\$1,475	\$1,192	\$282
7 Yrs	8.52	4.85	3.67	\$1,772	\$1,393	\$379
8 Yrs	5.47	2.33	3.15	\$1,532	\$1,202	\$330
9 Yrs	6.57	3.27	3.30	\$1,774	\$1,336	\$438
10 Yrs	9.67	6.57	3.10	\$2,517	\$1,890	\$627
Inception	10.17	--	--	\$36,918	--	--

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PERIODS ENDING: December 31, 2018
SINCE INCEPTION: September 30, 1981
BENCHMARK: MSCI ACWI x US Net

UBS CAPITAL GROUP INTERNATIONAL EQUITY INST'L

Address: 333 S. Hope Street, 51st Floor
Los Angeles, CA, 90071

Firm Type: Financial Services Controlled

Legal Structure: Corporation

Year Founded: 1968

Firm GIPS Compliant: Yes

Firm/Product Assets: \$ 1,872,659.25 Million / \$ 8,765.46 Million

Firm/Product Accounts: 4952 / 44

Parent Company: Capital Group

Investment Style: Core-Diversified

Market Capitalization: Large Capitalization (10-50 \$Billion)

Decision Making: Bottom-Up Stock Selection

Portfolio Manager: Multiple Manager Team

Manager Tenure: --

Mgr. Experience: --

Product Contact: Mr. Rob Forshee

Phone: 213-486-1900

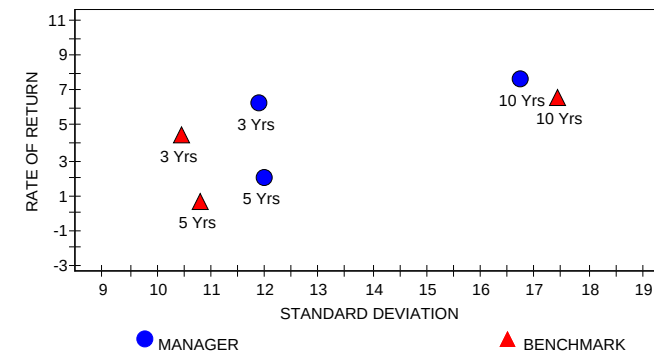
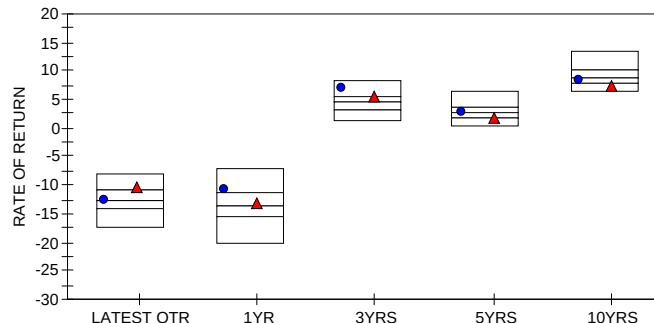
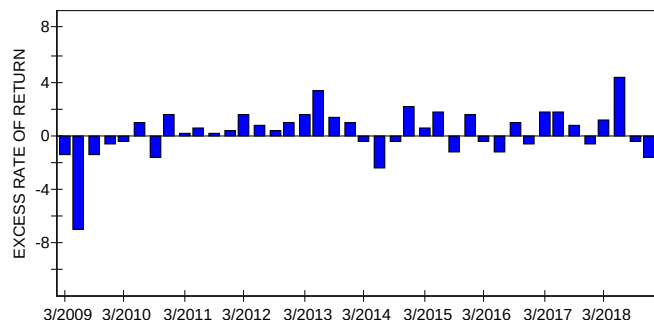
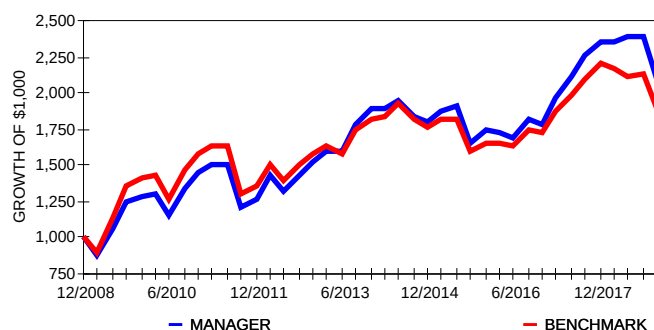
		Account Size	Annual Fees
Performance Incentive Fee:	Yes	US\$ 1 Mill	--
Individual Min Annual Fee:	\$312,500	US\$ 5 Mill	--
Individual Min Account Size:	\$50,000,000	US\$ 10 Mill	--
Offered As Mutual Funds:	No	US\$ 25 Mill	--
Offered As Commingled Funds:	Yes	US\$ 50 Mill	--
Commingled Min Annual Fee:	\$70,000	US\$ 100 Mill	--
Commingled Min Account Size:	\$10,000,000	US\$ 200 Mill	--

	MRQ	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	Incept
Manager	-13.0	-11.26	31.57	2.90	-3.47	-4.75	23.58	20.97	-12.75	12.05	29.19	10.60
Benchmark	-11.4	-14.20	27.19	4.50	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	--
Excess	-1.57	2.94	4.38	-1.60	2.19	-0.88	8.29	4.14	0.96	0.89	-12.25	--
90 TBill	0.59	2.00	0.96	0.33	0.06	0.03	0.05	0.08	0.06	0.14	0.15	4.52

PERIOD	ROR	STDEV	ALPHA	BETA	RSQR	TRCKERR	SHARPE	INFORATIO
3 Yrs	6.31	11.90	1.57	1.09	0.94	3.17	0.44	0.58
4 Yrs	3.77	12.87	1.92	1.11	0.96	2.98	0.23	0.65
5 Yrs	2.01	11.98	1.43	1.07	0.94	3.10	0.11	0.43
6 Yrs	5.32	11.97	2.24	1.06	0.94	3.11	0.40	0.76
7 Yrs	7.43	12.64	2.33	1.06	0.95	2.91	0.55	0.89
8 Yrs	4.67	14.10	2.30	1.04	0.96	2.73	0.30	0.86
9 Yrs	5.47	14.87	2.16	1.01	0.97	2.73	0.34	0.80
10 Yrs	7.63	16.76	1.37	0.94	0.96	3.59	0.43	0.29
Inception	10.60	18.05	--	--	--	--	0.34	--

GICS Sector Breakdown: 12/2018	%	Equity Characteristics: 12/2018	%
Materials	4.01	Beta(5 Year)	--
Energy	2.75	Dividend Yield	2.40
Consumer Staples	8.48	5 Year EPS Growth	9.27
Consumer Discretionary	14.67	Price/Book	1.99
Industrials	10.44	P/E (Proj next 12 mths)	14.63
Utilities	3.42	Return on Equity	14.89
Health Care	6.68	Market Capitalization:	
Information Technology	11.56	Wght Avg (\$ MM)	52770.00
Communication Services	7.92	Median (\$ MM)	33190.00
Financials	21.12	Debt/Equity	--
Real Estate	6.09	Active Share	0.0
Cash	2.86	Total # of Holdings	202.0
Other	--	% of Top Ten Holdings	--
		Ann Fiscal YTD Turnover	--
		SEC-30-Day Yield	--

Ten Largest Holdings:12/2018	%	Firm Representative Client List
CASH & CASH EQUIVALENTS	4.1500	Confidential
AIRBUS SE (BEARER)	2.7900	Confidential
OCADO GROUP PLC	2.7500	Confidential
SAFRAN SA	2.6100	Confidential
ASTRAZENECA PLC (GBP)	2.3400	Confidential
ENEL SPA	2.1700	Confidential
LVMH MOET HENNESSY LOUIS	2.0400	Confidential
PERNOD RICARD SA	2.0300	Confidential
AIA GROUP LTD	1.8800	Confidential
KEYENCE CORP	1.8500	Confidential



PERIOD	RATE OF RETURN			GROWTH OF \$1,000		
	MANAGER	BENCHMARK	EXCESS	MANAGER	BENCHMARK	PREMIUM
1 Yr	-11.26	-14.20	2.94	\$887	\$858	\$29
2 Yrs	8.06	4.47	3.59	\$1,168	\$1,091	\$76
3 Yrs	6.31	4.48	1.83	\$1,201	\$1,140	\$61
4 Yrs	3.77	1.84	1.93	\$1,160	\$1,076	\$84
5 Yrs	2.01	0.68	1.33	\$1,105	\$1,034	\$70
6 Yrs	5.32	2.98	2.35	\$1,365	\$1,192	\$173
7 Yrs	7.43	4.85	2.58	\$1,651	\$1,393	\$258
8 Yrs	4.67	2.33	2.34	\$1,441	\$1,202	\$239
9 Yrs	5.47	3.27	2.19	\$1,614	\$1,336	\$278
10 Yrs	7.63	6.57	1.06	\$2,086	\$1,890	\$196
Inception	10.60	--	--	\$56,262	--	--

Equity Personnel	Total	Firm Personnel	Total
Portfolio Managers	4	Portfolio Managers	105
Research Analysts	103	Research Analysts	215
Traders	22	Traders	105
Marketing	1500	Marketing	1500
Total Equity	1629	Client Service	2400

EQUITY INVESTMENT PHILOSOPHY - Capital uses a seamless approach to managing non-U.S. equities, relying on independent research and the integration of multiple perspectives. As markets and economies become more globalized, returns for developed market equities are increasingly driven by industry factors outside the U.S. Our research process and multiple portfolio manager system take advantage of this trend: we compare companies across regions and sectors to create a bottom-up portfolio designed to reflect the best investments internationally.

INVESTMENT DECISION-MAKING PROCESS - A core belief in independent research and long-term focus, combined with the diversity captured through our multiple portfolio manager system, define our investment process. As active managers, we believe that a comprehensive knowledge of companies and the global context in which they operate is the key to superior long-term returns. The investment process begins with in-depth research conducted by a large global team of analysts through on-site visits to companies, their competitors, suppliers and other relevant parties. Most of our analysts have made research their careers, developing long-standing relationships with key people in the industries they follow. Non-U.S. equity portfolio analysts and managers also work closely with our fixed-income and macroeconomic analysts when examining potential investments, especially in global industries such as energy and technology, benefiting from the vigorous discussion of multiple views. Analysts as a group are given a portion of portfolio assets to manage, each in their particular fields of expertise. Because they manage money, analysts provide portfolio managers with clear signals about their strongest convictions. The investment team consists of seven portfolio managers, each of whom makes independent investment decisions. Managers maintain a long-term view as they look for quality companies at attractive prices. While they primarily focus on large-capitalization stocks outside the U.S., there has been an increased focus in the mid-cap area. Varying investment styles and approaches among managers result in robust interaction, with constant challenges to prevailing convictions and frequent retesting of investment theses in each stock and market. This entire process is overseen by a mandate manager who helps achieve an ideal balance of convictions and investment styles to create a portfolio that reflects the best ideas of our managers. We have a comprehensive framework for managing risk. Our fundamental research process and a multiple manager approach help diversify risk. Capital's independent portfolio control and compliance teams monitor compliance with client guidelines and market regulations.

ORGANIZATION AND OWNERSHIP - Capital Group is one of the largest privately held investment management organizations in the world serving thousands of leading institutions and millions of individual investors. With more than 80 years of investment experience, we are globally recognized by investors seeking superior long-term investment results. Our roots date back to 1931, when Jonathan Bell Lovelace founded the Capital organization as a research-based company focused on helping investors in the wake of the 1929 Wall Street Crash. He believed that fundamental research is essential to achieving superior long-term investment results. The small company he established, based on this belief, has grown into one of the world's most respected financial institutions. Over time, the Capital organization has become truly global. In addition to managing the U.S.-based American Funds® family of mutual funds, Capital offers actively managed equity, fixed-income and balanced investment portfolios through separate accounts, trusts and funds worldwide. Today Capital Group manages \$1.4 trillion in assets and employs more than 7,000 associates, collectively, worldwide. The Capital Group Companies, Inc. (CGC) is the parent company of a number of organizational entities, all of which directly or indirectly provide investment management services. Capital Group has always been privately held and employee-owned by a broad group of more than 400 key investment and administrative active associates and retirees. Because ownership is so widely distributed, no one individual owns such a significant proportion of shares, that his or her departure would greatly impact the financial integrity or daily operations of the company.

Offered WRAP/TAMP Program:

*PSN is an investment manager database and is a division of Informa Investment Solutions, Inc. (IIS). Reproduction of any information obtained from PSN in any form is prohibited without the written permission of Informa Investment Solutions, Inc. Performance figures shown are gross of manager fees. All rates of return over one year are annualized. The performance figures are provided from the investment management firm and are reported for informational purposes only. No representation is given with respect to their accuracy or completeness, nor that the figures are necessarily GIPS compliant, and they will be subject to change. The information provided is not intended to be a complete analysis of every material fact concerning the firm or product. Past performance does not guarantee future results. This information should not be deemed as an offer to sell or a solicitation of an offer to buy shares of products that are described herein. Index performance returns do not reflect any management fees, transaction costs or expenses. One can not invest directly in an index. Because of the possibility of human or mechanical error by IIS sources or others, IIS does not guarantee the accuracy, adequacy, completeness or availability of any information and is not responsible for any errors or omissions or for the results obtained from the use of such information. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE. In no event shall IIS be liable for any indirect, special or consequential damages in connection with use of any subset of PSN data or derived data.

OVERALL RANKING:

μ μ μ μ

Product Type: Open Ended Mutual Fund
Mgmt. Co. Name: MFS
Mgmt. Co. Address: MFS SERIES TRUST X
111 HUNTINGTON AVENUE 24TH FLOOR
BOSTON MA 02199
USA
Phone: 800-225-2606
Website: <http://www.mfs.com>
Inception Date: 1/1997
CUSIP: 55273E848
Ticker: MQGIX
Share Class Type: Inst
Total Net Assets (12/2018): \$1,506,576,269
NAV (12/2018): 33.03
Yield: 1.11
Equity Style: Large Growth
Fix Income Style: --
Morningstar Category: Foreign Large Growth
Fund Objective: Foreign Stock
Portfolio Turnover: 12.00
Open to New Investors: Yes
Init. Min. Purchase (\$): 0.00
Subsequent Purchase (\$): --
Init. IRA Min. Purchase (\$): --
Portfolio Managers: David Antonelli
Tenure (yrs): 8.97

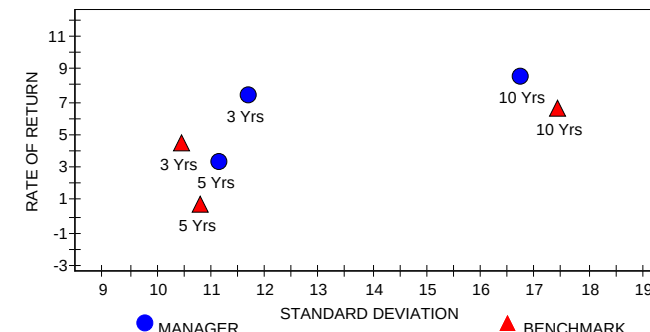
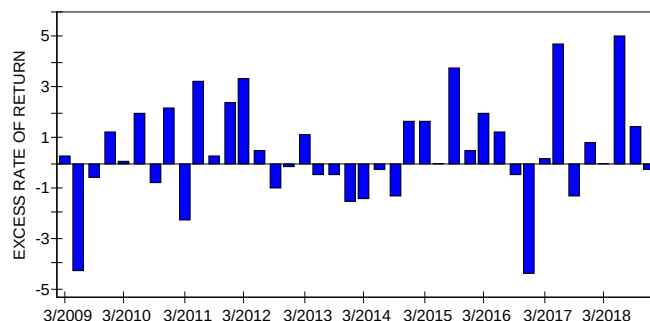
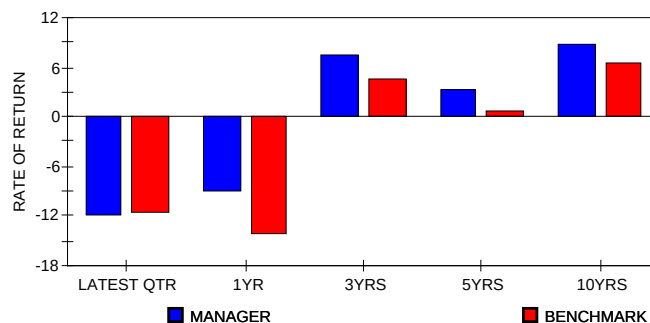
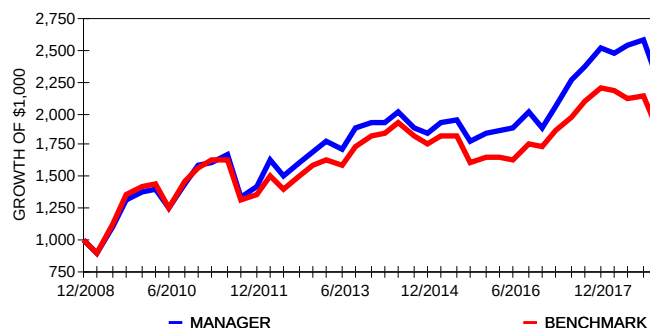
	MRQ	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	Incept
Manager	-11.7	-8.86	32.46	2.64	0.30	-5.10	13.84	19.71	-10.62	15.24	38.07	5.75
Benchmark	-11.4	-14.20	27.19	4.50	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	--
Excess	-0.29	5.34	5.27	-1.86	5.97	-1.24	-1.45	2.88	3.09	4.09	-3.38	--
90 TBILL	0.59	2.00	0.96	0.33	0.06	0.03	0.05	0.08	0.06	0.14	0.15	2.20

PERIOD	ROR	STDEV	ALPHA	BETA	RSQR	TRCKERR	SHARPE	INFORATIO
3 Yrs	7.41	11.70	2.92	1.01	0.84	4.80	0.54	0.61
4 Yrs	5.58	11.53	3.80	0.94	0.86	4.44	0.41	0.84
5 Yrs	3.35	11.15	2.72	0.95	0.86	4.24	0.24	0.63
6 Yrs	5.03	11.02	2.20	0.94	0.87	4.02	0.40	0.51
7 Yrs	7.01	12.02	2.26	0.97	0.90	3.92	0.54	0.55
8 Yrs	4.63	13.63	2.36	0.98	0.92	3.97	0.31	0.58
9 Yrs	5.76	14.52	2.55	0.97	0.93	3.84	0.37	0.65
10 Yrs	8.62	16.75	2.34	0.94	0.95	3.97	0.49	0.52
Inception	5.75	17.83	--	--	--	--	0.20	--

FEES AND EXPENSES			COMPOSITION OF ASSETS		
Deferred Load (%)	--		Cash (%)		1.35
Front Load (%)	--		Convertible (%)		0.00
Actual 12B-1 (%)	--		Non-US Bonds (%)		0.00
Expense Ratio (%)	0.89		Non-US Stocks (%)		92.28
Management Fee (%)	0.90		Preferred (%)		0.01
Redemption Fee (%)	--		US Bonds (%)		0.00
Admin Fee (%)	--		US Stocks (%)		6.36
			Other (%)		0.00

STYLE BREAKDOWN			MARKET CAP BREAKDOWN		
Equity Large Value (%)	6.22		Cap Giant (%)		61.51
Equity Large Blend (%)	24.40		Cap Large (%)		24.59
Equity Large Growth (%)	54.95		Cap Medium (%)		13.65
Equity Mid Value (%)	3.09		Cap Small (%)		0.25
Equity Mid Blend (%)	4.95		Cap Micro (%)		0.00
Equity Mid Growth (%)	6.13				
Equity Small Value (%)	0.00				
Equity Small Blend (%)	0.00				
Equity Small Growth (%)	0.26				

FIXED-INCOME STATISTICS			EQUITY STATISTICS		
Avg Eff/Mat/Duration (yrs)	--		Price/Earning Ratio (%)		18.84
Avg Weighted Coupon (%)	--		Price/Book Ratio (%)		3.07
Avg Credit Quality			Price/Sales Ratio (%)		2.27
			Price/Cash Ratio (%)		14.15



RATE OF RETURN				GROWTH OF \$1,000		
PERIOD	MANAGER	BENCHMARK	EXCESS	MANAGER	BENCHMARK	PREMIUM
1 Yr	-8.86	-14.20	5.34	\$911	\$858	\$53
2 Yrs	9.87	4.47	5.41	\$1,207	\$1,091	\$116
3 Yrs	7.41	4.48	2.93	\$1,239	\$1,140	\$99
4 Yrs	5.58	1.84	3.74	\$1,243	\$1,076	\$167
5 Yrs	3.35	0.68	2.68	\$1,179	\$1,034	\$145
6 Yrs	5.03	2.98	2.06	\$1,343	\$1,192	\$150
7 Yrs	7.01	4.85	2.17	\$1,607	\$1,393	\$214
8 Yrs	4.63	2.33	2.31	\$1,437	\$1,202	\$235
9 Yrs	5.76	3.27	2.49	\$1,656	\$1,336	\$320
10 Yrs	8.62	6.57	2.05	\$2,286	\$1,890	\$396
Inception	5.75	--	--	\$3,617	--	--

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PERIODS ENDING: December 31, 2018
SINCE INCEPTION: December 31, 1995
BENCHMARK: MSCI ACWI x US Net

400 S. Hope Street, 21st Floor
Los Angeles, CA, 90071
CONTACT: Mr. Rob Forshee

TEL: 213-486-1900
FAX:
PRODUCT ASSETS: \$ 8,765.46 MILLION

EQUITY INVESTMENT PHILOSOPHY - Capital uses a seamless approach to managing non-U.S. equities, relying on independent research and the integration of multiple perspectives. As markets and economies become more globalized, returns for developed market equities are increasingly driven by industry factors outside the U.S. Our research process and multiple portfolio manager system take advantage of this trend: we compare companies across regions and sectors to create a bottom-up portfolio designed to reflect the best investments internationally.

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for managing risk. Our fundamental research process and a multiple manager approach help diversify risk. Capital's independent portfolio control and compliance teams monitor compliance with client guidelines and market regulations.

PORTFOLIO CONSTRUCTION - Portfolio construction begins with intensive research and analysis of companies and securities. With a thorough understanding of companies and their respective global industries, analysts and portfolio managers discuss potential investments. Then individual portfolio managers, representing a range of backgrounds and investment styles, select securities for the portfolio based on each stock's long-term earnings prospects and its valuation compared to its peers and the market. Research analysts also manage a portion of the portfolio and invest in their best ideas within the industries they cover. The total portfolio holdings and investment results are the aggregate of the contributions of a large number of experienced investment professionals. We ensure broad portfolio diversification by having assembled a team of portfolio managers with complementary investment styles. The Investment Committee, composed of senior investment professionals, is ultimately responsible for the overall risk exposure of the portfolio and ensuring that client guidelines are upheld. We have a formal process for analyzing and discussing the attribution characteristics of each client's portfolio, and looking at the styles and characteristics of each portfolio manager as well as the portfolio as a whole. All investment ideas must be discussed before being added or removed from the Control List, which is our internal record of securities that are appropriate for purchase or sale. At the operational level, an independent Portfolio Control group is the centralized control mechanism that ensures adherence to the list of securities eligible for purchase, automatically checks trades for compliance with risk parameters and client guidelines prior to execution, authorizes all trade orders, and relays authorized trade orders to traders.

KEY INVESTMENT OFFICER:

TEAM APPROACH

Gerald Du Manoir
Current Position: Portfolio Management, 1990 -
PRESENT
Current Firm: Capital Guardian Trust Company

Responsibility: Equity Portfolio Manager
Professional Accreditation:
Education Undergraduate: Institut Supérieur de
Gestion, BA
Year Entered Industry: 1990
Phone:
email:
Previous Position: -
Company:
Title:

Rudolf Staehelin
Current Position: , 1981 - PRESENT
Current Firm:
Responsibility:
Professional Accreditation:
Education Undergraduate: Universitat Basel, MBA
Education Graduate: Stanford Graduate School of
Business, MBA
Advanced Degree: Universitat Basel, PhD
Year Entered Industry: 1980
Phone:
email:
Previous Position: -
Company:
Title:

Philip Winston
Current Position: Portfolio Management, 1997 -
PRESENT
Current Firm: Capital International Limited
Responsibility: Equity Portfolio Manager
Professional Accreditation:
Education Graduate: Cambridge University, MA
Advanced Degree: Cambridge University, PhD
Year Entered Industry: 1985
Phone:
email:
Previous Position: -
Company:
Title:

Michael Cohen
Current Position: Portfolio Manager, - PRESENT
Current Firm: Capital Guardian
Responsibility: Equity Portfolio Manager
Professional Accreditation:
Education Undergraduate: Tel Aviv, BS

Education Graduate: London Business School, MBA
Year Entered Industry: 1991
Phone:
email: cgiisrfi@capgroup.com
Previous Position: -
Company:
Title:

FEES AND MINIMUM ACCOUNT:

SEPARATE ACCT: 70bp on first \$25MM, 55bp on
next \$25MM, 42.5bp on Next \$200MM, 37.5bp over
\$250MM; Min Acct Size: \$50MM; Min Fee: \$312,500

COMMINGLED FUND: 70bp on first \$25MM, 55bp
on next \$25MM, 42.5bp on Next \$200MM, 37.5bp
over \$250MM; Min Acct Size: \$10MM; Min Fee:
\$70,000

Other: Daily Valued Commingled funds for Defined
Contribution Plans - 0.72% on all assets. Please ask
about large client discounts and revenue sharing
arrangements.

LAST MODIFIED ON: 1/21/2019

Important Information about this Report

This report includes presentations of managers' performance on a gross fee basis. Since the effects of management fees reduce performance, this report is intended only for one-on-one presentations to institutional and high net worth individuals who understand how the payment of fees, compounded over time, will reduce performance results and have indicated such accreditation in the MEPS questionnaire.

This report is intended as a general guide for your investment plans and is for your use only. This report provides, among other things, a preliminary comparison to various market indexes of the hypothetical investment performance that might have been achieved if the investment managers identified had managed an investor's account in accordance with the asset allocations and investment styles specified. It is not intended to provide and should not be construed as providing tax or legal advice.

The information contained in this report reflects a collaborative process between you and your Financial Advisor. Any recommendations are based upon our understanding of your responses to the profile questions and are current only as of the date printed on the front cover. Unless you make a specific request for an update, this report will not be updated to reflect any changes in any of the accounts covered, your investment objectives, risk tolerances or market conditions.

You should note that UBS Financial Services ("the Firm") has a variety of products and services that provide portfolio review and analysis. The recommendations and types of analyses provided (including recommended asset allocation strategies) may vary depending on the asset allocation model and program used.

This report may cover a number of your existing portfolio, each with potentially different investment objectives and risk parameters. As you instructed, the assets in these accounts have been considered as a whole in developing an overall asset allocation strategy that addresses your specific investment goal.

Investment Manager Performance

Performance results for investment managers that are included in our ACCESS program, which are indicated throughout the report, are based upon the ACCESS manager's time weighted rates of return of fully discretionary ACCESS accounts managed for at least one full calendar quarter. Performance results for non-ACCESS participating investment managers are obtained from Informa Investment Solutions' Plan Sponsor Network (PSN) as reported by each investment manager and do not reflect actual UBS Financial Services account performance. Your returns may vary from these results shown due to timing and other individual account factors. These

results are generally net of commissions on securities transactions but do not reflect the deduction of the investment manager's fee or UBS Financial Services' fee. The payment of these fees and expenses will reduce your return. The net effect of the deduction of fees on annualized performance, including the compounded effect over time, is determined by the relative size of the fee and the account's investment performance. For example, for an account with a 2.8% annual fee deducted quarterly, if the gross performance is 10% on an annual basis, the quarterly compounding effect of the fees will result in a final performance of approximately 7.1% per year, a reduction of 2.9% per year. Compounding will similarly affect the account's performance on a cumulative basis. It should also be noted that where your gross returns are compared to an index, the index performance also does not reflect any transaction costs or management fees.

Some investment managers presented in the strategies may have individual performance track records that are longer than the period shown in the report. Individual investment managers' performance records for longer time periods, if applicable, are available through your Financial Advisor. For complete information regarding these investment managers, their fees and performance, contact your UBSIC Consultant and see the manager's Form ADV, Part II.

Important Information Regarding Simulated Performance

The strategy is a new strategy and does not have a track record. The performance information presented is simulated, backtested and was created by applying the same investment perspectives and quantitative analysis of valuation, quality and sentiment that are employed in existing strategies managed by the investment manager, though differences exist in portfolio construction. Any improvements that were incorporated into the current investment process and quantitative models were assumed to exist for the entire simulation period. Implementation of the live strategy versus the simulated strategy will be virtually identical with the exception of intramonth trading. The hypothetical performance results for the model shown reflect the investment returns that an investor might have achieved by investing in the strategy for the entire period indicated. It assumes that, since inception, no cash was added to or assets withdrawn from the account and that all dividends, gains and other earnings in the account were reinvested. The simulation assumed once a month trading but trading for the live strategy will likely occur more frequently. Returns are simulated for the entire period and assume 1.0% transaction costs. The testing methodology used both internally and Factset provided data and applications to generate simulated historical portfolios. The results shown do not represent the results of actual trading using client assets, but were achieved by means of the

retroactive application of a model that was designed with the benefit of hindsight. The simulated performance was compiled after the end of the period depicted and does not represent the actual investment decisions of the advisor. These results do not reflect the effect of material economic and market factors on decision-making. As a result, there is no reason to believe that your portfolio will perform in a similar manner or that the investment manager would have made the same investment recommendations or achieved the same level of performance if it had been managing the strategy for the entire period for actual clients and charging fees for the advice, with the knowledge that clients would rely on the advice and in light of then-current market conditions. The strategy did not exist during the period presented. In addition, if investors had actually invested based on the strategy, their results would have differed from those shown because of differences in the timing and amounts of their investments. Past performance is never an indicator of future results.

Index Information

An actual investment in the securities included in the index would require an investor to incur transaction costs, which would lower the performance results. Please keep in mind that index information is for illustrative purposes and relates to historical performance of market indexes and not the performance of actual strategies or managers presented. The past performance of the indexes is not a guarantee of future results because each index reflects an unmanaged universe of securities and does not include any deduction for advisory fees or other expenses that would reduce actual returns. The performance shown should not be considered indicative of the performance of an actively managed portfolio for the same time period. Most managers are not restricted to investment in the same securities or security weightings as the corresponding indexes, so performance will vary. Finally, the performance of the indexes reflects the reinvestment of all income and dividends. A description of each index can be found in the Definitions section at the end of this report.

Recommended Strategies

The Manager Recommendations included in this Report are limited to those managers and strategies in our ACCESS, MAC Researched, and UBSIC Reviewed programs. While the due diligence process encompasses managers in each program, the frequency and depth of our due diligence reviews varies depending on which program the manager participates in. The level of due diligence encompasses a quantitative review of composite and actual performance data and portfolio analytics (including responses to a detailed questionnaire) and may also include on-site visits by one or more of our Investment Manager Research Analysts to each manager. For ACCESS managers, on-site visits occur on average at least once every 12 months. On-site visits to MAC Researched managers occur on average at least every 2 years. UBSIC Reviewed managers are subject to in-depth review on average at least every 2 years, but no on-site visits are conducted. The evaluation criteria covered in on-

site visits are the same for managers in both programs. In addition, for ACCESS managers, a detailed review of portfolio performance and attribution is performed on a quarterly basis to ensure that portfolios continue to be invested consistent with the manager's stated investment style. Portfolio attribution analysis is performed prior to on-site visits and may be done during periods of poor relative performance, but is not systematically performed on a quarterly basis. T

he strategies presented are hypothetical portfolios, and have not been tracked by UBS Financial Services. They were created as of the date of this report with the benefit of hindsight. The past performance of each recommended investment manager was known to UBS Financial Services when it developed the strategies and was a key factor in the Firm's decision to include each investment manager in a recommended strategy. There is no reason to believe that UBS Financial Services would have been able to develop this same strategy without knowing in advance how the recommended investment managers and the markets would perform, and these results are not an indicator that UBS Financial Services will be able to do so in the future.

The past performance results for the recommended strategy are hypothetical. They reflect the theoretical investment returns that an investor might have achieved by investing the amount and on the dates indicated on the investment profile section of this report, and by following the recommendation for initially allocating, and then reallocating from time to time, the account's assets among the different recommended investment managers. It assumes that, after establishing the account, the investor would not have added any cash to or withdrawn assets from the account and that all dividends, gains and other earnings in the account would have been reinvested in accordance with the Firm's recommendations. The recommended strategy in this format may not have existed as of the dates for which performance is shown. In addition, some of the investment managers recommended may not have been part of any UBS Financial Services sponsored program at that time. Actual assets of actual clients may not have been invested in accordance with these strategies during the time periods shown.

Past performance can never guarantee future results.

Assets Held at Other Financial Institutions

At your direction, we may also have considered assets that you hold at other financial institutions. Information about these assets is based solely on the information you have provided to us. We have not verified, and are not responsible for, the accuracy or completeness of this information.

You have provided the names of investment managers managing your assets at other financial institutions. This report provides performance information derived from a third party database, which is believed to be reliable, but which UBS Financial Services has not verified. The managers listed are in comparative portfolios and are for illustrative purposes. You may not have received the performance returns

presented here because they are gross of any management fees and other charges that have been assessed to your account. Therefore, any evaluation or analysis provided in this report regarding separate account managers, which includes assets

Please note that any discrepancies between the information you provided and the actual value of those assets at the time you choose to implement the strategy may also affect the outcome of the asset allocation strategy we discuss with you. As such, the results may differ from any illustrations shown on this report.

Taxes Implementing any strategy presented, including changing any strategy may result in incurring gains or losses for income tax purposes. UBS Financial Services does not provide tax advice. We recommend that you evaluate this report with your legal and/or tax advisor before taking any action because of the significance and complexity of tax considerations.

Periodic Reviews Since this report is based on information provided as of the date indicated on the cover, assumptions and estimates may change. For this reason, with your Financial Advisor, you should periodically revisit your current financial situation, your current strategy, and the assumptions it contains.

Definitions

General Definitions

Alpha – A measure of the difference between a fund's actual returns and its expected performance, given its level of risk as measured by beta. A positive alpha figure indicates the fund has performed better than its beta would predict. In contrast, a negative alpha indicates the fund's underperformance, given the expectations established by the fund's beta. All MPT statistics (alpha, beta, and R-squared) are based on a least-squared regression of the fund's return over Treasury bills.

Beta – A measure of a fund's sensitivity to market movements. The beta of the market is 1.00 by definition. Morningstar calculates beta by comparing a fund's excess return over T-bills to the market's excess return over T-bills, so a beta of 1.10 shows that the fund has performed 10% better than its benchmark index in up markets and 10% worse in down markets, assuming all other factors remain constant. Conversely, a beta of 0.85 indicates that the fund's excess return is expected to perform 15% worse than the market's excess return during up markets and 15% better during down markets.

Blend – A Blend is several managers allocated to percentages of a whole. The performance of the managers is weighted to create the blended performance.

Downside Risk – Downside Risk, or Semi-variance is the standard deviation (see Standard Deviation) of the portfolio's negative returns. Many consultants find the statistic extremely useful since it measures volatility in undesirable situations. The higher the value, the greater the historical Downside Risk.

Down Market Capture Ratio – A measure of managers' performance in down markets relative to the market itself. A down market is one in which the market's quarterly return is less than zero. The lower the manager's down-market capture ratio, the better the manager protected capital during a market decline. A value of 90 suggests that a manager's losses were 90% of the market loss when the market was down.

Information Ratio – The ratio of annualized expected residual return to residual risk. To calculate the IR the active return and tracking error must be annualized.

R-Squared – Reflects the percentage of a strategy's movements that can be explained by movements in its benchmark index. An R-squared of 100 indicates that all movements of a fund can be explained by movements in the index. Thus, portfolios invested in S&P 500 stocks will typically have an R-squared close to 100. Conversely, a low R-squared indicates that very few of the fund's movements can be explained by movements in its benchmark index. An R-squared measure of 35, for example, means that movements in the benchmark index can explain only 35% of the portfolio's movements.

Sharpe-Ratio – A risk-adjusted measure developed by Nobel Laureate William Sharpe. It is calculated by using standard deviation and excess return to determine reward per unit of risk. The higher the Sharpe Ratio, the better the portfolio's historical risk-adjusted performance is. The Sharpe Ratio is calculated for the past 36-month period by dividing a portfolio's annualized excess returns by its annualized standard deviation. Since this ratio uses standard deviation as its risk measure, it is most appropriately applied when analyzing a portfolio that is an investor's sole holding. The Sharpe Ratio can be used to compare two portfolios directly on how much risk a fund has to bear to earn excess return over the risk-free rate.

Standard Deviation – A measure of risk. A statistical measurement of dispersion about an average, which, for a portfolio, depicts how widely the returns varied over a certain period of time. Investors use the standard deviation of historical performance to try to predict the range of returns that are most likely for a given portfolio. When a portfolio has a high standard deviation, the predicted range of performance is wide, implying greater risk and volatility.

Tracking Error – Measures the divergence between the price behavior of a portfolio to the price behavior of a benchmark.

Up Market Capture Ratio – Up-market capture ratio is a measure of managers' performance in up markets relative to the market itself. An up market is one in which the market's quarterly return is greater than or equal to zero. The higher the manager's up-market capture ratio, the better the manager capitalized on a rising market. For example, a value of 110 suggests that the manager captured 110% of the up market (performed ten percent better than the market) when the market was up.

Index Definitions

First Boston Convertible Securities (FBCB) This is a performance benchmark for convertible accounts. This index generally includes 250 to 300 issues. To be included, convertible bonds and preferreds must be rated B- or better by Standard & Poor's (quality-related adjustments are made at the end of each calendar year), convertibles must have a minimum issue size of \$50 million (new issues are added in the month following their issuance), and preferreds must have a minimum of 500,000 shares outstanding. Eurobonds are also included if they are issued by US-domiciled companies, rated B- or higher by Standard & Poor's, and have an issue size greater than \$100 million.

Barclays Capital Aggregate Bond Index (BCAG) Composed of securities from Barclays Capital Brothers government/corporate bond index, mortgage-backed securities index, and the asset-backed securities index. Total return comprises price appreciation/depreciation and income as a percentage of the original investment. Indexes are rebalanced monthly by market capitalization.

Barclays Capital Corporate Int (BCIC) A subset of the Barclays Capital Corporate Bond Index covering all corporate, publicly issued, fixed-rate, nonconvertible US debt issues rated at least Baa with at least \$50 million principal outstanding and maturity less than 10 years.

Barclays Capital Corporate Long Term (BCLTC) A subset of the Barclays Capital Corporate Bond Index covering all corporate, publicly issued, fixed-rate, nonconvertible US debt issues rated at least Baa with at least \$50 million principal outstanding and maturity greater than 10 years.

Barclays Capital Government Corporate Bond Index (BCGC) Composed of all bonds that are investment grade (rated Baa or higher by Moody's or BBB or highest by S&P, if unrated by Moody's). Issues must have at least one year to maturity. Total return comprises price appreciation/depreciation and income as a percentage of the original investment. Indexes are rebalanced monthly by market capitalization.

Barclays Capital Government/Corporate Int (BCIGC) Composed of all bonds covered by the Barclays Capital Government/Corporate Bond Index with maturities between one and 9.99 years. Total return comprises price appreciation/depreciation and income as a percentage of the original investment. Indexes are rebalanced monthly by market capitalization.

Barclays Capital Government/Corporate Long Term (BCLTGC) Composed of all bonds covered by the Barclays Capital Government/Corporate Bond Index with maturities of 10 years or greater. Total return comprises price appreciation/depreciation and income as a percentage of the original investment. Indexes are rebalanced monthly by market capitalization.

Barclays Capital Mortgage Backed (BCMBS) Composed of all fixed-rate, securitized mortgage pools by GNMA, FNMA, and FHLMC, including GNMA graduated payment mortgages. The minimum principal amount required for inclusion is \$50 million. Total return comprises price appreciation/depreciation and income as a percentage of the original investment. Indexes are rebalanced monthly by market capitalization.

Barclays Capital Municipal Bond (BCM) Computed twice monthly from prices on approximately 1,100 bonds. Prices are supplied by Kenny Information Systems, Inc. The index is composed of approximately 60% revenue bonds and 40% state government obligations.

Barclays Capital Municipal 5 Year (BCMB) A subset of the Barclays Capital Municipal Bond Index where the average maturity of the bonds are five years.

MSCI (EAFE) An arithmetic, market value-weighted average of the performance of over 900 securities listed on the stock exchanges of the following countries in Europe, Australia and the Far East: Australia, Hong Kong, Norway, Austria, Ireland, Singapore, Belgium, Italy, Spain, Denmark, Japan, Sweden, Finland, Malaysia, Switzerland, France, Netherlands, United Kingdom, Germany, New Zealand.

MSCI Emerging Markets (EMF) The MSCI Emerging Markets (EMF) is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. As of April 2002 the MSCI EMF Index consisted of the following 26 emerging market country indexes: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Jordan, Korea, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, Turkey and Venezuela.

MSCI World S/B Net (MSCIW) The MSCI World Index is a free float-adjusted market capitalization index that is designed to measure global developed market equity performance. As of April 2002 the MSCI World Index consisted of the following 23 developed market country indexes: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom and the United States.

S&P 500 (SWPI) Covers 500 industrial, utility, transportation, and financial companies of the US markets (mostly NYSE issues). The index represents about 75% of NYSE market capitalization and 30% of NYSE issues. It is a capitalization-weighted index calculated on a total return basis with dividends reinvested.

Russell 1000 (R1000) Consists of the 1,000 largest securities in the Russell 3000 index. This large cap (market-oriented) index represents the universe of stocks from which most active money managers typically select. The Russell 1000 is highly correlated with the S&P 500 index.

Russell 1000 Growth (R1000G) Contains those Russell 1000 securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-earnings ratios, lower dividend yields and higher forecasted growth values than the value universe.

Russell 1000 Value (R1000V) Contains those Russell 1000 securities with a less-than-average growth orientation. It represents the universe of stocks from which value managers typically select. Securities in this index tend to exhibit low price-to-book and price-earnings ratios, higher dividend yields and lower forecasted growth values than the growth universe.

Russell 2000 (R2000) Consists of the smallest 2,000 securities in the Russell 3000 index, representing approximately 11% of the Russell 3000 total market capitalization. This index is widely regarded in the industry as the premier measure of small cap stocks.

Russell 2000 Growth (R2000G) Contains those Russell 2000 securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-earnings ratios, lower dividend yields and higher forecasted growth values than the value universe.

Russell 2000 Value (R2000V) Contains those Russell 2000 securities with a less-than-average growth orientation. Securities in this index tend to exhibit lower price-to-book and price-earnings ratios, higher dividend yields and lower forecasted growth values than the growth universe.

Russell 2500 (R2500) Consists of the bottom 500 securities in the Russell 1000 index and all 2,000 securities in the Russell 2000 index, representing approximately 23% of the Russell 3000 total market capitalization. This index is a good measure of small to medium-small stock performance.

Russell 2500 Growth (R2500G) Measures the performance of those Russell 2500 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 2500 Value (R2500V) Measures the performance of those Russell 2500 companies with lower price-to-book ratios and lower forecasted growth values.

Russell 3000 (R3000) Measures the performance of the 3,000 largest US companies based on total market capitalization, which represents approximately 98% of the investable US equity market.

Russell 3000 Growth (R3000G) Measures the performance of those Russell 3000® Index companies with higher price-to-book ratios and higher forecasted growth values. The stocks in this index are also members of either the Russell 1000® Growth or the Russell 2000® Growth indexes.

Russell 3000 Value (R3000V) Measures the performance of those Russell 3000® Index companies with lower price-to-book ratios and lower forecasted growth

values. The stocks in this index are also members of either the Russell 1000® Value or the Russell 2000® Value indexes.

Russell Midcap (RMID) Consists of the smallest 800 securities in the Russell 1000 index, as ranked by total market capitalization. This index accurately captures the medium-sized universe of securities and represents approximately 35% of the Russell 1000 total market capitalization.

Russell Midcap Growth (RMIDG) Contains those Russell Midcap securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-earnings ratios, lower dividend yields and higher forecasted growth values than the value universe. The stocks are also members of the Russell 1000 Growth Index.

Russell Midcap Value (RMIDV) Contains those Russell Midcap securities with a less-than-average growth orientation. Securities in this index tend to exhibit low price-to-book and price-earnings ratios, higher dividend yields and lower forecasted growth values than the growth universe. The stocks are also members of the Russell 1000 Value Index.

Salomon Brothers World Government Bond (SWGB) A market capitalization-weighted index consisting of government bond markets of the following countries: Australia, Austria, Belgium, Canada, Denmark, France, Germany, Italy, Japan, Netherlands, Spain, Sweden, United Kingdom, United States.

U.S. Treasury Bill (USTB): Represents 90-day return for Treasury Bills issued by the United States government.

Wilshire RE Securities Index (WRESI) A broad measure of the performance of publicly traded real estate securities, such as Real Estate Investment Trusts (REITs) and Real Estate Operating Companies (REOCs). The index is capitalization-weighted. The beginning date, January 1, 1978, was selected because it coincides with the Russell/NCREIF Property Index start date. The Index is rebalanced monthly, and returns are calculated on a buy and hold basis.

**UBS****Cobb County OPEB**
Asset Class SummaryStyle Analysis

As of December 31, 2018

Manager/Accounts	Account #:	% Assets	Large Cap Growth	Large Cap Blend	Large Cap Value	Mid Cap Blend	Small Cap Growth	Small Cap Value	Global	International	Fixed Income	Cash	Total Portfolio
TCW	XXXXX93	5.6%	\$ 6,375,868										\$ 6,375,868
Westfield Capital Management	XXXXX91	6.3%	\$ 7,147,820										\$ 7,147,820
Vanguard S&P 500 (VINIX)	XXXXX57	10.8%		\$ 12,177,109									\$ 12,177,109
Eagle Capital	XXXXX00	10.2%			\$ 11,504,940								\$ 11,504,940
Vanguard Mid Cap (VIMAX)	XXXXX57	5.7%				\$ 6,393,842							\$ 6,393,842
Eagle Asset Management (HSRUX)	XXXXX57	2.4%					\$ 2,725,391						\$ 2,725,391
Vaughan Nelson	XXXXX94	3.0%						\$ 3,344,343					\$ 3,344,343
BlackRock Global Allocation (MALOX)	XXXXX57	2.9%							\$ 3,318,929				\$ 3,318,929
First Eagle Global (SGHIX)	XXXXX57	3.4%							\$ 3,803,691				\$ 3,803,691
Loomis Sayles Global Equity & Income(LSWWX)	XXXXX57	3.5%							\$ 3,996,799				\$ 3,996,799
Vanguard Total Int'l Stock (VTSNX)	XXXXX57	6.6%								\$ 7,446,905			\$ 7,446,905
Oppenheimer International Growth (OIGYX)	XXXXX57	5.8%								\$ 6,594,300			\$ 6,594,300
Dodge & Cox Int'l (DODFX)	XXXXX57	5.3%								\$ 5,965,187			\$ 5,965,187
Richmond	XXXXX92	13.2%									\$ 14,934,473		\$ 14,934,473
BlackRock Strategic Income Opps (BSIIX)	XXXXX57	7.3%									\$ 8,227,060		\$ 8,227,060
Delaware Diversified Income (DPFFX)	XXXXX57	8.1%									\$ 9,141,024		\$ 9,141,024
Total		100%	\$ 13,523,688	\$ 12,177,109	\$ 11,504,940	\$ 6,393,842	\$ 2,725,391	\$ 3,344,343	\$ 11,119,420	\$ 20,006,392	\$ 32,302,557	\$ -	\$ 113,097,682
Current Allocation			11.96%	10.77%	10.17%	5.65%	2.41%	2.96%	9.83%	17.69%	28.56%	0.00%	100%
Target Allocation			11.00%	11.00%	11.00%	6.00%	3.00%	3.00%	10.00%	20.00%	25.00%		100%
Difference in %			0.96%	-0.23%	-0.83%	-0.35%	-0.59%	-0.04%	-0.17%	-2.31%	3.56%		

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Dollar values above are rounded to the nearest dollar.

**Cobb County OPEB
Asset Class Summary
Market Value As of: December 31, 2018**

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Sources: Custodial Statement; IPS; Client Request or Advisor Recommendation

Review code: IS1602740

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Cobb County Government Employees' Pension Plan

Asset Class Summary

Style Analysis

As of December 31, 2018

Manager/Accounts	Account #:	% Assets	Large Cap Growth	Large Cap Blend	Large Cap Value	Mid Cap Blend	Small Cap Growth	Small Cap Value	Global	International	Fixed Income	Cash	Total Portfolio
TCW	XXXXX76	5.7%	\$ 33,955,518										\$ 33,955,518
Westfield Capital Management	XXXXX32	7.0%	\$ 41,333,133										\$ 41,333,133
Vanguard S&P 500 (VINIX)	XXXXX66	11.1%		\$ 65,936,973									\$ 65,936,973
Eagle Capital	XXXXX85	10.7%			\$ 63,302,998								\$ 63,302,998
Vanguard Mid Cap (VMCIX)	XXXXX66	6.3%				\$ 37,244,374							\$ 37,244,374
Eagle Asset Management	XXXXX85	2.8%					\$ 16,715,707						\$ 16,715,707
Vaughan Nelson	XXXXX49	3.2%						\$ 18,728,561					\$ 18,728,561
BlackRock Global Allocation (MALOX)	XXXXX66	2.9%							\$ 17,126,854				\$ 17,126,854
First Eagle Global (SGIIX)	XXXXX66	3.4%							\$ 20,032,067				\$ 20,032,067
Loomis Sayles Global Equity & Income(LSWWX)	XXXXX66	3.2%							\$ 19,096,111				\$ 19,096,111
Vanguard Total Int'l Stock (VTSNX)	XXXXX66	5.7%								\$ 34,017,240			\$ 34,017,240
Oppenheimer International Growth (OIGIX)	XXXXX66	5.3%								\$ 31,576,459			\$ 31,576,459
Dodge & Cox Int'l (DODFX)	XXXXX66	5.3%								\$ 31,508,799			\$ 31,508,799
Richmond	XXXXX37	12.5%									\$ 73,993,799		\$ 73,993,799
BlackRock Strategic Income Opps (BSIIX)	XXXXX66	7.5%									\$ 44,602,476		\$ 44,602,476
Delaware Diversified Income (CIT)	XXXXX84	7.4%									\$ 44,072,792		\$ 44,072,792
Total		100%	\$ 75,288,650	\$ 65,936,973	\$ 63,302,998	\$ 37,244,374	\$ 16,715,707	\$ 18,728,561	\$ 56,255,032	\$ 97,102,498	\$ 162,669,067	\$ -	\$ 593,243,859
Current Allocation			12.69%	11.11%	10.67%	6.28%	2.82%	3.16%	9.48%	16.37%	27.42%	0.00%	100%
Target Allocation			11.00%	11.00%	11.00%	6.00%	3.00%	3.00%	10.00%	20.00%	25.00%		100%
Difference in %			1.69%	0.11%	-0.33%	0.28%	-0.18%	0.16%	-0.52%	-3.63%	2.42%		

Allen Wright, Earle Dodd, Vandye Price

Senior Institutional Consultant

Senior Vice President - Wealth Management

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Dollar values above are rounded to the nearest dollar.

Cobb County Government Employees' Pension Plan
Asset Class Summary
Market Value As of: December 31, 2018

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Cobb County Government 457 Deferred Compensation Plan

UBS DC Report

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December 31, 2018

Prepared by:

UBS Institutional Consulting Group
UBS Financial Services Inc.

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Cobb County Government 457 Deferred Compensation Plan

Alerts Summary

Recent Alerts 01-11-2019

Name	Performance	Portfolio	Morningstar Category Change	Operations	Prospectus Net Expense Ratio (% Rank in Cat.)
	5 Yr. Total Return (% Rank in Category)	Equity Style Box Change		Manager Change	
American Funds 2010 Trgt Date Retire R6	✓	✓	✓	✓	✓
American Funds 2015 Trgt Date Retire R6	✓	✓	✓	✓	✓
American Funds 2020 Trgt Date Retire R6	✓	✓	✓	✓	✓
American Funds 2025 Trgt Date Retire R6	✓	✓	✓	✓	✓
American Funds 2030 Trgt Date Retire R6	✓	✗	✓	✓	✓
American Funds 2035 Trgt Date Retire R6	✓	✓	✓	✓	✓
American Funds 2040 Trgt Date Retire R6	✓	✓	✓	✓	✓
American Funds 2045 Trgt Date Retire R6	✓	✓	✓	✓	✓
American Funds 2050 Trgt Date Retire R6	✓	✓	✓	✓	✓
American Funds 2055 Trgt Date Retire R6	✓	✓	✓	✓	✓
American Funds 2060 Trgt Date Retire R6	—	✓	✓	✓	✓
American Funds Europacific Growth R6	✓	✓	✓	✓	✓
American Funds New Perspective R6	✓	✓	✓	✓	✓
American Funds Washington Mutual R6	✓	✓	✗	✓	✓
ClearBridge Small Cap I	✓	✓	✓	✓	✓
Harbor Mid Cap Growth Retirement	✓	✓	✓	✓	✓
JHancock Fundamental Large Cap Core R6	✗	✓	✓	✓	✓
Nuveen Real Estate Securities R6	✓	✓	✓	✓	✓
Oakmark International Institutional	✗	✓	✓	✓	✓
PGIM High Yield R6	✓	—	✓	✓	✓
T. Rowe Price Growth Stock I	✓	✓	✓	✓	✓
Vanguard 500 Index Admiral	✓	✓	✓	✓	✓
Vanguard Treasury Money Market Investor	—	—	✗	✓	✓
Victory Sycamore Established Value R6	✓	✓	✓	✓	✓

✗ Alerts Triggered

✓ Alerts Not Triggered

Note: funds that display a dash for any data column above are due to lack of data. The Alerts displayed in this report are being provided to assist retirement plan fiduciaries in evaluating the investment options offered under a defined contribution retirement plan. A number of different factors should be considered when choosing to add, remove or maintain retirement plan investment options. Please refer to Important Information on Alerts in back of this report.

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Cobb County Government 457 Deferred Compensation Plan

Alerts Summary

Recent Alerts 01-11-2019					
Name	Performance	Portfolio	Morningstar Category Change	Operations	Prospectus Net Expense Ratio (% Rank in Cat.)
	5 Yr. Total Return (% Rank in Category)	Equity Style Box Change		Manager Change	
Western Asset Core Plus Bond IS	✓	✓	✓	✓	✓

- ✖ Alerts Triggered
- ✓ Alerts Not Triggered

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Cobb County Government 457 Deferred Compensation Plan

Alerts

Total Return % Rank in Category 01-11-2019

5 Yr. Total Return (% Rank in Category) greater than 50

Security Name	Initial Trigger Value	Current Trigger Value	Current Comparison Value	Current Comparison Subject
JHancock Fundamental Large Cap Core R6	61.00 (as of 11-08-2018)	75.00	50.00	—
Oakmark International Institutional	62.00 (as of 11-08-2018)	70.00	50.00	—

Portfolio Statistics 01-11-2019

Equity Style Box Change

Security Name	Initial Trigger Value	Current Trigger Value	Current Comparison Value	Current Comparison Subject
American Funds 2030 Trgt Date Retire R6	 (as of 01-07-2019)			—

Morningstar Category Change

Security Name	Initial Trigger Value	Current Trigger Value	Current Comparison Value	Current Comparison Subject
American Funds Washington Mutual R6	Large Blend (as of 11-08-2018)	Large Blend	Large Value	—
Vanguard Treasury Money Market Investor	Money Market-Taxable (as of 01-12-2019)	Money Market-Taxable	Money Market - Taxable	—

All performance rankings are based on each fund's total returns relative to other funds in it's Morningstar Category for each period shown. All other percentage rankings displayed are measured on an absolute basis and compared to its Morningstar Category for the each period shown.

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Cobb County Government 457 Deferred Compensation Plan

Plan Summary

Benchmark

S&P 500 TR USD

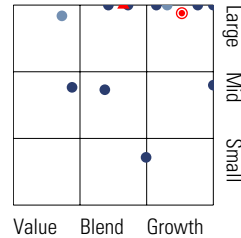
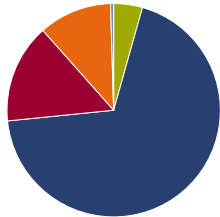
Plan Value

102,814,400.19

Total Number of Options

25

Composition 12-31-2018



Style Analysis 12-31-2018

16	18	46	Large
2	6	7	Mid
1	2	2	Small
Value	Blend	Growth	

0	19	0	High
0	63	0	Med
16	0	0	Low
Ltd	Mod	Ext	

Asset Allocation

	Portfolio Net %	Bmark Net %
Cash	4.35	0.00
US Stocks	69.04	99.16
Non-US Stocks	15.06	0.84
Bonds	11.07	0.00
Other/Not Clsfd	0.47	0.00

Equity Ownership Zone™

- Plan
- Domestic Equity
- International Equity
- Benchmark

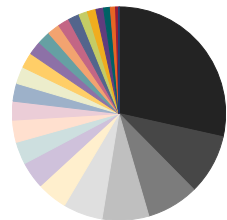
Equity Investment Style Actual %

Geo Avg Cap Plan (\$Mil)	63,346.09
Geo Avg Cap Bmark (\$Mil)	93,688.30

Fixed-Income Investment Style Actual %

Avg Effective Duration (Yrs)	5.61
Avg Effective Maturity (Yrs)	10.28
Avg Credit Quality	—

Composition By Fund 12-31-2018



Fund Name	Ticker	Plan %	Amount \$	Fund Name	Ticker	Plan %	Amount \$
T. Rowe Price Growth Stock I	PRUF	28.49	29,296,565.92	JHancock Fundamental Large Cap Core R6	JLCWX	9.11	9,369,477.71
American Funds Washington Mutual R6	RWMGX	7.88	8,101,765.35	American Funds New Perspective R6	RNPGX	7.06	7,263,230.01
Harbor Mid Cap Growth Retirement	HNMGX	5.99	6,156,646.12	ClearBridge Small Cap I	LMNSX	4.63	4,757,425.96
American Funds 2030 Trgt Date Retire R6	RFETX	4.09	4,202,092.18	Western Asset Core Plus Bond IS	WAPSX	3.41	3,502,810.03
American Funds Europacific Growth R6	REGRX	3.35	3,446,008.09	American Funds 2020 Trgt Date Retire R6	RRCTX	2.85	2,932,622.86
American Funds 2025 Trgt Date Retire R6	RFDTX	2.70	2,780,981.17	American Funds 2035 Trgt Date Retire R6	RFFTX	2.59	2,658,124.21
Oakmark International Institutional	OANIX	2.34	2,408,017.32	Nuveen Real Estate Securities R6	FREGX	2.08	2,141,975.26
American Funds 2015 Trgt Date Retire R6	RFJTX	1.98	2,039,649.87	Victory Sycamore Established Value R6	VEVRX	1.88	1,935,106.44
American Funds 2040 Trgt Date Retire R6	RFGTX	1.74	1,786,079.40	PGIM High Yield R6	PHYQX	1.70	1,747,493.85
American Funds 2045 Trgt Date Retire R6	RFHTX	1.33	1,366,851.27	American Funds 2010 Trgt Date Retire R6	RFTTX	1.31	1,343,308.57
Vanguard Treasury Money Market Investor	VUSXX	1.16	1,197,463.36	American Funds 2050 Trgt Date Retire R6	RFITX	1.01	1,040,426.65
Vanguard 500 Index Admiral	VFIAX	0.79	811,593.43	American Funds 2055 Trgt Date Retire R6	RFKTX	0.48	492,431.47
American Funds 2060 Trgt Date Retire R6	RFUTX	0.04	36,253.69				

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Cobb County Government 457 Deferred Compensation Plan

Performance

Style Count 12-31-2018

Equity Investment Style

1	2	4	Large
1	1	1	
0	0	1	Small
Value	Blend	Growth	

Equity Style Options: 11

* Does not include 11 hybrid funds.

* Style Count data is not available for 1 holdings.

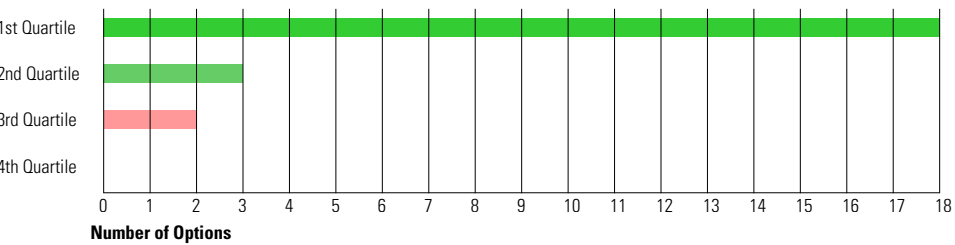
Fixed-Income Investment Style

0	0	0	High
0	1	0	
1	0	0	Low
Ltd	Mod	Ext	

Fixed-Income Options: 2

Performance Quartiles 12-31-2018

Quartile Rank (Trailing 5 Yr)



* Category % Rank is not available for 2 holdings.

Fund Performance 12-31-2018

	Type	Inception Date	Ret % YTD	Ret % 3 Mo	Ret % 1 Yr	Ret % 3 Yr	Ret % 5 Yr	Ret % 10 Yr	Ret % Since Incep	Gross Fund Exp Ratio	1 Yr % Rank	3 Yr % Rank	5 Yr % Rank	10 Yr % Rank
Large Blend(Fds)	Avg	—	-6.27	-13.53	-6.27	7.66	6.65	11.99	—	2.71	—	—	—	—
American Funds Washington Mutual R6	MF	05-01-2009	-2.66	-9.25	-2.66	10.09	8.30	12.47	13.64	0.29	12(1402)	5(1208)	15(1071)	43(805)
JHancock Fundamental Large Cap Core R6	MF	09-01-2011	-13.56	-17.74	-13.56	4.83	5.78	11.43	10.91	0.69	96(1402)	91(1208)	75(1071)	70(805)
Vanguard 500 Index Admiral	MF	11-13-2000	-4.43	-13.53	-4.43	9.22	8.46	13.10	5.51	0.04	27(1402)	16(1208)	10(1071)	19(805)
Russell 1000 TR USD	Idx	12-31-1978	-4.78	-13.82	-4.78	9.09	8.21	13.28	—	—	—	—	—	—
Large Growth(Fds)	Avg	—	-2.09	-15.43	-2.09	8.98	8.16	13.74	—	1.77	—	—	—	—
T. Rowe Price Growth Stock I	MF	08-28-2015	-0.89	-14.10	-0.89	10.45	10.22	16.14	10.40	0.52	37(1405)	28(1247)	19(1107)	12(799)
Russell 1000 Growth TR USD	Idx	12-31-1978	-1.51	-15.89	-1.51	11.15	10.40	15.29	—	—	—	—	—	—

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Cobb County Government 457 Deferred Compensation Plan

Performance

Fund Performance 12-31-2018

	Type	Inception Date	Ret % YTD	Ret % 3 Mo	Ret % 1 Yr	Ret % 3 Yr	Ret % 5 Yr	Ret % 10 Yr	Ret % Since Incep	Gross Fund Exp Ratio	1 Yr % Rank	3 Yr % Rank	5 Yr % Rank	10 Yr % Rank
Mid-Cap Value(Fds)	Avg	—	-12.86	-15.72	-12.86	5.42	3.88	11.66	—	2.38	—	—	—	—
Victory Sycamore Established Value R6	MF	03-04-2014	-9.95	-15.21	-9.95	8.18	7.50	13.36	7.26	0.54	24(417)	12(363)	3(306)	13(218)
Russell Mid Cap Value TR USD	Idx	12-31-1985	-12.29	-14.95	-12.29	6.06	5.44	13.03	—	—	—	—	—	—
Mid-Cap Growth(Fds)	Avg	—	-6.65	-17.57	-6.65	7.27	5.61	13.16	—	2.55	—	—	—	—
Harbor Mid Cap Growth Retirement	MF	03-01-2016	-1.57	-18.53	-1.57	9.50	7.17	13.11	14.38	0.81	14(605)	23(542)	25(489)	53(341)
Russell Mid Cap Growth TR USD	Idx	12-31-1985	-4.75	-15.99	-4.75	8.59	7.42	15.12	—	—	—	—	—	—
Small Growth(Fds)	Avg	—	-5.76	-20.82	-5.76	8.47	5.12	13.36	—	1.92	—	—	—	—
ClearBridge Small Cap I	MF	12-01-1994	-8.88	-19.96	-8.88	9.27	6.20	14.85	10.49	0.98	71(676)	38(583)	31(516)	24(391)
Russell 2000 Growth TR USD	Idx	12-31-1978	-9.31	-21.65	-9.31	7.24	5.13	13.52	—	—	—	—	—	—
Real Estate(Fds)	Avg	—	-5.97	-7.19	-5.97	2.45	6.92	11.50	—	2.49	—	—	—	—
Nuveen Real Estate Securities R6	MF	04-30-2013	-5.39	-6.40	-5.39	2.32	7.86	12.42	4.75	0.87	51(251)	46(223)	28(193)	17(139)
S&P United States REIT TR USD	Idx	12-31-1992	-3.79	-6.09	-3.79	2.88	7.78	12.16	—	—	—	—	—	—
Foreign Large Blend(Fds)	Avg	—	-14.59	-12.68	-14.59	2.63	0.10	5.89	—	2.43	—	—	—	—
Oakmark International Institutional	MF	11-30-2016	-23.32	-16.30	-23.32	2.48	-0.42	9.83	1.47	0.82	99(741)	59(639)	70(508)	2(380)
MSCI ACWI Ex USA NR USD	Idx	01-01-2001	-14.20	-11.46	-14.20	4.48	0.68	6.57	—	—	—	—	—	—
Foreign Large Growth(Fds)	Avg	—	-14.08	-13.87	-14.08	3.21	1.38	7.43	—	1.48	—	—	—	—
American Funds Europacific Growth R6	MF	05-01-2009	-14.91	-12.59	-14.91	4.08	1.86	7.69	7.72	0.49	58(439)	33(364)	36(315)	42(228)
MSCI ACWI Ex USA Growth NR USD	Idx	01-01-2001	-14.43	-12.20	-14.43	4.19	1.69	7.15	—	—	—	—	—	—
World Large Stock(Fds)	Avg	—	-9.64	-12.94	-9.64	5.69	3.72	9.33	—	2.22	—	—	—	—
American Funds New Perspective R6	MF	05-01-2009	-5.56	-13.15	-5.56	7.66	6.42	11.76	11.95	0.45	18(901)	19(729)	11(618)	11(360)
MSCI ACWI NR USD	Idx	01-01-2001	-9.42	-12.75	-9.42	6.60	4.26	9.46	—	—	—	—	—	—

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Cobb County Government 457 Deferred Compensation Plan

Performance

Fund Performance 12-31-2018

	Type	Inception Date	Ret % YTD	Ret % 3 Mo	Ret % 1 Yr	Ret % 3 Yr	Ret % 5 Yr	Ret % 10 Yr	Ret % Since Incep	Gross Fund Exp Ratio	1 Yr % Rank	3 Yr % Rank	5 Yr % Rank	10 Yr % Rank
Intermediate-Term Bond(Fds)	Avg	—	-0.50	0.87	-0.50	2.15	2.27	4.31	—	1.82	—	—	—	—
Western Asset Core Plus Bond IS	MF	08-04-2008	-1.47	0.78	-1.47	3.35	3.80	6.92	6.17	0.43	85(1019)	6(876)	3(767)	2(560)
BBgBarc US Agg Bond TR USD	Idx	01-01-1976	0.01	1.64	0.01	2.06	2.52	3.48	—	—	—	—	—	—
High Yield Bond(Fds)	Avg	—	-2.59	-4.33	-2.59	5.59	2.71	9.25	—	2.50	—	—	—	—
PGIM High Yield R6	MF	10-31-2011	-1.18	-4.14	-1.18	7.16	4.28	10.20	6.05	0.42	21(695)	9(604)	4(507)	22(329)
ICE BofAML US High Yield TR USD	Idx	08-29-1986	-2.26	-4.67	-2.26	7.27	3.82	10.99	—	—	—	—	—	—
Target-Date 2000-2010(Fds)	Avg	—	-3.25	-4.30	-3.25	4.11	3.22	6.96	—	2.81	—	—	—	—
American Funds 2010 Trgt Date Retire R6	MF	07-13-2009	-2.49	-3.64	-2.49	4.97	4.14	7.96	7.84	0.33	22(137)	1(118)	1(93)	9(76)
Morningstar Lifetime Mod 2010 TR USD	Idx	02-18-2009	-2.97	-4.63	-2.97	4.47	3.37	6.96	—	—	—	—	—	—
Target-Date 2015(Fds)	Avg	—	-3.86	-5.41	-3.86	4.39	3.36	7.49	—	4.64	—	—	—	—
American Funds 2015 Trgt Date Retire R6	MF	07-13-2009	-2.72	-4.21	-2.72	5.17	4.28	8.42	8.32	0.33	7(142)	9(118)	1(82)	14(49)
Morningstar Lifetime Mod 2015 TR USD	Idx	02-18-2009	-3.54	-5.20	-3.54	4.79	3.61	7.55	—	—	—	—	—	—
Target-Date 2020(Fds)	Avg	—	-4.49	-6.14	-4.49	4.54	3.41	7.73	—	1.61	—	—	—	—
American Funds 2020 Trgt Date Retire R6	MF	07-13-2009	-2.69	-4.88	-2.69	5.55	4.69	9.22	9.09	0.34	4(250)	8(206)	1(165)	5(107)
Morningstar Lifetime Mod 2020 TR USD	Idx	02-18-2009	-4.16	-5.95	-4.16	5.18	3.87	8.27	—	—	—	—	—	—
Target-Date 2025(Fds)	Avg	—	-5.34	-7.47	-5.34	5.05	3.71	8.55	—	1.70	—	—	—	—
American Funds 2025 Trgt Date Retire R6	MF	07-13-2009	-3.47	-6.32	-3.47	6.12	5.00	10.21	10.08	0.36	2(226)	3(189)	1(146)	3(73)
Morningstar Lifetime Mod 2025 TR USD	Idx	02-18-2009	-4.90	-7.01	-4.90	5.69	4.16	9.05	—	—	—	—	—	—
Target-Date 2030(Fds)	Avg	—	-6.25	-8.82	-6.25	5.45	3.94	8.86	—	1.50	—	—	—	—
American Funds 2030 Trgt Date Retire R6	MF	07-13-2009	-4.16	-7.86	-4.16	6.92	5.63	10.86	10.76	0.38	2(239)	1(196)	1(155)	2(97)
Morningstar Lifetime Mod 2030 TR USD	Idx	02-18-2009	-5.82	-8.44	-5.82	6.26	4.44	9.74	—	—	—	—	—	—

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Cobb County Government 457 Deferred Compensation Plan

Performance

Fund Performance 12-31-2018														
	Type	Inception Date	Ret % YTD	Ret % 3 Mo	Ret % 1 Yr	Ret % 3 Yr	Ret % 5 Yr	Ret % 10 Yr	Ret % Since Incep	Gross Fund Exp Ratio	1 Yr % Rank	3 Yr % Rank	5 Yr % Rank	10 Yr % Rank
Target-Date 2035(Fds)	Avg	—	-7.04	-10.13	-7.04	5.83	4.14	9.44	—	2.27	—	—	—	—
American Funds 2035 Trgt Date Retire R6	MF	07-13-2009	-5.14	-9.75	-5.14	7.43	5.95	11.08	10.97	0.39	6(221)	1(184)	1(141)	3(68)
Morningstar Lifetime Mod 2035 TR USD	Idx	02-18-2009	-6.82	-9.95	-6.82	6.72	4.61	10.17	—	—	—	—	—	—
Target-Date 2040(Fds)	Avg	—	-7.74	-11.01	-7.74	5.96	4.23	9.48	—	1.79	—	—	—	—
American Funds 2040 Trgt Date Retire R6	MF	07-27-2009	-5.52	-10.40	-5.52	7.62	6.05	11.19	10.22	0.40	4(239)	1(196)	1(155)	3(97)
Morningstar Lifetime Mod 2040 TR USD	Idx	02-18-2009	-7.65	-11.09	-7.65	6.98	4.65	10.32	—	—	—	—	—	—
Target-Date 2045(Fds)	Avg	—	-8.14	-11.71	-8.14	6.13	4.30	9.78	—	2.42	—	—	—	—
American Funds 2045 Trgt Date Retire R6	MF	07-13-2009	-5.58	-10.66	-5.58	7.77	6.17	11.25	11.16	0.40	3(221)	1(184)	1(141)	3(67)
Morningstar Lifetime Mod 2045 TR USD	Idx	02-18-2009	-8.17	-11.67	-8.17	7.05	4.60	10.32	—	—	—	—	—	—
Target-Date 2050(Fds)	Avg	—	-8.41	-11.91	-8.41	6.11	4.33	9.60	—	1.74	—	—	—	—
American Funds 2050 Trgt Date Retire R6	MF	07-13-2009	-5.61	-10.84	-5.61	7.83	6.19	11.27	11.18	0.41	3(239)	1(196)	1(155)	3(79)
Morningstar Lifetime Mod 2050 TR USD	Idx	02-18-2009	-8.41	-11.81	-8.41	7.05	4.51	10.27	—	—	—	—	—	—
Target-Date 2055(Fds)	Avg	—	-8.44	-12.12	-8.44	6.21	4.42	10.41	—	3.25	—	—	—	—
American Funds 2055 Trgt Date Retire R6	MF	02-01-2010	-5.65	-10.88	-5.65	7.81	6.17	—	9.57	0.42	3(221)	1(182)	1(115)	—
Morningstar Lifetime Mod 2055 TR USD	Idx	02-18-2009	-8.57	-11.84	-8.57	7.04	4.42	10.19	—	—	—	—	—	—
Target-Date 2060+(Fds)	Avg	—	-8.52	-12.28	-8.52	6.31	4.16	—	—	7.94	—	—	—	—
American Funds 2060 Trgt Date Retire R6	MF	03-27-2015	-5.64	-10.88	-5.64	7.81	—	—	5.72	0.44	2(201)	1(99)	—	—
Morningstar Lifetime Mod 2060 TR USD	Idx	06-23-2014	-8.69	-11.81	-8.69	7.02	4.34	10.22	—	—	—	—	—	—
Money Market-Taxable(FM)	Avg	—	1.41	0.44	1.41	0.66	0.40	0.22	—	0.56	—	—	—	—
Vanguard Treasury Money Market Investor	FM	12-14-1992	1.80	0.54	1.80	0.95	0.57	0.32	2.47	0.09	—	—	—	—
ICE BofAML USD 3M Dep OR CM TR USD	Idx	12-30-1994	2.08	0.57	2.08	1.28	0.86	0.67	—	—	—	—	—	—

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Cobb County Government 457 Deferred Compensation Plan

Performance

Standard Benchmark Returns 12-31-2018														
	Type	Inception Date	Ret % YTD	Ret % 3 Mo	Ret % 1 Yr	Ret % 3 Yr	Ret % 5 Yr	Ret % 10 Yr	Ret % Since Incep	Gross Fund Exp Ratio	1 Yr % Rank	3 Yr % Rank	5 Yr % Rank	10 Yr % Rank
S&P 500 TR USD	Idx	—	-4.38	-13.52	-4.38	9.26	8.49	13.12	—	—	—	—	—	—
BBgBarc US Agg Bond TR USD	Idx	—	0.01	1.64	0.01	2.06	2.52	3.48	—	—	—	—	—	—
MSCI EAFE NR USD	Idx	—	-13.79	-12.54	-13.79	2.87	0.53	6.32	—	—	—	—	—	—
USTREAS T-Bill Auction Ave 3 Mon	Idx	—	2.02	0.60	2.02	1.11	0.68	0.39	—	—	—	—	—	—

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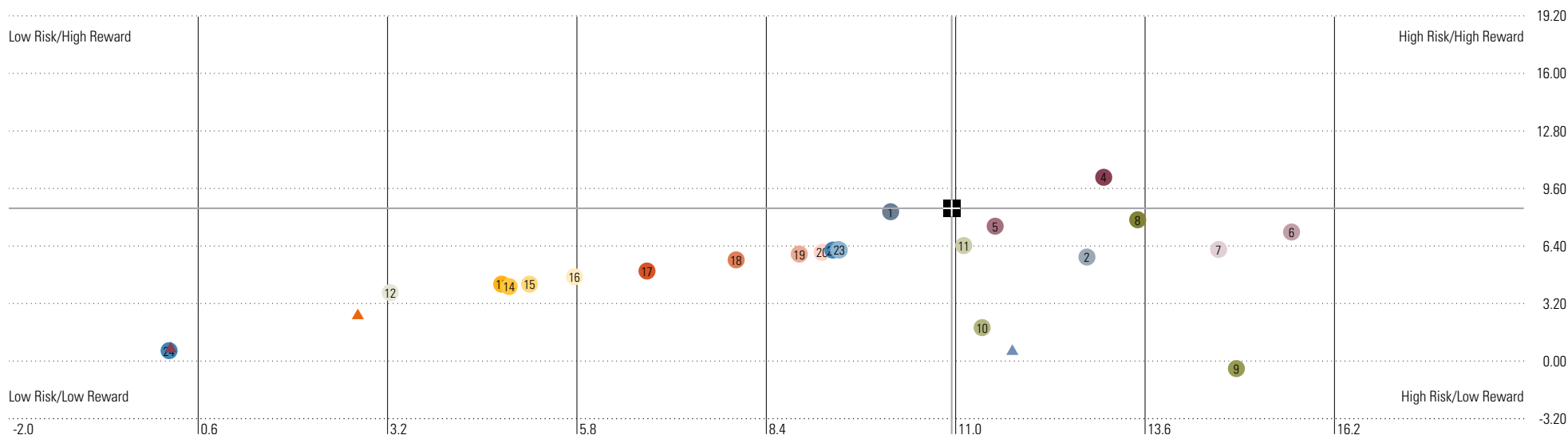
Cobb County Government 457 Deferred Compensation Plan

Risk and Return

Risk/Return 12-31-2018

Benchmarks ■ S&P 500 TR USD ▲ BBgBarc US Agg Bond TR USD ▲ MSCI EAFE NR USD ▲ USTREAS T-Bill Auction Ave 3 Mon

5 Year Mean



* Data not available for 1 options/funds.

Risk/Return Detail 12-31-2018

	Type	Std Dev 5 Yr	Mean 5 Yr	Alpha 5 Yr	Beta 5 Yr	R2 5 Yr	Information Ratio 5Yr	Treynor 5 Yr	Sharpe Ratio 5 Yr	Upside Capture 5 Yr	Downside Capture 5 Yr
Large Blend(Fds)	Avg	11.28	6.65	-1.33	0.99	92.94	-0.57	6.12	0.57	93.73	102.73
① American Funds Washington Mutual R6	MF	10.11	8.30	0.81	0.90	95.14	0.04	8.51	0.77	94.08	89.21
② JHancock Fundamental Large Cap Core R6	MF	12.80	5.78	-2.90	1.11	90.15	-0.58	4.62	0.45	99.52	119.77
③ Vanguard 500 Index Admiral	MF	10.94	8.46	0.28	0.99	99.72	0.42	7.83	0.73	100.58	98.90
Russell 1000 TR USD	Idx	11.01	8.21	—	—	—	—	—	0.71	—	—
Large Growth(Fds)	Avg	12.60	8.16	-1.90	0.99	89.31	-0.63	7.53	0.64	93.42	106.00
④ T. Rowe Price Growth Stock I	MF	13.03	10.22	-0.32	1.03	89.14	-0.04	9.28	0.76	101.76	104.66
Russell 1000 Growth TR USD	Idx	11.96	10.40	—	—	—	—	—	0.83	—	—

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Cobb County Government 457 Deferred Compensation Plan

Risk and Return

Risk/Return Detail 12-31-2018

	Type	Std Dev 5 Yr	Mean 5 Yr	Alpha 5 Yr	Beta 5 Yr	R2 5 Yr	Information Ratio 5Yr	Treynor 5 Yr	Sharpe Ratio 5 Yr	Upside Capture 5 Yr	Downside Capture 5 Yr
Mid-Cap Value(Fds)	Avg	12.39	3.88	-1.51	1.02	89.05	-0.39	3.23	0.32	95.67	106.13
5 Victory Sycamore Established Value R6	MF	11.54	7.50	2.09	0.97	92.73	0.65	7.01	0.62	102.45	87.84
Russell Mid Cap Value TR USD	Idx	11.42	5.44	—	—	—	—	—	0.46	—	—
Mid-Cap Growth(Fds)	Avg	13.48	5.61	-1.61	1.00	87.45	-0.47	5.02	0.43	95.44	106.10
6 Harbor Mid Cap Growth Retirement	MF	15.61	7.17	-1.11	1.18	90.14	-0.05	5.49	0.48	112.93	121.11
Russell Mid Cap Growth TR USD	Idx	12.51	7.42	—	—	—	—	—	0.58	—	—
Small Growth(Fds)	Avg	15.84	5.12	0.36	0.92	89.70	0.01	4.91	0.36	91.76	90.16
7 ClearBridge Small Cap I	MF	14.61	6.20	1.64	0.84	88.35	0.19	6.55	0.44	89.68	82.34
Russell 2000 Growth TR USD	Idx	16.30	5.13	—	—	—	—	—	0.35	—	—
Real Estate(Fds)	Avg	13.17	6.92	-0.18	0.91	93.22	-0.37	7.20	0.54	89.04	89.24
8 Nuveen Real Estate Securities R6	MF	13.50	7.86	0.33	0.96	99.09	0.05	7.50	0.58	95.92	93.74
S&P United States REIT TR USD	Idx	14.04	7.78	—	—	—	—	—	0.56	—	—
Foreign Large Blend(Fds)	Avg	11.63	0.10	-0.56	0.93	90.51	-0.15	-0.55	0.01	89.42	92.83
9 Oakmark International Institutional	MF	14.85	-0.42	-0.81	1.15	84.68	-0.18	-0.96	0.00	110.28	117.15
MSCI ACWI Ex USA NR USD	Idx	11.92	0.68	—	—	—	—	—	0.06	—	—
Foreign Large Growth(Fds)	Avg	10.85	1.38	0.72	0.94	87.12	0.08	5.55	0.52	94.49	89.16
10 American Funds Europacific Growth R6	MF	11.36	1.86	0.23	0.93	93.57	0.06	1.26	0.16	92.57	90.84
MSCI ACWI Ex USA Growth NR USD	Idx	11.79	1.69	—	—	—	—	—	0.14	—	—
World Large Stock(Fds)	Avg	11.25	3.72	-0.47	0.96	86.60	-0.19	3.23	0.32	94.28	97.94
11 American Funds New Perspective R6	MF	11.11	6.42	2.04	0.98	91.10	0.61	5.87	0.55	103.49	89.11
MSCI ACWI NR USD	Idx	10.87	4.26	—	—	—	—	—	0.38	—	—
Intermediate-Term Bond(Fds)	Avg	2.65	2.27	0.02	0.86	84.25	-0.37	1.91	0.61	88.88	87.68
12 Western Asset Core Plus Bond IS	MF	3.24	3.80	1.18	1.04	80.09	0.87	3.00	0.95	118.66	88.61
BBgBarc US Agg Bond TR USD	Idx	2.79	2.52	—	—	—	—	—	0.66	—	—

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Cobb County Government 457 Deferred Compensation Plan

Risk and Return

Risk/Return Detail 12-31-2018

	Type	Std Dev 5 Yr	Mean 5 Yr	Alpha 5 Yr	Beta 5 Yr	R2 5 Yr	Information Ratio 5Yr	Treynor 5 Yr	Sharpe Ratio 5 Yr	Upside Capture 5 Yr	Downside Capture 5 Yr
High Yield Bond(Fds)	Avg	4.78	2.71	-0.64	0.86	87.60	-0.69	2.75	0.50	82.41	90.45
13 PGIM High Yield R6	MF	4.77	4.28	0.69	0.92	97.40	0.51	3.92	0.76	95.87	84.86
ICE BofAML US High Yield TR USD	Idx	5.14	3.82	—	—	—	—	—	0.62	—	—
Target-Date 2000-2010(Fds)	Avg	4.39	3.22	-0.14	1.01	92.37	-0.09	4.25	0.97	97.13	96.43
14 American Funds 2010 Trgt Date Retire R6	MF	4.87	4.14	0.69	1.03	94.11	0.65	3.37	0.71	107.25	96.66
Morningstar Lifetime Mod 2010 TR USD	Idx	4.60	3.37	—	—	—	—	—	0.59	—	—
Target-Date 2015(Fds)	Avg	4.94	3.36	-0.21	1.02	92.87	-0.06	4.66	0.96	98.17	98.50
15 American Funds 2015 Trgt Date Retire R6	MF	5.15	4.28	0.70	0.98	94.66	0.56	3.66	0.70	102.59	92.19
Morningstar Lifetime Mod 2015 TR USD	Idx	5.11	3.61	—	—	—	—	—	0.58	—	—
Target-Date 2020(Fds)	Avg	5.29	3.41	-0.25	0.97	92.28	-0.23	5.19	0.95	93.79	95.21
16 American Funds 2020 Trgt Date Retire R6	MF	5.77	4.69	0.87	0.98	95.11	0.64	4.10	0.70	102.84	91.57
Morningstar Lifetime Mod 2020 TR USD	Idx	5.76	3.87	—	—	—	—	—	0.57	—	—
Target-Date 2025(Fds)	Avg	6.16	3.71	-0.27	0.99	94.96	-0.20	5.91	0.95	95.79	97.17
17 American Funds 2025 Trgt Date Retire R6	MF	6.76	5.00	0.84	0.99	95.70	0.60	4.35	0.65	103.91	94.71
Morningstar Lifetime Mod 2025 TR USD	Idx	6.66	4.16	—	—	—	—	—	0.54	—	—
Target-Date 2030(Fds)	Avg	6.97	3.94	-0.22	0.96	94.51	-0.26	6.75	0.94	94.78	96.28
18 American Funds 2030 Trgt Date Retire R6	MF	7.99	5.63	1.10	1.01	96.51	0.79	4.88	0.64	106.33	95.97
Morningstar Lifetime Mod 2030 TR USD	Idx	7.75	4.44	—	—	—	—	—	0.51	—	—
Target-Date 2035(Fds)	Avg	7.75	4.14	-0.17	0.96	96.43	-0.27	7.47	0.93	94.70	95.29
19 American Funds 2035 Trgt Date Retire R6	MF	8.85	5.95	1.31	0.99	96.76	0.83	5.30	0.62	104.82	93.74
Morningstar Lifetime Mod 2035 TR USD	Idx	8.77	4.61	—	—	—	—	—	0.48	—	—
Target-Date 2040(Fds)	Avg	8.16	4.23	-0.04	0.94	95.01	-0.25	8.00	0.93	93.47	93.09
20 American Funds 2040 Trgt Date Retire R6	MF	9.17	6.05	1.50	0.96	96.96	0.84	5.62	0.61	101.88	89.94
Morningstar Lifetime Mod 2040 TR USD	Idx	9.45	4.65	—	—	—	—	—	0.46	—	—

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Cobb County Government 457 Deferred Compensation Plan

Risk and Return

Risk/Return Detail 12-31-2018

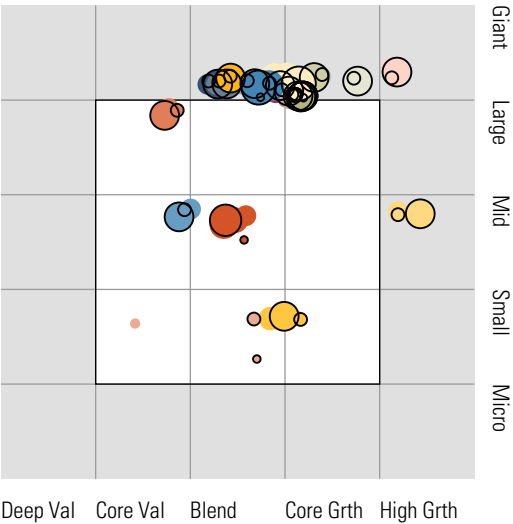
	Type	Std Dev 5 Yr	Mean 5 Yr	Alpha 5 Yr	Beta 5 Yr	R2 5 Yr	Information Ratio 5Yr	Treynor 5 Yr	Sharpe Ratio 5 Yr	Upside Capture 5 Yr	Downside Capture 5 Yr
Target-Date 2045(Fds)	Avg	8.54	4.30	0.01	0.97	96.61	-0.14	8.14	0.93	95.06	93.20
21 American Funds 2045 Trgt Date Retire R6	MF	9.31	6.17	1.71	0.94	96.74	0.88	5.84	0.62	99.42	85.37
Morningstar Lifetime Mod 2045 TR USD	Idx	9.76	4.60	—	—	—	—	—	0.44	—	—
Target-Date 2050(Fds)	Avg	8.59	4.33	0.21	0.95	94.89	-0.04	8.30	0.93	94.88	91.68
22 American Funds 2050 Trgt Date Retire R6	MF	9.39	6.19	1.82	0.94	96.68	0.92	5.88	0.61	99.61	84.84
Morningstar Lifetime Mod 2050 TR USD	Idx	9.85	4.51	—	—	—	—	—	0.43	—	—
Target-Date 2055(Fds)	Avg	8.73	4.42	0.39	0.97	96.45	0.12	8.38	0.94	97.37	92.65
23 American Funds 2055 Trgt Date Retire R6	MF	9.40	6.17	1.90	0.93	96.49	0.93	5.89	0.61	99.69	84.48
Morningstar Lifetime Mod 2055 TR USD	Idx	9.90	4.42	—	—	—	—	—	0.42	—	—
Target-Date 2060+(Fds)	Avg	8.49	4.16	0.43	0.95	97.33	0.07	8.31	0.93	95.24	90.20
American Funds 2060 Trgt Date Retire R6	MF	—	—	—	—	—	—	—	—	—	—
Morningstar Lifetime Mod 2060 TR USD	Idx	9.91	4.34	—	—	—	—	—	0.41	—	—
Money Market-Taxable(FM)	Avg	0.14	0.40	-0.33	0.36	10.19	-5.48	-0.73	-3.49	40.39	-185.32
24 Vanguard Treasury Money Market Investor	FM	0.20	0.57	-0.15	0.23	29.28	-5.17	-0.47	-3.83	66.37	-466.67
ICE BofAML USD 3M Dep OR CM TR USD	Idx	0.21	0.86	—	—	—	—	—	2.72	—	—

Cobb County Government 457 Deferred Compensation Plan

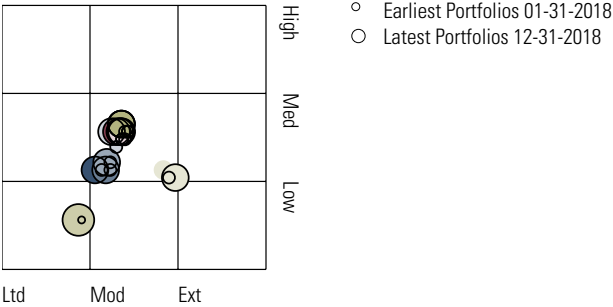
Style Drift

Style Orientation 12-31-2018

Equity Style Drift - 1 Year



Fixed-Income Style Drift - 1 Year



Equity Options

- American Funds 2010 Trgt Date Retire R6
- American Funds 2020 Trgt Date Retire R6
- American Funds 2030 Trgt Date Retire R6
- American Funds 2040 Trgt Date Retire R6
- American Funds 2050 Trgt Date Retire R6
- American Funds 2060 Trgt Date Retire R6
- American Funds New Perspective R6
- ClearBridge Small Cap I
- JHancock Fundamental Large Cap Core R6
- Oakmark International Institutional
- T. Rowe Price Growth Stock I
- Victory Sycamore Established Value R6
- American Funds 2015 Trgt Date Retire R6
- American Funds 2025 Trgt Date Retire R6
- American Funds 2035 Trgt Date Retire R6
- American Funds 2045 Trgt Date Retire R6
- American Funds 2055 Trgt Date Retire R6
- American Funds Europacific Growth R6
- American Funds Washington Mutual R6
- Harbor Mid Cap Growth Retirement
- Nuveen Real Estate Securities R6
- PGIM High Yield R6
- Vanguard 500 Index Admiral

Fixed-Income Options

- American Funds 2010 Trgt Date Retire R6
- American Funds 2020 Trgt Date Retire R6
- American Funds 2030 Trgt Date Retire R6
- American Funds 2040 Trgt Date Retire R6
- American Funds 2050 Trgt Date Retire R6
- American Funds 2060 Trgt Date Retire R6
- Western Asset Core Plus Bond IS
- American Funds 2015 Trgt Date Retire R6
- American Funds 2025 Trgt Date Retire R6
- American Funds 2035 Trgt Date Retire R6
- American Funds 2045 Trgt Date Retire R6
- American Funds 2055 Trgt Date Retire R6
- PGIM High Yield R6

Please refer to "Style Drift" in the back of this report for more complete information on the graphical illustrations above.

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Cobb County Government 457 Deferred Compensation Plan

Style Drift

Style Orientation 12-31-2018

*Data not available for 1 options/funds

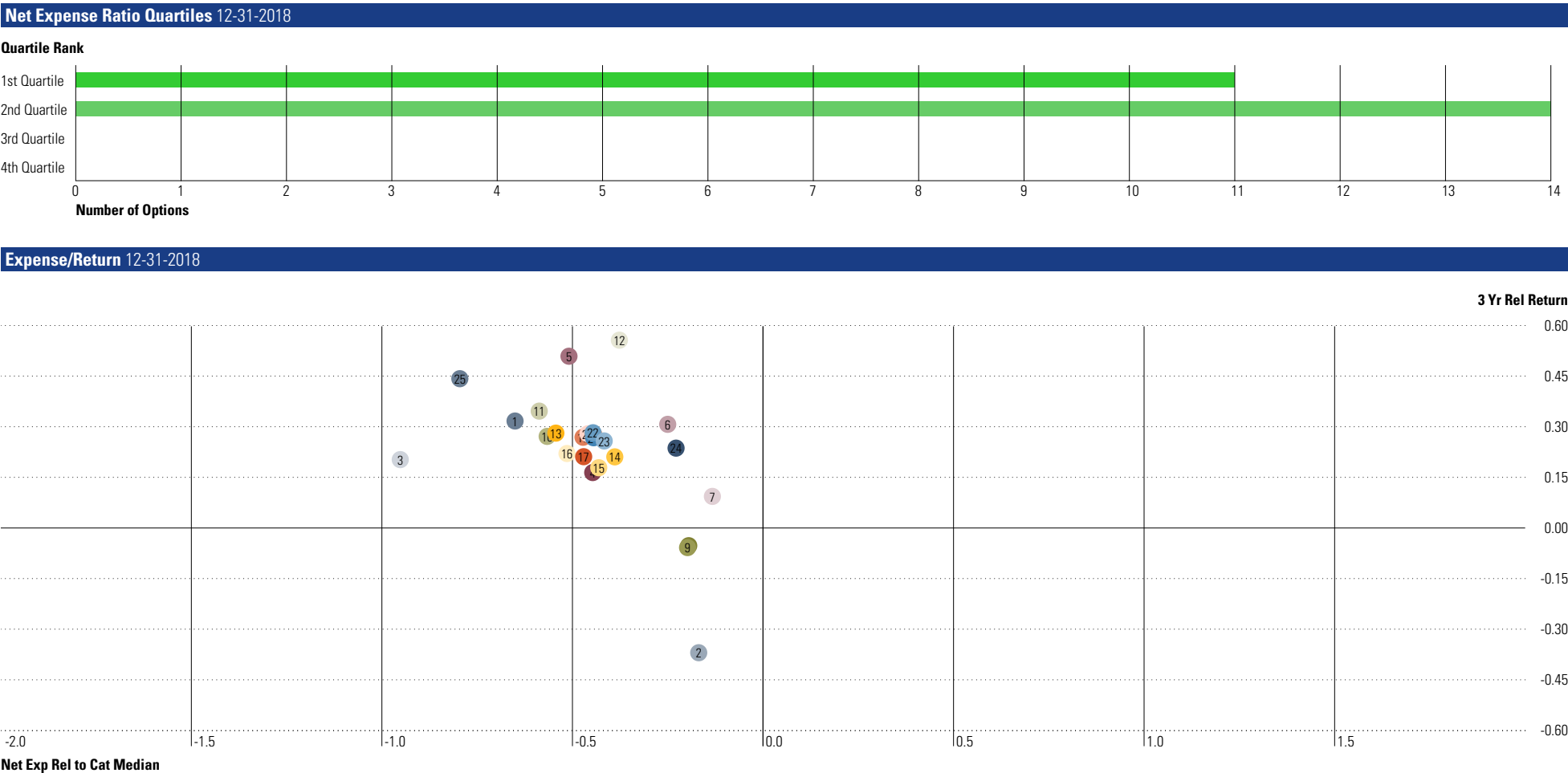
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Cobb County Government 457 Deferred Compensation Plan

Investment Costs



Cobb County Government 457 Deferred Compensation Plan

Investment Costs

Investment Costs 12-31-2018											
	Type	Market Value \$	% of Portfolio	Gross Exp Ratio %	Net Exp Ratio %	Net Fund Exp \$	Rel to Cat	Net Exp Median	Current 12b-1	Weighted Avg Cost	Net Exp % Rank in Cat
Large Blend(Fds)		Med	—	—	0.88	0.83	—	—	0.25	—	—
① American Funds Washington Mutual R6	MF	8,101,765.35	7.88	0.29	0.29	23,495.12	-0.65	—	—	0.0229	20
② JHancock Fundamental Large Cap Core R6	MF	9,369,477.71	9.11	0.69	0.69	64,649.40	-0.17	0.00	0.00	0.0629	39
③ Vanguard 500 Index Admiral	MF	811,593.43	0.79	0.04	0.04	324.64	-0.95	—	—	0.0003	6
Russell 1000 TR USD		Idx	—	—	—	—	—	—	—	—	—
Large Growth(Fds)		Med	—	—	0.97	0.94	—	—	0.25	—	—
④ T. Rowe Price Growth Stock I	MF	29,296,565.92	28.49	0.52	0.52	152,342.14	-0.45	—	—	0.1482	23
Russell 1000 Growth TR USD		Idx	—	—	—	—	—	—	—	—	—
Mid-Cap Value(Fds)		Med	—	—	1.11	1.10	—	—	0.25	—	—
⑤ Victory Sycamore Established Value R6	MF	1,935,106.44	1.88	0.54	0.54	10,449.57	-0.51	0.00	0.00	0.0102	16
Russell Mid Cap Value TR USD		Idx	—	—	—	—	—	—	—	—	—
Mid-Cap Growth(Fds)		Med	—	—	1.11	1.08	—	—	0.25	—	—
⑥ Harbor Mid Cap Growth Retirement	MF	6,156,646.12	5.99	0.81	0.81	49,868.83	-0.25	—	—	0.0485	30
Russell Mid Cap Growth TR USD		Idx	—	—	—	—	—	—	—	—	—
Small Growth(Fds)		Med	—	—	1.17	1.13	—	—	0.25	—	—
⑦ ClearBridge Small Cap I	MF	4,757,425.96	4.63	0.98	0.98	46,622.77	-0.13	—	—	0.0453	39
Russell 2000 Growth TR USD		Idx	—	—	—	—	—	—	—	—	—
Real Estate(Fds)		Med	—	—	1.10	1.08	—	—	0.25	—	—
⑧ Nuveen Real Estate Securities R6	MF	2,141,975.26	2.08	0.87	0.87	18,635.18	-0.19	0.00	0.00	0.0181	38
S&P United States REIT TR USD		Idx	—	—	—	—	—	—	—	—	—
Foreign Large Blend(Fds)		Med	—	—	1.04	0.96	—	—	0.25	—	—
⑨ Oakmark International Institutional	MF	2,408,017.32	2.34	0.82	0.77 ¹	18,541.73	-0.20	—	—	0.0180	42
MSCI ACWI Ex USA NR USD		Idx	—	—	—	—	—	—	—	—	—

Cost measures for mutual funds use Prospectus Net Expense Ratio. For VAs, total insurance expense is included in the Prospectus ratio. For CITs, CEs, and ETFs, Net Operating Expense Ratio is used. The Weighted Average Cost is the total of each security's Expense Ratio, multiplied by the weight of each security's assets in the plan, multiplied by 100.

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Cobb County Government 457 Deferred Compensation Plan

Investment Costs

Investment Costs 12-31-2018

	Type	Market Value \$	% of Portfolio	Gross Exp Ratio %	Net Exp Ratio %	Net Fund Exp \$	Rel to Cat Median	Current 12b-1	Weighted Avg Cost	Net Exp % Rank in Cat
Foreign Large Growth(Fds)	Med	—	—	1.13	1.13	—	—	0.25	—	—
¹⁰ American Funds Europacific Growth R6	MF	3,446,008.09	3.35	0.49	0.49	16,885.44	-0.57	—	0.0164	12
MSCI ACWI Ex USA Growth NR USD	Idx	—	—	—	—	—	—	—	—	—
World Large Stock(Fds)	Med	—	—	1.12	1.09	—	—	0.25	—	—
¹¹ American Funds New Perspective R6	MF	7,263,230.01	7.06	0.45	0.45	32,684.54	-0.59	—	0.0318	16
MSCI ACWI NR USD	Idx	—	—	—	—	—	—	—	—	—
Intermediate-Term Bond(Fds)	Med	—	—	0.74	0.69	—	—	0.25	—	—
¹² Western Asset Core Plus Bond IS	MF	3,502,810.03	3.41	0.43	0.43	15,062.08	-0.38	—	0.0146	30
BBgBarc US Agg Bond TR USD	Idx	—	—	—	—	—	—	—	—	—
High Yield Bond(Fds)	Med	—	—	0.96	0.92	—	—	0.25	—	—
¹³ PGIM High Yield R6	MF	1,747,493.85	1.70	0.42	0.42	7,339.47	-0.54	—	0.0071	13
ICE BofAML US High Yield TR USD	Idx	—	—	—	—	—	—	—	—	—
Target-Date 2000-2010(Fds)	Med	—	—	0.68	0.54	—	—	0.50	—	—
¹⁴ American Funds 2010 Trgt Date Retire R6	MF	1,343,308.57	1.31	0.33	0.33	4,432.92	-0.39	—	0.0043	24
Morningstar Lifetime Mod 2010 TR USD	Idx	—	—	—	—	—	—	—	—	—
Target-Date 2015(Fds)	Med	—	—	0.75	0.58	—	—	0.10	—	—
¹⁵ American Funds 2015 Trgt Date Retire R6	MF	2,039,649.87	1.98	0.33	0.33	6,730.84	-0.43	—	0.0065	25
Morningstar Lifetime Mod 2015 TR USD	Idx	—	—	—	—	—	—	—	—	—
Target-Date 2020(Fds)	Med	—	—	0.80	0.70	—	—	0.25	—	—
¹⁶ American Funds 2020 Trgt Date Retire R6	MF	2,932,622.86	2.85	0.34	0.34	9,970.92	-0.51	—	0.0097	25
Morningstar Lifetime Mod 2020 TR USD	Idx	—	—	—	—	—	—	—	—	—
Target-Date 2025(Fds)	Med	—	—	0.77	0.68	—	—	0.25	—	—
¹⁷ American Funds 2025 Trgt Date Retire R6	MF	2,780,981.17	2.70	0.36	0.36	10,011.53	-0.47	—	0.0097	31
Morningstar Lifetime Mod 2025 TR USD	Idx	—	—	—	—	—	—	—	—	—

Cost measures for mutual funds use Prospectus Net Expense Ratio. For VAs, total insurance expense is included in the Prospectus ratio. For CITs, CEs, and ETFs, Net Operating Expense Ratio is used. The Weighted Average Cost is the total of each security's Expense Ratio, multiplied by the weight of each security's assets in the plan, multiplied by 100.

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Cobb County Government 457 Deferred Compensation Plan

Investment Costs

Investment Costs 12-31-2018

	Type	Market Value \$	% of Portfolio	Gross Exp Ratio %	Net Exp Ratio %	Net Fund Exp \$	Rel to Cat Median	Current 12b-1	Weighted Avg Cost	Net Exp % Rank in Cat
Target-Date 2030(Fds)	Med	—	—	0.83	0.72	—	—	0.25	—	—
¹⁸ American Funds 2030 Trgt Date Retire R6	MF	4,202,092.18	4.09	0.38	0.38	15,967.95	-0.47	—	0.0155	27
Morningstar Lifetime Mod 2030 TR USD	Idx	—	—	—	—	—	—	—	—	—
Target-Date 2035(Fds)	Med	—	—	0.80	0.70	—	—	0.25	—	—
¹⁹ American Funds 2035 Trgt Date Retire R6	MF	2,658,124.21	2.59	0.39	0.39	10,366.68	-0.44	—	0.0101	31
Morningstar Lifetime Mod 2035 TR USD	Idx	—	—	—	—	—	—	—	—	—
Target-Date 2040(Fds)	Med	—	—	0.87	0.74	—	—	0.25	—	—
²⁰ American Funds 2040 Trgt Date Retire R6	MF	1,786,079.40	1.74	0.40	0.40	7,144.32	-0.46	—	0.0069	30
Morningstar Lifetime Mod 2040 TR USD	Idx	—	—	—	—	—	—	—	—	—
Target-Date 2045(Fds)	Med	—	—	0.85	0.72	—	—	0.25	—	—
²¹ American Funds 2045 Trgt Date Retire R6	MF	1,366,851.27	1.33	0.40	0.40	5,467.41	-0.44	—	0.0053	32
Morningstar Lifetime Mod 2045 TR USD	Idx	—	—	—	—	—	—	—	—	—
Target-Date 2050(Fds)	Med	—	—	0.90	0.74	—	—	0.25	—	—
²² American Funds 2050 Trgt Date Retire R6	MF	1,040,426.65	1.01	0.41	0.41	4,265.75	-0.45	—	0.0041	29
Morningstar Lifetime Mod 2050 TR USD	Idx	—	—	—	—	—	—	—	—	—
Target-Date 2055(Fds)	Med	—	—	0.94	0.72	—	—	0.25	—	—
²³ American Funds 2055 Trgt Date Retire R6	MF	492,431.47	0.48	0.42	0.42	2,068.21	-0.42	—	0.0020	34
Morningstar Lifetime Mod 2055 TR USD	Idx	—	—	—	—	—	—	—	—	—
Target-Date 2060+(Fds)	Med	—	—	0.91	0.57	—	—	0.25	—	—
²⁴ American Funds 2060 Trgt Date Retire R6	MF	36,253.69	0.04	0.44	0.44	159.52	-0.23	—	0.0002	33
Morningstar Lifetime Mod 2060 TR USD	Idx	—	—	—	—	—	—	—	—	—
Money Market-Taxable(FM)	Med	—	—	0.47	0.44	—	—	0.25	—	—
²⁵ Vanguard Treasury Money Market Investor	FM	1,197,463.36	1.16	0.09	0.09	1,077.72	-0.80	—	0.0010	6
ICE BofAML USD 3M Dep OR CM TR USD	Idx	—	—	—	—	—	—	—	—	—

Cost measures for mutual funds use Prospectus Net Expense Ratio. For VAs, total insurance expense is included in the Prospectus ratio. For CITs, CEs, and ETFs, Net Operating Expense Ratio is used. The Weighted Average Cost is the total of each security's Expense Ratio, multiplied by the weight of each security's assets in the plan, multiplied by 100.

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Cobb County Government 457 Deferred Compensation Plan

Investment Costs

Investment Costs 12-31-2018											
	Type	Market Value \$	% of Portfolio	Gross Exp Ratio %	Net Exp Ratio %	Net Fund Exp \$	Rel to Cat	Net Exp Median	Current 12b-1	Weighted Avg Cost	Net Exp % Rank in Cat
Total	—	102,814,400.19	100.00	—	—	534,564.69		—	—	0.5200	—

1. Contractual waiver; 01-28-2018.

Cost measures for mutual funds use Prospectus Net Expense Ratio. For VAs, total insurance expense is included in the Prospectus ratio. For CITs, CEs, and ETFs, Net Operating Expense Ratio is used. The Weighted Average Cost is the total of each security’s Expense Ratio, multiplied by the weight of each security’s assets in the plan, multiplied by 100.

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2010 Trgt Date Retire R6 (USD)

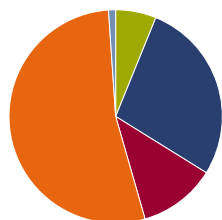
Details 12-31-2018

Ticker	RFTTX
Gross Expense Ratio %	0.33
Total Assets	\$3,021.01 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	11.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
118 TA	
Standard Deviation 3 Yr	4.37
Mean 3 Yr	4.97
Alpha 3 Yr	0.63
Beta 3 Yr	0.95
R-Squared 3 Yr	94.24
Upside Capture Ratio 3 Yr	97.57
Downside Capture Ratio 3 Yr	82.81
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2010 TR USD

Composition 09-30-2018

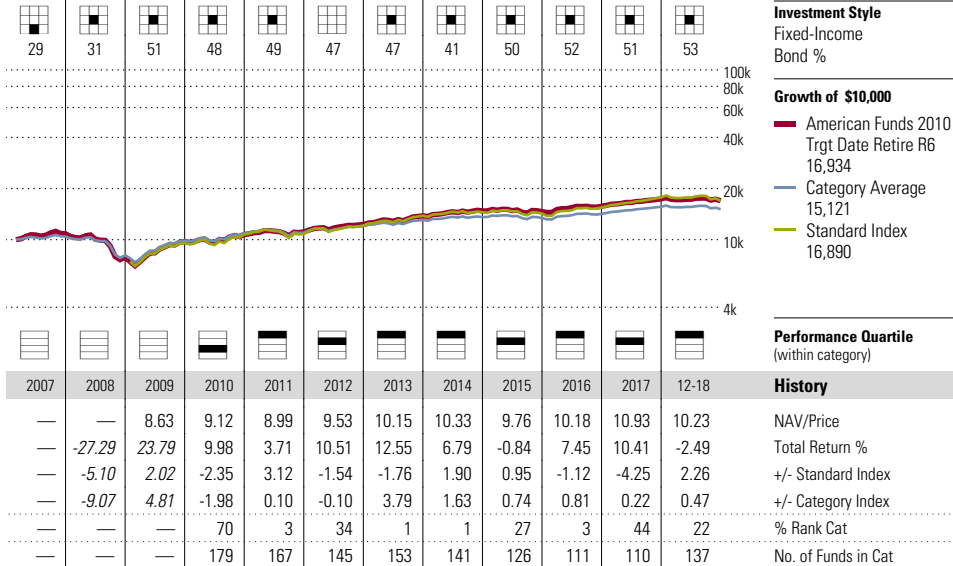


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	6.15	1.01
US Stocks	27.69	35.88
Non-US Stocks	11.72	23.19
Bonds	53.37	39.84
Other/Not Clsfd	1.07	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	33.0	0.80
Basic Materials	4.7	0.92
Consumer Cyclical	9.2	0.85
Financial Services	15.6	0.87
Real Estate	3.6	0.47
Sensitive	39.2	1.11
Communication Services	4.7	1.36
Energy	11.1	1.98
Industrials	8.9	0.81
Technology	14.5	0.95
Defensive	27.8	1.20
Consumer Defensive	10.3	1.26
Healthcare	13.0	1.17
Utilities	4.4	1.14

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Portfolio Statistics	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	15.9	1.15	0.98
Geo Avg Cap Plan (\$Mil)	85,535		
Geo Avg Cap Bmark (\$Mil)	28,486		
Value	40	32	22
Blend	3	2	1
Growth	0	0	0

Fixed-Income Investment Style Actual %

Avg Effective Duration (Yrs)	4.80
Avg Effective Maturity (Yrs)	—
Avg Credit Quality	—
Bond %	
AAA	68.89
AA	4.30
A	9.18
BBB	7.45
BB	4.37
B	4.21
Below B	1.30
NR	0.30

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period. The performance data represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the return data quoted. For performance data current to the most recent month-end, visit <http://advisor.morningstar.com/familyinfo.asp>. The "Overall Morningstar Rating" is based on risk-adjusted returns, derived from a weighted average of the three, five and ten-year (if applicable) Morningstar metrics. An investment in the fund is not insured or guaranteed by the FDIC or any other government agency.

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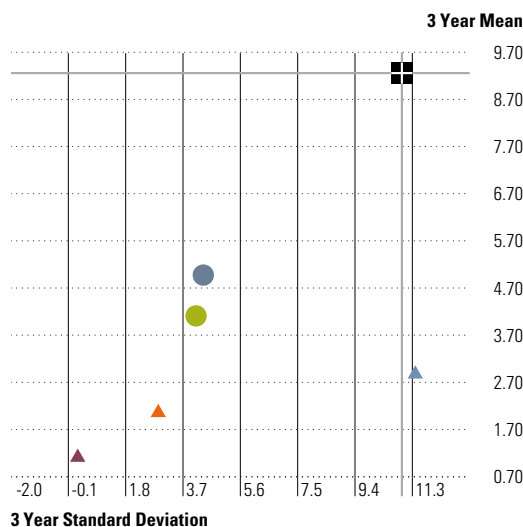
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2010 Trgt Date Retire R6 (USD)

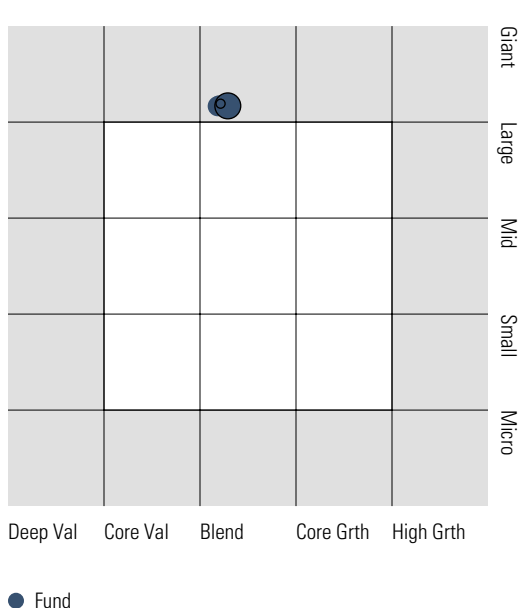
Risk/Return 12-31-2018



Benchmarks

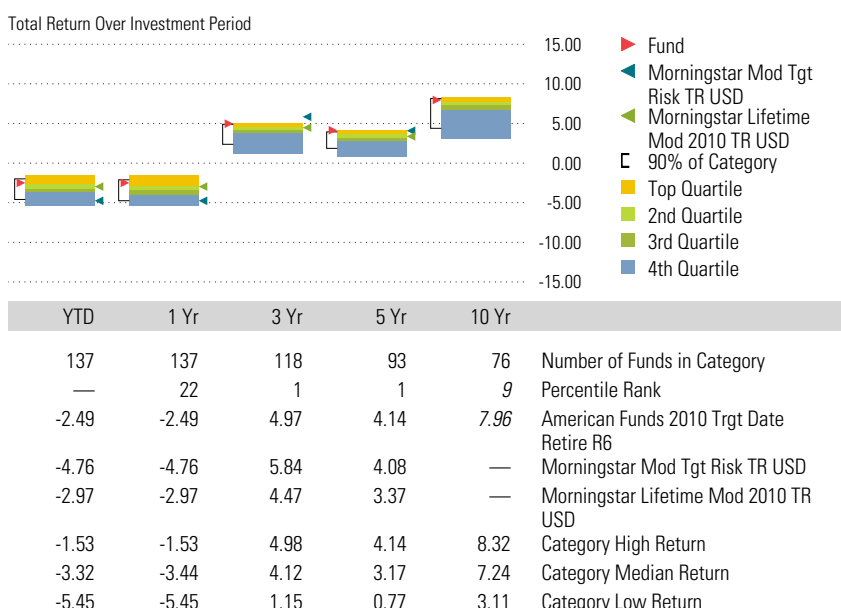
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Interm Bd Fd of Amer R6	12.76
American Funds Capital Income Bldr R6	11.99
American Funds Income Fund of Amer R6	11.99
American Funds Bond Fund of Amer R6	8.00
American Funds Inflation Linked Bd R6	6.98
American Funds Mortgage R6	6.00
American Funds American Mutual R6	5.26
American Funds American High-Inc R6	5.01
American Funds Capital World Bond R6	4.98
American Funds Invmt Co of Amer R6	4.27

Investment Strategy 12-31-2018

The investment seeks growth, income and conservation of capital.

The fund normally invests a greater portion of its assets in bond, equity-income and balanced funds as it passes its target date. The adviser will attempt to achieve the fund's investment objectives by investing in a mix of American Funds in different combinations and weightings. The underlying American Funds represent a variety of fund categories, including growth-and-income funds, equity-income funds, balanced funds and fixed income funds. The fund categories represent differing investment objectives.

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2015 Trgt Date Retire R6 (USD)

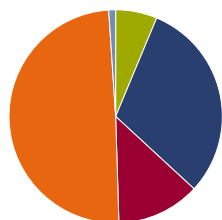
Details 12-31-2018

Ticker	RFJTX
Gross Expense Ratio %	0.33
Total Assets	\$4,755.95 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	11.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
118 TD	
Standard Deviation 3 Yr	4.69
Mean 3 Yr	5.17
Alpha 3 Yr	0.63
Beta 3 Yr	0.92
R-Squared 3 Yr	95.01
Upside Capture Ratio 3 Yr	95.25
Downside Capture Ratio 3 Yr	82.15
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2015 TR USD

Composition 09-30-2018

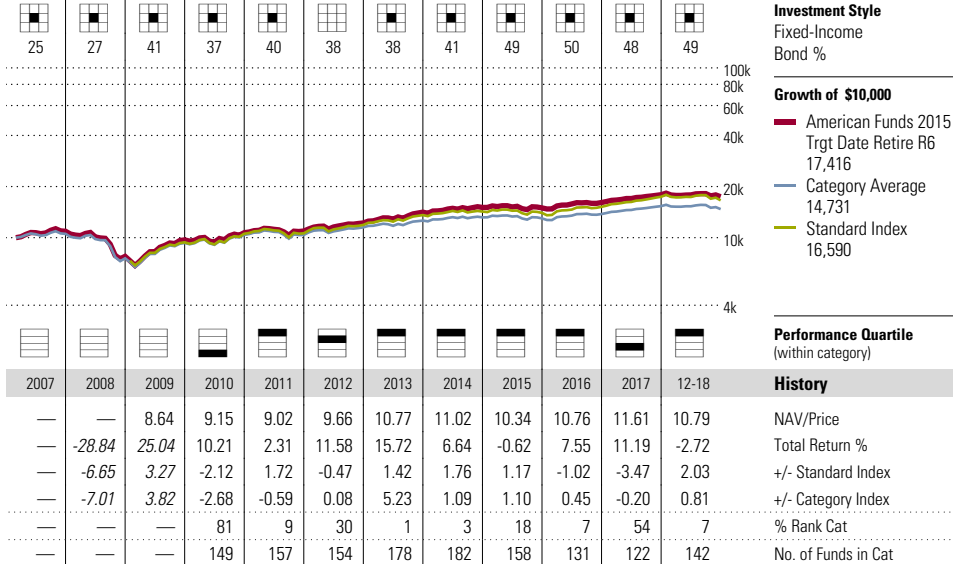


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	6.28	1.01
US Stocks	30.58	35.88
Non-US Stocks	12.65	23.19
Bonds	49.44	39.84
Other/Not Clsfd	1.05	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	33.0	0.79
Basic Materials	4.7	0.92
Consumer Cyclical	9.5	0.88
Financial Services	15.5	0.86
Real Estate	3.2	0.43
Sensitive	39.8	1.13
Communication Services	4.6	1.31
Energy	10.9	1.95
Industrials	9.0	0.83
Technology	15.2	1.00
Defensive	27.3	1.18
Consumer Defensive	10.1	1.23
Healthcare	13.1	1.18
Utilities	4.1	1.08

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Portfolio Statistics	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	16.1	1.16	1.02
Geo Avg Cap Plan (\$Mil)	85,755		
Geo Avg Cap Bmark (\$Mil)	28,486		
Value	Blend	Growth	

Fixed-Income Investment Style Actual %

Avg Effective Duration (Yrs)	5.20
Avg Effective Maturity (Yrs)	—
Avg Credit Quality	—
Bond %	
AAA	70.17
AA	3.18
A	8.48
BBB	7.45
BB	4.60
B	4.44
Below B	1.37
NR	0.31

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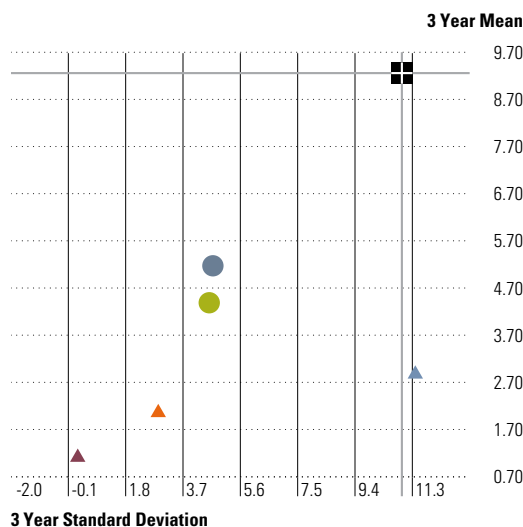
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2015 Trgt Date Retire R6 (USD)

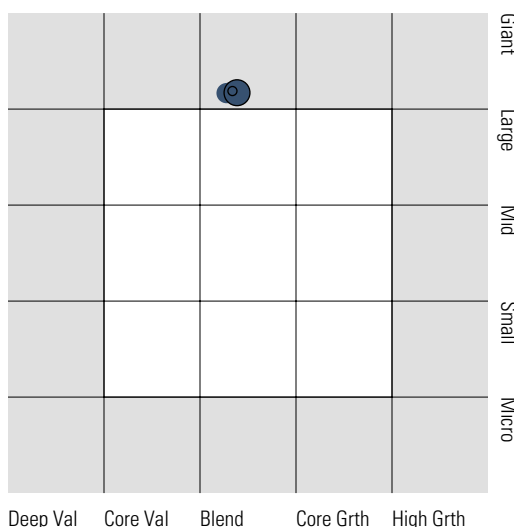
Risk/Return 12-31-2018



Benchmarks

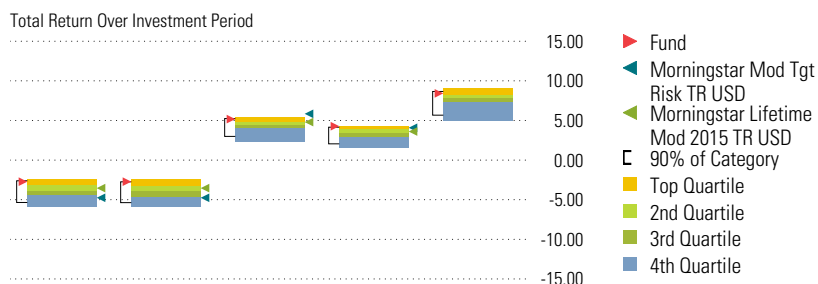
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



YTD	1 Yr	3 Yr	5 Yr	10 Yr	
142	142	118	82	49	Number of Funds in Category
—	7	9	1	14	Percentile Rank
-2.72	-2.72	5.17	4.28	8.42	American Funds 2015 Trgt Date Retire R6
-4.76	-4.76	5.84	4.08	—	Morningstar Mod Tgt Risk TR USD
-3.54	-3.54	4.79	3.61	—	Morningstar Lifetime Mod 2015 TR USD
-2.39	-2.39	5.40	4.27	9.08	Category High Return
-3.89	-3.93	4.42	3.40	7.80	Category Median Return
-5.90	-5.90	2.30	1.62	4.92	Category Low Return

Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Income Fund of Amer R6	11.26
American Funds Capital Income Bldr R6	11.24
American Funds Interm Bd Fd of Amer R6	8.99
American Funds Bond Fund of Amer R6	8.00
American Funds Inflation Linked Bd R6	6.98
American Funds American Mutual R6	6.01
American Funds Mortgage R6	5.98
American Funds Invmt Co of Amer R6	5.02
American Funds American High-Inc R6	5.01
American Funds Washington Mutual R6	5.00

Investment Strategy 12-31-2018

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2020 Trgt Date Retire R6 (USD)

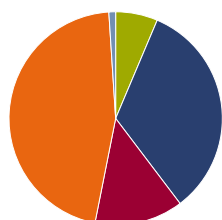
Details 12-31-2018

Ticker	RRCTX
Gross Expense Ratio %	0.34
Total Assets	\$13,842.51 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	11.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
206 TE	
Standard Deviation 3 Yr	5.19
Mean 3 Yr	5.55
Alpha 3 Yr	0.70
Beta 3 Yr	0.91
R-Squared 3 Yr	95.57
Upside Capture Ratio 3 Yr	95.38
Downside Capture Ratio 3 Yr	83.83
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2020 TR USD

Composition 09-30-2018

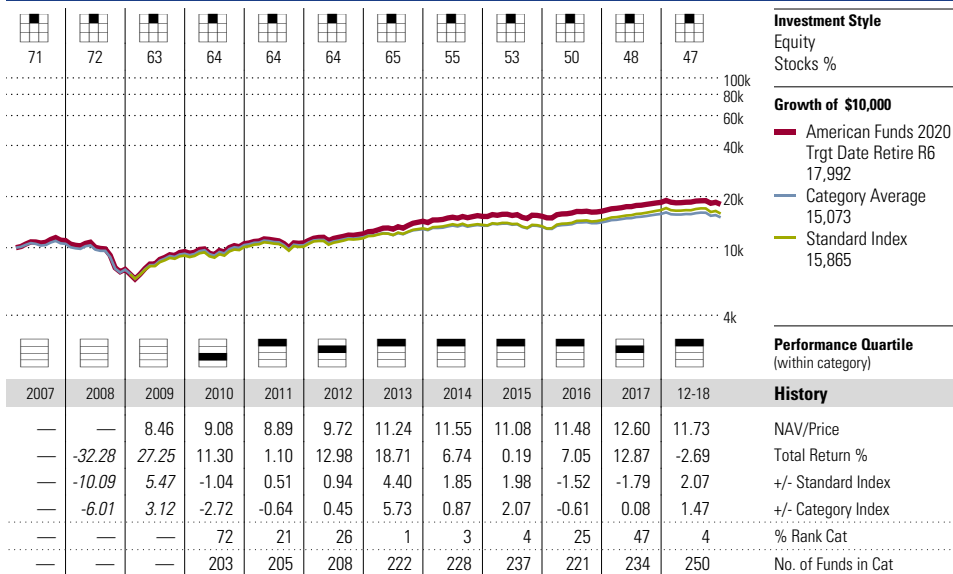


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	6.37	1.01
US Stocks	33.32	35.88
Non-US Stocks	13.43	23.19
Bonds	45.86	39.84
Other/Not Clsfd	1.02	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	33.2	0.80
Basic Materials	4.7	0.91
Consumer Cyclical	10.9	1.01
Financial Services	15.0	0.84
Real Estate	2.5	0.33
Sensitive	40.7	1.15
Communication Services	4.0	1.15
Energy	10.4	1.86
Industrials	9.1	0.84
Technology	17.2	1.12
Defensive	26.1	1.13
Consumer Defensive	9.3	1.13
Healthcare	13.4	1.20
Utilities	3.4	0.89

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Portfolio Statistics	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	16.8	1.21	1.04
Geo Avg Cap Plan (\$Mil)	85,581		
Geo Avg Cap Bmark (\$Mil)	28,486		
Value	Blend	Growth	

Fixed-Income Investment Style Actual %

Avg Effective Duration (Yrs)	5.20
Avg Effective Maturity (Yrs)	—
Avg Credit Quality	—
Bond %	
AAA	72.03
AA	3.36
A	8.86
BBB	7.42
BB	3.64
B	3.41
Below B	1.03
NR	0.25

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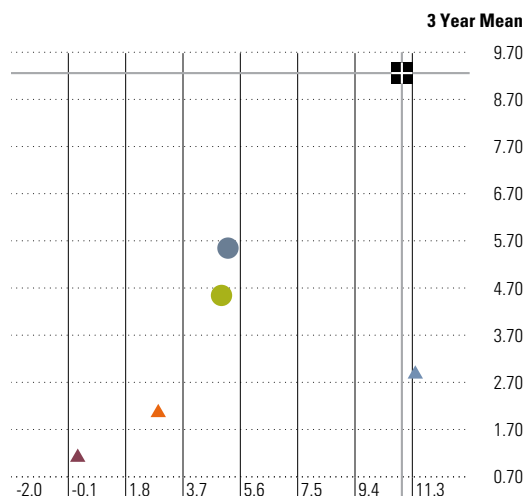
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2020 Trgt Date Retire R6 (USD)

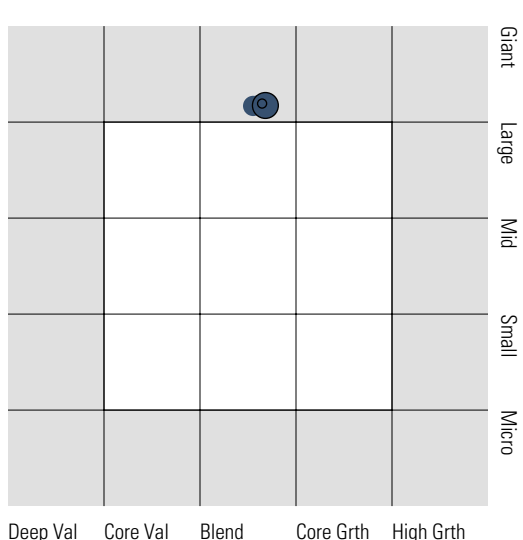
Risk/Return 12-31-2018



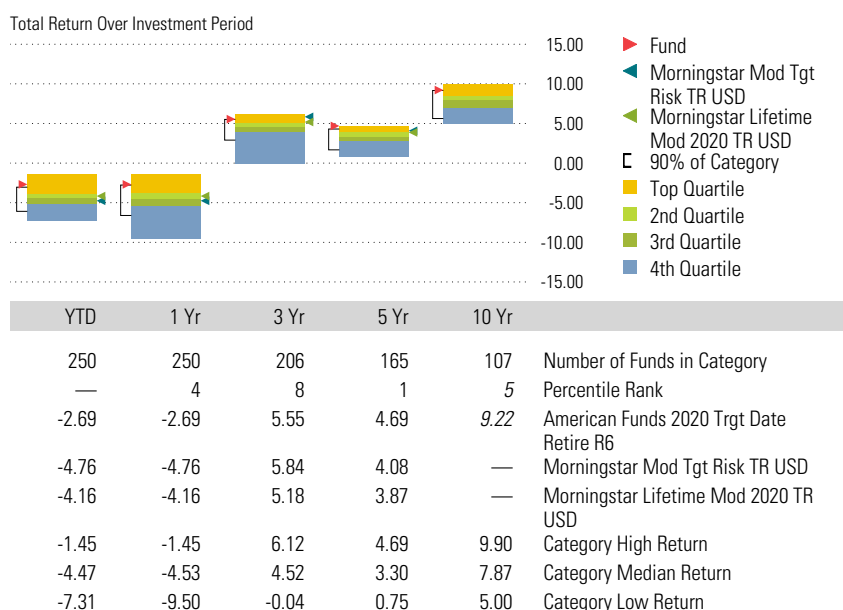
Benchmarks

- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Interm Bd Fd of Amer R6	8.98
American Funds Capital Income Bldr R6	7.69
American Funds Income Fund of Amer R6	7.67
American Funds Bond Fund of Amer R6	7.22
American Funds Inflation Linked Bd R6	6.45
American Funds American Mutual R6	6.08
American Funds Mortgage R6	5.72
American Funds Washington Mutual R6	5.33
American Funds Invmt Co of Amer R6	5.33
American Funds US Government Sec R6	5.22

Investment Strategy 12-31-2018

The investment seeks growth, income and conservation of capital. The fund normally invests a greater portion of its assets in bond, equity-income and balanced funds as it approaches and passes its target date. The advisor attempts to achieve its investment objectives by investing in a mix of American Funds in different combinations and weightings. The underlying American Funds represent a variety of fund categories, including growth funds, growth-and-income funds, equity-income funds, balanced funds and fixed income funds. The fund categories represent differing investment objectives.

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2025 Trgt Date Retire R6 (USD)

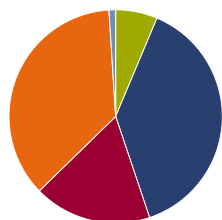
Details 12-31-2018

Ticker	RFDTX
Gross Expense Ratio %	0.36
Total Assets	\$17,849.28 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	11.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
189 TG	
Standard Deviation 3 Yr	6.21
Mean 3 Yr	6.12
Alpha 3 Yr	0.64
Beta 3 Yr	0.95
R-Squared 3 Yr	95.82
Upside Capture Ratio 3 Yr	99.40
Downside Capture Ratio 3 Yr	91.78
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2025 TR USD

Composition 09-30-2018

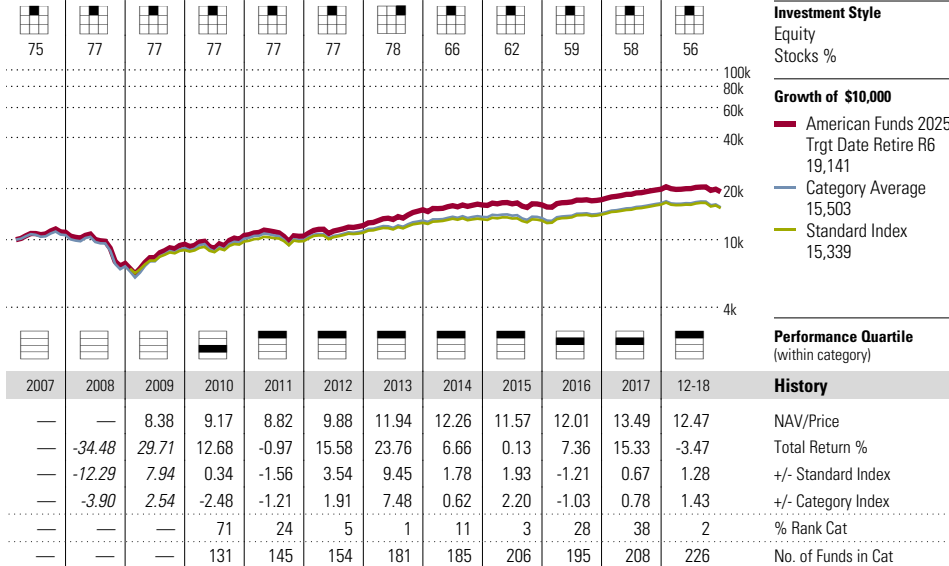


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	6.33	1.01
US Stocks	38.51	35.88
Non-US Stocks	17.86	23.19
Bonds	36.29	39.84
Other/Not Clsfd	1.01	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	33.9	0.82
Basic Materials	4.9	0.96
Consumer Cyclical	12.1	1.12
Financial Services	14.9	0.83
Real Estate	1.9	0.25
Sensitive	41.3	1.17
Communication Services	3.5	1.00
Energy	9.9	1.77
Industrials	9.2	0.84
Technology	18.7	1.22
Defensive	24.8	1.07
Consumer Defensive	8.6	1.05
Healthcare	13.4	1.20
Utilities	2.8	0.74

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Portfolio Statistics	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	17.1	1.24	1.08
Geo Avg Cap Plan (\$Mil)	79,140		
Geo Avg Cap Bmark (\$Mil)	28,486		
Value	30	27	34
Blend	3	3	3
Growth	0	0	0

Fixed-Income Investment Style Actual %

Avg Effective Duration (Yrs)	5.40
Avg Effective Maturity (Yrs)	—
Avg Credit Quality	—
Bond %	
AAA	77.47
AA	3.64
A	9.62
BBB	7.25
BB	1.12
B	0.68
Below B	0.11
NR	0.11

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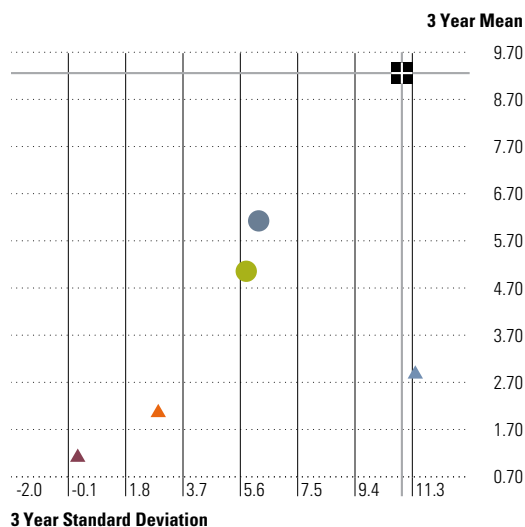
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2025 Trgt Date Retire R6 (USD)

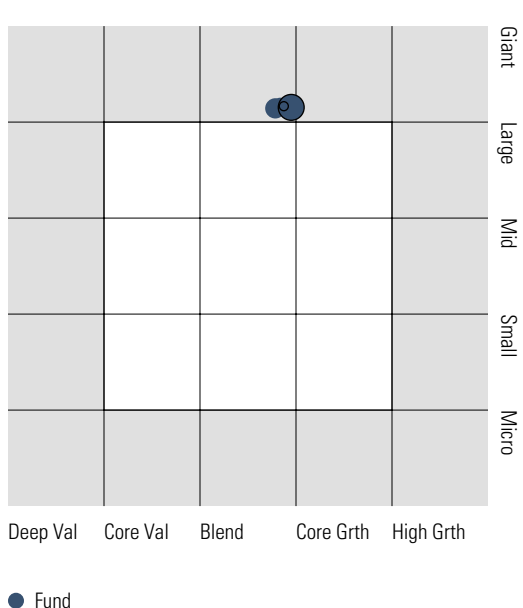
Risk/Return 12-31-2018



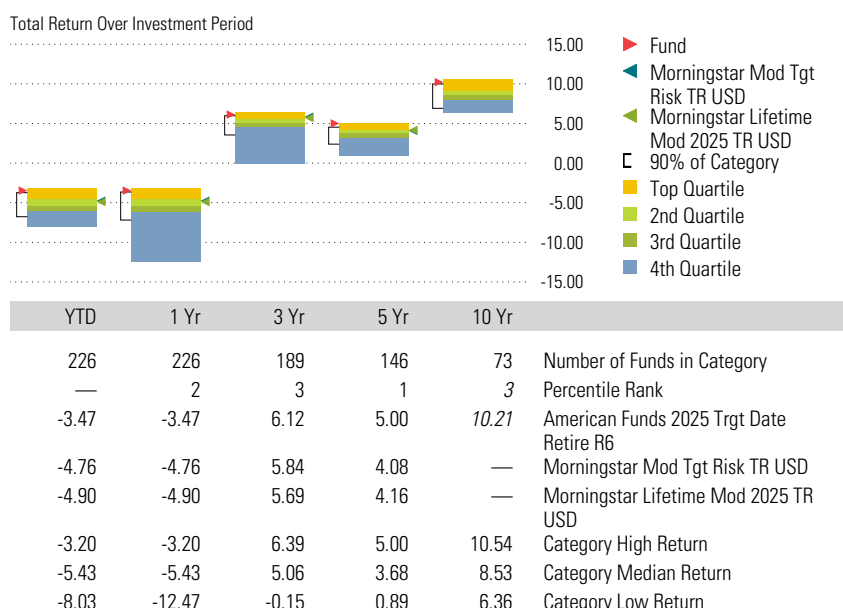
Benchmarks

- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Interm Bd Fd of Amer R6	7.76
American Funds Washington Mutual R6	6.49
American Funds US Government Sec R6	6.26
American Funds Invmt Co of Amer R6	6.24
American Funds American Mutual R6	6.01
American Funds Global Balanced R6	5.99
American Funds American Balanced R6	5.99
American Funds Fundamental Invs R6	5.24
American Funds Mortgage R6	5.00
American Funds Capital World Gr&Inc R6	4.99

Investment Strategy 12-31-2018

The investment seeks growth, income and conservation of capital.

The fund normally invests a greater portion of its assets in bond, equity-income and balanced funds as it approaches and passes its target date. The advisor attempts to achieve its investment objectives by investing in a mix of American Funds in different combinations and weightings. The underlying American Funds represent a variety of fund categories, including growth funds, growth-and-income funds, equity-income funds, balanced funds and fixed income funds. The fund categories represent differing investment objectives.

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2030 Trgt Date Retire R6 (USD)

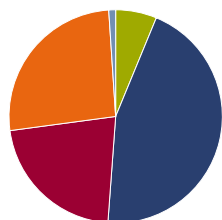
Details 12-31-2018

Ticker	RFETX
Gross Expense Ratio %	0.38
Total Assets	\$19,113.90 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	11.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
Standard Deviation 3 Yr	7.51
Mean 3 Yr	6.92
Alpha 3 Yr	0.70
Beta 3 Yr	0.99
R-Squared 3 Yr	96.56
Upside Capture Ratio 3 Yr	102.45
Downside Capture Ratio 3 Yr	95.49
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2030 TR USD

Composition 09-30-2018

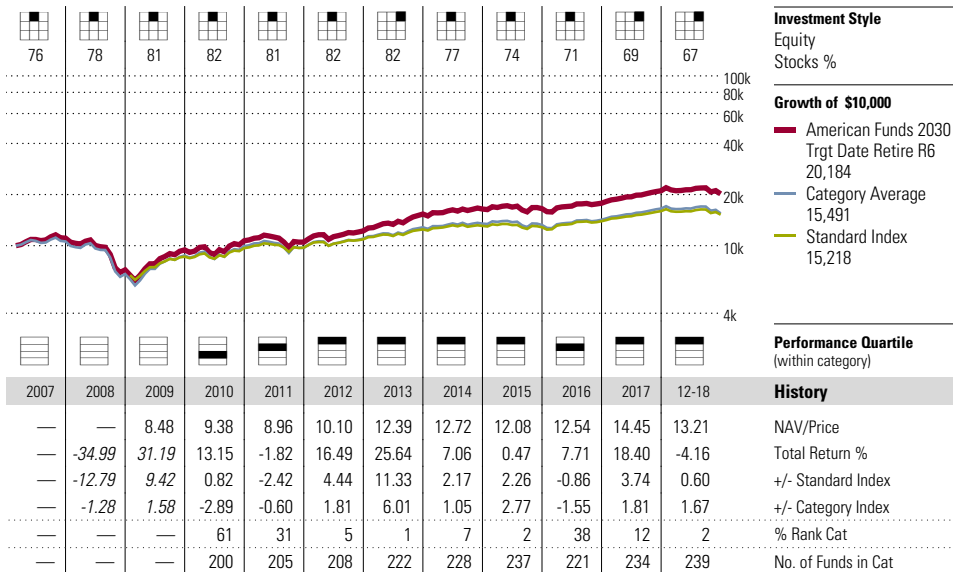


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	6.22	1.01
US Stocks	44.94	35.88
Non-US Stocks	21.71	23.19
Bonds	26.08	39.84
Other/Not Clsfd	1.04	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	34.4	0.83
Basic Materials	5.0	0.98
Consumer Cyclical	12.7	1.17
Financial Services	14.9	0.83
Real Estate	1.8	0.24
Sensitive	41.1	1.16
Communication Services	3.3	0.94
Energy	9.4	1.68
Industrials	9.3	0.85
Technology	19.1	1.25
Defensive	24.5	1.06
Consumer Defensive	8.3	1.01
Healthcare	13.5	1.21
Utilities	2.6	0.69

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

	28	26	32	
Large				Portfolio Statistics
Mid	3	4	4	P/E Ratio TTM
Small	1	1	1	Port Avg
				Rel Index
				Rel Cat
				Geo Avg Cap Plan (\$Mil)
				Geo Avg Cap Bmark (\$Mil)
Value				70,298
Blend				28,486
Growth				

Fixed-Income Investment Style Actual %

	0	100	0	
High				Avg Effective Duration (Yrs)
Med	0	0	0	Avg Effective Maturity (Yrs)
Low	0	0	0	Avg Credit Quality
				Bond %
				AAA
				AA
				A
				BBB
				BB
				B
				Below B
				NR

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period. The performance data represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the return data quoted. For performance data current to the most recent month-end, visit <http://advisor.morningstar.com/familyinfo.asp>. The "Overall Morningstar Rating" is based on risk-adjusted returns, derived from a weighted average of the three, five and ten-year (if applicable) Morningstar metrics. An investment in the fund is not insured or guaranteed by the FDIC or any other government agency.

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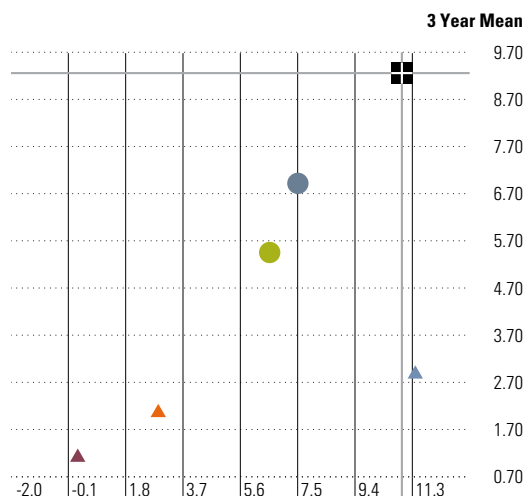
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2030 Trgt Date Retire R6 (USD)

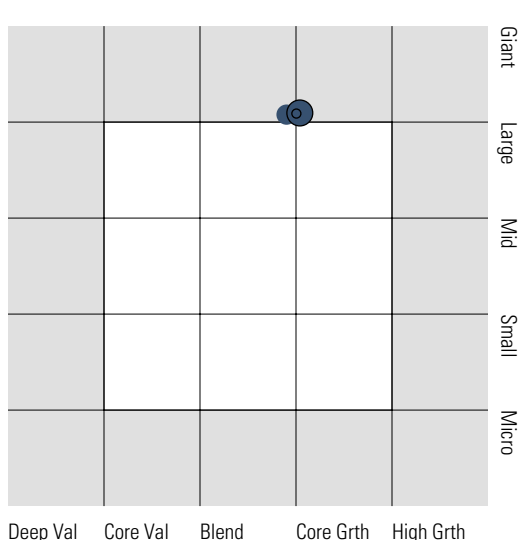
Risk/Return 12-31-2018



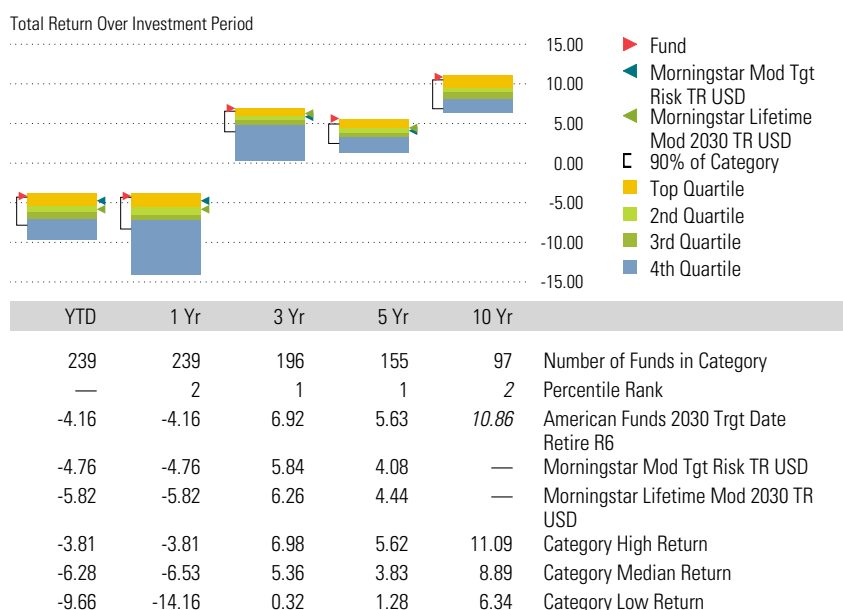
Benchmarks

- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Washington Mutual R6	7.99
American Funds US Government Sec R6	7.26
American Funds Invmt Co of Amer R6	6.99
American Funds American Balanced R6	5.99
American Funds Global Balanced R6	5.99
American Funds American Mutual R6	5.99
American Funds Fundamental Invs R6	5.99
American Funds New Perspective R6	5.44
American Funds Capital World Gr&Inc R6	5.01
American Funds AMCAP R6	4.46

Investment Strategy 12-31-2018

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2035 Trgt Date Retire R6 (USD)

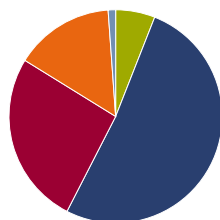
Details 12-31-2018

Ticker	RFCTX
Gross Expense Ratio %	0.39
Total Assets	\$14,996.10 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	11.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
Standard Deviation 3 Yr	8.65
Mean 3 Yr	7.43
Alpha 3 Yr	0.69
Beta 3 Yr	1.00
R-Squared 3 Yr	96.85
Upside Capture Ratio 3 Yr	103.25
Downside Capture Ratio 3 Yr	97.48
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2035 TR USD

Composition 09-30-2018

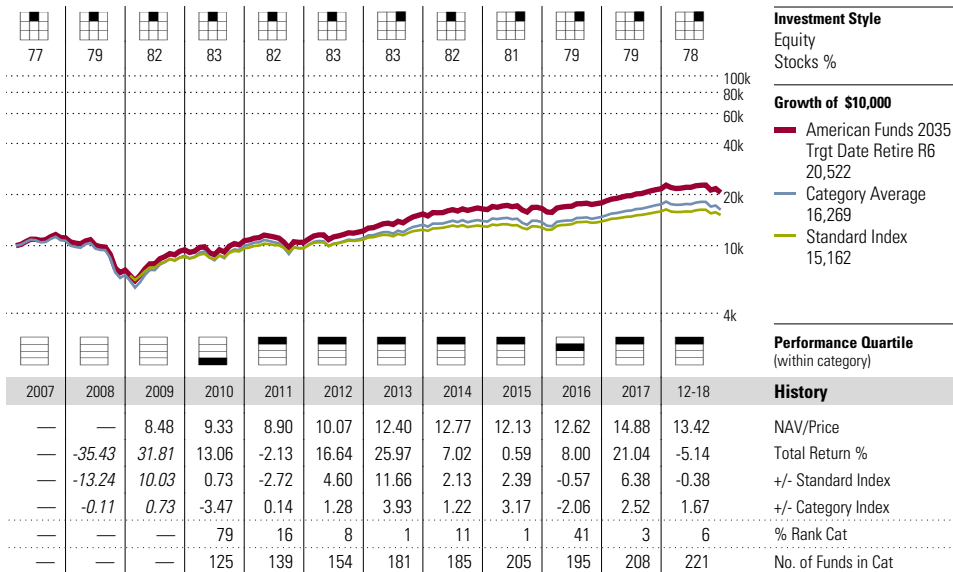


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	5.97	1.01
US Stocks	51.58	35.88
Non-US Stocks	26.27	23.19
Bonds	15.06	39.84
Other/Not Clsfd	1.13	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	34.9	0.84
Basic Materials	5.0	0.98
Consumer Cyclical	13.5	1.24
Financial Services	14.8	0.82
Real Estate	1.7	0.22
Sensitive	40.9	1.16
Communication Services	3.0	0.85
Energy	8.8	1.57
Industrials	9.3	0.85
Technology	19.8	1.29
Defensive	24.2	1.04
Consumer Defensive	8.0	0.97
Healthcare	13.8	1.24
Utilities	2.4	0.64

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Value	Blend	Growth
25	24	36
3	4	5
1	1	1

Fixed-Income Investment Style Actual %

Ltd	Mod	Ext
0	100	0
0	0	0
0	0	0

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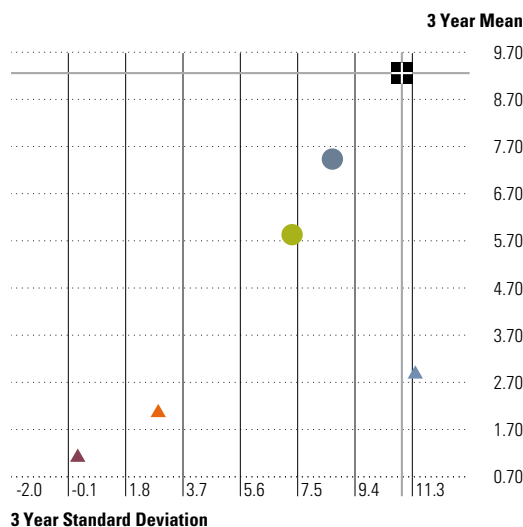
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2035 Trgt Date Retire R6 (USD)

Risk/Return 12-31-2018



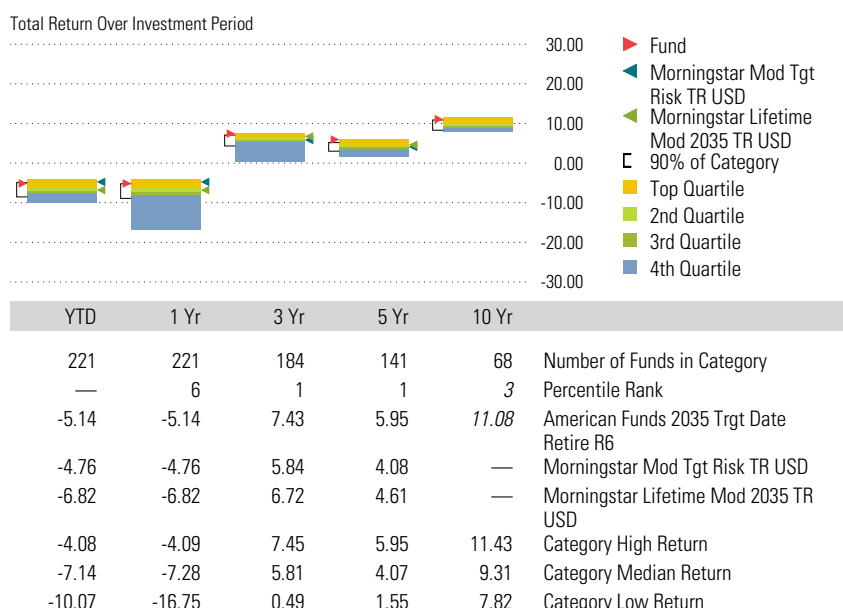
Benchmarks

- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Washington Mutual R6	8.00
American Funds US Government Sec R6	7.27
American Funds Invmt Co of Amer R6	7.00
American Funds New Perspective R6	6.99
American Funds AMCAP R6	6.30
American Funds Growth Fund of Amer R6	6.27
American Funds SMALLCAP World R6	6.20
American Funds American Mutual R6	6.01
American Funds American Balanced R6	6.00
American Funds Global Balanced R6	6.00

Investment Strategy 12-31-2018

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2040 Trgt Date Retire R6 (USD)

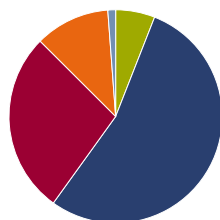
Details 12-31-2018

Ticker	RFGTX
Gross Expense Ratio %	0.40
Total Assets	\$12,982.35 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	11.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
Standard Deviation 3 Yr	9.04
Mean 3 Yr	7.62
Alpha 3 Yr	0.83
Beta 3 Yr	0.96
R-Squared 3 Yr	97.13
Upside Capture Ratio 3 Yr	100.08
Downside Capture Ratio 3 Yr	93.31
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2040 TR USD

Composition 09-30-2018

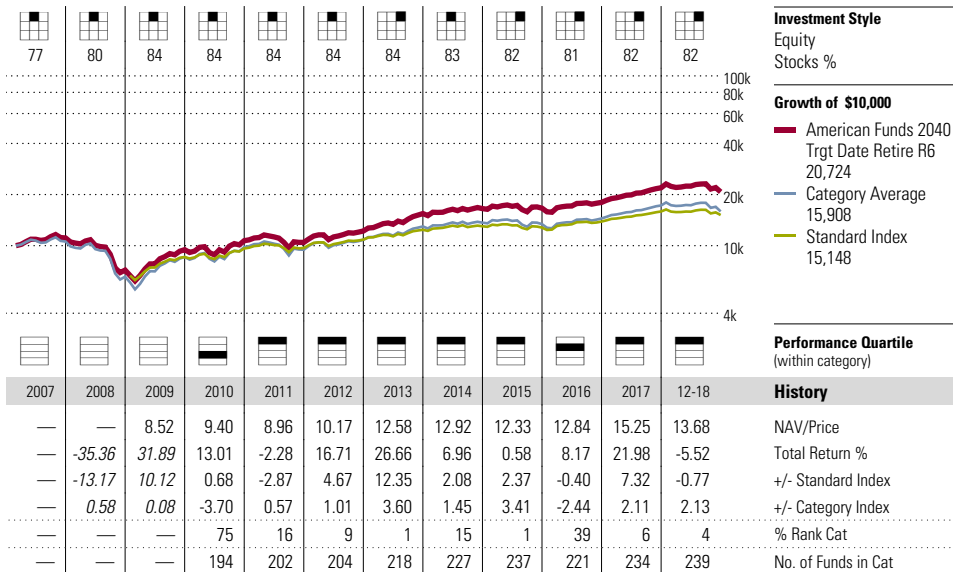


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	5.95	1.01
US Stocks	53.98	35.88
Non-US Stocks	27.54	23.19
Bonds	11.34	39.84
Other/Not Clsfd	1.18	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	35.0	0.84
Basic Materials	5.0	0.98
Consumer Cyclical	13.7	1.27
Financial Services	14.7	0.82
Real Estate	1.6	0.21
Sensitive	40.9	1.16
Communication Services	2.9	0.82
Energy	8.7	1.55
Industrials	9.4	0.86
Technology	20.0	1.31
Defensive	24.1	1.04
Consumer Defensive	7.8	0.95
Healthcare	13.9	1.25
Utilities	2.4	0.62

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Value	Blend	Growth
25	24	36
3	4	5
1	1	1
Portfolio Statistics	Port Avg	Rel Index
P/E Ratio TTM	17.7	1.28
Geo Avg Cap Plan (\$Mil)	61,481	
Geo Avg Cap Bmark (\$Mil)	28,486	

Fixed-Income Investment Style Actual %

Ltd	Mod	Ext
0	100	0
0	0	0
0	0	0
Avg Effective Duration (Yrs)	5.60	
Avg Effective Maturity (Yrs)	—	
Avg Credit Quality	—	
Bond %		
AAA	84.29	
AA	1.87	
A	5.74	
BBB	5.70	
BB	1.44	
B	0.77	
Below B	0.12	
NR	0.07	

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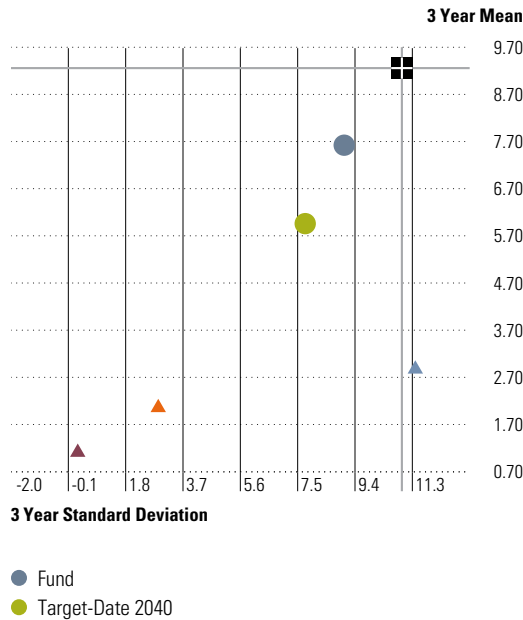
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2040 Trgt Date Retire R6 (USD)

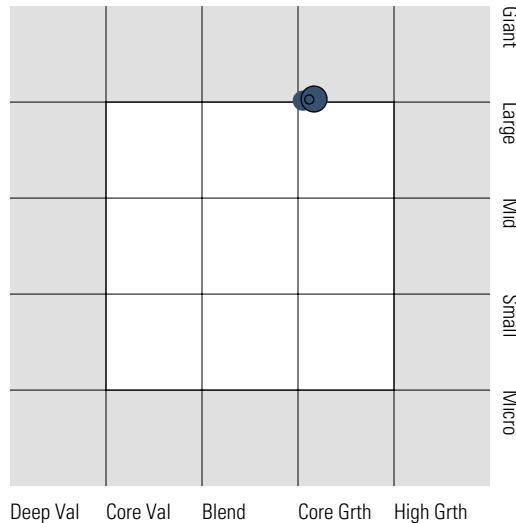
Risk/Return 12-31-2018



Benchmarks

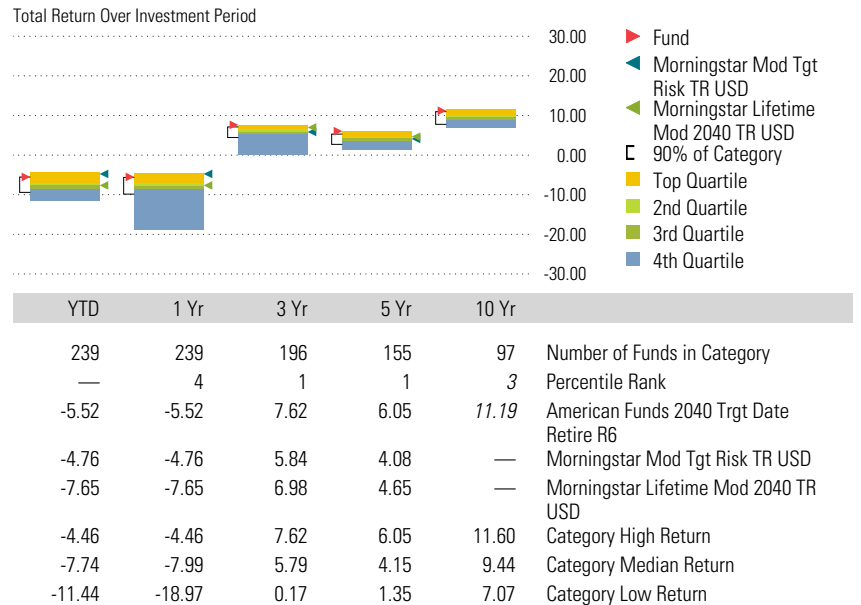
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Washington Mutual R6	8.00
American Funds Invmt Co of Amer R6	7.25
American Funds AMCAP R6	7.04
American Funds Growth Fund of Amer R6	7.03
American Funds New Perspective R6	6.99
American Funds SMALLCAP World R6	6.94
American Funds American Mutual R6	6.25
American Funds Fundamental Invs R6	6.25
American Funds American Balanced R6	6.00
American Funds Global Balanced R6	5.75

Investment Strategy 12-31-2018

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2045 Trgt Date Retire R6 (USD)

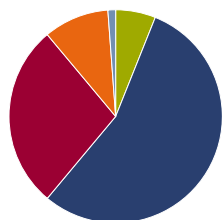
Details 12-31-2018

Ticker	RFHTX
Gross Expense Ratio %	0.40
Total Assets	\$9,360.73 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	11.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
Standard Deviation 3 Yr	9.22
Mean 3 Yr	7.77
Alpha 3 Yr	1.00
Beta 3 Yr	0.94
R-Squared 3 Yr	97.09
Upside Capture Ratio 3 Yr	98.85
Downside Capture Ratio 3 Yr	90.72
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2045 TR USD

Composition 09-30-2018

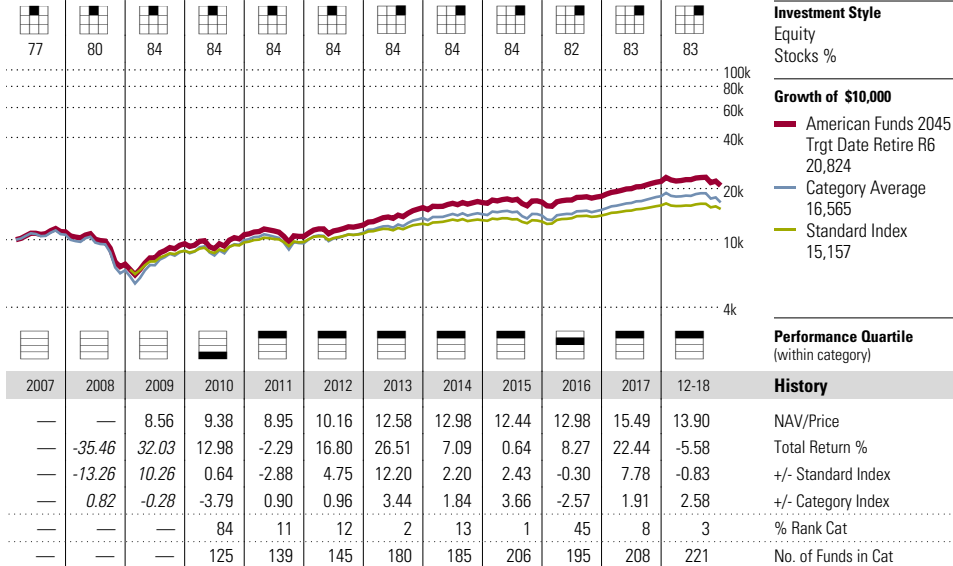


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	6.06	1.01
US Stocks	55.02	35.88
Non-US Stocks	27.84	23.19
Bonds	9.92	39.84
Other/Not Clsfd	1.17	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	34.9	0.84
Basic Materials	5.0	0.98
Consumer Cyclical	13.7	1.27
Financial Services	14.7	0.82
Real Estate	1.4	0.19
Sensitive	41.1	1.16
Communication Services	2.8	0.81
Energy	8.7	1.54
Industrials	9.4	0.86
Technology	20.2	1.32
Defensive	24.0	1.03
Consumer Defensive	7.7	0.94
Healthcare	13.9	1.25
Utilities	2.3	0.60

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Value	Blend	Growth
25	24	36
3	4	5
1	1	1

Fixed-Income Investment Style Actual %

Ltd	Mod	Ext
0	100	0
0	0	0
0	0	0

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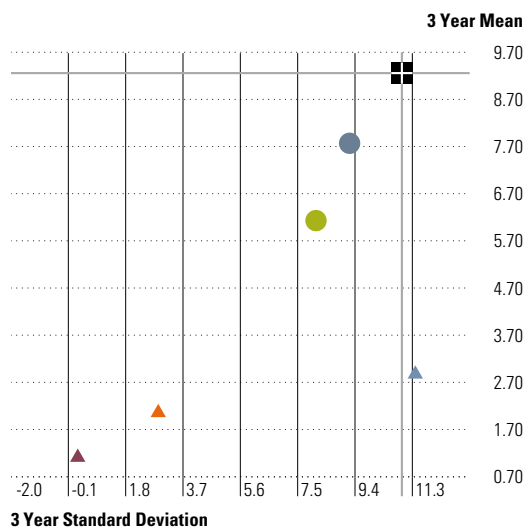
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2045 Trgt Date Retire R6 (USD)

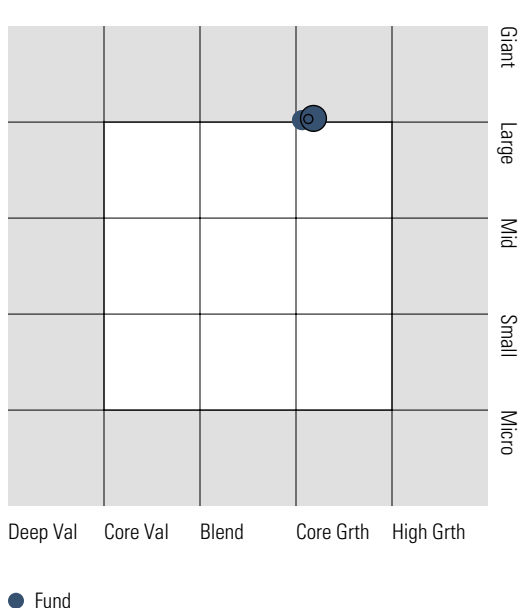
Risk/Return 12-31-2018



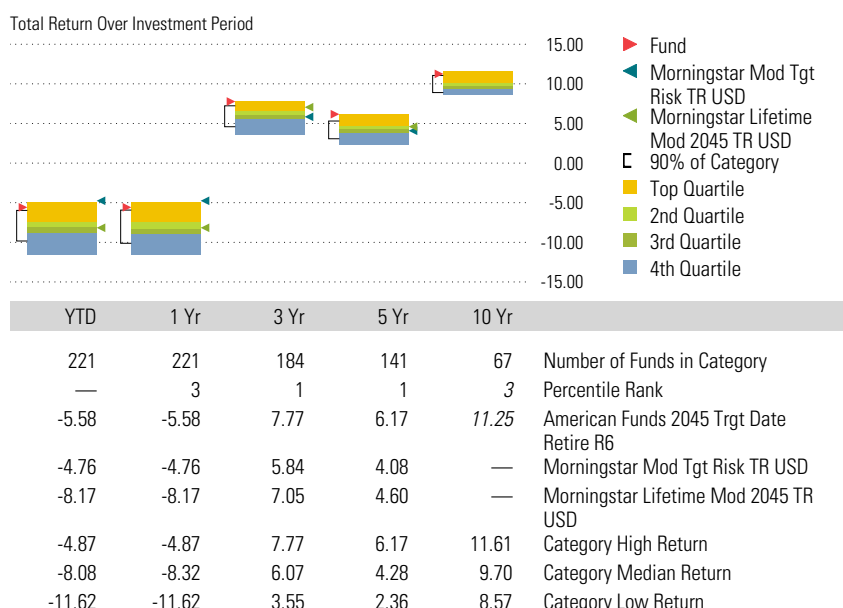
Benchmarks

- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Invmt Co of Amer R6	8.25
American Funds Washington Mutual R6	8.25
American Funds American Mutual R6	7.25
American Funds Fundamental Invs R6	7.25
American Funds AMCAP R6	7.03
American Funds Growth Fund of Amer R6	7.02
American Funds New Perspective R6	6.98
American Funds SMALLCAP World R6	6.97
American Funds Capital World Gr&Inc R6	6.25
American Funds American Balanced R6	5.75

Investment Strategy 12-31-2018

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2050 Trgt Date Retire R6 (USD)

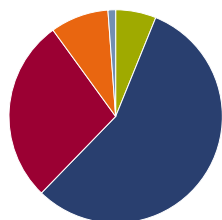
Details 12-31-2018

Ticker	RFITX
Gross Expense Ratio %	0.41
Total Assets	\$7,729.44 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	11.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
	196 TN
Standard Deviation 3 Yr	9.32
Mean 3 Yr	7.83
Alpha 3 Yr	1.06
Beta 3 Yr	0.94
R-Squared 3 Yr	97.10
Upside Capture Ratio 3 Yr	98.91
Downside Capture Ratio 3 Yr	90.31
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2050 TR USD

Composition 09-30-2018

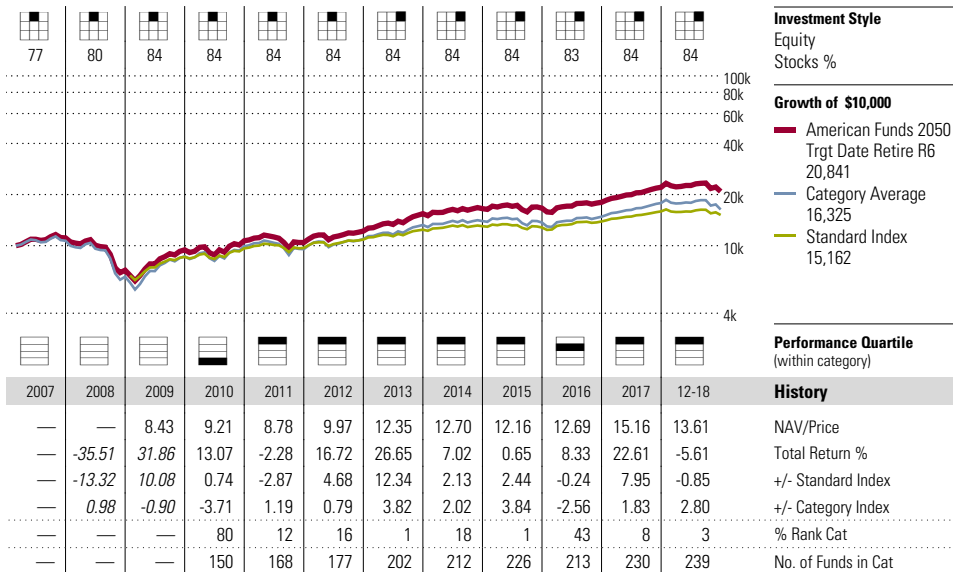


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	6.13	1.01
US Stocks	56.12	35.88
Non-US Stocks	27.75	23.19
Bonds	8.84	39.84
Other/Not Clsfd	1.16	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	34.7	0.84
Basic Materials	5.0	0.98
Consumer Cyclical	13.7	1.26
Financial Services	14.7	0.82
Real Estate	1.3	0.17
Sensitive	41.3	1.17
Communication Services	2.8	0.81
Energy	8.7	1.54
Industrials	9.5	0.87
Technology	20.4	1.33
Defensive	24.0	1.03
Consumer Defensive	7.7	0.94
Healthcare	14.0	1.26
Utilities	2.2	0.59

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

	24	24	37	Large
Portfolio Statistics				
P/E Ratio TTM	3	4	5	Mid
Geo Avg Cap Plan (\$Mil)	1	1	1	Small
Geo Avg Cap Bmark (\$Mil)				
Value				
Blend				
Growth				

Fixed-Income Investment Style Actual %

	0	100	0	High
Avg Effective Duration (Yrs)				5.70
Avg Effective Maturity (Yrs)				—
Avg Credit Quality				—
Bond %				
AAA				87.65
AA				1.61
A				4.91
BBB				4.52
BB				0.94
B				0.34
Below B				0.00
NR				0.03

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period. The performance data represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the return data quoted. For performance data current to the most recent month-end, visit <http://advisor.morningstar.com/familyinfo.asp>. The "Overall Morningstar Rating" is based on risk-adjusted returns, derived from a weighted average of the three, five and ten-year (if applicable) Morningstar metrics. An investment in the fund is not insured or guaranteed by the FDIC or any other government agency.

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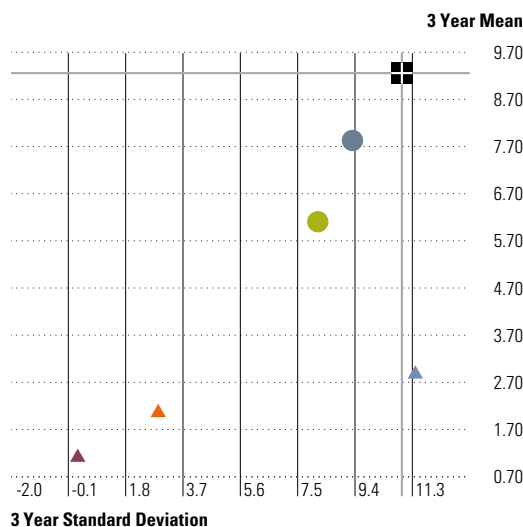
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2050 Trgt Date Retire R6 (USD)

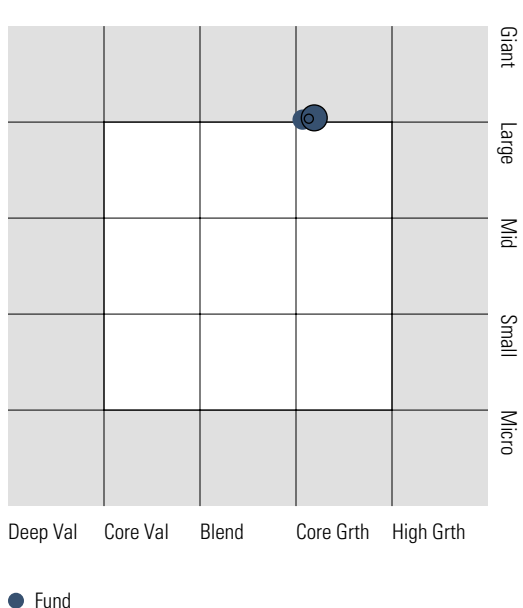
Risk/Return 12-31-2018



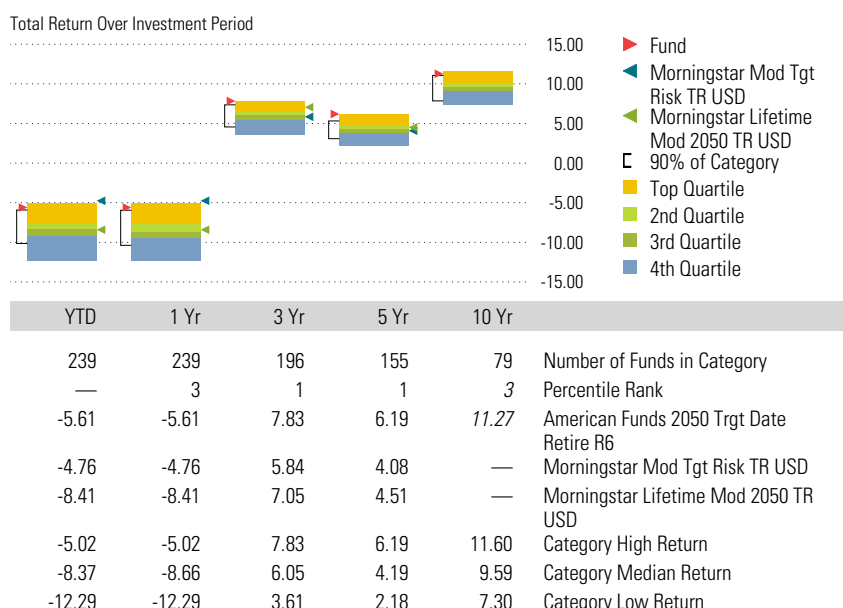
Benchmarks

- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Invmt Co of Amer R6	9.00
American Funds Washington Mutual R6	9.00
American Funds American Mutual R6	8.00
American Funds Fundamental Invs R6	8.00
American Funds AMCAP R6	7.03
American Funds Growth Fund of Amer R6	7.02
American Funds Capital World Gr&Inc R6	7.00
American Funds New Perspective R6	6.98
American Funds SMALLCAP World R6	6.98
American Funds US Government Sec R6	5.01

Investment Strategy 12-31-2018

The investment seeks growth, income and conservation of capital.

The fund normally invests a greater portion of its assets in bond, equity-income and balanced funds as it approaches and passes its target date. The advisor attempts to achieve its investment objectives by investing in a mix of American Funds in different combinations and weightings. The underlying American Funds represent a variety of fund categories, including growth funds, growth-and-income funds, equity-income funds, balanced funds and fixed income funds. The fund categories represent differing investment objectives.

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2055 Trgt Date Retire R6 (USD)

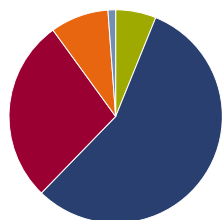
Details 12-31-2018

Ticker	RFKTX
Gross Expense Ratio %	0.42
Total Assets	\$3,956.19 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	8.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
Standard Deviation 3 Yr	182 TL
Mean 3 Yr	9.33
Alpha 3 Yr	7.81
Beta 3 Yr	1.07
R-Squared 3 Yr	0.94
Upside Capture Ratio 3 Yr	97.05
Downside Capture Ratio 3 Yr	98.92
Standard Index	90.50
Category Index	Morningstar Mod Tgt Risk TR USD
	Morningstar Lifetime Mod 2055 TR USD

Composition 09-30-2018

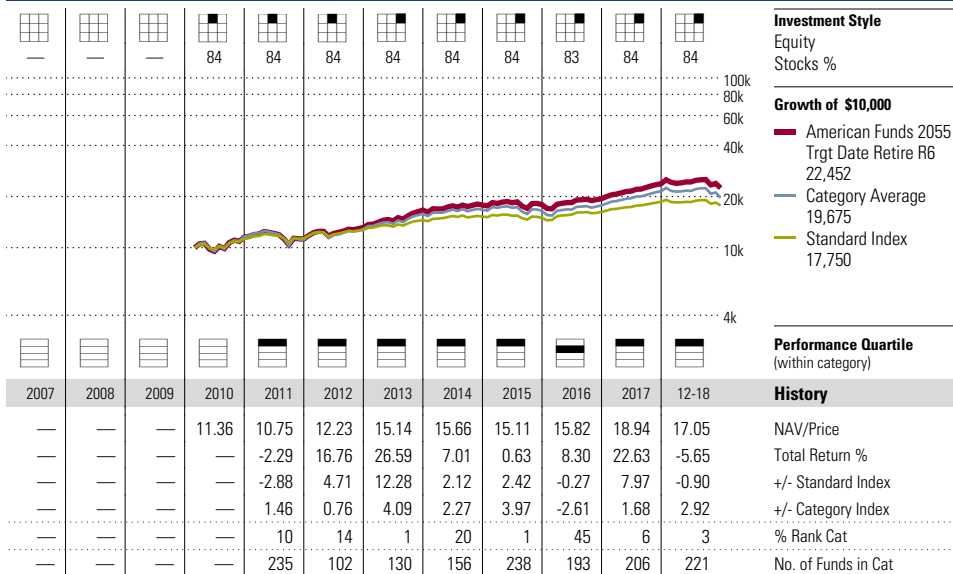


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	6.13	1.01
US Stocks	56.13	35.88
Non-US Stocks	27.75	23.19
Bonds	8.83	39.84
Other/Not Clsfd	1.16	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	34.7	0.84
Basic Materials	5.0	0.98
Consumer Cyclical	13.7	1.26
Financial Services	14.7	0.82
Real Estate	1.3	0.17
Sensitive	41.3	1.17
Communication Services	2.8	0.81
Energy	8.7	1.54
Industrials	9.5	0.87
Technology	20.4	1.33
Defensive	24.0	1.03
Consumer Defensive	7.7	0.94
Healthcare	14.0	1.26
Utilities	2.2	0.59

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Value	Blend	Growth
24	24	37
3	4	5
1	1	1

Fixed-Income Investment Style Actual %

Ltd	Mod	Ext
0	100	0
0	0	0
0	0	0

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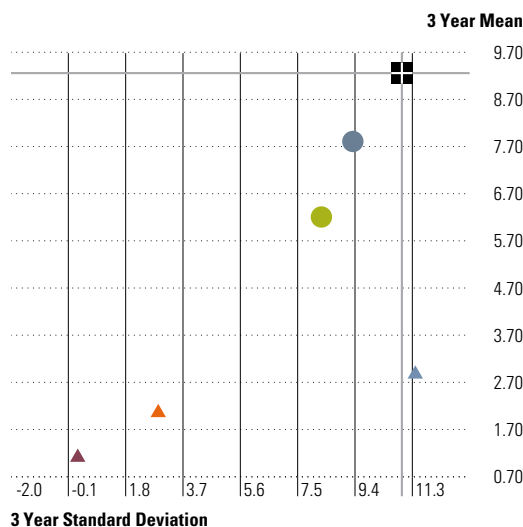
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2055 Trgt Date Retire R6 (USD)

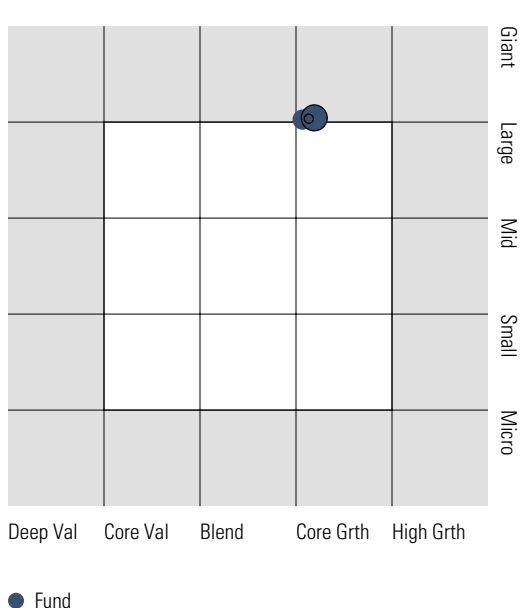
Risk/Return 12-31-2018



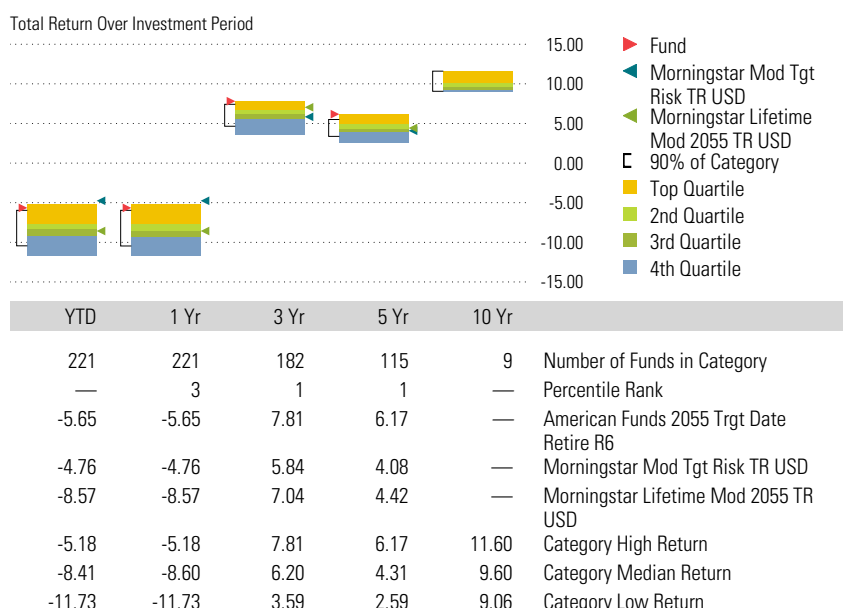
Benchmarks

- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Washington Mutual R6	9.00
American Funds Invmt Co of Amer R6	9.00
American Funds Fundamental Invs R6	8.00
American Funds American Mutual R6	8.00
American Funds AMCAP R6	7.03
American Funds Growth Fund of Amer R6	7.02
American Funds Capital World Gr&Inc R6	7.00
American Funds New Perspective R6	6.99
American Funds SMALLCAP World R6	6.99
American Funds US Government Sec R6	5.01

Investment Strategy 12-31-2018

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2060 Trgt Date Retire R6 (USD)

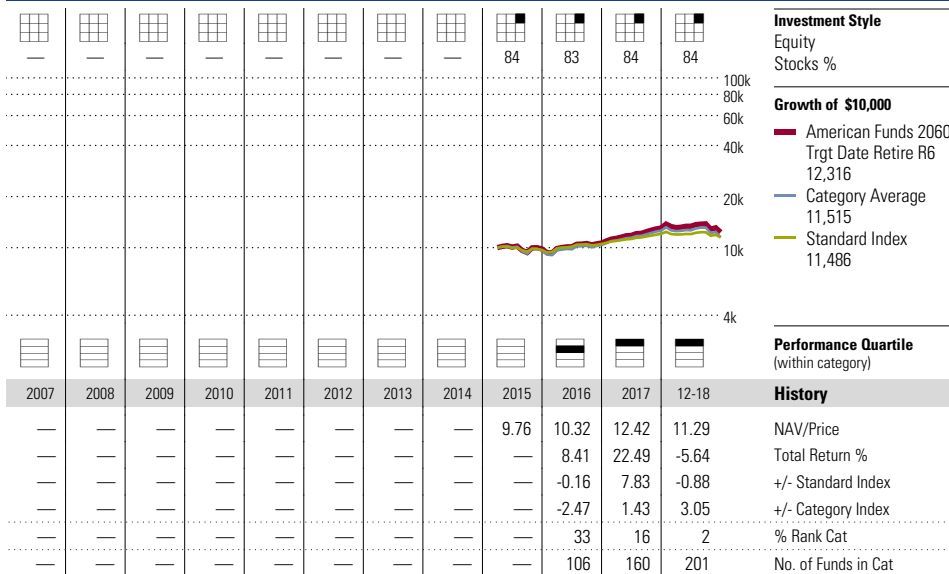
Details 12-31-2018

Ticker	RFUTX
Gross Expense Ratio %	0.44
Total Assets	\$1,138.73 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro, Andrew Suzman, Jody Jonsson, Wesley Phoa, Bradley Vogt, 3.8 Years
Tenure	Asset Allocation
Objective	

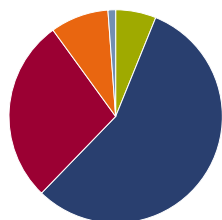
Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
Standard Deviation 3 Yr	9.28
Mean 3 Yr	7.81
Alpha 3 Yr	1.12
Beta 3 Yr	0.93
R-Squared 3 Yr	97.09
Upside Capture Ratio 3 Yr	98.53
Downside Capture Ratio 3 Yr	89.58
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2060 TR USD

Performance 12-31-2018



Composition 09-30-2018



Asset Allocation	Portfolio Net %	Bmark Net %
Cash	6.13	1.01
US Stocks	56.10	35.88
Non-US Stocks	27.77	23.19
Bonds	8.84	39.84
Other/Not Clsfd	1.16	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	34.7	0.84
Basic Materials	5.0	0.98
Consumer Cyclical	13.7	1.26
Financial Services	14.7	0.82
Real Estate	1.3	0.17
Sensitive	41.3	1.17
Communication Services	2.8	0.81
Energy	8.7	1.54
Industrials	9.5	0.87
Technology	20.4	1.33
Defensive	24.0	1.03
Consumer Defensive	7.7	0.94
Healthcare	14.0	1.26
Utilities	2.2	0.59

Style Analysis 09-30-2018

Equity Investment Style Actual %

Value	Blend	Growth
24	24	37
3	4	5
1	1	1
Portfolio Statistics	Port Avg	Rel Index
P/E Ratio TTM	17.7	1.28
Geo Avg Cap Plan (\$Mil)	62,707	
Geo Avg Cap Bmark (\$Mil)	28,486	

Fixed-Income Investment Style Actual %

Ltd	Mod	Ext
0	100	0
0	0	0
0	0	0
Avg Effective Duration (Yrs)	5.70	
Avg Effective Maturity (Yrs)	—	
Avg Credit Quality	—	
Bond %		
AAA	87.64	
AA	1.61	
A	4.91	
BBB	4.52	
BB	0.95	
B	0.34	
Below B	0.00	
NR	0.03	

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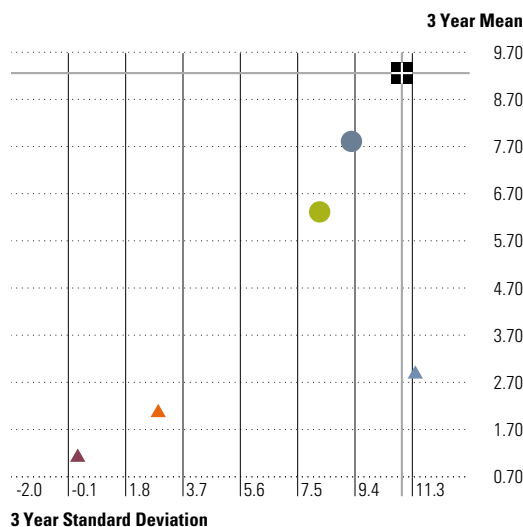
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2060 Trgt Date Retire R6 (USD)

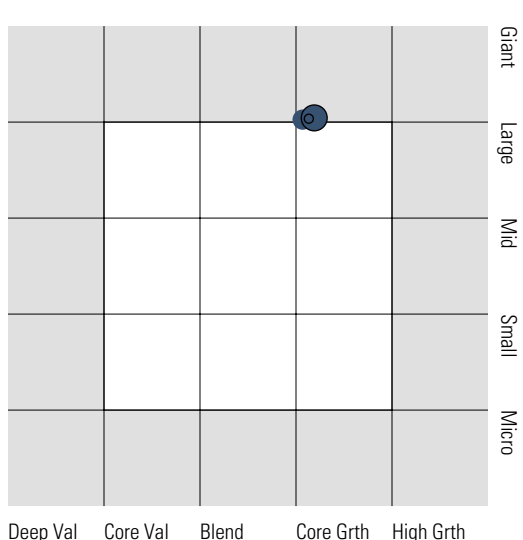
Risk/Return 12-31-2018



Benchmarks

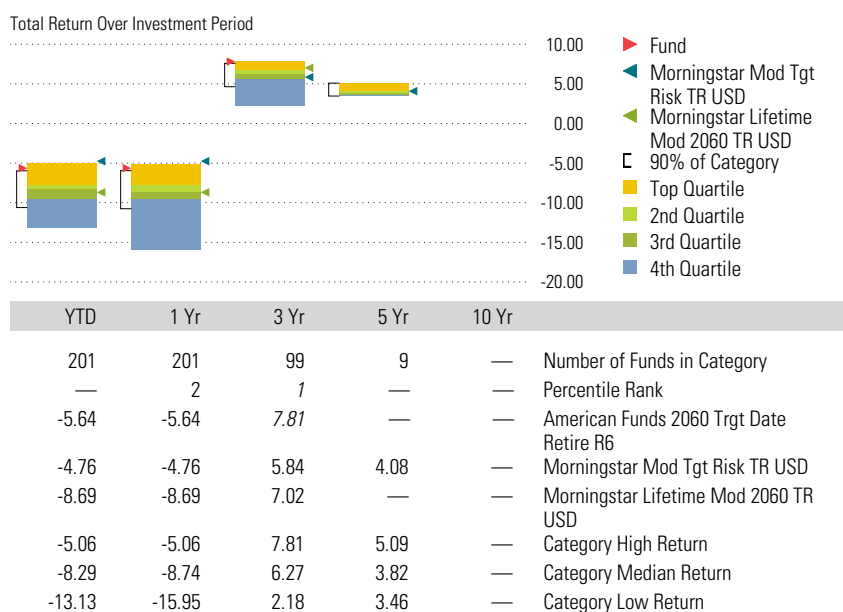
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Invmt Co of Amer R6	9.00
American Funds Washington Mutual R6	9.00
American Funds American Mutual R6	8.00
American Funds Fundamental Invs R6	8.00
American Funds Growth Fund of Amer R6	7.00
American Funds New Perspective R6	7.00
American Funds SMALLCAP World R6	7.00
American Funds AMCAP R6	7.00
American Funds Capital World Gr&Inc R6	7.00
American Funds US Government Sec R6	5.01

Investment Strategy 12-31-2018

The investment seeks growth, income and conservation of capital.

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Cobb County Government 457 Deferred Compensation Plan

American Funds Europacific Growth R6 (USD)

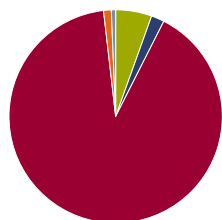
Details 12-31-2018

Ticker	REGX
Gross Expense Ratio %	0.49
Total Assets	\$143,360.77 mil
Family	American Funds
Manager	Mark Denning,
Tenure	27.1 Years
Objective	Foreign Stock

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★
Standard Deviation 3 Yr	11.90
Mean 3 Yr	4.08
Alpha 3 Yr	-0.03
Beta 3 Yr	0.99
R-Squared 3 Yr	93.94
Upside Capture Ratio 3 Yr	97.82
Downside Capture Ratio 3 Yr	98.01
Standard Index	MSCI ACWI Ex USA NR USD
Category Index	MSCI ACWI Ex USA Growth NR USD

Composition 09-30-2018

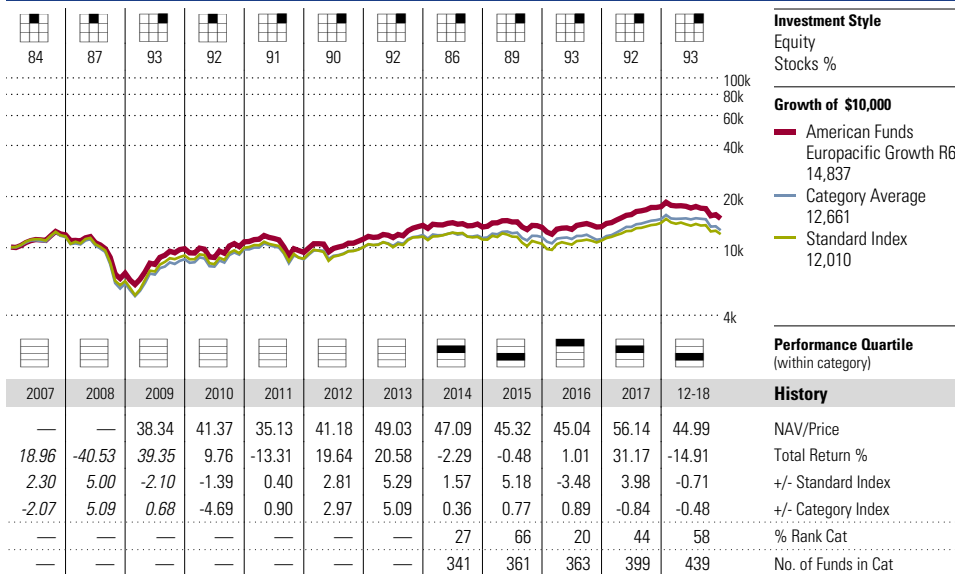


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	5.48	0.01
US Stocks	1.98	0.80
Non-US Stocks	90.72	99.12
Bonds	1.17	0.00
Other/Not Clsfd	0.65	0.07

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	41.0	0.92
Basic Materials	8.7	1.10
Consumer Cyclical	13.0	1.20
Financial Services	18.3	0.82
Real Estate	1.0	0.29
Sensitive	40.7	1.21
Communication Services	2.9	0.68
Energy	6.7	0.91
Industrials	11.1	1.03
Technology	20.1	1.75
Defensive	18.3	0.84
Consumer Defensive	7.5	0.74
Healthcare	8.1	0.96
Utilities	2.7	0.80

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

20	19	54	Large Mid Small	Portfolio Statistics	Port Avg	Rel Index	Rel Cat
2	1	4		P/E Ratio TTM	14.7	1.21	0.88
0	0	0		Geo Avg Cap Plan (\$Mil)			44,867
				Geo Avg Cap Bmark (\$Mil)			30,558
Value	Blend	Growth					

Fixed-Income Investment Style Actual %

High	Med	Low
Avg Effective Duration (Yrs)	—	—
Avg Effective Maturity (Yrs)	—	—
Avg Credit Quality	—	—
Bond %	—	—
AAA	—	—
AA	—	—
A	—	—
BBB	—	—
BB	—	—
B	—	—
Below B	—	—
NR	—	—

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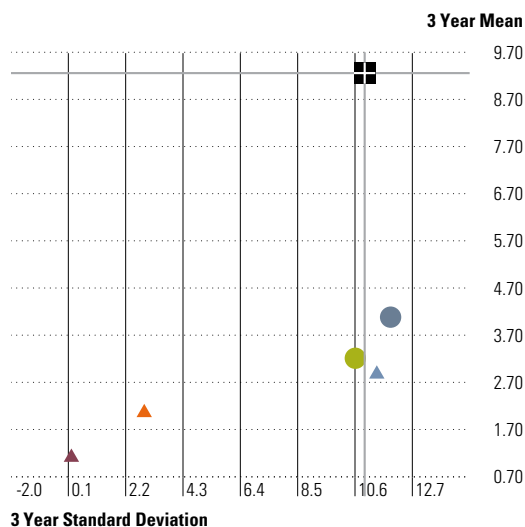
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Cobb County Government 457 Deferred Compensation Plan

American Funds Europacific Growth R6 (USD)

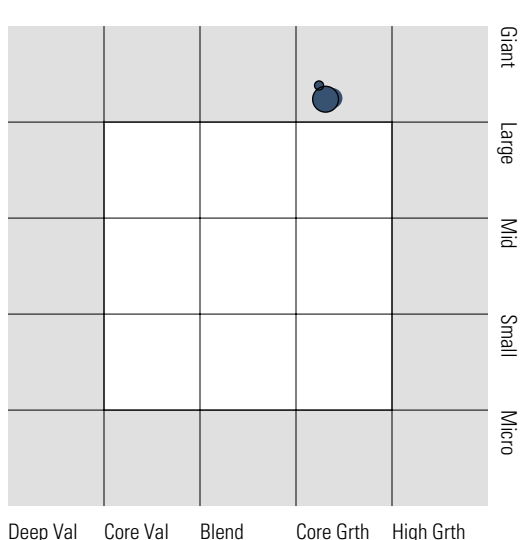
Risk/Return 12-31-2018



Benchmarks

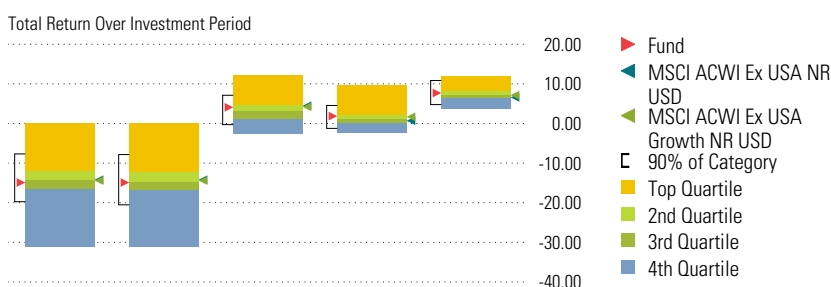
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



YTD	1 Yr	3 Yr	5 Yr	10 Yr	
439	439	364	315	228	Number of Funds in Category
—	58	33	36	42	Percentile Rank
-14.91	-14.91	4.08	1.86	7.69	American Funds Europacific Growth R6
-14.20	-14.20	4.48	0.68	6.57	MSCI ACWI Ex USA NR USD
-14.43	-14.43	4.19	1.69	7.15	MSCI ACWI Ex USA Growth NR USD
0.00	0.00	12.03	9.72	11.97	Category High Return
-14.25	-14.84	2.93	1.02	7.30	Category Median Return
-31.19	-31.19	-2.55	-2.33	3.56	Category Low Return

Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
AIA Group Ltd	2.70
Airbus SE	2.49
Nintendo Co Ltd	2.35
Samsung Electronics Co Ltd	2.34
Reliance Industries Ltd	2.32
HDFC Bank Ltd	1.95
Alibaba Group Holding Ltd ADR	1.81
Sony Corp	1.66
ASML Holding NV	1.59
Taiwan Semiconductor Manufacturing Co Ltd	1.58

Investment Strategy 12-31-2018

The investment seeks long-term growth of capital. The fund invests primarily in common stocks of issuers in Europe and the Pacific Basin that the investment adviser believes have the potential for growth. Growth stocks are stocks that the investment adviser believes have the potential for above-average capital appreciation. It normally will invest at least 80% of its net assets in securities of issuers in Europe and the Pacific Basin. The fund may invest a portion of its assets in common stocks and other securities of companies in emerging markets.

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Cobb County Government 457 Deferred Compensation Plan

American Funds New Perspective R6 (USD)

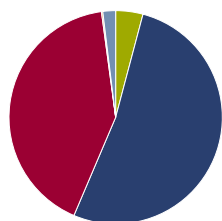
Details 12-31-2018

Ticker	RNPGX
Gross Expense Ratio %	0.45
Total Assets	\$77,669.88 mil
Family	American Funds
Manager	Robert Lovelace,
Tenure	18.1 Years
Objective	World Stock

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★
	729 WS
Standard Deviation 3 Yr	11.32
Mean 3 Yr	7.66
Alpha 3 Yr	0.62
Beta 3 Yr	1.03
R-Squared 3 Yr	90.55
Upside Capture Ratio 3 Yr	106.24
Downside Capture Ratio 3 Yr	103.42
Standard Index	MSCI ACWI Ex USA
	NR USD
Category Index	MSCI ACWI NR USD

Composition 09-30-2018

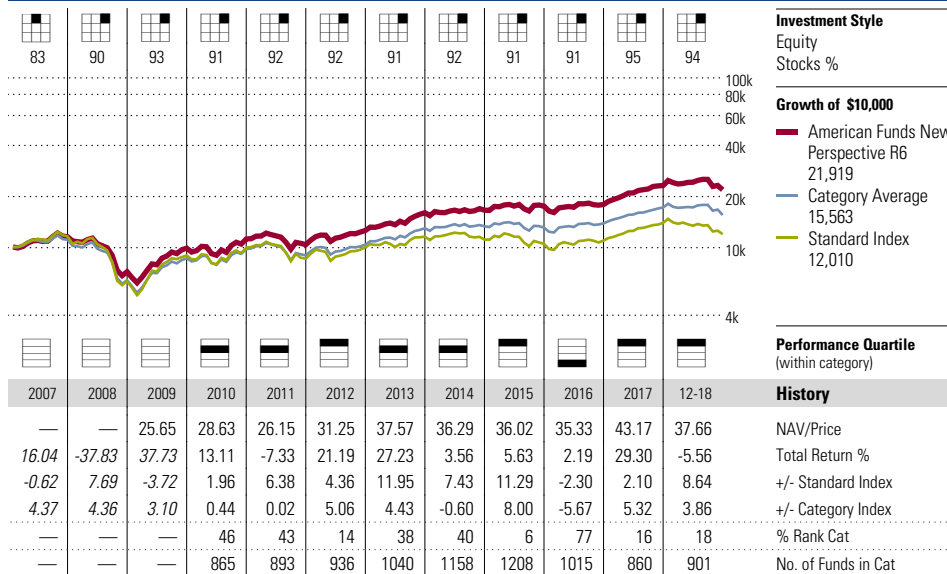


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	4.13	0.01
US Stocks	52.27	0.80
Non-US Stocks	41.46	99.12
Bonds	0.20	0.00
Other/Not Clsfd	1.93	0.07

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	39.6	0.89
Basic Materials	6.5	0.82
Consumer Cyclical	18.3	1.69
Financial Services	14.6	0.66
Real Estate	0.2	0.07
Sensitive	40.6	1.20
Communication Services	1.9	0.46
Energy	4.5	0.61
Industrials	8.0	0.74
Technology	26.3	2.28
Defensive	19.8	0.91
Consumer Defensive	8.6	0.85
Healthcare	10.0	1.19
Utilities	1.2	0.36

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

15	17	58	Large Mid Small	Portfolio Statistics	Port Avg	Rel Index	Rel Cat
2	3	5		P/E Ratio TTM	20.4	1.68	1.22
0	0	0		Geo Avg Cap Plan (\$Mil)	75,483		
				Geo Avg Cap Bmark (\$Mil)	30,558		
Value	Blend	Growth					

Fixed-Income Investment Style Actual %

High	Med	Low
Avg Effective Duration (Yrs)	—	—
Avg Effective Maturity (Yrs)	—	—
Avg Credit Quality	—	—
Bond %	—	—
AAA	—	—
AA	—	—
A	—	—
BBB	—	—
BB	—	—
B	—	—
Below B	—	—
NR	—	—

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period. The performance data represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the return data quoted. For performance data current to the most recent month-end, visit <http://advisor.morningstar.com/familyinfo.asp>. The "Overall Morningstar Rating" is based on risk-adjusted returns, derived from a weighted average of the three, five and ten-year (if applicable) Morningstar metrics. An investment in the fund is not insured or guaranteed by the FDIC or any other government agency.

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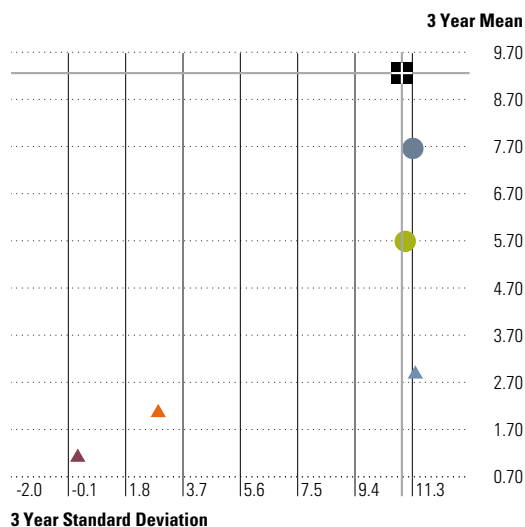
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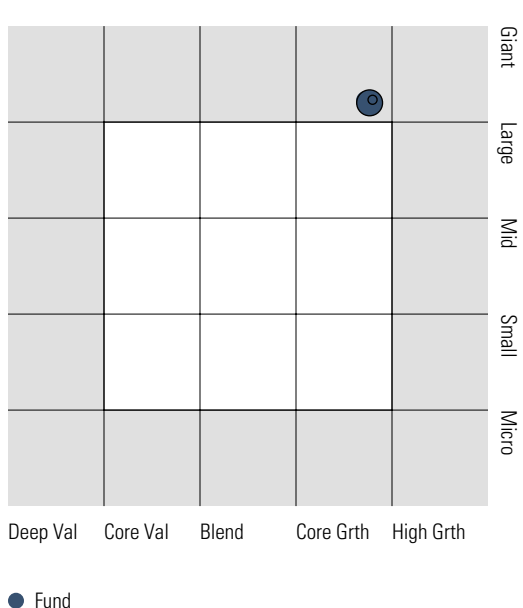
Cobb County Government 457 Deferred Compensation Plan

American Funds New Perspective R6 (USD)

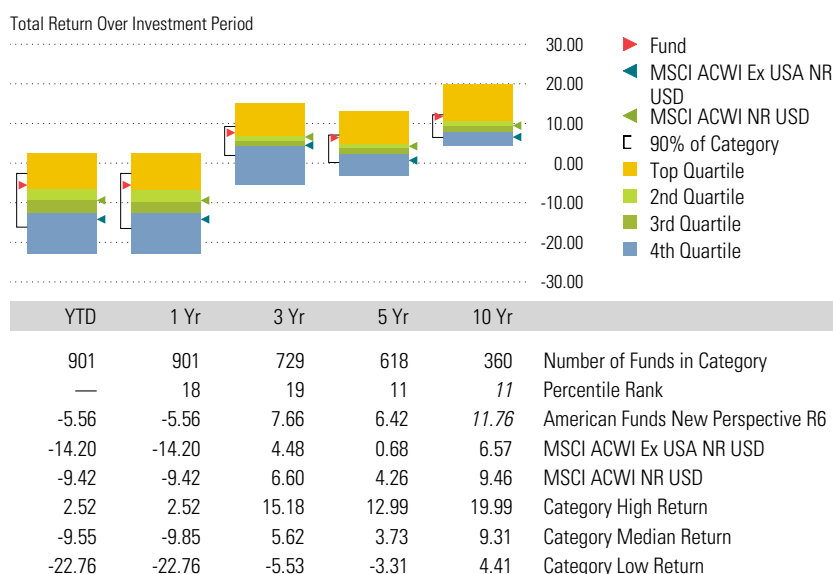
Risk/Return 12-31-2018



Equity Style Drift 09-30-2018



Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
Amazon.com Inc	5.22
Taiwan Semiconductor Manufacturing Co Ltd	2.24
Facebook Inc A	2.14
Microsoft Corp	2.12
Broadcom Inc	1.64
Mastercard Inc A	1.58
JPMorgan Chase & Co	1.56
Netflix Inc	1.49
Naspers Ltd Class N	1.48
Visa Inc Class A	1.42

Investment Strategy 12-31-2018

The investment seeks long-term growth of capital; future income is a secondary objective. The fund seeks to take advantage of investment opportunities generated by changes in international trade patterns and economic and political relationships by investing in common stocks of companies located around the world. In pursuing its primary investment objective, it invests primarily in common stocks that the investment adviser believes have the potential for growth. In pursuing its secondary objective, the fund invests in common stocks of companies with the potential to pay dividends in the future.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

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Cobb County Government 457 Deferred Compensation Plan

American Funds Washington Mutual R6 (USD)

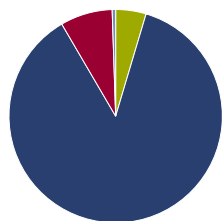
Details 12-31-2018

Ticker	RWMGX
Gross Expense Ratio %	0.29
Total Assets	\$104,255.30 mil
Family	American Funds
Manager	Alan Berro,
Tenure	21.5 Years
Objective	Growth and Income

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
	1,208 LB
Standard Deviation 3 Yr	9.73
Mean 3 Yr	10.09
Alpha 3 Yr	2.01
Beta 3 Yr	0.85
R-Squared 3 Yr	94.07
Upside Capture Ratio 3 Yr	94.48
Downside Capture Ratio 3 Yr	81.19
Standard Index	S&P 500 TR USD
Category Index	Russell 1000 TR USD

Composition 09-30-2018

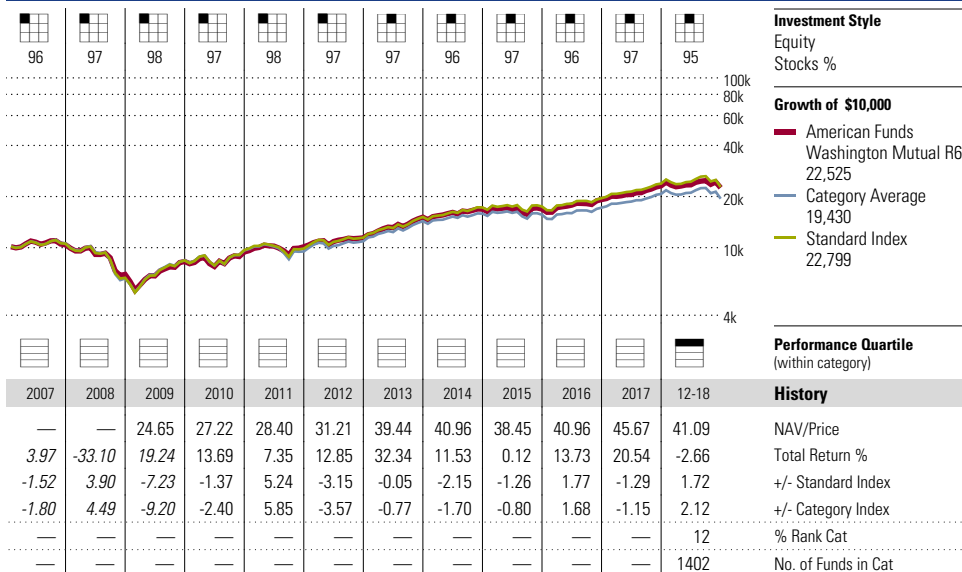


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	4.61	0.00
US Stocks	86.97	99.16
Non-US Stocks	7.90	0.84
Bonds	0.00	0.00
Other/Not Clsfd	0.53	0.00

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	29.8	0.91
Basic Materials	4.3	1.68
Consumer Cyclical	7.4	0.63
Financial Services	16.7	1.05
Real Estate	1.4	0.58
Sensitive	46.0	1.13
Communication Services	4.6	1.29
Energy	11.3	2.13
Industrials	12.5	1.26
Technology	17.6	0.81
Defensive	24.1	0.91
Consumer Defensive	6.2	0.80
Healthcare	15.1	0.98
Utilities	2.8	0.83

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

	Value	Blend	Growth
Large	34	36	26
Mid	2	1	1
Small	0	0	0

Portfolio Statistics	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	19.7	1.15	0.97
Geo Avg Cap Plan (\$Mil)			120,066
Geo Avg Cap Bmark (\$Mil)			93,688

Fixed-Income Investment Style Actual %

	Ltd	Mod	Ext
High			
Med			
Low			

Avg Effective Duration (Yrs)	—
Avg Effective Maturity (Yrs)	—
Avg Credit Quality	—
Bond %	—
AAA	—
AA	—
A	—
BBB	—
BB	—
B	—
Below B	—
NR	—

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period. The performance data represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the return data quoted. For performance data current to the most recent month-end, visit <http://advisor.morningstar.com/familyinfo.asp>. The "Overall Morningstar Rating" is based on risk-adjusted returns, derived from a weighted average of the three, five and ten-year (if applicable) Morningstar metrics. An investment in the fund is not insured or guaranteed by the FDIC or any other government agency.

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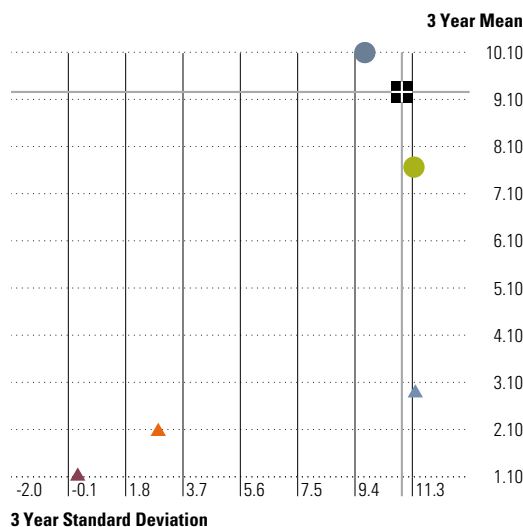
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Cobb County Government 457 Deferred Compensation Plan

American Funds Washington Mutual R6 (USD)

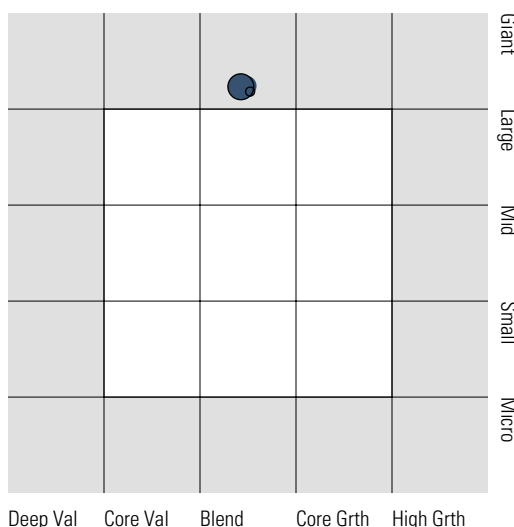
Risk/Return 12-31-2018



Benchmarks

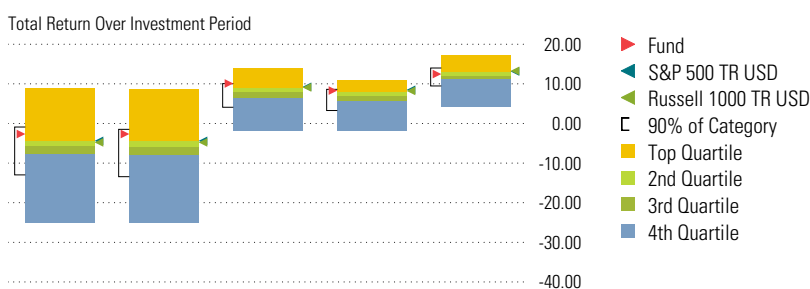
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



YTD	1 Yr	3 Yr	5 Yr	10 Yr	
1402	1402	1208	1071	805	Number of Funds in Category
—	12	5	15	43	Percentile Rank
-2.66	-2.66	10.09	8.30	12.47	American Funds Washington Mutual R6
-4.38	-4.38	9.26	8.49	13.12	S&P 500 TR USD
-4.78	-4.78	9.09	8.21	13.28	Russell 1000 TR USD
8.74	8.74	13.93	11.03	17.26	Category High Return
-5.64	-5.97	7.89	6.90	12.00	Category Median Return
-25.04	-25.04	-1.74	-1.90	4.07	Category Low Return

Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
Microsoft Corp	6.22
The Home Depot Inc	3.57
Intel Corp	2.76
Boeing Co	2.74
Royal Dutch Shell PLC ADR Class B	2.54
Merck & Co Inc	2.48
Broadcom Inc	2.33
DowDuPont Inc	2.25
Lockheed Martin Corp	2.23
Verizon Communications Inc	2.21

Investment Strategy 12-31-2018

The investment seeks to produce income and to provide an opportunity for growth of principal consistent with sound common stock investing. The fund invests primarily in common stocks of established companies that are listed on, or meet the financial listing requirements of, the New York Stock Exchange and have a strong record of earnings and dividends. Its advisor strives to maintain a fully invested, diversified portfolio, consisting primarily of high-quality common stocks.

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Cobb County Government 457 Deferred Compensation Plan

ClearBridge Small Cap I (USD)

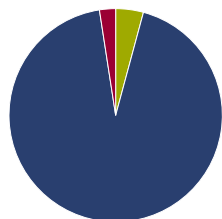
Details 12-31-2018

Ticker	LMNSX
Gross Expense Ratio %	0.98
Total Assets	\$1,029.05 mil
Family	Legg Mason
Manager	Albert Grosman,
Tenure	7.3 Years
Objective	Small Company

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★
Standard Deviation 3 Yr	15.45
Mean 3 Yr	9.27
Alpha 3 Yr	2.60
Beta 3 Yr	0.87
R-Squared 3 Yr	88.74
Upside Capture Ratio 3 Yr	94.36
Downside Capture Ratio 3 Yr	81.60
Standard Index	S&P 500 TR USD
Category Index	Russell 2000 Growth TR USD

Composition 09-30-2018

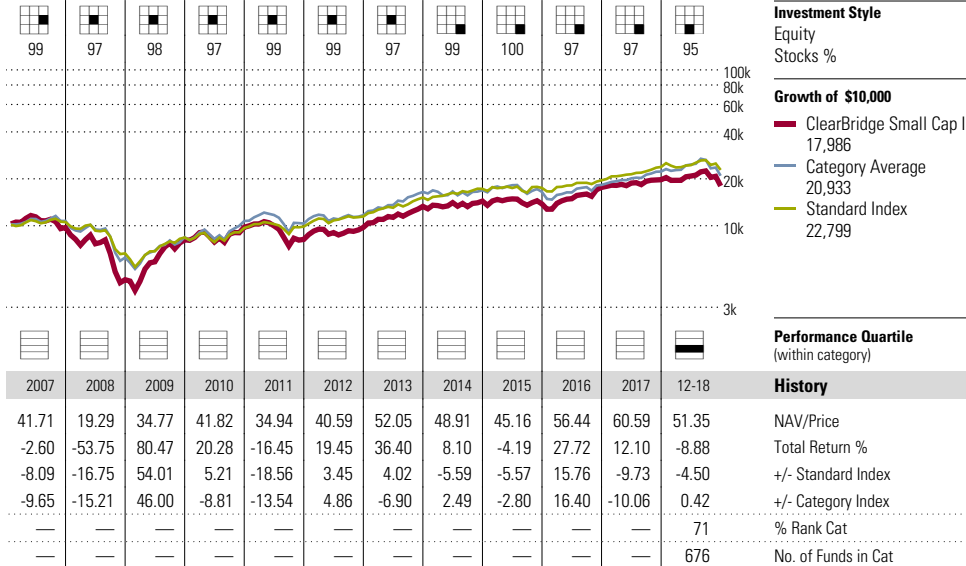


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	4.20	0.00
US Stocks	93.37	99.16
Non-US Stocks	2.44	0.84
Bonds	0.00	0.00
Other/Not Clsfd	0.00	0.00

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	43.7	1.34
Basic Materials	4.3	1.70
Consumer Cyclical	13.2	1.12
Financial Services	21.4	1.35
Real Estate	4.8	1.98
Sensitive	36.9	0.91
Communication Services	1.2	0.33
Energy	3.8	0.72
Industrials	14.7	1.48
Technology	17.2	0.79
Defensive	19.4	0.73
Consumer Defensive	4.4	0.57
Healthcare	12.0	0.78
Utilities	3.0	0.89

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

	0	0	0	Large
P/E Ratio TTM	12.8	0.74	0.51	
Geo Avg Cap Plan (\$Mil)	20	26	28	Small
Geo Avg Cap Bmark (\$Mil)	93,688			
Value				
Blend				
Growth				

Fixed-Income Investment Style Actual %

	High	Med	Low	Bond %
Avg Effective Duration (Yrs)	—	—	—	—
Avg Effective Maturity (Yrs)	—	—	—	—
Avg Credit Quality	—	—	—	—
AAA	—	—	—	—
AA	—	—	—	—
A	—	—	—	—
BBB	—	—	—	—
BB	—	—	—	—
B	—	—	—	—
Below B	—	—	—	—
NR	—	—	—	—

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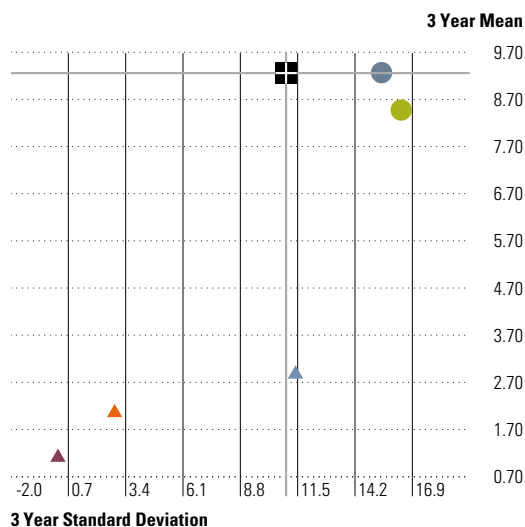
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Cobb County Government 457 Deferred Compensation Plan

ClearBridge Small Cap I (USD)

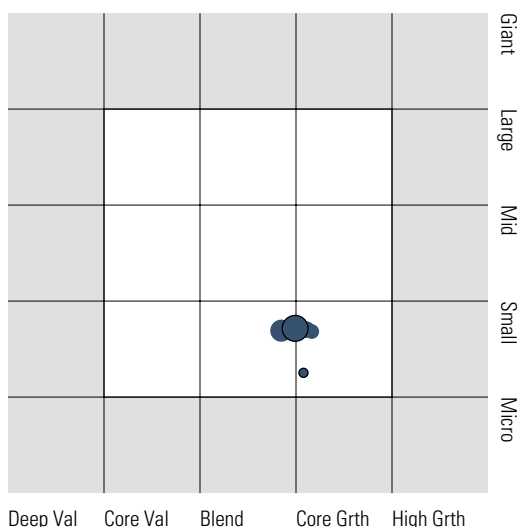
Risk/Return 12-31-2018



Benchmarks

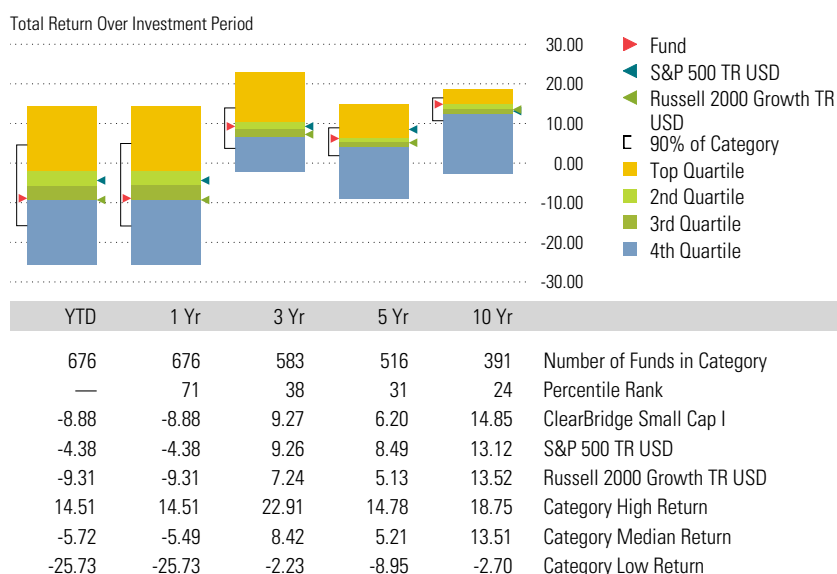
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
Amarin Corp PLC ADR	3.97
Gray Television Inc	2.83
Aaron's Inc	2.48
HealthEquity Inc	2.37
First Interstate BancSystem Inc	2.34
Cadence Bancorp A	2.22
Sprouts Farmers Market Inc	2.17
Encompass Health Corp	2.09
OneMain Holdings Inc	1.80
Black Hills Corp	1.74

Investment Strategy 12-31-2018

The investment seeks capital appreciation. Under normal circumstances, the fund invests at least 80% of its net assets plus borrowings for investment purposes, if any, in common stocks and other equity securities of small capitalization companies or in other investments that the portfolio managers believe have similar economic characteristics. The adviser does not currently intend to borrow for investment purposes.

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Cobb County Government 457 Deferred Compensation Plan

Harbor Mid Cap Growth Retirement (USD)

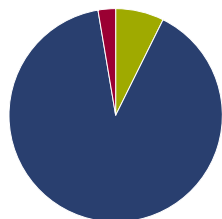
Details 12-31-2018

Ticker	HNMGX
Gross Expense Ratio %	0.81
Total Assets	\$339.38 mil
Family	Harbor
Manager	Michael Carmen,
Tenure	13.3 Years
Objective	Growth

Risk and Return 12-31-2018

Overall Morningstar Rating	☆☆☆
Standard Deviation 3 Yr	16.72
Mean 3 Yr	9.50
Alpha 3 Yr	-0.39
Beta 3 Yr	1.22
R-Squared 3 Yr	90.86
Upside Capture Ratio 3 Yr	114.97
Downside Capture Ratio 3 Yr	117.55
Standard Index	S&P 500 TR USD
Category Index	Russell Mid Cap Growth TR USD

Composition 09-30-2018

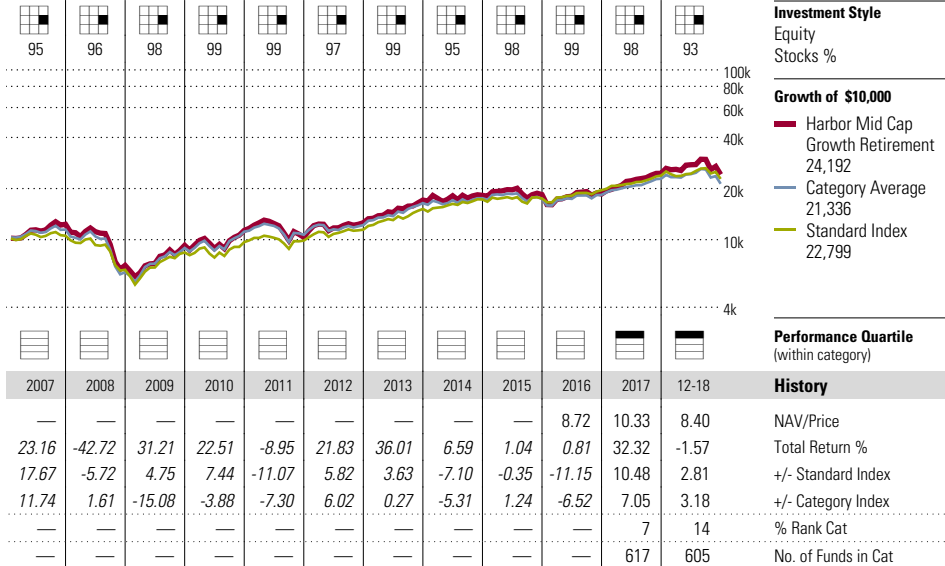


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	7.33	0.00
US Stocks	90.02	99.16
Non-US Stocks	2.65	0.84
Bonds	0.00	0.00
Other/Not Clsfd	0.00	0.00

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	29.4	0.90
Basic Materials	1.9	0.73
Consumer Cyclical	21.6	1.82
Financial Services	2.6	0.16
Real Estate	3.4	1.39
Sensitive	44.3	1.09
Communication Services	0.0	0.00
Energy	1.9	0.36
Industrials	10.0	1.00
Technology	32.5	1.48
Defensive	26.3	0.99
Consumer Defensive	3.3	0.42
Healthcare	23.0	1.49
Utilities	0.0	0.00

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Value	Blend	Growth	Large	Mid	Small
0	6	30			
2	12	43			
0	2	5			

Fixed-Income Investment Style Actual %

Ltd	Mod	Ext	High	Med	Low

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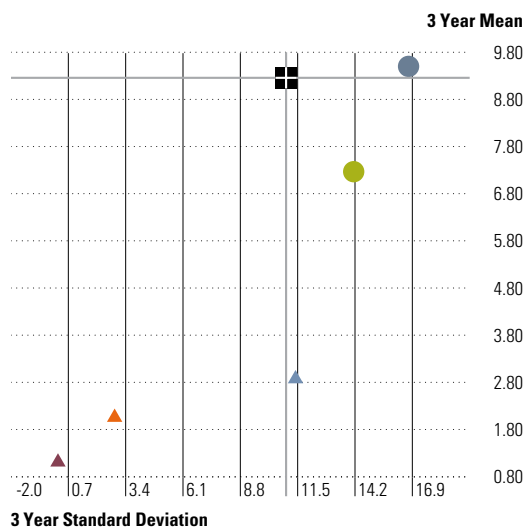
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Cobb County Government 457 Deferred Compensation Plan

Harbor Mid Cap Growth Retirement (USD)

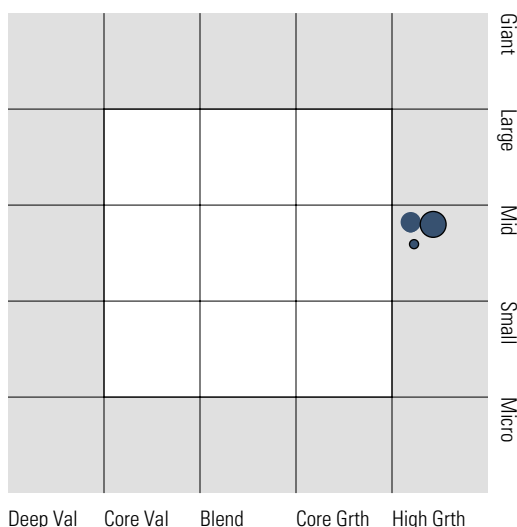
Risk/Return 12-31-2018



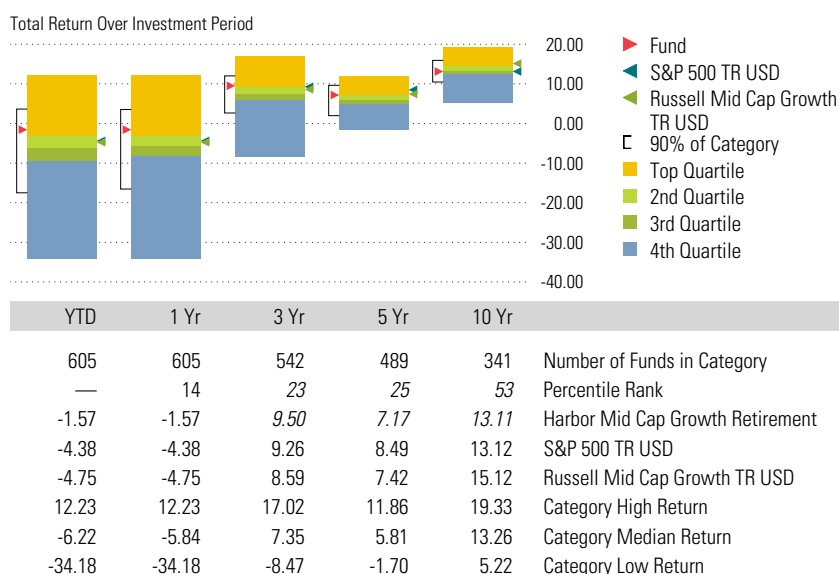
Benchmarks

- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
Exact Sciences Corp	4.23
ServiceNow Inc	3.81
Workday Inc Class A	3.68
Guidewire Software Inc	3.15
CoStar Group Inc	3.11
Align Technology Inc	2.86
Advanced Micro Devices Inc	2.57
DexCom Inc	2.55
Hilton Worldwide Holdings Inc	2.43
Wayfair Inc Class A	2.43

Investment Strategy 12-31-2018

The investment seeks long-term growth of capital. The fund invests primarily in equity securities, principally common and preferred stocks of mid cap companies. The adviser defines mid cap companies as those with market capitalizations that fall within the range of the Russell Midcap® Growth Index. It normally invests at least 80% of its net assets, plus borrowings for investment purposes, in a diversified portfolio of equity securities of mid cap companies. The fund may invest up to 25% of its total assets in the securities of foreign issuers, including issuers located or doing business in emerging markets.

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Cobb County Government 457 Deferred Compensation Plan

JHancock Fundamental Large Cap Core R6 (USD)

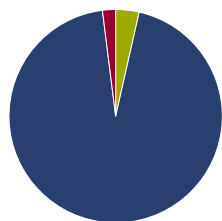
Details 12-31-2018

Ticker	JLCWX
Gross Expense Ratio %	0.69
Total Assets	\$4,589.62 mil
Family	John Hancock
Manager	Emory (Sandy) Sanders,
Tenure	7.1 Years
Objective	Growth

Risk and Return 12-31-2018

Overall Morningstar Rating	★★
	1,208 LB
Standard Deviation 3 Yr	13.09
Mean 3 Yr	4.83
Alpha 3 Yr	-4.72
Beta 3 Yr	1.12
R-Squared 3 Yr	89.51
Upside Capture Ratio 3 Yr	93.56
Downside Capture Ratio 3 Yr	126.64
Standard Index	S&P 500 TR USD
Category Index	Russell 1000 TR USD

Composition 10-31-2018

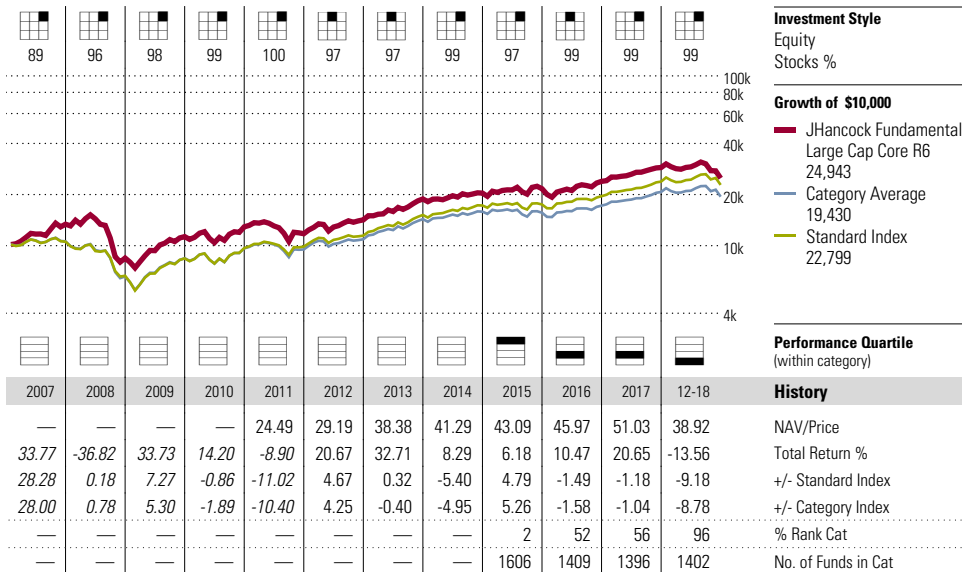


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	3.55	0.00
US Stocks	94.47	99.16
Non-US Stocks	1.98	0.84
Bonds	0.00	0.00
Other/Not Clsfd	0.00	0.00

Sector Weightings 11-30-2018

	Stocks %	Rel Std Index
Cyclical	44.7	1.37
Basic Materials	0.0	0.00
Consumer Cyclical	23.4	1.98
Financial Services	21.3	1.35
Real Estate	0.0	0.00
Sensitive	38.1	0.94
Communication Services	3.3	0.93
Energy	5.4	1.02
Industrials	6.1	0.62
Technology	23.2	1.06
Defensive	17.2	0.64
Consumer Defensive	6.7	0.86
Healthcare	10.4	0.67
Utilities	0.0	0.00

Performance 12-31-2018



Style Analysis 11-30-2018

Equity Investment Style Actual %

Value	Blend	Growth
31	16	39
0	9	3
0	0	2

Fixed-Income Investment Style Actual %

High	Med	Low

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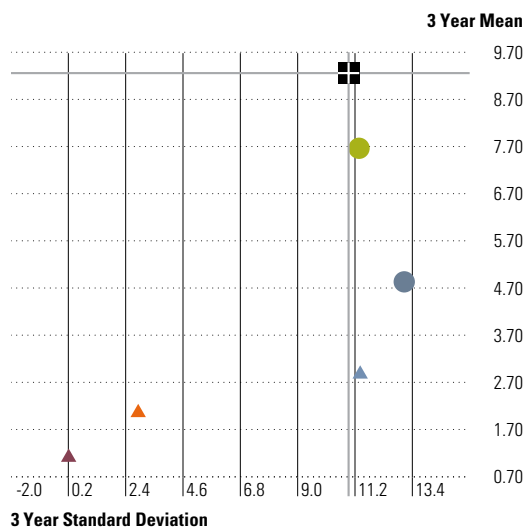
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Cobb County Government 457 Deferred Compensation Plan

JHancock Fundamental Large Cap Core R6 (USD)

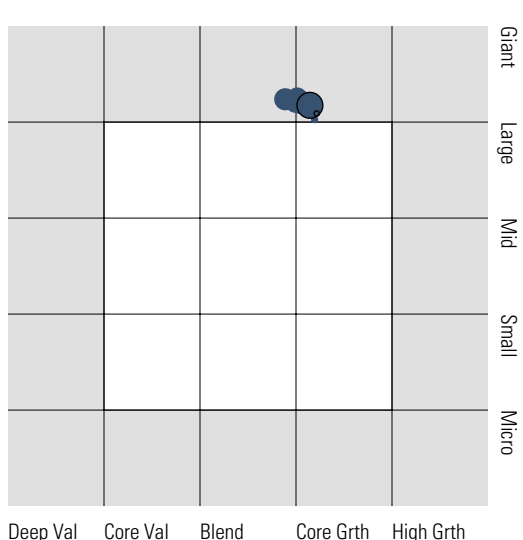
Risk/Return 12-31-2018



Benchmarks

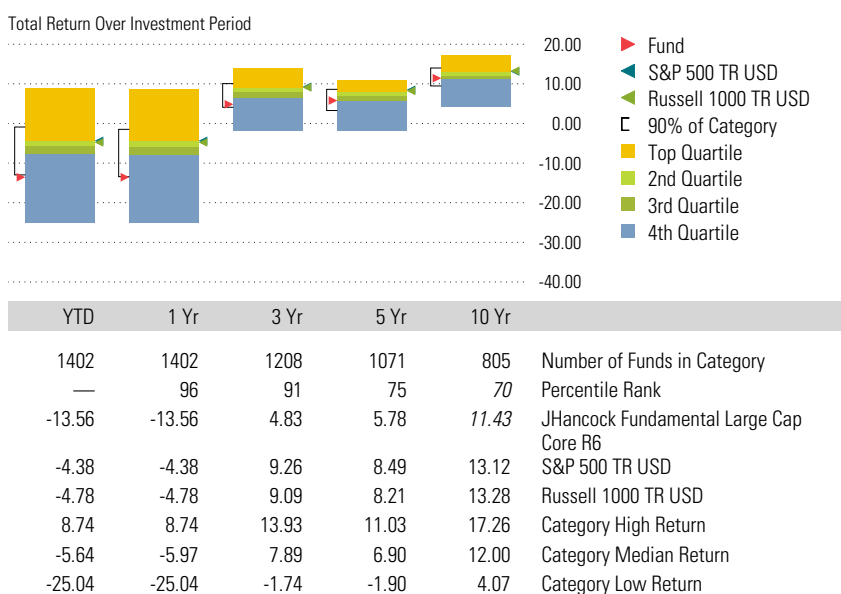
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 11-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 11-30-2018

Holding Name	% Net Assets
Amazon.com Inc	7.91
Lennar Corp	4.56
Bank of America Corporation	4.49
Alphabet Inc A	4.48
Apple Inc	4.20
Facebook Inc A	4.14
Polaris Industries Inc	3.58
Workday Inc Class A	3.53
Citigroup Inc	3.42
Anheuser-Busch InBev SA/NV ADR	2.50

Investment Strategy 12-31-2018

The investment seeks long-term capital appreciation. The fund normally invests at least 80% of its net assets (plus any borrowings for investment purposes) in equity securities of large-capitalization companies. It may invest up to 20% of its assets in bonds of any maturity, including up to 15% of net assets in below investment grade bonds (i.e., junk bonds) rated as low as CC by Standard & Poor's Ratings Services or Ca by Moody's Investors' Service, Inc. and their unrated equivalents. The fund may invest up to 35% of its assets in foreign securities and may trade securities actively.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

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Cobb County Government 457 Deferred Compensation Plan

Nuveen Real Estate Securities R6 (USD)

Details 12-31-2018

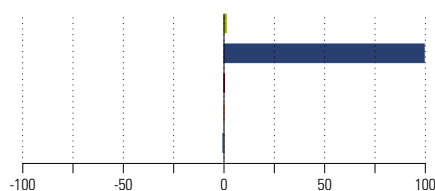
Ticker	FREGX
Gross Expense Ratio %	0.87
Total Assets	\$3,102.41 mil
Family	Nuveen
Manager	Jay Rosenberg,
Tenure	13.7 Years
Objective	Specialty - Real Estate

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★
Standard Deviation 3 Yr	223 SR
Mean 3 Yr	13.03
Alpha 3 Yr	2.32
Beta 3 Yr	-0.48
R-Squared 3 Yr	0.94
Upside Capture Ratio 3 Yr	98.77
Downside Capture Ratio 3 Yr	91.81
Standard Index	93.86
Category Index	MSCI ACWI NR USD
	S&P United States
	REIT TR USD

Composition 10-31-2018

Asset Allocation

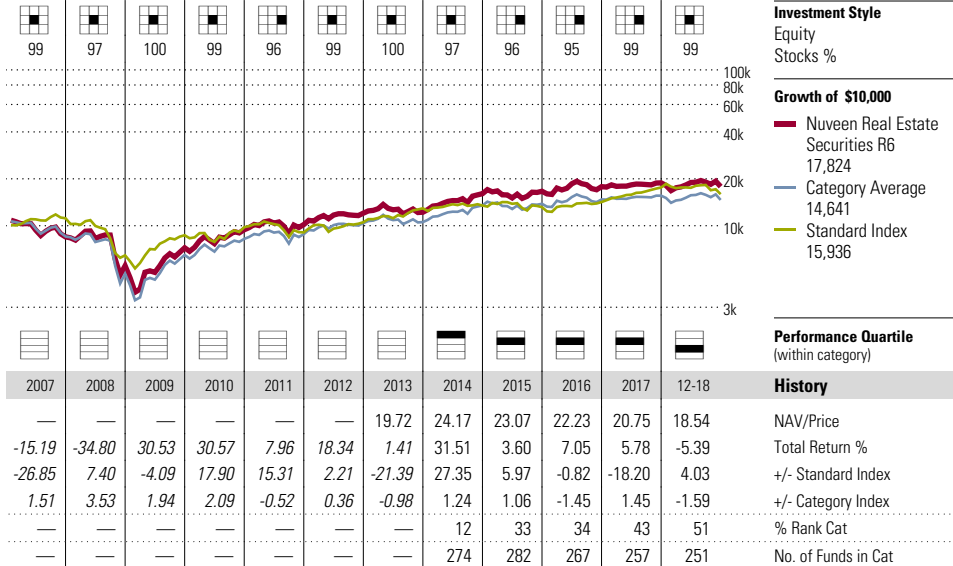


	Portfolio Net %	Bmark Net %
Cash	1.12	0.00
US Stocks	99.44	54.18
Non-US Stocks	0.15	45.79
Bonds	0.00	0.00
Other/Not Clsfd	-0.72	0.03
Total	100.00	100.00

Sector Weightings 10-31-2018

	Stocks %	Rel Std Index
Cyclical	98.9	2.60
Basic Materials	0.0	0.00
Consumer Cyclical	0.5	0.04
Financial Services	0.0	0.00
Real Estate	98.5	32.51
Sensitive	1.1	0.03
Communication Services	0.9	0.22
Energy	0.0	0.00
Industrials	0.2	0.02
Technology	0.0	0.00
Defensive	0.0	0.00
Consumer Defensive	0.0	0.00
Healthcare	0.0	0.00
Utilities	0.0	0.00

Performance 12-31-2018



Style Analysis 10-31-2018

Equity Investment Style Actual %

	0	31	5	Large
P/E Ratio TTM	12	36	4	Mid
Geo Avg Cap Plan (\$Mil)	5	4	3	Small
Geo Avg Cap Bmark (\$Mil)				
Value				
Blend				
Growth				

Fixed-Income Investment Style Actual %

	High	Med	Low	Bond %
Avg Effective Duration (Yrs)				
Avg Effective Maturity (Yrs)				
Avg Credit Quality				
AAA				
AA				
A				
BBB				
BB				
B				
Below B				
NR				

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period. The performance data represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the return data quoted. For performance data current to the most recent month-end, visit <http://advisor.morningstar.com/familyinfo.asp>. The "Overall Morningstar Rating" is based on risk-adjusted returns, derived from a weighted average of the three, five and ten-year (if applicable) Morningstar metrics. An investment in the fund is not insured or guaranteed by the FDIC or any other government agency.

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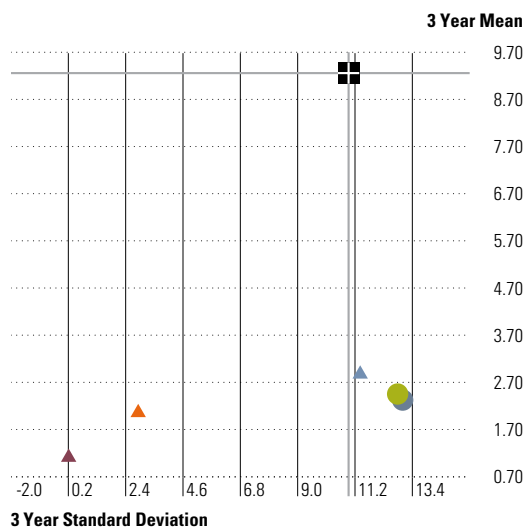
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Cobb County Government 457 Deferred Compensation Plan

Nuveen Real Estate Securities R6 (USD)

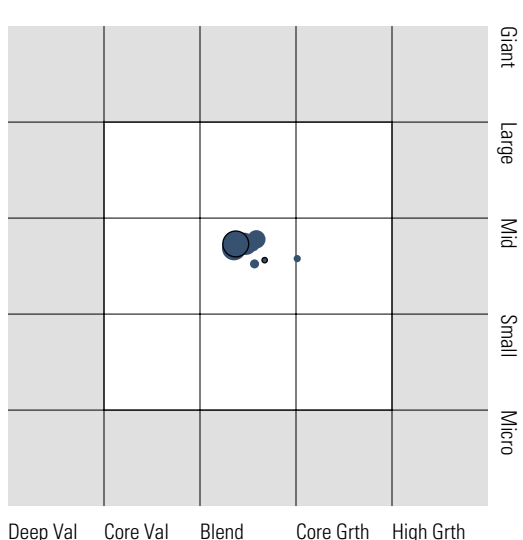
Risk/Return 12-31-2018



Benchmarks

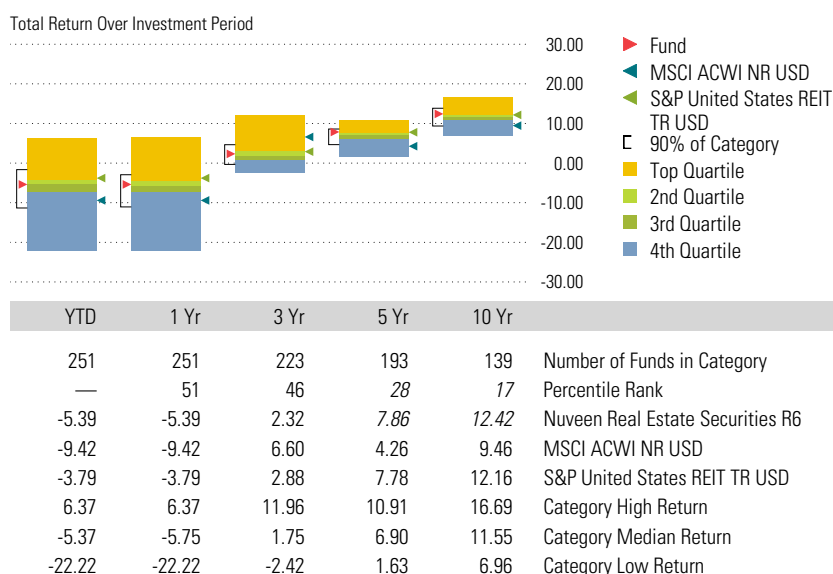
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 10-31-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 10-31-2018

Holding Name	% Net Assets
Simon Property Group Inc	6.72
Prologis Inc	4.56
Duke Realty Corp	4.27
Boston Properties Inc	3.68
Camden Property Trust	3.44
Alexandria Real Estate Equities Inc	3.40
Ventas Inc	3.25
Equinix Inc	3.09
AvalonBay Communities Inc	3.09
Public Storage	3.09

Investment Strategy 12-31-2018

The investment seeks to provide above average current income and long-term capital appreciation. The fund normally invests at least 80% of the sum of its net assets and the amount of any borrowings for investment purposes in income-producing common stocks of publicly traded companies engaged in the real estate industry. The advisor expects to emphasize investments in equity REITs, although it may invest in all three kinds of REITs. It may invest up to 15% of its total assets in non-dollar denominated equity securities of non-U.S. issuers. Up to 15% of the fund's total assets may be invested in equity securities of emerging market issuers.

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Cobb County Government 457 Deferred Compensation Plan

Oakmark International Institutional (USD)

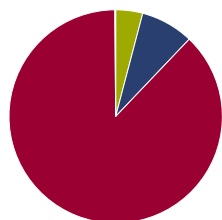
Details 12-31-2018

Ticker	OANIX
Gross Expense Ratio %	0.82
Total Assets	\$32,832.07 mil
Family	Oakmark
Manager	David Herro,
Tenure	26.3 Years
Objective	Foreign Stock

Risk and Return 12-31-2018

Overall Morningstar Rating	☆☆☆☆
	639 FB
Standard Deviation 3 Yr	15.61
Mean 3 Yr	2.48
Alpha 3 Yr	-2.36
Beta 3 Yr	1.25
R-Squared 3 Yr	85.04
Upside Capture Ratio 3 Yr	118.03
Downside Capture Ratio 3 Yr	136.67
Standard Index	MSCI ACWI Ex USA NR USD
Category Index	MSCI ACWI Ex USA NR USD

Composition 09-30-2018

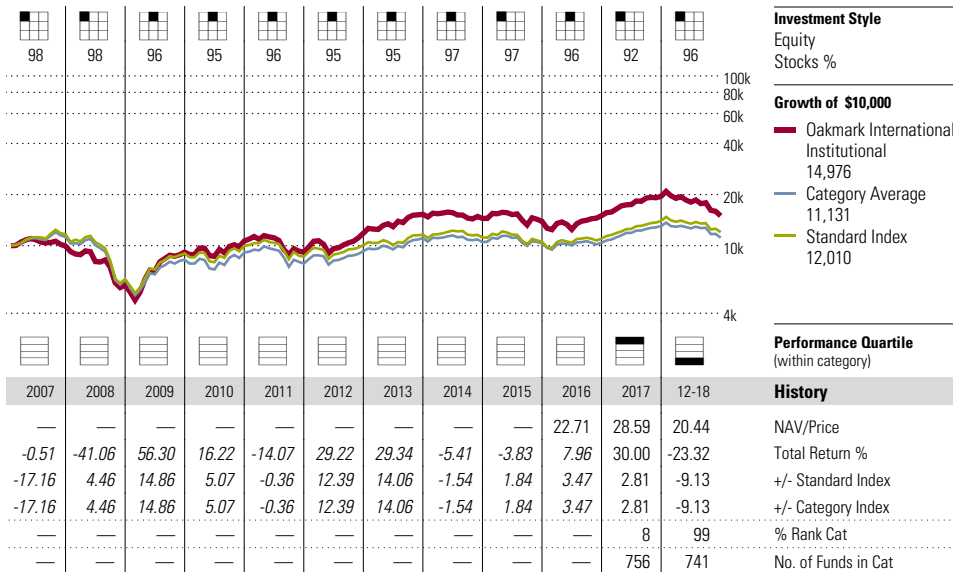


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	4.09	0.01
US Stocks	8.02	0.80
Non-US Stocks	87.77	99.12
Bonds	0.00	0.00
Other/Not Clsfd	0.12	0.07

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	65.2	1.47
Basic Materials	8.0	1.01
Consumer Cyclical	27.8	2.56
Financial Services	29.3	1.32
Real Estate	0.0	0.00
Sensitive	26.7	0.79
Communication Services	3.0	0.71
Energy	1.4	0.19
Industrials	15.8	1.48
Technology	6.5	0.56
Defensive	8.2	0.37
Consumer Defensive	4.2	0.42
Healthcare	3.9	0.47
Utilities	0.0	0.00

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Portfolio Statistics	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	12.1	1.00	0.98
Geo Avg Cap Plan (\$Mil)	35,878		
Geo Avg Cap Bmark (\$Mil)	30,558		
Value	Blend	Growth	

Fixed-Income Investment Style Actual %

High	Med	Low	Bond %
Avg Effective Duration (Yrs)			—
Avg Effective Maturity (Yrs)			—
Avg Credit Quality			—
AAA			—
AA			—
A			—
BBB			—
BB			—
B			—
Below B			—
NR			—

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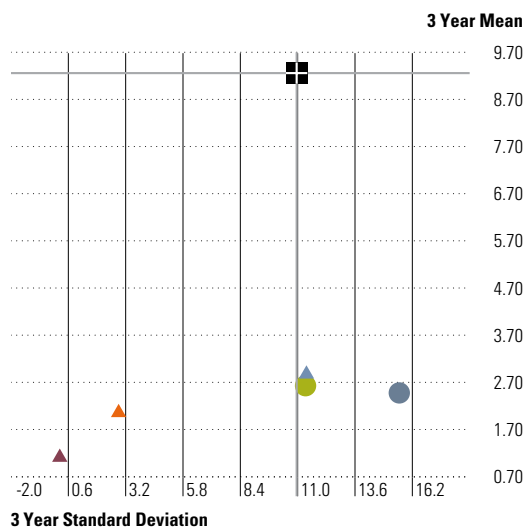
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Cobb County Government 457 Deferred Compensation Plan

Oakmark International Institutional (USD)

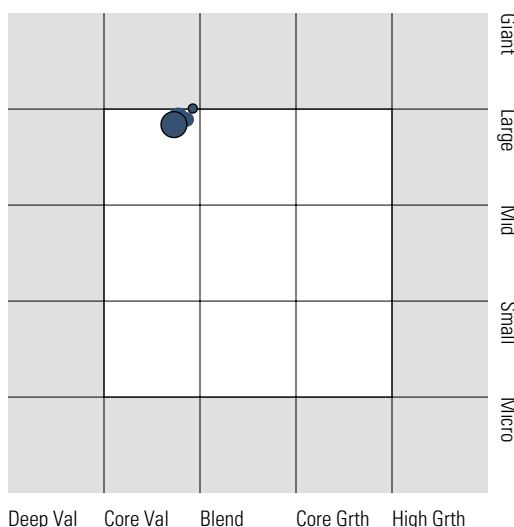
Risk/Return 12-31-2018



Benchmarks

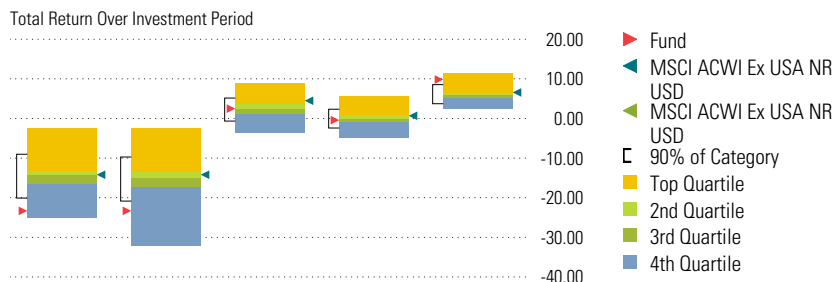
- S&P 500 TR USD
- BBgBarc US Agg Bond TR USD
- MSCI EAFE NR USD
- USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



YTD	1 Yr	3 Yr	5 Yr	10 Yr	
741	741	639	508	380	Number of Funds in Category
—	99	59	70	2	Percentile Rank
-23.32	-23.32	2.48	-0.42	9.83	Oakmark International Institutional
-14.20	-14.20	4.48	0.68	6.57	MSCI ACWI Ex USA NR USD
-14.20	-14.20	4.48	0.68	6.57	MSCI ACWI Ex USA NR USD
-2.46	-2.46	9.00	5.60	11.50	Category High Return
-14.45	-15.05	2.45	-0.12	5.80	Category Median Return
-24.92	-32.11	-3.59	-4.93	2.34	Category Low Return

Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
Daimler AG	4.42
BNP Paribas	4.28
Hennes & Mauritz AB B	4.27
Lloyds Banking Group PLC	4.02
Intesa Sanpaolo	3.68
Glencore PLC	3.60
Bayerische Motoren Werke AG	3.34
Allianz SE	3.29
Credit Suisse Group AG	3.24
CNH Industrial NV	3.13

Investment Strategy 12-31-2018

The investment seeks long-term capital appreciation.

The fund invests primarily in a diversified portfolio of common stocks of non-U.S. companies. It may invest in non-U.S. markets throughout the world, including emerging markets. Ordinarily, the fund will invest in the securities of at least five countries outside of the U.S. There are no geographic limits on the fund's non-U.S. investments. The fund may invest in securities of large-, mid-, and small- capitalization companies.

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Cobb County Government 457 Deferred Compensation Plan

PGIM High Yield R6 (USD)

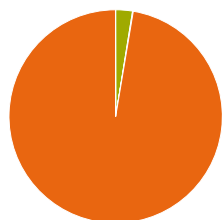
Details 12-31-2018

Ticker	PHYQX
Gross Expense Ratio %	0.42
Total Assets	\$7,634.99 mil
Family	PGIM Funds (Prudential)
Manager	Robert Spano,
Tenure	11.3 Years
Objective	Corporate Bond - High Yield

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
	604 HY
Standard Deviation 3 Yr	4.43
Mean 3 Yr	7.16
Alpha 3 Yr	0.31
Beta 3 Yr	0.93
R-Squared 3 Yr	97.56
Upside Capture Ratio 3 Yr	96.51
Downside Capture Ratio 3 Yr	91.71
Standard Index	BBgBarc US Agg Bond TR USD
Category Index	ICE BofAML US High Yield TR USD

Composition 11-30-2018

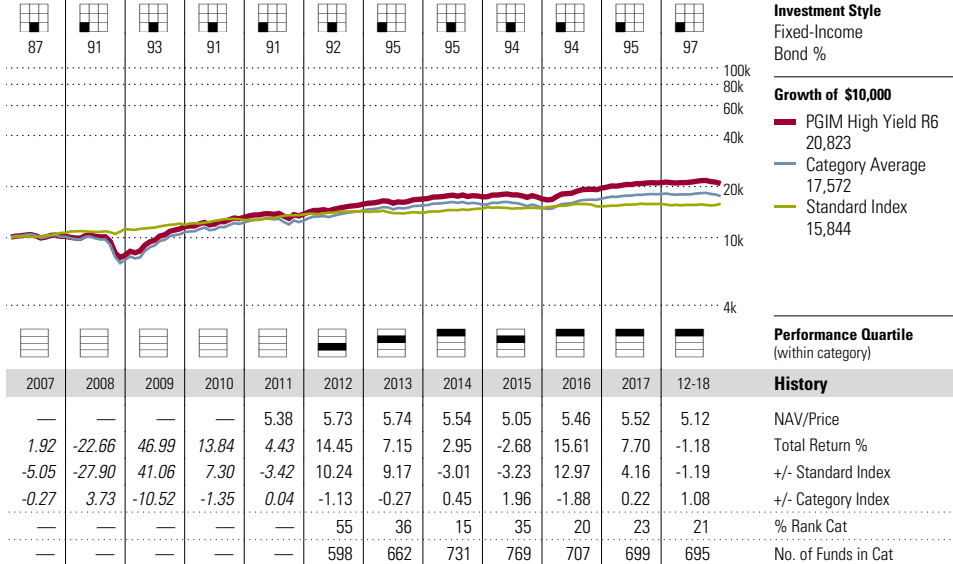


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	2.54	1.99
US Stocks	0.10	0.00
Non-US Stocks	0.01	0.00
Bonds	97.33	97.62
Other/Not Clsfd	0.03	0.39

Sector Weightings 11-30-2018

	Stocks %	Rel Std Index
Cyclical	1.5	—
Basic Materials	0.0	—
Consumer Cyclical	1.5	—
Financial Services	0.0	—
Real Estate	0.0	—
Sensitive	6.3	—
Communication Services	0.0	—
Energy	6.3	—
Industrials	0.0	—
Technology	0.0	—
Defensive	92.2	—
Consumer Defensive	0.0	—
Healthcare	0.0	—
Utilities	92.2	—

Performance 12-31-2018



Style Analysis 11-30-2018

Equity Investment Style Actual %

	Value	Blend	Growth
Large			
Mid			
Small			
P/E Ratio TTM	—	—	—
Geo Avg Cap Plan (\$Mil)	9,718		
Geo Avg Cap Bmark (\$Mil)	—		

Fixed-Income Investment Style Actual %

	Ltd	Mod	Ext
High	0	0	0
Med	0	0	0
Low	100	0	0
Avg Effective Duration (Yrs)	3.88		
Avg Effective Maturity (Yrs)	—		
Avg Credit Quality	—		
Bond %			
AAA	10.26		
AA	0.00		
A	0.00		
BBB	4.45		
BB	32.71		
B	39.86		
Below B	11.70		
NR	1.03		

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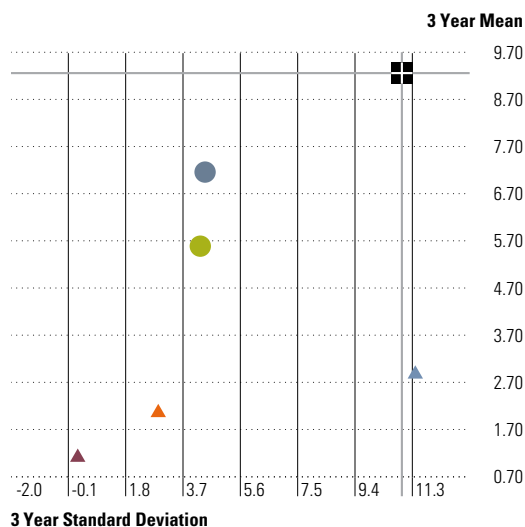
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Cobb County Government 457 Deferred Compensation Plan

PGIM High Yield R6 (USD)

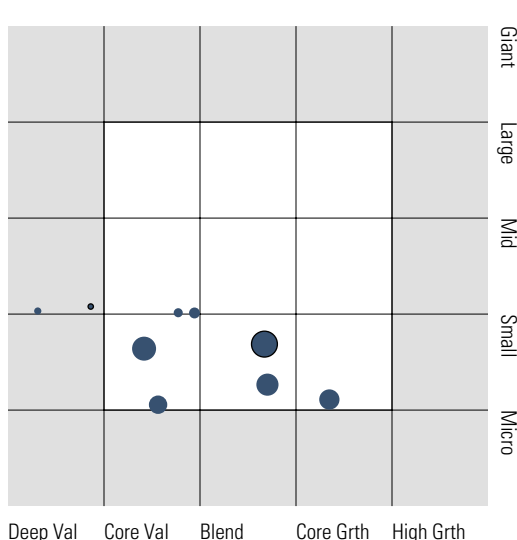
Risk/Return 12-31-2018



Benchmarks

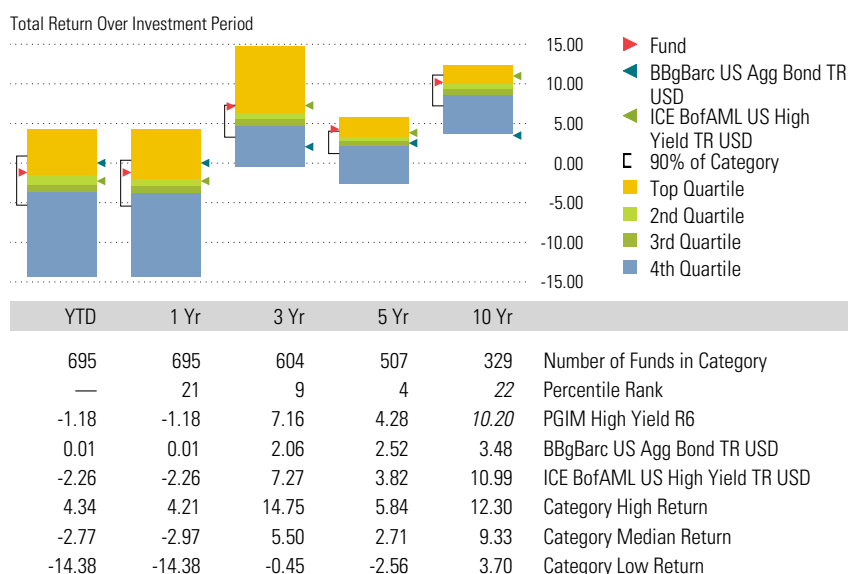
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 03-31-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 11-30-2018

Holding Name	% Net Assets
2 Year US Treasury Note Future Mar19	3.52
US 10 Year Note (CBT) Mar19	3.34
First Data Corporation 7%	1.68
US 5 Year Note (CBT) Mar19	1.63
DISH DBS Corporation 7.75%	1.35
Wind Tre S.p.A. 5%	1.11
Calpine Corporation 5.75%	1.03
Bombardier Inc. 7.5%	0.99
Wand Merger Corporation 9.12%	0.84
Clear Channel Worldwide Holdings Inc. 7.62%	0.79

Investment Strategy 12-31-2018

The investment seeks to maximize current income; and capital appreciation is a secondary objective. The fund normally invests at least 80% of its investable assets in a diversified portfolio of high yield fixed-income instruments rated Ba or lower by Moody's Investors Service (Moody's) or BB or lower by S&P Global Ratings (Standard & Poor's), and instruments either rated by another nationally recognized statistical rating organization (NRSRO), or considered to be of comparable quality, that is, junk bonds.

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Cobb County Government 457 Deferred Compensation Plan

T. Rowe Price Growth Stock I (USD)

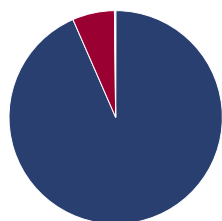
Details 12-31-2018

Ticker	PRUFX
Gross Expense Ratio %	0.52
Total Assets	\$49,608.75 mil
Family	T. Rowe Price
Manager	Joseph Fath
Tenure	5.0 Years
Objective	Growth

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★
Standard Deviation 3 Yr	13.39
Mean 3 Yr	10.45
Alpha 3 Yr	-0.79
Beta 3 Yr	1.03
R-Squared 3 Yr	89.28
Upside Capture Ratio 3 Yr	102.00
Downside Capture Ratio 3 Yr	109.21
Standard Index	S&P 500 TR USD
Category Index	Russell 1000 Growth TR USD

Composition 09-30-2018

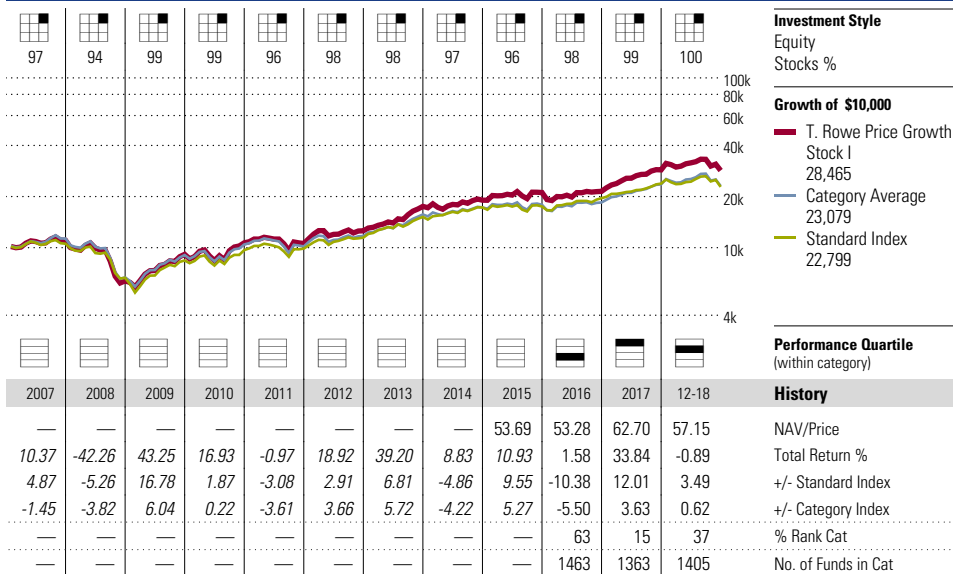


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	0.03	0.00
US Stocks	93.42	99.16
Non-US Stocks	6.37	0.84
Bonds	0.00	0.00
Other/Not Clsfd	0.18	0.00

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	40.7	1.25
Basic Materials	0.6	0.23
Consumer Cyclical	25.6	2.17
Financial Services	13.2	0.83
Real Estate	1.3	0.52
Sensitive	39.9	0.98
Communication Services	0.0	0.00
Energy	0.0	0.00
Industrials	10.5	1.06
Technology	29.4	1.34
Defensive	19.4	0.73
Consumer Defensive	2.9	0.37
Healthcare	15.0	0.97
Utilities	1.5	0.45

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

4	12	78	Large Mid Small	Portfolio Statistics	Port Avg	Rel Index	Rel Cat
1	2	3		P/E Ratio TTM	31.9	1.86	1.20
0	0	0		Geo Avg Cap Plan (\$Mil)			132,963
Value	Blend	Growth		Geo Avg Cap Bmark (\$Mil)			93,688

Fixed-Income Investment Style Actual %

High	Med	Low
Avg Effective Duration (Yrs)	—	—
Avg Effective Maturity (Yrs)	—	—
Avg Credit Quality	—	—
Bond %	—	—
AAA	—	—
AA	—	—
A	—	—
BBB	—	—
BB	—	—
B	—	—
Below B	—	—
NR	—	—

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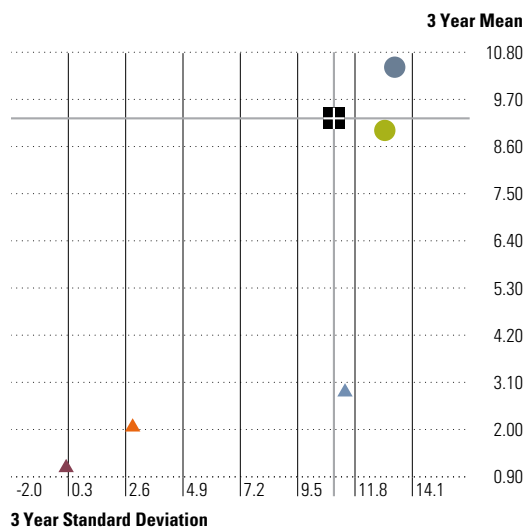
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Cobb County Government 457 Deferred Compensation Plan

T. Rowe Price Growth Stock I (USD)

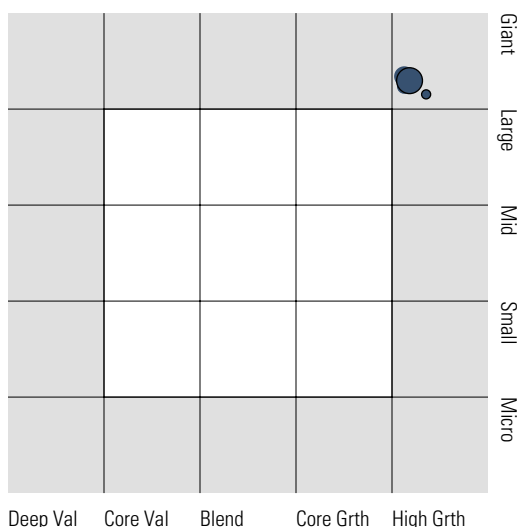
Risk/Return 12-31-2018



Benchmarks

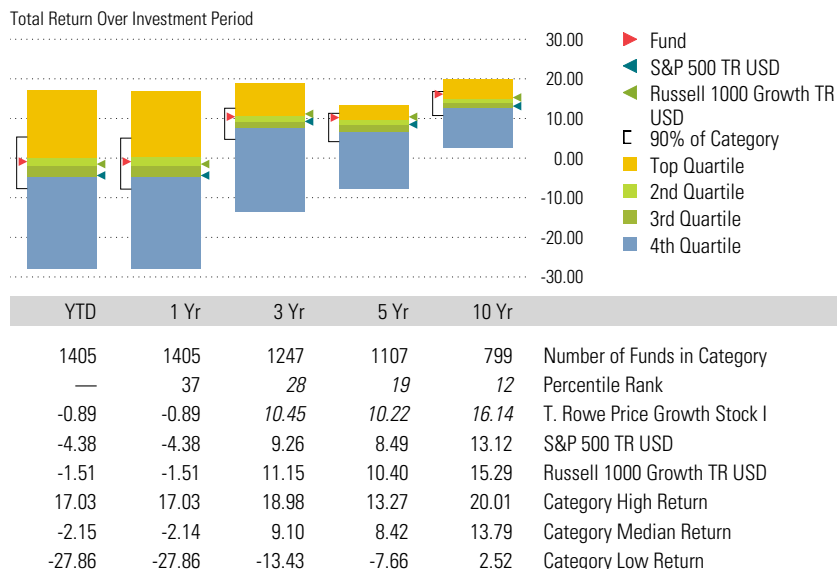
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
Amazon.com Inc	10.16
Microsoft Corp	5.42
Visa Inc Class A	3.48
Boeing Co	3.40
Alphabet Inc Class C	3.07
Mastercard Inc A	2.92
Facebook Inc A	2.90
Alphabet Inc A	2.77
Booking Holdings Inc	2.68
UnitedHealth Group Inc	2.63

Investment Strategy 12-31-2018

The investment seeks long-term capital growth through investments in stocks. The fund will normally invest at least 80% of its net assets (including any borrowings for investment purposes) in the common stocks of a diversified group of growth companies. While most assets will typically be invested in U.S. common stocks, the fund may invest in foreign stocks in keeping with the fund's objective.

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Cobb County Government 457 Deferred Compensation Plan

Vanguard 500 Index Admiral (USD)

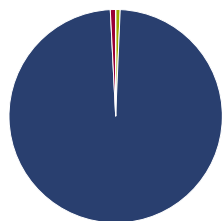
Details 12-31-2018

Ticker	VFIAX
Gross Expense Ratio %	0.04
Total Assets	\$400,586.80 mil
Family	Vanguard
Manager	Donald Butler,
Tenure	2.8 Years
Objective	Growth

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★
	1,208 LB
Standard Deviation 3 Yr	10.96
Mean 3 Yr	9.22
Alpha 3 Yr	0.22
Beta 3 Yr	0.99
R-Squared 3 Yr	99.81
Upside Capture Ratio 3 Yr	99.73
Downside Capture Ratio 3 Yr	98.41
Standard Index	S&P 500 TR USD
Category Index	Russell 1000 TR USD

Composition 11-30-2018

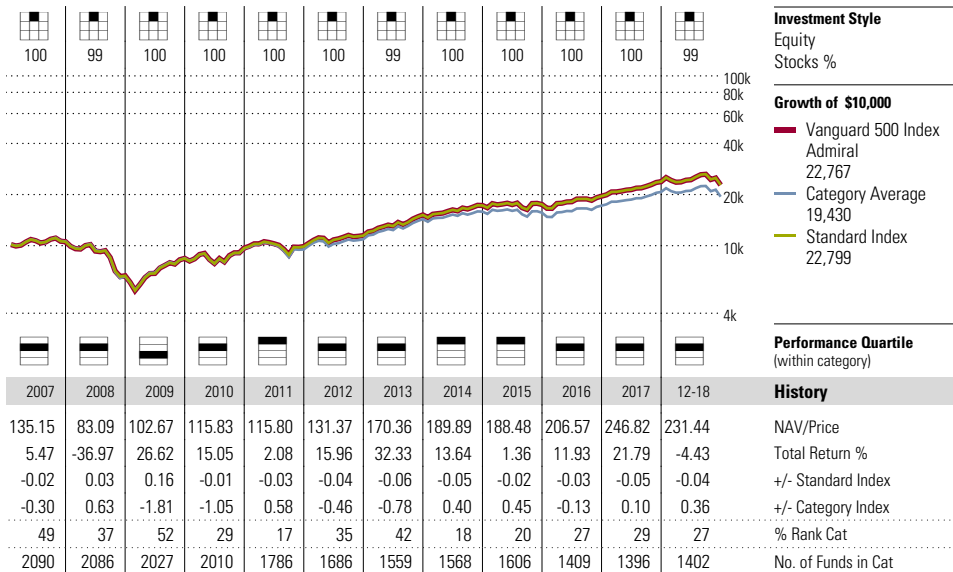


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	0.68	0.00
US Stocks	98.51	99.16
Non-US Stocks	0.79	0.84
Bonds	0.01	0.00
Other/Not Clsfd	0.00	0.00

Sector Weightings 11-30-2018

	Stocks %	Rel Std Index
Cyclical	32.6	1.00
Basic Materials	2.4	0.95
Consumer Cyclical	11.7	0.99
Financial Services	16.1	1.02
Real Estate	2.4	0.98
Sensitive	40.9	1.00
Communication Services	3.6	1.00
Energy	5.5	1.04
Industrials	10.1	1.02
Technology	21.7	0.99
Defensive	26.5	0.99
Consumer Defensive	7.8	1.00
Healthcare	15.5	1.00
Utilities	3.1	0.94

Performance 12-31-2018



Style Analysis 11-30-2018

Equity Investment Style Actual %

	Value	Blend	Growth
Large	29	29	32
Mid	4	4	2
Small	0	0	0
Portfolio Statistics	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	18.8	1.10	0.93
Geo Avg Cap Plan (\$Mil)			101,945
Geo Avg Cap Bmark (\$Mil)			93,688

Fixed-Income Investment Style Actual %

	High	Med	Low
Avg Effective Duration (Yrs)	—	—	—
Avg Effective Maturity (Yrs)	—	—	—
Avg Credit Quality	—	—	—
Bond %	—	—	—
AAA	—	—	—
AA	—	—	—
A	—	—	—
BBB	—	—	—
BB	—	—	—
B	—	—	—
Below B	—	—	—
NR	—	—	—

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period. The performance data represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the return data quoted. For performance data current to the most recent month-end, visit <http://advisor.morningstar.com/familyinfo.asp>. The "Overall Morningstar Rating" is based on risk-adjusted returns, derived from a weighted average of the three, five and ten-year (if applicable) Morningstar metrics. An investment in the fund is not insured or guaranteed by the FDIC or any other government agency.

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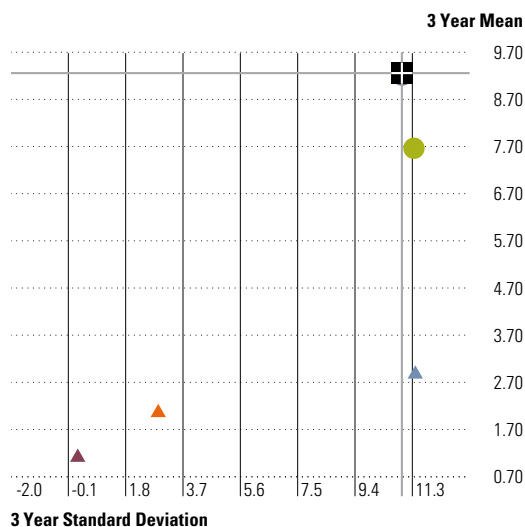
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Cobb County Government 457 Deferred Compensation Plan

Vanguard 500 Index Admiral (USD)

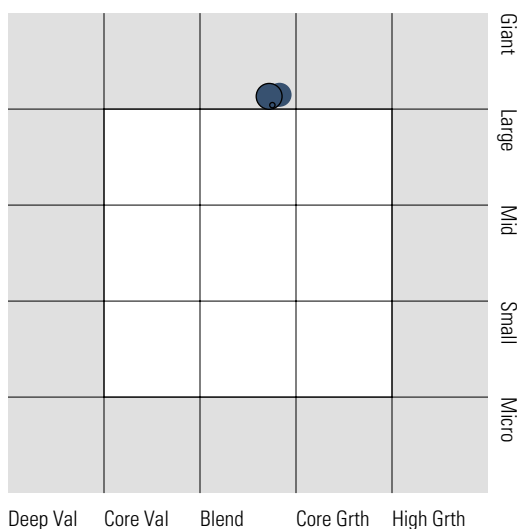
Risk/Return 12-31-2018



Benchmarks

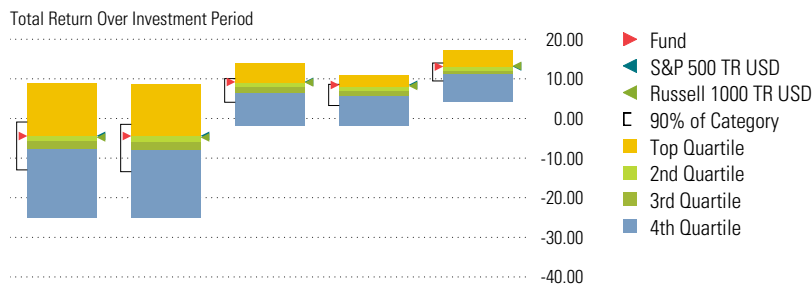
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 11-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



YTD	1 Yr	3 Yr	5 Yr	10 Yr	
1402	1402	1208	1071	805	Number of Funds in Category
—	27	16	10	19	Percentile Rank
-4.43	-4.43	9.22	8.46	13.10	Vanguard 500 Index Admiral
-4.38	-4.38	9.26	8.49	13.12	S&P 500 TR USD
-4.78	-4.78	9.09	8.21	13.28	Russell 1000 TR USD
8.74	8.74	13.93	11.03	17.26	Category High Return
-5.64	-5.97	7.89	6.90	12.00	Category Median Return
-25.04	-25.04	-1.74	-1.90	4.07	Category Low Return

Top 10 Holdings 11-30-2018

Holding Name	% Net Assets
Microsoft Corp	3.62
Apple Inc	3.49
Amazon.com Inc	2.95
Berkshire Hathaway Inc B	1.75
Johnson & Johnson	1.68
JPMorgan Chase & Co	1.59
Facebook Inc A	1.44
Alphabet Inc Class C	1.44
Exxon Mobil Corp	1.43
Alphabet Inc A	1.41

Investment Strategy 12-31-2018

The investment seeks to track the performance of a benchmark index that measures the investment return of large-capitalization stocks. The fund employs an indexing investment approach designed to track the performance of the Standard & Poor's 500 Index, a widely recognized benchmark of U.S. stock market performance that is dominated by the stocks of large U.S. companies. The advisor attempts to replicate the target index by investing all, or substantially all, of its assets in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting in the index.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

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Cobb County Government 457 Deferred Compensation Plan

Victory Sycamore Established Value R6 (USD)

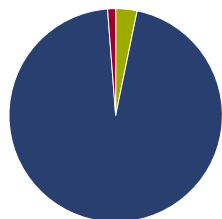
Details 12-31-2018

Ticker	VEVRX
Gross Expense Ratio %	0.54
Total Assets	\$10,056.83 mil
Family	Victory
Manager	Gary Miller,
Tenure	20.5 Years
Objective	Growth

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★
Standard Deviation 3 Yr	11.63
Mean 3 Yr	8.18
Alpha 3 Yr	2.31
Beta 3 Yr	0.93
R-Squared 3 Yr	94.44
Upside Capture Ratio 3 Yr	99.27
Downside Capture Ratio 3 Yr	82.51
Standard Index	S&P 500 TR USD
Category Index	Russell Mid Cap Value TR USD

Composition 09-30-2018

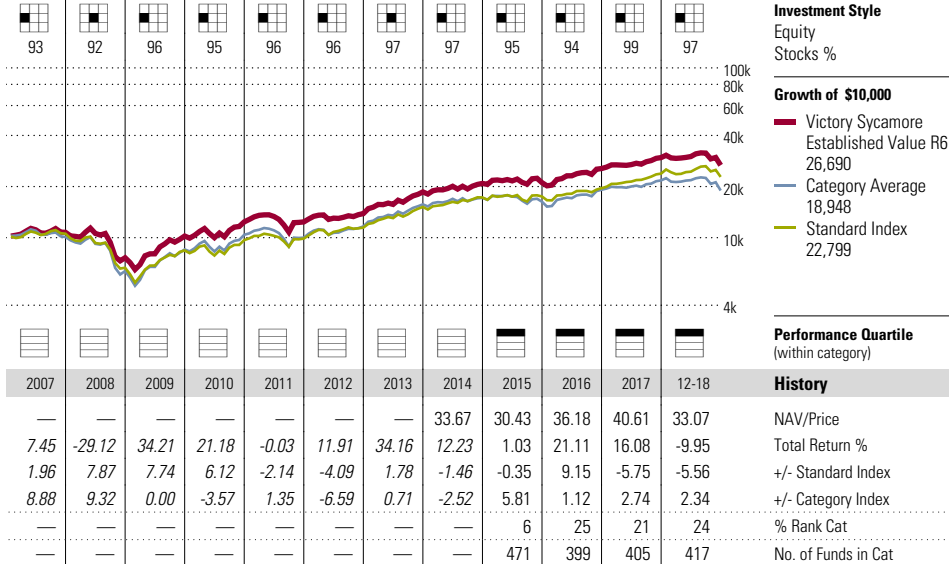


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	3.23	0.00
US Stocks	95.55	99.16
Non-US Stocks	1.22	0.84
Bonds	0.00	0.00
Other/Not Clsfd	0.00	0.00

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	46.6	1.43
Basic Materials	5.7	2.25
Consumer Cyclical	15.7	1.33
Financial Services	19.5	1.23
Real Estate	5.7	2.34
Sensitive	35.2	0.86
Communication Services	0.0	0.00
Energy	5.7	1.08
Industrials	15.7	1.58
Technology	13.8	0.63
Defensive	18.2	0.68
Consumer Defensive	8.0	1.02
Healthcare	6.7	0.43
Utilities	3.5	1.05

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

13	18	3	Large Mid Small	Portfolio Statistics	Port Avg	Rel Index	Rel Cat
26	32	7		P/E Ratio TTM	17.8	1.03	1.28
0	1	0		Geo Avg Cap Plan (\$Mil)	12,177		
				Geo Avg Cap Bmark (\$Mil)	93,688		
Value	Blend	Growth					

Fixed-Income Investment Style Actual %

Ltd	Mod	Ext
—	—	—
—	—	—
—	—	—
—	—	—
—	—	—
—	—	—
—	—	—
—	—	—
—	—	—
—	—	—
—	—	—

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period. The performance data represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the return data quoted. For performance data current to the most recent month-end, visit <http://advisor.morningstar.com/familyinfo.asp>. The "Overall Morningstar Rating" is based on risk-adjusted returns, derived from a weighted average of the three, five and ten-year (if applicable) Morningstar metrics. An investment in the fund is not insured or guaranteed by the FDIC or any other government agency.

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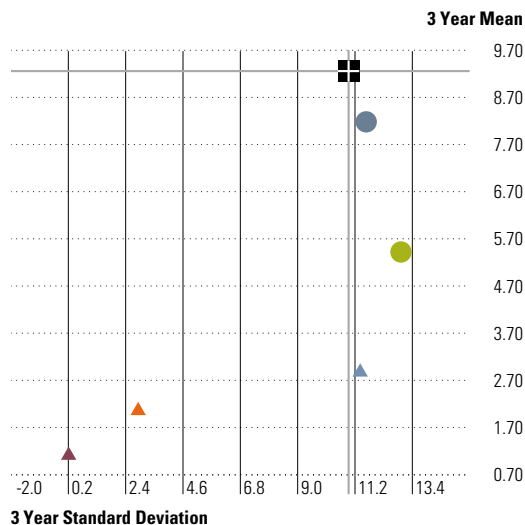
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Cobb County Government 457 Deferred Compensation Plan

Victory Sycamore Established Value R6 (USD)

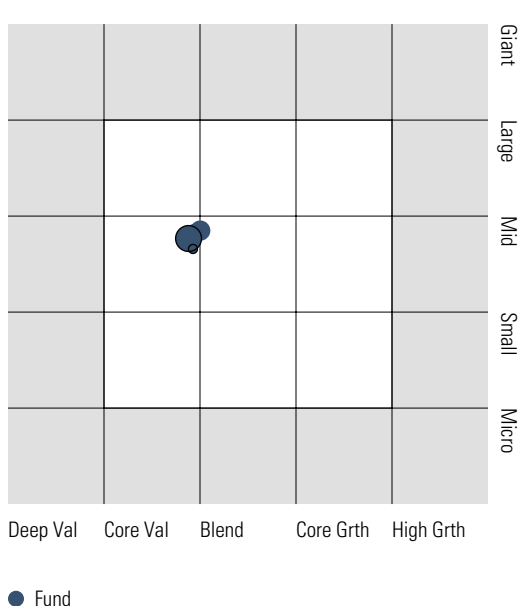
Risk/Return 12-31-2018



Benchmarks

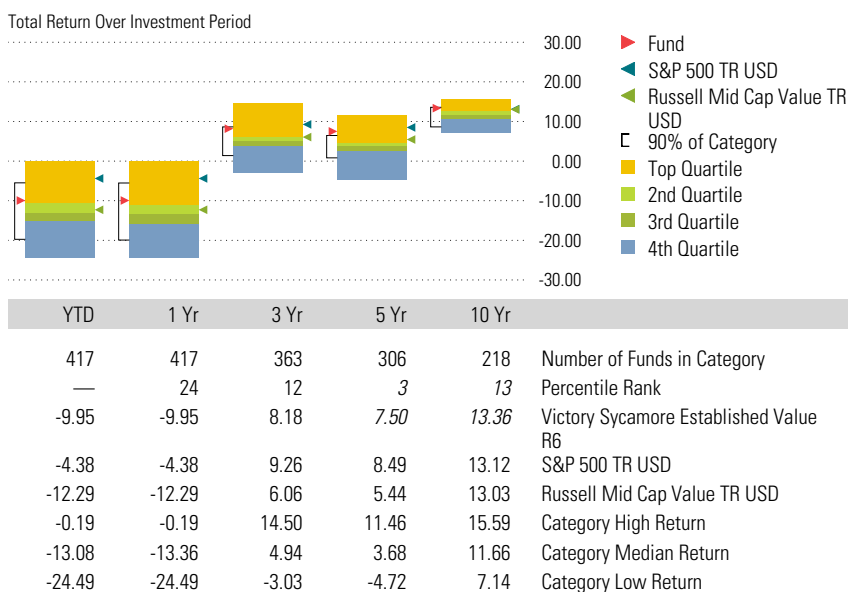
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
Archer-Daniels Midland Co	2.52
National Retail Properties Inc	2.39
Allegheny Corp	2.34
SunTrust Banks Inc	2.29
Hasbro Inc	2.08
Textron Inc	1.98
Quest Diagnostics Inc	1.88
WR Berkley Corp	1.88
Reliance Steel & Aluminum Co	1.85
Cinemark Holdings Inc	1.68

Investment Strategy 12-31-2018

The investment seeks long-term capital growth by investing primarily in common stocks. The fund pursues its investment objective by investing, under normal circumstances, at least 80% of its assets in equity securities of companies with market capitalizations, at the time of purchase, within the range of companies comprising the Russell MidCap® Value Index. The fund may invest a portion of its assets in equity securities of foreign companies traded in the U.S., including American Depositary Receipts and Global Depositary Receipts (ADRs and GDRs).

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Cobb County Government 457 Deferred Compensation Plan

Western Asset Core Plus Bond IS (USD)

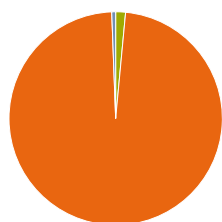
Details 12-31-2018

Ticker	WAPSX
Gross Expense Ratio %	0.43
Total Assets	\$23,722.29 mil
Family	Legg Mason
Manager	Carl Eichstaedt,
Tenure	20.5 Years
Objective	Corporate Bond - General

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
876 CI	
Standard Deviation 3 Yr	3.43
Mean 3 Yr	3.35
Alpha 3 Yr	1.23
Beta 3 Yr	1.06
R-Squared 3 Yr	77.77
Upside Capture Ratio 3 Yr	119.03
Downside Capture Ratio 3 Yr	88.13
Standard Index	BBgBarc US Agg Bond TR USD
Category Index	BBgBarc US Agg Bond TR USD

Composition 09-30-2018

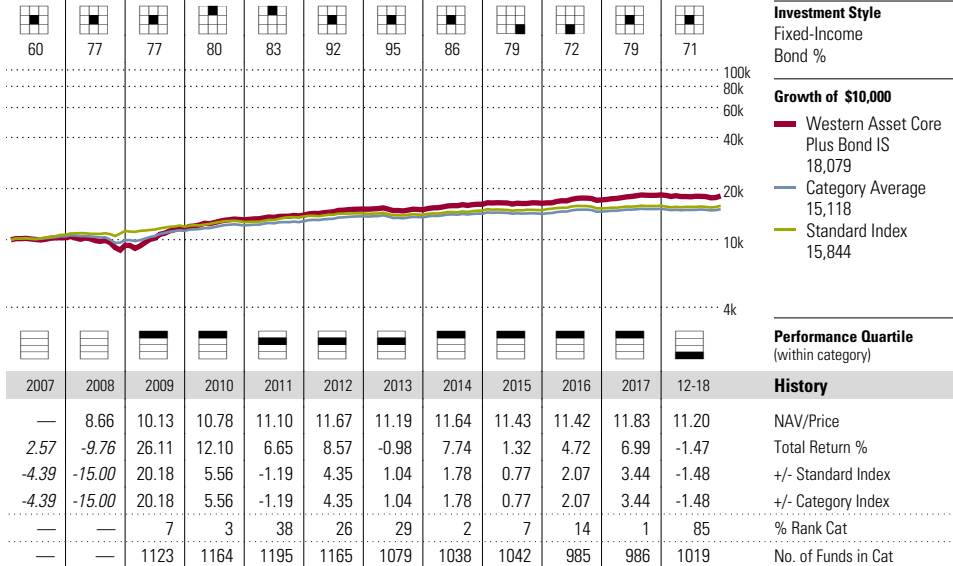


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	1.49	1.99
US Stocks	0.00	0.00
Non-US Stocks	0.00	0.00
Bonds	97.92	97.62
Other/Not Clsfd	0.59	0.39

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	—	—
Basic Materials	—	—
Consumer Cyclical	—	—
Financial Services	—	—
Real Estate	—	—
Sensitive	—	—
Communication Services	—	—
Energy	—	—
Industrials	—	—
Technology	—	—
Defensive	—	—
Consumer Defensive	—	—
Healthcare	—	—
Utilities	—	—

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Portfolio Statistics	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	—	—	—
Geo Avg Cap Plan (\$Mil)	—	—	—
Geo Avg Cap Bmark (\$Mil)	—	—	—
Value Blend Growth			

Fixed-Income Investment Style Actual %

High	Med	Low	Bond %
0	0	0	Avg Effective Duration (Yrs) 7.49
0	100	0	Avg Effective Maturity (Yrs) 10.28
0	0	0	Avg Credit Quality —
Ltd	Mod	Ext	AAA 55.84
			AA 3.47
			A 15.27
			BBB 13.57
			BB 6.44
			B 2.54
			Below B 3.08
			NR -0.21

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period. The performance data represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the return data quoted. For performance data current to the most recent month-end, visit <http://advisor.morningstar.com/familyinfo.asp>. The "Overall Morningstar Rating" is based on risk-adjusted returns, derived from a weighted average of the three, five and ten-year (if applicable) Morningstar metrics. An investment in the fund is not insured or guaranteed by the FDIC or any other government agency.

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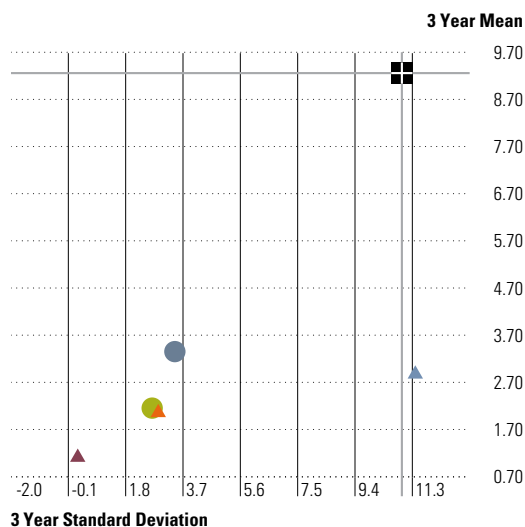
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Western Asset Core Plus Bond IS (USD)

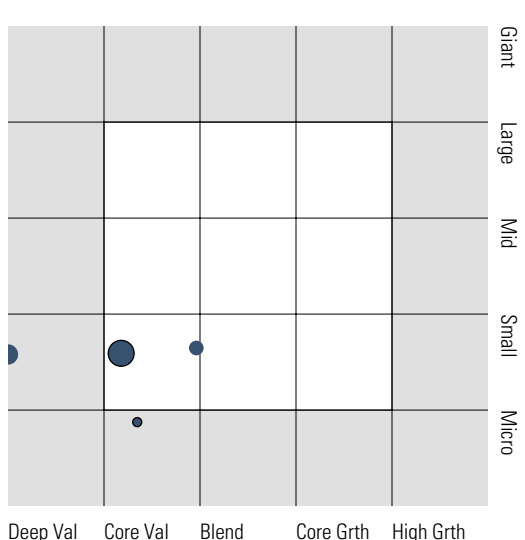
Risk/Return 12-31-2018



Benchmarks

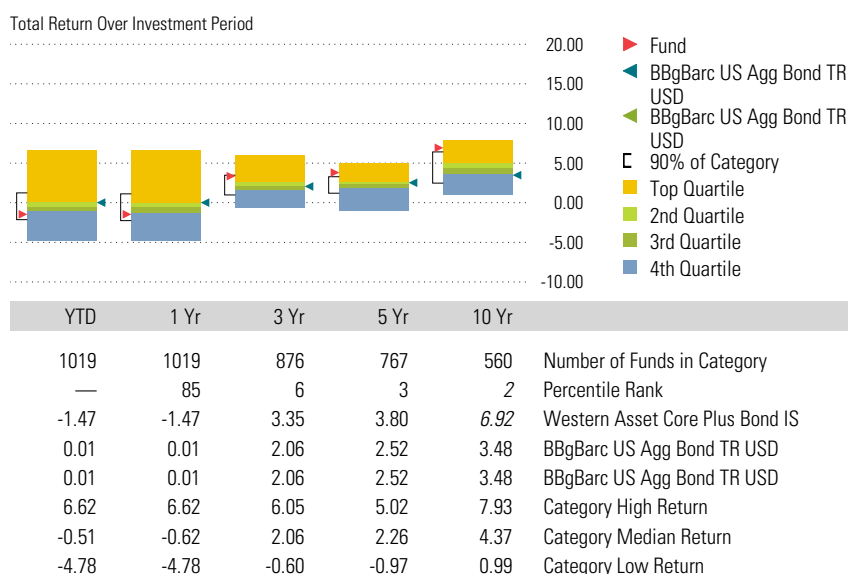
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 06-30-2017



- Fund
- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
Ir Swap 3m-Libor-Bba	-8.94
Ir Swap 1d-Fed101 31 Bps	8.94
Federal National Mortgage Association 4.5%	2.78
United States Treasury Bonds 3%	2.73
United States Treasury Bonds 3%	2.55
Government National Mortgage Association 4.5%	2.44
Fx Fut Mexican Peso Fut Dec18	-2.21
Fx Fut Mexican Peso Fut Dec18	2.21
United States Treasury Bonds 2.88%	2.14
United States Treasury Bonds 3.75%	1.90

Investment Strategy 12-31-2018

The investment seeks to maximize total return, consistent with prudent investment management and liquidity needs.

The fund invests in a portfolio of fixed income securities of various maturities and, under normal market conditions, will invest at least 80% of its net assets in debt and fixed income securities. Although the fund may invest in securities of any maturity, it will normally maintain a dollar-weighted average effective duration within 30% of the average duration of the domestic bond market as a whole as estimated by the fund's subadvisers. The fund may invest up to 20% of its total assets in non-U.S. dollar denominated securities.

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Cobb County Government 457 Deferred Compensation Plan

Disclosure

The Defined Contribution Plan Status Report is supplemental sales literature, and therefore must be preceded or accompanied by the fund's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Defined Contribution Plan Status Report. Morningstar is not itself a FINRA-member firm. All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

The information and data in the presentation may be deemed reliable; however, their accuracy and completeness is not guaranteed by UBS Financial Services Inc and providing you with this information is not to be considered a solicitation on our part with respect to the purchase or sale of any securities, investments, strategies or products that may be mentioned. In addition, the information and data used are subject to change without notice.

Morningstar and its employees are not affiliated with UBS Financial Services Inc. or its affiliates.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities.

Prior to 2016, Morningstar's methodology evaluated open-end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most-recent month-end reflect the updated methodology. Following this change, we expect some movement in the UBS Fund Score. For example, some mutual funds could score a little worse than ETFs after the category merge. Alerts that were set using UBS MF (or US ETF) category

returns/ranking could be triggered.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns, and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publically-offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution. **Although the money market seeks to preserve a stable per share value (i.e. \$1.00 per share), it is possible to lose money by investment in the fund.**

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual

Cobb County Government 457 Deferred Compensation Plan

Disclosure

fund itself, or through an intermediary, but cannot be traded on a secondary market, such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

Mutual Fund Performance Information

Additional information regarding each fund analyzed is presented in the Fact Sheets included with this analysis. Note that the information contained in this analysis was obtained from a variety of sources and UBS has not verified the accuracy of this information.

Mutual Funds are sold by prospectus and you should carefully consider important information on the fund's investment objectives, risk, charges and expenses. Please read the prospectus and offering documents carefully before you invest. Your Financial Advisor can provide a copy of the prospectus. For current month-end returns:
<http://advisor.morningstar.com/familyinfo.asp>.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales

charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net asset value minus a deferred sales charge, and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

Comparison of Other Security Types

A bond is a debt security. When an investor purchases a bond, the purchase amount is lent to a government, municipality, corporation or other entity known as an issuer. The issuer promises to pay a specified rate of interest during the life of the bond and repay the face value of the bond when it matures. U.S. Treasuries can be purchased directly from the Treasury or through a brokerage firm. Most other newly issued bonds are offered through an underwriter. Older bonds are traded throughout the day on the secondary market and can be purchased through a brokerage firm, who will charge transaction fees and commission for the purchase or sale. Price evaluations are provided by Interactive Data Corporation (IDC).

A commingled pool or collective investment trust (CIT) is a product where assets from several accounts are pooled and managed together. This strategy reduces management and administrative costs. Typically a collection of participants with the same strategy is pooled together.

Insurance group separate accounts (IGSA) are unregistered group annuities, primarily used in 401(k) qualified, but also 403(b) and 457 retirement plans. They are segregated (usually pooled) investment portfolios, separate from the general investment portfolios established by life insurance companies. These products are regulated by state insurance boards, but not the SEC.

A separate account is a professionally managed portfolio of individual securities. Generally, it is an investment consulting relationship in which a client's money is placed with one or more money managers, and

all administrative and management fees, along with commissions, are wrapped into one comprehensive fee, often paid quarterly.

A stock is an ownership interest in a company. When an investor purchases a stock, they become a business owner, and the value of their ownership stake will rise and fall according to the underlying business. Stockholders are entitled to the profits, if any, generated by the company after everyone else – employees, vendors, lenders – get paid. Companies usually pay out their profits to investors in the form of dividends, or they reinvest the money back into the business. Stocks trade on exchanges throughout the day, through a brokerage firm who will charge a commission for the purchase or sale of shares. Income distributions and capital gains of the stock are subject to income tax upon their sale, if held in a taxable account.

Variable annuities are tax-deferred investments structured to convert a sum of money into a series of payments over time. Variable annuity policies have limitations and are not viewed as short-term liquid investments. An insurance company's fulfillment of a commitment to pay a minimum death benefit, a schedule of payments, a fixed investment account guaranteed by the insurance company, or another form of guarantee depends on the claims-paying ability of the issuing insurance company. Any such guarantee does not affect or apply to the investment return or principal value of the separate account and its subaccount. The financial ratings quoted for an insurance company do not apply to the separate account and its subaccount. The insurance company offering a variable life contract will charge several fees to investors, including annual contract charges that compensate the insurance company for the cost of maintaining and administering the variable life contract, mortality and expense risk (M&E Risk) charges based on a percentage of a subaccount's assets to cover costs associated with mortality and expense risk, and administration fees that are based on a percentage of a subaccount's assets to cover the costs involved in offering and administering the subaccount. A variable life investor will also be charged a front-end load by the insurance company on their initial contribution, ongoing fees related to the management of the fund, and surrender charges if the investor makes a withdrawal prior to a specified time. If the variable annuity subaccount is invested in a money-market fund, the money market fund is not FDIC-insured, may lose money, and is

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not guaranteed by a bank or other financial institution.

Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Fund portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the Medicare surcharge. As of 2016, this rate is 39.6% plus 0.9% Medicare surcharge, or 40.5%, this has been unchanged since 2013. This rate changes periodically in accordance with changes in federal law.

Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the

pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

The information contained in this report is from the most recent information available to Morningstar as of the release date, and may or may not be an accurate reflection of the current composition of the securities included in the plan. There is no assurance that the weightings, composition and ratios will remain the same.

Benchmark Returns

Benchmark performance is based on market total returns for market indices and NAV total returns for category averages. NAV total return reflects performance without adjusting for sales charges or the effects of taxation, but is adjusted to reflect all actual ongoing security expenses (management, administrative, 12b-1 fees and other costs taken out of fund assets), and assumes reinvestment of dividends and capital gains. A fund's portfolio may differ significantly from the securities in the benchmark.

Returns for custom benchmarks are calculated by applying user-supplied weightings to each benchmark's returns every month. Trailing returns are calculated by geometrically linking these weighted-average monthly returns. Custom benchmark returns thus assume monthly rebalancing.

12b1 Expense %

Current 12b-1 is the maximum annual charge deducted from fund assets to pay for distribution and marketing costs. This information is taken directly from the fund's prospectus.

ALERTS

The Alerts displayed in this report are being provided to assist retirement plan fiduciaries in evaluating the investment options offered under a defined contribution retirement plan. A number of different factors should be considered when choosing to add, remove or maintain a retirement plan investment options.

General

The Alerts section identifies alerts that you and your financial advisor set to help identify changes and/or potential problems in securities. The Alerts section is intended to be for client reporting purposes on implemented strategies or for advisor use only. It is not intended for use as supplemental sales literature. Morningstar is not itself a FINRA member firm.

The content of this section is driven by measurement criteria that were selected by you and your advisor.

Alerts may be set on performance, risk, ratings, composition, and other characteristics. Alerts may be set on an absolute basis, where a measure is compared against a set value, or on a relative basis, where a security value is compared with the value of a benchmark or category.

Triggering of alerts is based on comparisons of data points that are available to Morningstar, Inc., applying mechanical checking mechanisms. Although best efforts are made by Morningstar, Inc. to maintain accurate and complete data and functional mechanical processes, there are no guarantees with regard to either.

You and your financial advisor determined the criteria for setting alerts. There is no guarantee that the alerts set are appropriate. Setting alerts does not provide or guarantee protection against losses, market risk, or any other factors impacting securities. The presence of triggered alerts does not necessarily indicate weaknesses or problems with the securities, and is not necessarily a cause for action or changes in the implemented securities. The absence of triggered alerts also does not necessarily indicate security strength. Alerts are checked on a schedule (daily, weekly, monthly) selected by the advisor. The checking schedule set may be insufficient to trigger a current alert even if an alert criterion is met currently.

Any performance data given in the report represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when redeemed, may be worth more or less than the original investment. Most securities covered in this report are not FDIC-insured, may lose value and are not guaranteed by a bank or other financial institution.

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Alert Terminology

Security Alert: An alert rule that is based on characteristics of a single security, e.g. a mutual fund. Note that it is possible to set one alert rule to multiple securities at a time.

Status: The status of an alert will be either “triggered” or “not triggered.” A status of “triggered” means that the criteria set in the alert is currently met. A status of “not triggered” means that conditions set in the alert were not met when last checked.

Initial Trigger Date: This represents the first date on which the alert was checked and for which alert conditions were met. Note that it is possible that conditions for triggering the alert were met prior to the first check.

Initial Trigger Value: This represents the measure that caused an alert’s conditions to first be met. For example, if an alert is set to trigger when one-year trailing return is less than 2%, and one year trailing return is 1.9% when checked, 1.9 will appear as the trigger value.

Current Trigger Value: This represents the measure that causes an alert’s conditions to continue to be met when most recently checked.

Current Comparison Value: This represents the value that is being compared to determine if the alert is triggered. For example, if an alert is set to trigger when one-year trailing return is less than 2.0%, a value of 2 will appear as the Comparison Value. If the alert is set to trigger when one-year trailing performance for a security is less than one-year performance for a benchmark, the comparison value will show the performance of the benchmark.

Current Comparison Subject: This represents the entity against which the security or aggregate is compared. For example, if an alert is set to trigger if one-year return is less than the return of a benchmark, the benchmark name will be shown as the comparison subject.

Security Name: When a security alert is triggered, the name of any impacted security will be listed.

Frequency: Alerts may be set on monthly, weekly, and daily frequencies.

Monthly alerts compare data based on the last business day of the month and continue monthly. Weekly alerts compare data based on the last business day of the week and continue weekly. Daily alerts compare data based on the previous business day and continue daily.

Alpha

Alpha is a measure of the difference between a security or portfolio’s actual returns and its expected performance, given its level of risk (as measured by beta.) Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The “Other” category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the fund against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the fund’s managers are buying and how they are positioning the fund’s portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the fund’s exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security’s price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most fund portfolios hold fairly conventional securities, such as long

positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while other have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart’s generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of fund holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of fund holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the fund only.

Average Effective Duration

Duration is a time measure of a bond’s interest-rate sensitivity. Average effective duration is a weighted average of the duration of the fixed-income securities within a portfolio.

Average Effective Maturity

Average Effective Maturity is a weighted average of the maturities of all bonds in a portfolio.

Best Fit Index

Alpha, beta, and R-squared statistics are presented for a broad market index and a “best fit” index. The Best Fit Index identified in this report was determined by Morningstar by calculating R-squared for the fund against approximately 100 indexes tracked by Morningstar. The index representing the highest R-squared is identified as the best fit index. The best fit index may not be the fund’s benchmark, nor does it

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necessarily contain the types of securities that may be held by the fund or portfolio.

Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

Capture Ratios

Capture Ratios compare the fund's results to their peer group index in periods of both positive and negative returns. The Downside Capture Ratio uses the annualized cumulative returns for both the fund and the S&P 500 for all the quarters when the S&P500 had negative returns.

Dividing the fund's return during the down quarters by the S&P 500's return during the same quarters provides the downside capture ratio. The Upside Capture Ratio uses the annualized cumulative returns for both the fund and the S&P 500 for all quarters when the S&P 500 had positive returns. Dividing the fund's return during the positive quarters by the S&P 500's return during the same quarters provides the upside capture ratio.

Composition By Fund

The pie chart displays the funds' exposure by their respective percentage allocation. The corresponding table provides the fund name, ticker, plan percentage, and amount (\$) of funds in the plan. If your plan has more than 26 funds only the top 26 based on their percentage of plan assets will be listed.

Concentration Ratio

The concentration ratio depicts how much of the plan's aggregate investment options are within the top 10 stock holdings.

Correlation Matrix Graph

The Correlation Matrix is based on the correlation coefficient calculated for the monthly returns of each investment showing in the report against the other investments in the report. The correlation coefficient is a number between -1.0 and 1.0.

If there is a perfect positive linear relationship between the returns of investments, the correlation will be 1.0. A correlation close to 1.0 means that two investments perform similarly—when one investment is performing above its average return, the other performs above its average return. The opposite is also true—when one investment performs below its average return, the other also performs below its average.

A correlation coefficient of 0.0 means that there is no linear relationship between the returns of two investments. Securities with a correlation coefficient at or near 0 indicate a pattern of returns between two securities that are unrelated.

If there is a perfect negative linear relationship between two investments the correlation coefficient is -1.0. If there is a perfectly negative relationship between two investments, when one investment performs above its average return, the other performs below its average, and vice versa.

Correlation between securities is a helpful measure because it indicates the extent to which securities may serve to improve diversification within a portfolio. Portfolios containing securities with low correlation of returns produce portfolio risk that is lower than the average risk of the individual securities. The lower the correlation between securities, the greater the impact in lowering portfolio risk. Securities with correlations equal to 1.0 indicate a pattern of returns that do not contribute to beneficial diversification in a portfolio and do not lower overall portfolio risk when the securities are combined in a portfolio. Securities with correlations equal to 0.0 or close to 0.0 indicate a pattern of returns that serve to improve diversification effects in a portfolio. Securities with correlations equal to -1.0 or close to -1.0 indicate a pattern of returns that serve to strongly improve diversification effects in a portfolio, notably, lower overall portfolio risk. Note that it is very unusual to have investments with extremely strong negative correlation patterns. Most securities have a correlation above 0.

Note that return patterns between securities may change over time. The correlation coefficient between two investments over one period may differ from that of another period.

Further, note that while combining securities with correlation coefficients less than 1.0 in a portfolio can reduce risk, risk cannot be completely eliminated with diversification. There is no guarantee that any particular mix of securities will eliminate risk, reduce your current exposure to risk, or manage your exposure to risk in a way that is tolerable for you.

Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a fund. The percentage of the load charged generally declines the longer the fund's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

Expense Ratio %

Prospectus Gross Expense Ratio is the maximum expense ratio which a fund may charge as detailed in the prospectus. The purpose of this data point is to identify the maximum exposure an investor has to fund expenses. The Prospectus Gross Expense Ratio may not equal the actual expenses paid.

Prospectus Net Expense Ratio reflects actual expenses paid by the fund as well as any voluntary waivers, reductions from brokerage service arrangements and any other expense offset arrangements.

Expense Ratio Quartile Rank

The expense ratio quartile rank of a holding is calculated by dividing the expense ratio of the holding by the expense ratio of its Morningstar Category. The graph, ranging from Q1 (best/lowest) to Q4 (worse/highest), displays the number of funds that fall into each of the resulting quartiles.

Expense/Return Graph

Cost measures for mutual funds use Prospectus Net Expense Ratio. For VAs, total insurance expense is included in the Prospectus ratio. For CITs, CEs, and ETFs, Net Operating Expense Ratio is used. The expense/return graph is used to capture each security's return and expense performance relative to its category peers. It's important to understand the context in which returns and expenses are experienced.

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For example, slightly higher than category median expenses may be acceptable if the option provides much higher than category average returns. The desirable quadrant of the expense/return graph is the upper left, where options have demonstrated lower expenses and higher returns than their category peers. The 3 Yr Relative Return measures the fund's 3 year performance relative to the median of its Morningstar Category. The Median Relative Expense measures the security's Net Expense relative to the median of its Morningstar Category.

Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

IMPORTANT INFORMATION ON FUND SCORING

The fund scores illustrated in this report are derived from a UBS proprietary process using a number of different standards and criteria to measure a fund's overall performance, risk and history. UBS does not make any representation regarding the effectiveness of this process, and makes no guarantee regarding the funds earning strong scores from this process. These scores are being provided to assist retirement plan fiduciaries in evaluating the investment options offered under a defined contribution retirement plan. These scores do not constitute fiduciary advice or judgment, and should not be used in place of the retirement plan fiduciaries' prudent review of the investment options. The fund scores are only one element for consideration when evaluating the appropriateness of such investment options. This process does not factor other considerations that affect future performance, such as whether a manager's investing style is recently out of favor. For this reason, many investment options that receive low scores may outperform peers. A number of different factors should be considered when choosing to add, remove or maintain a retirement plan investment option.

The Fund Scoring Process

The following is a description of the proprietary process we use to arrive at the fund score. The process is comprised of ten individual scoring measures (as further discussed below under "More Detail on Individual Scoring Measures") and one Overall Fund Score. The formula in each

individual category calculates a percentile ranking relative to the funds in their respective Morningstar peer group. The percentile rank is then assigned a numerical value as indicated the chart below.

Transforming Percentile Ranks to Fund Scores

When transforming a percentile rank into a fund score for any given measure, or overall score, the following rules will be followed:

- 91st percentile or greater - 5
- Between 71st and 90th Percentile - 4
- Between 31st and 70th percentile - 3
- Between 11th and 30th percentile - 2
- Less than 11th percentile - 1

Note: A score of 5 represents the best possible score - and a 1 represents the worst. If a security is missing any measure among the 10, no overall score will be calculated.

Overall Score

The Overall score is derived from the final percentage rankings for each measure, weighting them at the percentages noted below:

- Criteria 1 - Information Ratio vs. Category Benchmark: 7.143%
- Criteria 2 - Information Ratio vs. Category Average: 7.143%
- Criteria 3 - Sharpe Ratio : 14.286%
- Criteria 4 - Batting Average vs. Category Benchmark: 7.143%
- Criteria 5 - Batting Average vs. Category Average: 7.143%
- Criteria 6 - Performance vs. Peers: 14.286%
- Criteria 7 - Capture Ratios vs. Category Benchmark: 7.143%
- Criteria 8 - Capture Ratios vs. Category Average: 7.143%
- Criteria 9 - Manager Tenure: 14.286%
- Criteria 10 - Expense Ratio: 14.286%

Rolling Periods

All metrics, with the exception of batting average, manager tenure, and expense ratio, are for 36-month periods, rolled monthly. The first period begins 96 months before the most recent month-end and ends 60 months before the most recent month end. For periods of less than 96 months, the score will be calculated based on the data available, provided there is a minimum of 36 months.

For rolling period scores, each period's score is calculated and then

transformed into a percentile. The percentiles for all periods are averaged and then transformed into a final percentile used to assign the scores 1-5, as noted above.

More Detail on Individual Scoring Measures

1.) Modified Information Ratio Versus Category Benchmark--Has the fund demonstrated value added over the category benchmark for available rolling three year rolling periods ending over the last five years? [7.143% of the overall score]

This measure looks at excess returns over the category benchmark for all available rolling 36-month periods going back monthly, ending over the last 5 years.

The Information Ratio is an investment's active premium (its annualized geometric return minus the benchmark's annualized geometric return) divided by its tracking error. This calculation of the information ratio uses excess returns over the benchmark for 36 months ending with the most recent month.

2.) Modified Information Ratio Versus Category Average--Has the fund demonstrated value added over the category average for available rolling three year periods ending over the last five years? [7.143% of the overall score]

This measure looks at excess returns over the category average for available rolling 36-month periods going back monthly, ending over the last five years.

The Information Ratio is an investment's active premium (its annualized geometric return minus the benchmark's annualized geometric return) divided by its tracking error. This calculation of the information ratio uses excess returns over the category average for each 36-month period evaluated.

3.) Modified Sharpe Ratio- Did the fund perform well against a relevant peer universe for the rolling three year monthly periods ended over the last five years in terms of Sharpe ratios? [14.286% of the overall score]

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The Sharpe Ratio is calculated by using standard deviation and excess return to determine reward per unit of risk. The higher the Sharpe Ratio, the better the portfolio's historical risk-adjusted performance. The Sharpe Ratios are calculated for all rolling periods available (e.g. all 36-month periods ending in the past five years). Each fund's rolling period Sharpe ratios are averaged. Within each category, the average rolling Sharpe ratios for included funds is ranked.

4.) Batting Average Versus Category Benchmark- Did the fund perform well versus its category benchmark over the most recent eight years? [7.143% of the overall score]

The batting average versus category benchmark is the average number of times, expressed in percentage, that the fund's returns beat the category benchmark over the past 96 months. (For periods of less than 96 months, the score will be calculated based on the data available, provided there is a minimum of 36 months.) For example, if the fund has a better record than the category benchmark in 66 out of the last 96 months, the batting average for this period would be 0.6875 (66/96).

Using all monthly returns available over the last eight years (96 months), the fund's batting average is calculated compared to the category benchmark. All batting averages are ranked within the category.

5.) Batting Average Versus Category Average- Did the fund perform well versus its category average over the most recent eight years? [7.143% of the overall score]

The batting average versus category average is the average number of times the fund's returns beat the category average over the past 96 months. (For periods of less than 96 months, the score will be calculated based on the data available, provided there is a minimum of 36 months.) For example, if the fund has a better record than the category average in 66 out of the last 96 months, the batting average for this period was 0.6875 (66/96).

Using all monthly returns available over the last eight years (96 months), the fund's batting average is calculated compared to the category benchmark. All batting averages are ranked within the category.

5.) Batting Average Versus Category Average- Did the fund perform well versus its category average over the most recent eight years? [7.143% of the overall score]

The batting average versus category average is the average number of times the fund's returns beat the category average over the past 96 months. (For periods of less than 96 months, the score will be calculated based on the data available, provided there is a minimum of 36 months.) For example, if the fund has a better record than the category average in 66 out of the last 96 months, the batting average for this period was 0.6875 (66/96).

Using all monthly return data available over the last eight years (96 months), the fund's batting average is calculated compared to the category average. All batting averages are ranked within the category.

6.) Performance vs. Peers--Did the fund perform well against a relevant peer universe for the available three year rolling periods ended over the last five years? [14.286% of the overall score]

For the available 36-month rolling periods ending in the most recent 5 years, the fund's average return is calculated. All funds in the category are ranked, and the fund's score is assigned based on its percentile rank.

7.) Capture Ratios Vs. Category Benchmark- Has the fund achieved an acceptable up-side to down-side performance capture ratio relative to its category benchmark? [7.143% of the overall score] This metric evaluates a fund's capture ratios, which reflect the percentage of the market's performance that the fund participated in over time, including up and down markets.

The upside capture ratio is the compound return of the portfolio for all periods in which the benchmark was up, divided by the compound return of the benchmark during the same periods.

The downside capture ratio is the compound return of the portfolio for all periods in which the benchmark was down, divided by the compound return of the benchmark during the same periods.

Capture ratios are usually expressed as a percent, so if a portfolio's compound return during positive markets was 21% and the benchmark's return was 20%, the upside capture ratio would be 105 (21/20). A good upside capture ratio is greater than 100 and a good downside capture ratio is less than 100. Because it is difficult to devise a strategy that will outperform in both up and down markets, an investment fund may choose to focus on one side, e.g., create an aggressive or defensive portfolio. This metric awards its best value to funds that perform well in both up and down markets.

Capture ratios are calculated as follows: All rolling periods' capture ratios are averaged for the fund. The percentile rankings are calculated for each score (Upside and Downside). The score for each fund is then applied from the average of these two percentiles.

8.) Capture Ratios Vs Category Average- Has the fund achieved an acceptable up-side to down-side performance capture ratio relative to its category average? [7.143% of the overall score]

This metric evaluates a fund's capture ratios, which reflect the percentage of the market's performance in which the fund participated over time, including up and down markets.

The upside capture ratio is the compound return of the portfolio for all periods in which the benchmark was up, divided by the compound return of the benchmark during the same periods.

The downside capture ratio is the compound return of the portfolio for all periods in which the benchmark was down, divided by the compound return of the benchmark during the same periods.

Capture ratios are usually expressed as a percent, so if a portfolio's compound return during positive markets was 21% and the benchmark's return was 20%, the upside capture ratio would be 105 (21/20). A good upside capture ratio is greater than 100 and a good downside capture ratio is less than 100. Because it is difficult to devise a strategy that will outperform in both up and down markets, an investment fund may choose to focus on one side, e.g., create an aggressive or defensive portfolio. This metric awards its best value to funds that perform well in

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both up and down markets.

All rolling periods' capture ratios are averaged for the fund. The percentile rankings for each score (Upside and Downside) are calculated. The score for each fund is then applied from the average of these two percentiles.

9.) Manager Tenure—Percent rank of the average tenure of the portfolio management among those funds in its peer group. It is assumed that a longer tenure is more desirable than a shorter tenure. [14.286% of the overall score]

10.) Expense ratio relative to peer group- The percent rank of a fund's operating expense among those funds in its peer group with the same load structure. It is assumed that a lower expense ratio is more desirable than a higher expense ratio. [14.286% of the overall score]

Note: Net prospectus expense ratios are used for open-end mutual funds, operating expense ratios are used for closed-end funds, exchange-traded funds, and CITs, and prospectus net expense ratio plus total insurance expense are used for variable annuity subaccounts.

Pre-Inception Returns

Monthly returns for the security, category, category benchmark, and a risk-free rate proxy are required to perform most of the calculations. When actual return is lacking for a mutual fund or variable annuity subaccount, pre-inception return will be applied. The US 3-month Treasury bill return will be used for the risk-free rate.

For ETFs and closed-end funds, NAV return will be applied, rather than market return, in all calculations.

Notes

In the Fund Scoring report, a "Note" column is included next to each investment option (security) analyzed and will be populated as follows:

Null Value

A null value (dash) will be populated in the "note" column if the score is calculated for a fund.

Value of "A"

If a fund has less than 36 months of consecutive, recent monthly return history, only Expense Ratio and Manager Tenure will be scored. No overall score will be generated and a value of "A" will be populated in the Note column.

Value of "B"

If a fund has at least 36 but less than 96 months of consecutive, recent monthly return, the measurement values and scores will be calculated. A value of "B" will be populated in the Note column.

Value of "C"

If a category average or category benchmark has less than the number of included return available for the fund (i.e., any month's return applied in calculating scores for the fund is unavailable for the category average or category benchmark), measurement values and scores will be calculated for the fund. A value of "C" will be populated in the Note column of the table.

Value of "D"

If a fund has less than \$25MM in total assets, no scores will be calculated and a value of "D" will be populated in the Note column.

Geometric Average Market Capitalization

Geometric Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

Holding Portfolio Date

The Portfolio Date is the date that the fund's portfolio was last updated. When making comparisons among funds, it is an important date to keep in mind. Although Morningstar tries to ensure timely information, Morningstar does not always receive current information from fund companies. By law, funds need only report this information two times during the calendar year, and they have two months after the report date to actually release the shareholder report and portfolio. Therefore, it is possible that a fund's portfolio could be up to eight months old at the time of publication.

Information Ratio

Information ratio is a risk-adjusted performance measure. It is similar in structure to the Sharpe Ratio as a ratio of excess return per unit of risk. In the Sharpe Ratio, excess return and risk are measured relative to a risk-free rate. In comparison, the Information Ratio measures excess return and risk relative to a specific benchmark index.

The numerator for the Information Ratio is the difference between the annualized returns of the fund and the annualized returns of the benchmark. The denominator is the fund's annualized tracking error, which is the standard deviation of the fund's monthly excess returns over the benchmark returns.

Information Ratio is especially helpful for evaluating active managers. Index funds will typically have an Information Ratio close to zero, because these funds achieve very little excess return over the benchmark. In contrast, active managers deviate from the benchmark in an attempt to add value. The Information Ratio measures how much the fund outperformed the benchmark per unit of additional risk taken.

Investment Fees and Expenses

Please note that all data in the Fees and Expenses section are entered by your financial advisor. This section of the report itemizes costs at a plan level and investment level based on information entered by the advisor.

Investment Strategy

The investment strategy displayed in this report summarizes the fund's plan of investing assets among various investments/securities. These plans take into consideration such factors as goals, what kinds of companies they look for, what market cap range they invest in, where they are located and how much will they pay. Morningstar pulls this information directly from the fund's prospectus.

Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

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Maximum Redemption Fee %

The Maximum Redemption Fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase (for example, 30, 180, or 365 days).

Mean

Mean is the annualized geometric return for the period shown.

Morningstar Analyst Rating™

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates funds based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five pillar evaluation to determine how they believe funds are likely to perform relative to a benchmark, or in the case of exchange-traded funds and index mutual funds, a relevant peer group, over the long term on a risk-adjusted basis. They consider quantitative and qualitative factors in their research, and the weight of each pillar may vary. The Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. A Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's conviction in a fund's prospects for outperformance. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months. For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to global.morningstar.com/managerdisclosures/.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating a fund, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the fund.

Morningstar Category

For Institutional Use Only – Not For Participant Distribution

Morningstar Category is assigned by placing funds into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a fund's prospectus may not be sufficiently detailed for our proprietary classification methodology. Funds are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the fund is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

Morningstar Ownership Zone

The Morningstar Ownership Zone provides a graphic representation of the size and investment style of long stocks in fund's portfolio. The Ownership Zone is derived by plotting each stock in the portfolio within the Morningstar Style Box™. The Ownership Zone is the shaded area that represents 75% of the assets in the portfolio and indicates the level of concentration in the holdings. The "centroid" in the middle of the Ownership Zone represents the weighted average of all the holdings. The Ownership Zone helps investors differentiate between portfolios that may otherwise look similar. Investors can also use the Ownership Zone to construct diversified portfolios and model how multiple funds complement one another in a portfolio.

Morningstar Pillar Ratings

Morningstar Pillar Ratings are subjective evaluations of funds performed by manager research analysts of Morningstar. Morningstar evaluates funds based on five key pillars, which are process, performance, people, parent, and price. Morningstar's analysts assign each pillar a rating of Positive, Neutral, or Negative. Morningstar Pillar Scores are then used to help determine the fund's Morningstar Analyst Rating.

The Morningstar Pillar Rating should not be used as the sole basis in evaluating a fund. Morningstar Pillar Ratings involve unknown risks and uncertainties which may cause Morningstar's expectations not to occur or to differ significantly from what we expected.

Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a fund at the time of calculation.

Morningstar Rating™

The Morningstar Rating™ for funds, or "star rating", is calculated for managed products (including mutual funds, variable annuity and variable life subaccounts, exchange-traded funds, closed-end funds, and separate accounts) with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product's monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. The weights are: 100% three-year rating for 36-59 months of total returns, 60% five-year rating/40% three-year rating for 60-119 months of total returns, and 50% 10-year rating/30% five-year rating/20% three-year rating for 120 or more months of total returns. While the 10-year overall star rating formula seems to give the most weight to the 10-year period, the most recent three-year period actually has the greatest impact because it is included in all three rating periods.

The subaccounts of unregistered variable annuities, as well as those of registered group variable annuities that are solely available for use in qualified plans, are rated based on their position within the bell curve of the open-end/ETF fund peer group (a.k.a. category), rather than the variable annuity subaccount peer group. These ratings are calculated by using an overlay of the open-end/ETF fund peer group break points and therefore do not contribute to the category average or number of funds within the subaccount peer group.

See Important Information and Disclosures at the end of this Report

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The Morningstar Rating for separate accounts is based on the same methodology that Morningstar uses to rate other investments, such as open- end mutual funds, closed-end mutual funds, and variable annuity subaccounts. There are some differences between the separate account rating methodology and the rating methodologies for other investments because of the unique way that separate account managers calculate and report investment performance. All separate account performance data is reported to Morningstar as a “composite” of similarly managed portfolios. Morningstar rates separate accounts based on total returns that have not been adjusted for investment management fees.

Morningstar does not tax-adjust the returns of separate accounts that invest in municipal bonds. The Morningstar Rating for separate accounts is based on quarter-end performance data. It will be recalculated quarterly, because many managers do not provide monthly returns until the end of each quarter.

Please note that some Morningstar proprietary calculations, including the Morningstar Rating, may be calculated based on adjusted historical returns (pre- inception returns). If the extended performance rating is in effect, the “stars” are represented as unshaded stars.

Morningstar Return

The Morningstar Return rates a fund’s performance relative to other managed products in its Morningstar Category. It is an assessment of a product’s excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Ave), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Risk

Morningstar Risk evaluates a fund’s downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations,

in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Style Box™

The Morningstar Style Box™ reveals a fund’s investment strategy as of the date noted on this report.

For equity funds, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened square in the style box indicates the weighted average style of the portfolio.

For fixed-income funds, the vertical axis shows the credit quality of the long bonds owned and the horizontal axis shows interest-rate sensitivity as measured by a bond’s effective duration. Morningstar seeks credit rating information from fund companies on a periodic basis (for example, quarterly). In compiling credit rating information, Morningstar accepts credit ratings reported by fund companies that have been issued by all Nationally Recognized Statistical Rating Organizations. For a list of all NRSROs, please visit <http://www.sec.gov/divisions/marketreg/ratingagency.htm>. Additionally, Morningstar accepts foreign credit ratings from widely recognized or registered rating agencies. If two rating organizations/ agencies have rated a security, fund companies are to report the lower rating; if three or more organizations/agencies have rated a security, fund companies are to report the median rating; and in cases where there are more than two organization/agency ratings and a median rating does not exist, fund companies are to use the lower of the two middle ratings.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the fund. NRSRO or rating agency ratings can change from time to time.

For credit quality, Morningstar combines the credit rating information provided by the fund companies with an average default rate calculation to come up with a weighted-average credit quality. The weighted-average credit quality is currently a letter that roughly corresponds to the scale used by a leading NRSRO. Bond funds are assigned a style box placement of “low,” “medium,” or “high” based on their average credit quality. Funds with a “low” credit quality are those whose weighted-average credit quality is determined to be less than “BBB-”; “medium” are those less than “AA-”, but greater or equal to “BBB-”; and “high” are those with a weighted-average credit quality of “AA-” or higher. When classifying a bond portfolio, Morningstar first maps the NRSRO credit ratings of the underlying holdings to their respective default rates (as determined by Morningstar’s analysis of actual historical default rates). Morningstar then averages these default rates to determine the average default rate for the entire bond fund. Finally, Morningstar maps this average default rate to its corresponding credit rating along a convex curve.

For interest-rate sensitivity, Morningstar obtains from fund companies the average effective duration. Generally, Morningstar classifies a fixed-income fund’s interest-rate sensitivity based on the effective duration of the Morningstar Core Bond Index, which is currently three years. The classification of Limited will be assigned to those funds whose average effective duration is between 25% to 75% of MCB’s average effective duration; funds whose average effective duration is between 75% to 125% of the MCB will be classified as Moderate; and those that are at 125% or greater of the average effective duration of the MCB will be classified as Extensive.

For municipal-bond funds, Morningstar also obtains from fund companies the average effective duration. In these cases, static breakpoints are used. These breakpoints are as follows: (i) Limited: 4.5 years or less; (ii) Moderate: more than 4.5 years but less than 7 years; and (iii) Extensive: more than 7 years. In addition, for non-U.S. taxable and non-U.S. domiciled fixed-income funds, static duration breakpoints are used: (i) Limited: less than or equal to 3.5 years; (ii) Moderate: more than 3.5 years but less than or equal to 6 years; (iii) Extensive: more than 6 years.

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Interest-rate sensitivity for non-U.S. domiciled funds (excluding funds in convertible categories) may be measured with modified duration when effective duration is not available.

Net Expense Relative to Category Median

This ratio shows how an individual fund compares to the median of all funds within its Morningstar Category. The category median is always set to equal 0.0. For example, a Large Blend fund with a Relative Expense Ratio weighting of 0.5 has 50% more expense than its median peer. The Net Expense Relative to Category Median is calculated by dividing the fund's Expense Ratio by the Category Net Expense Ratio median, then subtracting 1.

P/B Ratio TTM

The Price/Book Ratio (or P/B Ratio) for a fund is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

P/C Ratio TTM

The Price/Cash Flow Ratio (or P/C Ratio) for a fund is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

P/E Ratio TTM

The Price/Earnings Ratio (or P/E Ratio) for a fund is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is the stock's current price divided by the company's trailing 12-month earnings per share. A high P/E Ratio usually indicates the market will pay more to obtain the company's earnings because it believes in the company's abilities to increase their earnings. A low P/E Ratio indicates the market has less confidence that the company's earnings will increase, however value investors may believe such stocks have an

overlooked or undervalued potential for appreciation.

Percentage of Investments

The Percentage of Investments column indicates the percentage of net assets that any given security (either as an individual holding or as an underlying stock makes up as an overall position of the plan's investment options.

Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, funds within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

Performance Quartile

Performance Quartile reflects a fund's Morningstar Rank.

Plan Growth of 10,000

This graph shows how an investment of \$10,000 invested in the plan would have grown over time based on historical monthly returns and compares it with that of a benchmark index. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing fund expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. The growth of \$10,000 begins at the earliest common inception date of each investment option within the trailing ten years.

The benchmark index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The benchmark index does not reflect any initial or ongoing expenses. A fund's portfolio may differ significantly from the securities in the benchmark index. The index is chosen by Morningstar.

Plan Trailing Total Returns

Plan Trailing Total Returns reflect the weighted average of the underlying holdings' non-standardized returns during the same periods. The plan-level performance is calculated by applying the holding weightings supplied by the user to an individual holding's monthly returns. When monthly returns are unavailable for a holding (i.e. due to it not being in existence during the historical period being reported), the remaining portfolio holdings are re-weighted to maintain consistent proportions. Inception dates are listed in the Standardized and Tax Adjusted Returns Disclosure Statement. Trailing returns are calculated by geometrically linking these weighted-average monthly returns. The plan-level returns thus assume monthly rebalancing. Returns for individual holdings are simple time-weighted trailing returns. Neither portfolio returns nor holding returns are adjusted for loads or taxes. If they were, the returns shown would be reduced. The returns stated assume the reinvestment of dividends and capital gains. Mutual fund returns include all ongoing fund expenses. VA/VL returns reflect subaccount level fund expenses, including M&E expenses, administration fees, and actual ongoing fund-level expenses. Benchmark returns may or may not be adjusted to reflect ongoing expenses such as sales charges. An investment's portfolio may differ significantly from the securities in the benchmark. Returns for custom benchmarks are calculated by applying user-supplied weighting to each benchmark's return every month. Trailing returns are calculated by geometrically linking these weighted-average monthly returns. Custom benchmark returns thus assume monthly rebalancing.

Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

Quarterly Returns

Quarterly Return is calculated applying the same methodology as Total Return except it represents return through each quarter-end.

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R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

Regional Exposure

The regional exposure is a display of the portfolio's assets invested in the regions shown on the report.

Return vs. Category Quartiles Graph

This graph shows how the total return of a single investment matches up to the returns of its category each year for up to the past 10 years.

Relative Return

Relative Return is a ratio that shows how an individual fund compares to the average return of all funds in its Morningstar Category. The category average is always set to equal 0.00. For example, a Large Blend fund with a Relative Return of 0.5 has 50 more return than its average peer. The relative return is calculated by dividing the difference between the fund's return and the category average return by the absolute value of the category average return.

Risk/Reward Scatterplot

The risk/reward scatterplot graph plots the return and risk (measured by standard deviation) for a selection of securities and a benchmark index for the trailing period identified in the report. The table beneath the graph identifies the specific risk and return plot points for the graphed securities and the benchmark index.

The returns noted for a security reflect any sales charges that were applied in the illustration over the time period selected, but do not reflect impacts of taxation. If impacts of taxation were reflected, the returns would be lower than those indicated in the report.

The return plotted in the graph is mean geometric return. Standard

deviation is a statistical measure of the volatility of the security's or portfolio's returns in relation to the mean return. The larger the standard deviation, the greater the volatility of return in relation to the mean return.

Sector Delta

The sector delta is an equilateral triangle that depicts a fund's super sector allocation, relative to a benchmark. The sector delta is divided into four parts of equal area representing the diversified, defensive, sensitive, and cyclical classifications of a fund's portfolio and is used to represent a fund's allocation at a single point in time or over a historical period.

Sector Weightings

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Security Types

The following security types may be represented herein: bond (BD), closed-end fund (CE), collective investment trust (CIT), exchange-traded fund (ETF), holding company depository receipt (HOLDR), insurance group separate account (IGSA), index (IDX), money market mutual fund (MM), open-end mutual fund (MF), separate account (SA), stock (ST), and variable annuity/life (VA/L).

Share Change

Shares Change represents the number of shares of a stock bought or sold by a fund since the previously reported portfolio of the fund.

Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a

security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk. The higher the Sharpe Ratio, the better the portfolio's historical risk-adjusted performance. It can be used to compare two portfolios directly on how much excess return each portfolio achieved for a certain level of risk.

Sortino Ratio

Sortino Ratio is similar to the Sharpe ratio, except that it uses downside risk (downside deviation). Since upside volatility is not necessarily undesirable, the Sortino ratio is sometimes preferable to a Sharpe ratio. It measures the annualized rate of return for a given level of downside risk.

Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experience if the security was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Style Drift

The Equity Style Drift graph visually depicts a historical view of the holdings in a fund's portfolio and where they have fallen in the Morningstar Style Box™. A larger circle within the graph denotes a more recent portfolio. All circles represent a distinct month-end date where a maximum of 12 circles are available for fund companies that submit monthly portfolios and a maximum of 4 circles are available for fund companies that submit quarterly portfolios.

Stock Intersection

The stock intersection report reviews the top 25 stock holdings across

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the plan's investment option offerings. It identifies (both at the plan level and the fund level) the overall weightings of a particular security. While this report only displays the top 25 holdings, your plan portfolio may hold substantially more. For purposes of this report, all investment option offerings in the plan are considered on an equally weighted basis, regardless of the actual amount of plan assets invested in each fund.

This report is being provided to help plan fiduciaries evaluate overlap and diversification within the plan's investment option offerings and not intended to be a promotion, offer or recommendation by UBS Financial Services Inc. or Morningstar to purchase or liquidate any security listed. While the plan does not own the securities held by an open-end fund, closed-end fund, group annuity separate account or similar investment, the holdings are relevant in reviewing the overall asset allocation and diversification.

Style Count

Style count is a derivation of the Morningstar Style Box that reveals a plan's investment strategy. For equity holdings, the vertical axis shows the market capitalization of the stocks owned and the horizontal axis shows investment style (value, blend, or growth). For fixed-income holdings, the vertical axis shows the average credit quality of the bonds owned and the horizontal axis shows interest rate sensitivity as measured by a bond's duration (limited, moderate, or extended). The boxes contain the count of funds in the plan for which the weighted average of holdings falls in that box.

Style Orientation

Style orientation is a graph that visually depicts a historical view of the holdings in the portfolio and where they have fallen in the Morningstar Style Box. A larger circle within the graph denotes a more recent portfolio. All circles represent a distinct month-end date where a maximum of 12 circles are available for companies that submit monthly portfolios and a maximum of 4 circles are available for companies that submit quarterly portfolios.

Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of

taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes reinvestment of dividends and capital gains. It is the return an investor would have experienced if the fund was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Trailing Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the fund was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Treynor Ratio

Treynor Ratio is a risk-adjusted measure of return based on systematic risk. It is the annualized monthly excess return of the strategy divided by the beta of the strategy's excess returns relative to the strategy's benchmark. It is similar to the Sharpe ratio with the difference being that it uses beta as the measurement of volatility (rather than standard deviation). In using beta, the Treynor ratio assumes a portfolio is fully diversified and all unsystematic risk has been eliminated. Investors

should look for a higher Treynor number, especially relative to a strategy's benchmark, indicating a higher level of return per unit of risk.

UBS Fund Eligibility

Investment options that are not available through UBS, as well as investment options recently removed from the UBS fund eligibility list are specifically noted on the "Performance" page. These investment options are included at your request and such inclusion does not constitute an endorsement that the Plan continue to hold these investment options. Please speak with your financial advisor for additional information.

World Regions

Broad breakdown of a portfolio's geographical exposure, by region and by market maturity. Only non-cash equity assets are evaluated in determining the exposures. "Not Available" indicates the percentage of the equity portion of the portfolio for which Morningstar is unable to assess region or origin.

Investment Risks

Some of the general risk considerations associated with the investment options included in this report are described below. The descriptions are not meant to be a complete list of all investment risks. For more complete information regarding fees, expenses, risks and restrictions associated with these investments please review the offering documents and marketing materials. Investors should consult their tax advisor about their specific tax situation before investing in any securities. In addition, clients should familiarize themselves with the particular market risks and the other risks associated with the specific investment. **All investments contain risk and may lose value.**

International/Emerging Market Equities: Investing in international securities involve special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

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Sector Strategies: Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor to increased industry-specific risks.

Non-Diversified Strategies: Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

Small Cap Equities: Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and are not as well established as larger blue-chip companies. Historically, smaller company stocks have experienced a greater degree of market volatility than the overall market average.

Mid Cap Equities: Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

High-Yield Bonds: Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

Tax-Free Municipal Bonds: The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

Bonds: Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

HOLDERS: The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a

fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDER might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

Hedge Funds: The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

Bank Loan/Senior Debt: Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

Exchange Traded Notes (ETNs): ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its obligations. ETNs do not typically pay interest.

Leveraged ETFs: Levered investments are designed to meet multiples of the return performance of the index they track and seek to meet their fund objectives on a daily basis (or other time period stated within the Fund objective). The leverage/gearing ratio is the amount of excess return that a levered investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, -200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the fund to be either greater or less than the index performance multiplied by the multiple stated within the funds objective over a stated time period.

Short Positions: When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more

collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

Long-Short: Due to the strategies used by long-short funds, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these funds may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

Liquidity Risk: Closed-end fund, ETF, and HOLDER trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

Market Price Risk: The market price of ETFs, HOLDERS, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV which will affect an investor's value.

Market Risk: The market prices of ETF's and HOLDERS can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

Target-Date Funds: Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date of when investors expect to begin withdrawing their money. Target-date fund's investment objective/strategy typically becomes more conservative over time primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at anytime, including at the fund's target date.

High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

The information and data presented may be deemed reliable; however, their accuracy and completeness is not guaranteed by UBS Financial

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Services Inc.

UBS Retirement Plan Consulting Services is an investment advisory program. Details regarding the program, including fees, services, features and suitability are provided in the ADV Disclosure.

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As a firm providing wealth management services to clients, we offer both investment advisory and brokerage services. These services are separate and distinct, differ in material ways and are governed by different laws and separate contracts. For more information on the distinctions between our brokerage and investment advisory services, please speak with your Financial Advisor or visit our website at ubs.com/workingwithus. ©UBS 2016. All rights reserved. UBS Financial Services Inc. is a subsidiary of UBS AG. Member FINRA/SIPC.

Benchmark Disclosure

The past performance of an index is not a guarantee of future results. Each index reflects an unmanaged universe of securities without any deduction for advisory fees or other expenses that would reduce actual returns. An actual investment in the securities included in the index would require an investor to incur transaction costs, which would lower the performance results. Indices are not actively managed and investors cannot invest directly in the indices.

BBgBarc US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which includes the daily

reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond ETF.

MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices: Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information.

S&P 500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the U.S. stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core S&P 500 ETF.

USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months. Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

Risk and Return Benchmark Disclosure

Investment Name

MPT Index

American Funds 2010 Trgt Date Retire R6	Morningstar Lifetime Mod 2010 TR USD
American Funds 2015 Trgt Date Retire R6	Morningstar Lifetime Mod 2015 TR USD
American Funds 2020 Trgt Date Retire R6	Morningstar Lifetime Mod 2020 TR USD
American Funds 2025 Trgt Date Retire R6	Morningstar Lifetime Mod 2025 TR USD
American Funds 2030 Trgt Date Retire R6	Morningstar Lifetime Mod 2030 TR USD
American Funds 2035 Trgt Date Retire R6	Morningstar Lifetime Mod 2035 TR USD
American Funds 2040 Trgt Date Retire R6	Morningstar Lifetime Mod 2040 TR USD
American Funds 2045 Trgt Date Retire R6	Morningstar Lifetime Mod 2045 TR USD
American Funds 2050 Trgt Date Retire R6	Morningstar Lifetime Mod 2050 TR USD
American Funds 2055 Trgt Date Retire R6	Morningstar Lifetime Mod 2055 TR USD
American Funds 2060 Trgt Date Retire R6	Morningstar Lifetime Mod 2060 TR USD
American Funds Europacific Growth R6	MSCI ACWI Ex USA Growth NR USD
American Funds New Perspective R6	MSCI ACWI NR USD
American Funds Washington Mutual R6	Russell 1000 TR USD
ClearBridge Small Cap I	Russell 2000 Growth TR USD
Harbor Mid Cap Growth Retirement	Russell Mid Cap Growth TR USD
JHancock Fundamental Large Cap Core R6	Russell 1000 TR USD
Nuveen Real Estate Securities R6	S&P United States REIT TR USD
Oakmark International Institutional	MSCI ACWI Ex USA NR USD
PGIM High Yield R6	ICE BofAML US High Yield TR USD
T. Rowe Price Growth Stock I	Russell 1000 Growth TR USD
Vanguard 500 Index Admiral	Russell 1000 TR USD
Vanguard Treasury Money Market Investor	ICE BofAML USD 3M Dep OR CM TR USD

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Cobb County Government 457 Deferred Compensation Plan

Disclosure

Victory Sycamore Established Value R6	Russell Mid Cap Value TR USD
Western Asset Core Plus Bond IS	BBgBarc US Agg Bond TR USD

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Cobb County Government 457 Deferred Compensation Plan

UBS DC Report

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December 31, 2018

Prepared by:

UBS Institutional Consulting Group
UBS Financial Services Inc.

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Cobb County Government 457 Deferred Compensation Plan

Alerts Summary

Recent Alerts 01-11-2019

Name	Performance	Portfolio	Morningstar Category Change	Operations	Prospectus Net Expense Ratio (% Rank in Cat.)
	5 Yr. Total Return (% Rank in Category)	Equity Style Box Change		Manager Change	
American Funds 2010 Trgt Date Retire R6	✓	✓	✓	✓	✓
American Funds 2015 Trgt Date Retire R6	✓	✓	✓	✓	✓
American Funds 2020 Trgt Date Retire R6	✓	✓	✓	✓	✓
American Funds 2025 Trgt Date Retire R6	✓	✓	✓	✓	✓
American Funds 2030 Trgt Date Retire R6	✓	✗	✓	✓	✓
American Funds 2035 Trgt Date Retire R6	✓	✓	✓	✓	✓
American Funds 2040 Trgt Date Retire R6	✓	✓	✓	✓	✓
American Funds 2045 Trgt Date Retire R6	✓	✓	✓	✓	✓
American Funds 2050 Trgt Date Retire R6	✓	✓	✓	✓	✓
American Funds 2055 Trgt Date Retire R6	✓	✓	✓	✓	✓
American Funds 2060 Trgt Date Retire R6	—	✓	✓	✓	✓
American Funds Europacific Growth R6	✓	✓	✓	✓	✓
American Funds New Perspective R6	✓	✓	✓	✓	✓
American Funds Washington Mutual R6	✓	✓	✗	✓	✓
ClearBridge Small Cap I	✓	✓	✓	✓	✓
Harbor Mid Cap Growth Retirement	✓	✓	✓	✓	✓
JHancock Fundamental Large Cap Core R6	✗	✓	✓	✓	✓
Nuveen Real Estate Securities R6	✓	✓	✓	✓	✓
Oakmark International Institutional	✗	✓	✓	✓	✓
PGIM High Yield R6	✓	—	✓	✓	✓
T. Rowe Price Growth Stock I	✓	✓	✓	✓	✓
Vanguard 500 Index Admiral	✓	✓	✓	✓	✓
Vanguard Treasury Money Market Investor	—	—	✗	✓	✓
Victory Sycamore Established Value R6	✓	✓	✓	✓	✓

✗ Alerts Triggered

✓ Alerts Not Triggered

Note: funds that display a dash for any data column above are due to lack of data. The Alerts displayed in this report are being provided to assist retirement plan fiduciaries in evaluating the investment options offered under a defined contribution retirement plan. A number of different factors should be considered when choosing to add, remove or maintain retirement plan investment options. Please refer to Important Information on Alerts in back of this report.

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Alerts Summary

Recent Alerts 01-11-2019					
Name	Performance	Portfolio	Morningstar Category Change	Operations	Prospectus Net Expense Ratio (% Rank in Cat.)
	5 Yr. Total Return (% Rank in Category)	Equity Style Box Change		Manager Change	
Western Asset Core Plus Bond IS	✓	✓	✓	✓	✓

- ✖ Alerts Triggered
- ✓ Alerts Not Triggered

Note: funds that display a dash for any data column above are due to lack of data. The Alerts displayed in this report are being provided to assist retirement plan fiduciaries in evaluating the investment options offered under a defined contribution retirement plan. A number of different factors should be considered when choosing to add, remove or maintain retirement plan investment options. Please refer to Important Information on Alerts in back of this report.

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Cobb County Government 457 Deferred Compensation Plan

Alerts

Total Return % Rank in Category 01-11-2019

5 Yr. Total Return (% Rank in Category) greater than 50

Security Name	Initial Trigger Value	Current Trigger Value	Current Comparison Value	Current Comparison Subject
JHancock Fundamental Large Cap Core R6	61.00 (as of 11-08-2018)	75.00	50.00	—
Oakmark International Institutional	62.00 (as of 11-08-2018)	70.00	50.00	—

Portfolio Statistics 01-11-2019

Equity Style Box Change

Security Name	Initial Trigger Value	Current Trigger Value	Current Comparison Value	Current Comparison Subject
American Funds 2030 Trgt Date Retire R6	 (as of 01-07-2019)			—

Morningstar Category Change

Security Name	Initial Trigger Value	Current Trigger Value	Current Comparison Value	Current Comparison Subject
American Funds Washington Mutual R6	Large Blend (as of 11-08-2018)	Large Blend	Large Value	—
Vanguard Treasury Money Market Investor	Money Market-Taxable (as of 01-12-2019)	Money Market-Taxable	Money Market - Taxable	—

All performance rankings are based on each fund's total returns relative to other funds in it's Morningstar Category for each period shown. All other percentage rankings displayed are measured on an absolute basis and compared to its Morningstar Category for the each period shown.

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Cobb County Government 457 Deferred Compensation Plan

Plan Summary

Benchmark

S&P 500 TR USD

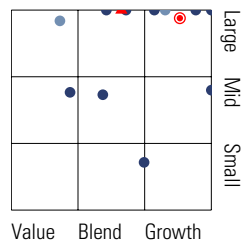
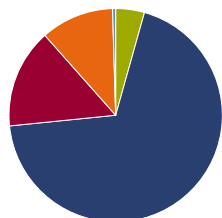
Plan Value

102,814,400.19

Total Number of Options

25

Composition 12-31-2018



Style Analysis 12-31-2018

16	18	46	Large
2	6	7	Mid
1	2	2	Small
Value	Blend	Growth	

0	19	0	High
0	63	0	Med
16	0	0	Low
Ltd	Mod	Ext	

Asset Allocation

	Portfolio Net %	Bmark Net %
Cash	4.35	0.00
US Stocks	69.04	99.16
Non-US Stocks	15.06	0.84
Bonds	11.07	0.00
Other/Not Clsfd	0.47	0.00

Equity Ownership Zone™

- Plan
- Domestic Equity
- International Equity
- Benchmark

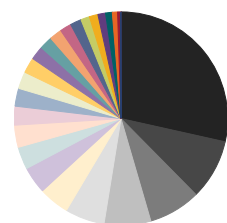
Equity Investment Style Actual %

Geo Avg Cap Plan (\$Mil)	63,346.09
Geo Avg Cap Bmark (\$Mil)	93,688.30

Fixed-Income Investment Style Actual %

Avg Effective Duration (Yrs)	5.61
Avg Effective Maturity (Yrs)	10.28
Avg Credit Quality	—

Composition By Fund 12-31-2018



Fund Name	Ticker	Plan %	Amount \$	Fund Name	Ticker	Plan %	Amount \$
T. Rowe Price Growth Stock I	PRUF	28.49	29,296,565.92	JHancock Fundamental Large Cap Core R6	JLCWX	9.11	9,369,477.71
American Funds Washington Mutual R6	RWMGX	7.88	8,101,765.35	American Funds New Perspective R6	RNPGX	7.06	7,263,230.01
Harbor Mid Cap Growth Retirement	HNMGX	5.99	6,156,646.12	ClearBridge Small Cap I	LMNSX	4.63	4,757,425.96
American Funds 2030 Trgt Date Retire R6	RFETX	4.09	4,202,092.18	Western Asset Core Plus Bond IS	WAPSX	3.41	3,502,810.03
American Funds Europacific Growth R6	REGRX	3.35	3,446,008.09	American Funds 2020 Trgt Date Retire R6	RRCTX	2.85	2,932,622.86
American Funds 2025 Trgt Date Retire R6	RFDTX	2.70	2,780,981.17	American Funds 2035 Trgt Date Retire R6	RFFTX	2.59	2,658,124.21
Oakmark International Institutional	OANIX	2.34	2,408,017.32	Nuveen Real Estate Securities R6	FREGX	2.08	2,141,975.26
American Funds 2015 Trgt Date Retire R6	RFJTX	1.98	2,039,649.87	Victory Sycamore Established Value R6	VEVRX	1.88	1,935,106.44
American Funds 2040 Trgt Date Retire R6	RFCTX	1.74	1,786,079.40	PGIM High Yield R6	PHYQX	1.70	1,747,493.85
American Funds 2045 Trgt Date Retire R6	RFHTX	1.33	1,366,851.27	American Funds 2010 Trgt Date Retire R6	RFTTX	1.31	1,343,308.57
Vanguard Treasury Money Market Investor	VUSXX	1.16	1,197,463.36	American Funds 2050 Trgt Date Retire R6	RFITX	1.01	1,040,426.65
Vanguard 500 Index Admiral	VFIAX	0.79	811,593.43	American Funds 2055 Trgt Date Retire R6	RFKTX	0.48	492,431.47
American Funds 2060 Trgt Date Retire R6	RFUTX	0.04	36,253.69				

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Cobb County Government 457 Deferred Compensation Plan

Performance

Style Count 12-31-2018

Equity Investment Style

1	2	4	Large
1	1	1	
0	0	1	Small
Value	Blend	Growth	

Equity Style Options: 11

* Does not include 11 hybrid funds.

* Style Count data is not available for 1 holdings.

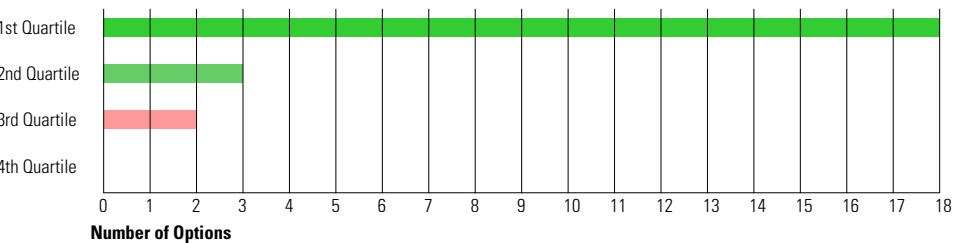
Fixed-Income Investment Style

0	0	0	High
0	1	0	
1	0	0	Low
Ltd	Mod	Ext	

Fixed-Income Options: 2

Performance Quartiles 12-31-2018

Quartile Rank (Trailing 5 Yr)



* Category % Rank is not available for 2 holdings.

Fund Performance 12-31-2018

	Type	Inception Date	Ret % YTD	Ret % 3 Mo	Ret % 1 Yr	Ret % 3 Yr	Ret % 5 Yr	Ret % 10 Yr	Ret % Since Incep	Gross Fund Exp Ratio	1 Yr % Rank	3 Yr % Rank	5 Yr % Rank	10 Yr % Rank
Large Blend(Fds)	Avg	—	-6.27	-13.53	-6.27	7.66	6.65	11.99	—	2.71	—	—	—	—
American Funds Washington Mutual R6	MF	05-01-2009	-2.66	-9.25	-2.66	10.09	8.30	12.47	13.64	0.29	12(1402)	5(1208)	15(1071)	43(805)
JHancock Fundamental Large Cap Core R6	MF	09-01-2011	-13.56	-17.74	-13.56	4.83	5.78	11.43	10.91	0.69	96(1402)	91(1208)	75(1071)	70(805)
Vanguard 500 Index Admiral	MF	11-13-2000	-4.43	-13.53	-4.43	9.22	8.46	13.10	5.51	0.04	27(1402)	16(1208)	10(1071)	19(805)
Russell 1000 TR USD	Idx	12-31-1978	-4.78	-13.82	-4.78	9.09	8.21	13.28	—	—	—	—	—	—
Large Growth(Fds)	Avg	—	-2.09	-15.43	-2.09	8.98	8.16	13.74	—	1.77	—	—	—	—
T. Rowe Price Growth Stock I	MF	08-28-2015	-0.89	-14.10	-0.89	10.45	10.22	16.14	10.40	0.52	37(1405)	28(1247)	19(1107)	12(799)
Russell 1000 Growth TR USD	Idx	12-31-1978	-1.51	-15.89	-1.51	11.15	10.40	15.29	—	—	—	—	—	—

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Cobb County Government 457 Deferred Compensation Plan

Performance

Fund Performance 12-31-2018

	Type	Inception Date	Ret % YTD	Ret % 3 Mo	Ret % 1 Yr	Ret % 3 Yr	Ret % 5 Yr	Ret % 10 Yr	Ret % Since Incep	Gross Fund Exp Ratio	1 Yr % Rank	3 Yr % Rank	5 Yr % Rank	10 Yr % Rank
Mid-Cap Value(Fds)	Avg	—	-12.86	-15.72	-12.86	5.42	3.88	11.66	—	2.38	—	—	—	—
Victory Sycamore Established Value R6	MF	03-04-2014	-9.95	-15.21	-9.95	8.18	7.50	13.36	7.26	0.54	24(417)	12(363)	3(306)	13(218)
Russell Mid Cap Value TR USD	Idx	12-31-1985	-12.29	-14.95	-12.29	6.06	5.44	13.03	—	—	—	—	—	—
Mid-Cap Growth(Fds)	Avg	—	-6.65	-17.57	-6.65	7.27	5.61	13.16	—	2.55	—	—	—	—
Harbor Mid Cap Growth Retirement	MF	03-01-2016	-1.57	-18.53	-1.57	9.50	7.17	13.11	14.38	0.81	14(605)	23(542)	25(489)	53(341)
Russell Mid Cap Growth TR USD	Idx	12-31-1985	-4.75	-15.99	-4.75	8.59	7.42	15.12	—	—	—	—	—	—
Small Growth(Fds)	Avg	—	-5.76	-20.82	-5.76	8.47	5.12	13.36	—	1.92	—	—	—	—
ClearBridge Small Cap I	MF	12-01-1994	-8.88	-19.96	-8.88	9.27	6.20	14.85	10.49	0.98	71(676)	38(583)	31(516)	24(391)
Russell 2000 Growth TR USD	Idx	12-31-1978	-9.31	-21.65	-9.31	7.24	5.13	13.52	—	—	—	—	—	—
Real Estate(Fds)	Avg	—	-5.97	-7.19	-5.97	2.45	6.92	11.50	—	2.49	—	—	—	—
Nuveen Real Estate Securities R6	MF	04-30-2013	-5.39	-6.40	-5.39	2.32	7.86	12.42	4.75	0.87	51(251)	46(223)	28(193)	17(139)
S&P United States REIT TR USD	Idx	12-31-1992	-3.79	-6.09	-3.79	2.88	7.78	12.16	—	—	—	—	—	—
Foreign Large Blend(Fds)	Avg	—	-14.59	-12.68	-14.59	2.63	0.10	5.89	—	2.43	—	—	—	—
Oakmark International Institutional	MF	11-30-2016	-23.32	-16.30	-23.32	2.48	-0.42	9.83	1.47	0.82	99(741)	59(639)	70(508)	2(380)
MSCI ACWI Ex USA NR USD	Idx	01-01-2001	-14.20	-11.46	-14.20	4.48	0.68	6.57	—	—	—	—	—	—
Foreign Large Growth(Fds)	Avg	—	-14.08	-13.87	-14.08	3.21	1.38	7.43	—	1.48	—	—	—	—
American Funds Europacific Growth R6	MF	05-01-2009	-14.91	-12.59	-14.91	4.08	1.86	7.69	7.72	0.49	58(439)	33(364)	36(315)	42(228)
MSCI ACWI Ex USA Growth NR USD	Idx	01-01-2001	-14.43	-12.20	-14.43	4.19	1.69	7.15	—	—	—	—	—	—
World Large Stock(Fds)	Avg	—	-9.64	-12.94	-9.64	5.69	3.72	9.33	—	2.22	—	—	—	—
American Funds New Perspective R6	MF	05-01-2009	-5.56	-13.15	-5.56	7.66	6.42	11.76	11.95	0.45	18(901)	19(729)	11(618)	11(360)
MSCI ACWI NR USD	Idx	01-01-2001	-9.42	-12.75	-9.42	6.60	4.26	9.46	—	—	—	—	—	—

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period shown.

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Performance

Fund Performance 12-31-2018

	Type	Inception Date	Ret % YTD	Ret % 3 Mo	Ret % 1 Yr	Ret % 3 Yr	Ret % 5 Yr	Ret % 10 Yr	Ret % Since Incep	Gross Fund Exp Ratio	1 Yr % Rank	3 Yr % Rank	5 Yr % Rank	10 Yr % Rank
Intermediate-Term Bond(Fds)	Avg	—	-0.50	0.87	-0.50	2.15	2.27	4.31	—	1.82	—	—	—	—
Western Asset Core Plus Bond IS	MF	08-04-2008	-1.47	0.78	-1.47	3.35	3.80	6.92	6.17	0.43	85(1019)	6(876)	3(767)	2(560)
BBgBarc US Agg Bond TR USD	Idx	01-01-1976	0.01	1.64	0.01	2.06	2.52	3.48	—	—	—	—	—	—
High Yield Bond(Fds)	Avg	—	-2.59	-4.33	-2.59	5.59	2.71	9.25	—	2.50	—	—	—	—
PGIM High Yield R6	MF	10-31-2011	-1.18	-4.14	-1.18	7.16	4.28	10.20	6.05	0.42	21(695)	9(604)	4(507)	22(329)
ICE BofAML US High Yield TR USD	Idx	08-29-1986	-2.26	-4.67	-2.26	7.27	3.82	10.99	—	—	—	—	—	—
Target-Date 2000-2010(Fds)	Avg	—	-3.25	-4.30	-3.25	4.11	3.22	6.96	—	2.81	—	—	—	—
American Funds 2010 Trgt Date Retire R6	MF	07-13-2009	-2.49	-3.64	-2.49	4.97	4.14	7.96	7.84	0.33	22(137)	1(118)	1(93)	9(76)
Morningstar Lifetime Mod 2010 TR USD	Idx	02-18-2009	-2.97	-4.63	-2.97	4.47	3.37	6.96	—	—	—	—	—	—
Target-Date 2015(Fds)	Avg	—	-3.86	-5.41	-3.86	4.39	3.36	7.49	—	4.64	—	—	—	—
American Funds 2015 Trgt Date Retire R6	MF	07-13-2009	-2.72	-4.21	-2.72	5.17	4.28	8.42	8.32	0.33	7(142)	9(118)	1(82)	14(49)
Morningstar Lifetime Mod 2015 TR USD	Idx	02-18-2009	-3.54	-5.20	-3.54	4.79	3.61	7.55	—	—	—	—	—	—
Target-Date 2020(Fds)	Avg	—	-4.49	-6.14	-4.49	4.54	3.41	7.73	—	1.61	—	—	—	—
American Funds 2020 Trgt Date Retire R6	MF	07-13-2009	-2.69	-4.88	-2.69	5.55	4.69	9.22	9.09	0.34	4(250)	8(206)	1(165)	5(107)
Morningstar Lifetime Mod 2020 TR USD	Idx	02-18-2009	-4.16	-5.95	-4.16	5.18	3.87	8.27	—	—	—	—	—	—
Target-Date 2025(Fds)	Avg	—	-5.34	-7.47	-5.34	5.05	3.71	8.55	—	1.70	—	—	—	—
American Funds 2025 Trgt Date Retire R6	MF	07-13-2009	-3.47	-6.32	-3.47	6.12	5.00	10.21	10.08	0.36	2(226)	3(189)	1(146)	3(73)
Morningstar Lifetime Mod 2025 TR USD	Idx	02-18-2009	-4.90	-7.01	-4.90	5.69	4.16	9.05	—	—	—	—	—	—
Target-Date 2030(Fds)	Avg	—	-6.25	-8.82	-6.25	5.45	3.94	8.86	—	1.50	—	—	—	—
American Funds 2030 Trgt Date Retire R6	MF	07-13-2009	-4.16	-7.86	-4.16	6.92	5.63	10.86	10.76	0.38	2(239)	1(196)	1(155)	2(97)
Morningstar Lifetime Mod 2030 TR USD	Idx	02-18-2009	-5.82	-8.44	-5.82	6.26	4.44	9.74	—	—	—	—	—	—

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period shown.

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Cobb County Government 457 Deferred Compensation Plan

Performance

Fund Performance 12-31-2018														
	Type	Inception Date	Ret % YTD	Ret % 3 Mo	Ret % 1 Yr	Ret % 3 Yr	Ret % 5 Yr	Ret % 10 Yr	Ret % Since Incep	Gross Fund Exp Ratio	1 Yr % Rank	3 Yr % Rank	5 Yr % Rank	10 Yr % Rank
Target-Date 2035(Fds)	Avg	—	-7.04	-10.13	-7.04	5.83	4.14	9.44	—	2.27	—	—	—	—
American Funds 2035 Trgt Date Retire R6	MF	07-13-2009	-5.14	-9.75	-5.14	7.43	5.95	11.08	10.97	0.39	6(221)	1(184)	1(141)	3(68)
Morningstar Lifetime Mod 2035 TR USD	Idx	02-18-2009	-6.82	-9.95	-6.82	6.72	4.61	10.17	—	—	—	—	—	—
Target-Date 2040(Fds)	Avg	—	-7.74	-11.01	-7.74	5.96	4.23	9.48	—	1.79	—	—	—	—
American Funds 2040 Trgt Date Retire R6	MF	07-27-2009	-5.52	-10.40	-5.52	7.62	6.05	11.19	10.22	0.40	4(239)	1(196)	1(155)	3(97)
Morningstar Lifetime Mod 2040 TR USD	Idx	02-18-2009	-7.65	-11.09	-7.65	6.98	4.65	10.32	—	—	—	—	—	—
Target-Date 2045(Fds)	Avg	—	-8.14	-11.71	-8.14	6.13	4.30	9.78	—	2.42	—	—	—	—
American Funds 2045 Trgt Date Retire R6	MF	07-13-2009	-5.58	-10.66	-5.58	7.77	6.17	11.25	11.16	0.40	3(221)	1(184)	1(141)	3(67)
Morningstar Lifetime Mod 2045 TR USD	Idx	02-18-2009	-8.17	-11.67	-8.17	7.05	4.60	10.32	—	—	—	—	—	—
Target-Date 2050(Fds)	Avg	—	-8.41	-11.91	-8.41	6.11	4.33	9.60	—	1.74	—	—	—	—
American Funds 2050 Trgt Date Retire R6	MF	07-13-2009	-5.61	-10.84	-5.61	7.83	6.19	11.27	11.18	0.41	3(239)	1(196)	1(155)	3(79)
Morningstar Lifetime Mod 2050 TR USD	Idx	02-18-2009	-8.41	-11.81	-8.41	7.05	4.51	10.27	—	—	—	—	—	—
Target-Date 2055(Fds)	Avg	—	-8.44	-12.12	-8.44	6.21	4.42	10.41	—	3.25	—	—	—	—
American Funds 2055 Trgt Date Retire R6	MF	02-01-2010	-5.65	-10.88	-5.65	7.81	6.17	—	9.57	0.42	3(221)	1(182)	1(115)	—
Morningstar Lifetime Mod 2055 TR USD	Idx	02-18-2009	-8.57	-11.84	-8.57	7.04	4.42	10.19	—	—	—	—	—	—
Target-Date 2060+(Fds)	Avg	—	-8.52	-12.28	-8.52	6.31	4.16	—	—	7.94	—	—	—	—
American Funds 2060 Trgt Date Retire R6	MF	03-27-2015	-5.64	-10.88	-5.64	7.81	—	—	5.72	0.44	2(201)	1(99)	—	—
Morningstar Lifetime Mod 2060 TR USD	Idx	06-23-2014	-8.69	-11.81	-8.69	7.02	4.34	10.22	—	—	—	—	—	—
Money Market-Taxable(FM)	Avg	—	1.41	0.44	1.41	0.66	0.40	0.22	—	0.56	—	—	—	—
Vanguard Treasury Money Market Investor	FM	12-14-1992	1.80	0.54	1.80	0.95	0.57	0.32	2.47	0.09	—	—	—	—
ICE BofAML USD 3M Dep OR CM TR USD	Idx	12-30-1994	2.08	0.57	2.08	1.28	0.86	0.67	—	—	—	—	—	—

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period shown.

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Cobb County Government 457 Deferred Compensation Plan

Performance

Standard Benchmark Returns 12-31-2018														
	Type	Inception Date	Ret % YTD	Ret % 3 Mo	Ret % 1 Yr	Ret % 3 Yr	Ret % 5 Yr	Ret % 10 Yr	Ret % Since Incep	Gross Fund Exp Ratio	1 Yr % Rank	3 Yr % Rank	5 Yr % Rank	10 Yr % Rank
S&P 500 TR USD	Idx	—	-4.38	-13.52	-4.38	9.26	8.49	13.12	—	—	—	—	—	—
BBgBarc US Agg Bond TR USD	Idx	—	0.01	1.64	0.01	2.06	2.52	3.48	—	—	—	—	—	—
MSCI EAFE NR USD	Idx	—	-13.79	-12.54	-13.79	2.87	0.53	6.32	—	—	—	—	—	—
USTREAS T-Bill Auction Ave 3 Mon	Idx	—	2.02	0.60	2.02	1.11	0.68	0.39	—	—	—	—	—	—

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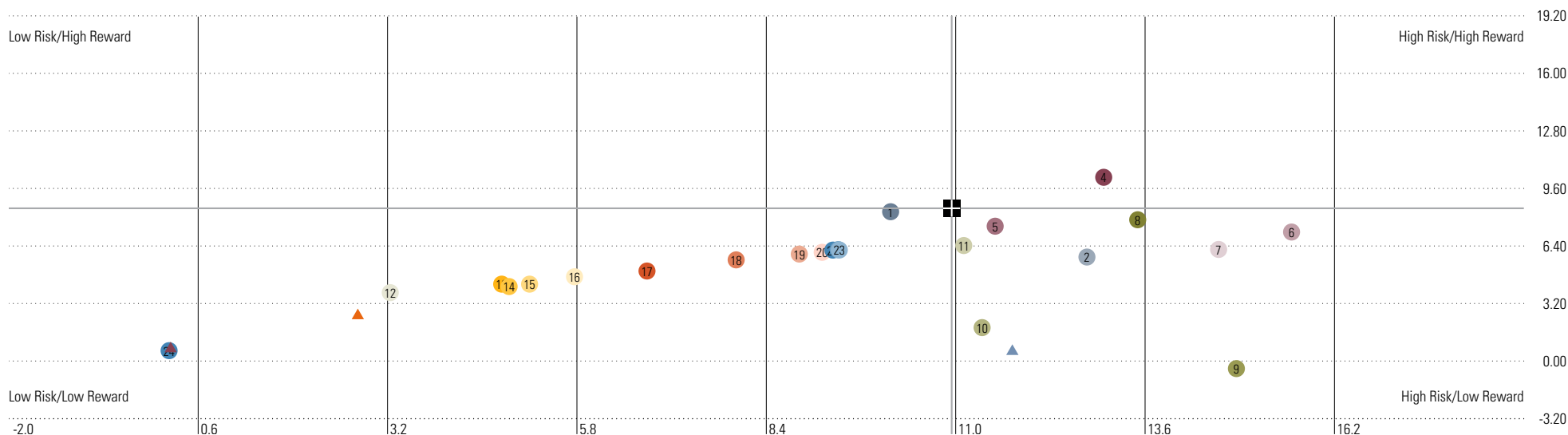
Cobb County Government 457 Deferred Compensation Plan

Risk and Return

Risk/Return 12-31-2018

Benchmarks ■ S&P 500 TR USD ▲ BBgBarc US Agg Bond TR USD ▲ MSCI EAFE NR USD ▲ USTREAS T-Bill Auction Ave 3 Mon

5 Year Mean



* Data not available for 1 options/funds.

Risk/Return Detail 12-31-2018

	Type	Std Dev 5 Yr	Mean 5 Yr	Alpha 5 Yr	Beta 5 Yr	R2 5 Yr	Information Ratio 5Yr	Treynor 5 Yr	Sharpe Ratio 5 Yr	Upside Capture 5 Yr	Downside Capture 5 Yr
Large Blend(Fds)	Avg	11.28	6.65	-1.33	0.99	92.94	-0.57	6.12	0.57	93.73	102.73
① American Funds Washington Mutual R6	MF	10.11	8.30	0.81	0.90	95.14	0.04	8.51	0.77	94.08	89.21
② JHancock Fundamental Large Cap Core R6	MF	12.80	5.78	-2.90	1.11	90.15	-0.58	4.62	0.45	99.52	119.77
③ Vanguard 500 Index Admiral	MF	10.94	8.46	0.28	0.99	99.72	0.42	7.83	0.73	100.58	98.90
Russell 1000 TR USD	Idx	11.01	8.21	—	—	—	—	—	0.71	—	—
Large Growth(Fds)	Avg	12.60	8.16	-1.90	0.99	89.31	-0.63	7.53	0.64	93.42	106.00
④ T. Rowe Price Growth Stock I	MF	13.03	10.22	-0.32	1.03	89.14	-0.04	9.28	0.76	101.76	104.66
Russell 1000 Growth TR USD	Idx	11.96	10.40	—	—	—	—	—	0.83	—	—

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Cobb County Government 457 Deferred Compensation Plan

Risk and Return

Risk/Return Detail 12-31-2018

	Type	Std Dev 5 Yr	Mean 5 Yr	Alpha 5 Yr	Beta 5 Yr	R2 5 Yr	Information Ratio 5Yr	Treynor 5 Yr	Sharpe Ratio 5 Yr	Upside Capture 5 Yr	Downside Capture 5 Yr
Mid-Cap Value(Fds)	Avg	12.39	3.88	-1.51	1.02	89.05	-0.39	3.23	0.32	95.67	106.13
5 Victory Sycamore Established Value R6	MF	11.54	7.50	2.09	0.97	92.73	0.65	7.01	0.62	102.45	87.84
Russell Mid Cap Value TR USD	Idx	11.42	5.44	—	—	—	—	—	0.46	—	—
Mid-Cap Growth(Fds)	Avg	13.48	5.61	-1.61	1.00	87.45	-0.47	5.02	0.43	95.44	106.10
6 Harbor Mid Cap Growth Retirement	MF	15.61	7.17	-1.11	1.18	90.14	-0.05	5.49	0.48	112.93	121.11
Russell Mid Cap Growth TR USD	Idx	12.51	7.42	—	—	—	—	—	0.58	—	—
Small Growth(Fds)	Avg	15.84	5.12	0.36	0.92	89.70	0.01	4.91	0.36	91.76	90.16
7 ClearBridge Small Cap I	MF	14.61	6.20	1.64	0.84	88.35	0.19	6.55	0.44	89.68	82.34
Russell 2000 Growth TR USD	Idx	16.30	5.13	—	—	—	—	—	0.35	—	—
Real Estate(Fds)	Avg	13.17	6.92	-0.18	0.91	93.22	-0.37	7.20	0.54	89.04	89.24
8 Nuveen Real Estate Securities R6	MF	13.50	7.86	0.33	0.96	99.09	0.05	7.50	0.58	95.92	93.74
S&P United States REIT TR USD	Idx	14.04	7.78	—	—	—	—	—	0.56	—	—
Foreign Large Blend(Fds)	Avg	11.63	0.10	-0.56	0.93	90.51	-0.15	-0.55	0.01	89.42	92.83
9 Oakmark International Institutional	MF	14.85	-0.42	-0.81	1.15	84.68	-0.18	-0.96	0.00	110.28	117.15
MSCI ACWI Ex USA NR USD	Idx	11.92	0.68	—	—	—	—	—	0.06	—	—
Foreign Large Growth(Fds)	Avg	10.85	1.38	0.72	0.94	87.12	0.08	5.55	0.52	94.49	89.16
10 American Funds Europacific Growth R6	MF	11.36	1.86	0.23	0.93	93.57	0.06	1.26	0.16	92.57	90.84
MSCI ACWI Ex USA Growth NR USD	Idx	11.79	1.69	—	—	—	—	—	0.14	—	—
World Large Stock(Fds)	Avg	11.25	3.72	-0.47	0.96	86.60	-0.19	3.23	0.32	94.28	97.94
11 American Funds New Perspective R6	MF	11.11	6.42	2.04	0.98	91.10	0.61	5.87	0.55	103.49	89.11
MSCI ACWI NR USD	Idx	10.87	4.26	—	—	—	—	—	0.38	—	—
Intermediate-Term Bond(Fds)	Avg	2.65	2.27	0.02	0.86	84.25	-0.37	1.91	0.61	88.88	87.68
12 Western Asset Core Plus Bond IS	MF	3.24	3.80	1.18	1.04	80.09	0.87	3.00	0.95	118.66	88.61
BBgBarc US Agg Bond TR USD	Idx	2.79	2.52	—	—	—	—	—	0.66	—	—

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Cobb County Government 457 Deferred Compensation Plan

Risk and Return

Risk/Return Detail 12-31-2018

	Type	Std Dev 5 Yr	Mean 5 Yr	Alpha 5 Yr	Beta 5 Yr	R2 5 Yr	Information Ratio 5Yr	Treynor 5 Yr	Sharpe Ratio 5 Yr	Upside Capture 5 Yr	Downside Capture 5 Yr
High Yield Bond(Fds)	Avg	4.78	2.71	-0.64	0.86	87.60	-0.69	2.75	0.50	82.41	90.45
13 PGIM High Yield R6	MF	4.77	4.28	0.69	0.92	97.40	0.51	3.92	0.76	95.87	84.86
ICE BofAML US High Yield TR USD	Idx	5.14	3.82	—	—	—	—	—	0.62	—	—
Target-Date 2000-2010(Fds)	Avg	4.39	3.22	-0.14	1.01	92.37	-0.09	4.25	0.97	97.13	96.43
14 American Funds 2010 Trgt Date Retire R6	MF	4.87	4.14	0.69	1.03	94.11	0.65	3.37	0.71	107.25	96.66
Morningstar Lifetime Mod 2010 TR USD	Idx	4.60	3.37	—	—	—	—	—	0.59	—	—
Target-Date 2015(Fds)	Avg	4.94	3.36	-0.21	1.02	92.87	-0.06	4.66	0.96	98.17	98.50
15 American Funds 2015 Trgt Date Retire R6	MF	5.15	4.28	0.70	0.98	94.66	0.56	3.66	0.70	102.59	92.19
Morningstar Lifetime Mod 2015 TR USD	Idx	5.11	3.61	—	—	—	—	—	0.58	—	—
Target-Date 2020(Fds)	Avg	5.29	3.41	-0.25	0.97	92.28	-0.23	5.19	0.95	93.79	95.21
16 American Funds 2020 Trgt Date Retire R6	MF	5.77	4.69	0.87	0.98	95.11	0.64	4.10	0.70	102.84	91.57
Morningstar Lifetime Mod 2020 TR USD	Idx	5.76	3.87	—	—	—	—	—	0.57	—	—
Target-Date 2025(Fds)	Avg	6.16	3.71	-0.27	0.99	94.96	-0.20	5.91	0.95	95.79	97.17
17 American Funds 2025 Trgt Date Retire R6	MF	6.76	5.00	0.84	0.99	95.70	0.60	4.35	0.65	103.91	94.71
Morningstar Lifetime Mod 2025 TR USD	Idx	6.66	4.16	—	—	—	—	—	0.54	—	—
Target-Date 2030(Fds)	Avg	6.97	3.94	-0.22	0.96	94.51	-0.26	6.75	0.94	94.78	96.28
18 American Funds 2030 Trgt Date Retire R6	MF	7.99	5.63	1.10	1.01	96.51	0.79	4.88	0.64	106.33	95.97
Morningstar Lifetime Mod 2030 TR USD	Idx	7.75	4.44	—	—	—	—	—	0.51	—	—
Target-Date 2035(Fds)	Avg	7.75	4.14	-0.17	0.96	96.43	-0.27	7.47	0.93	94.70	95.29
19 American Funds 2035 Trgt Date Retire R6	MF	8.85	5.95	1.31	0.99	96.76	0.83	5.30	0.62	104.82	93.74
Morningstar Lifetime Mod 2035 TR USD	Idx	8.77	4.61	—	—	—	—	—	0.48	—	—
Target-Date 2040(Fds)	Avg	8.16	4.23	-0.04	0.94	95.01	-0.25	8.00	0.93	93.47	93.09
20 American Funds 2040 Trgt Date Retire R6	MF	9.17	6.05	1.50	0.96	96.96	0.84	5.62	0.61	101.88	89.94
Morningstar Lifetime Mod 2040 TR USD	Idx	9.45	4.65	—	—	—	—	—	0.46	—	—

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Cobb County Government 457 Deferred Compensation Plan

Risk and Return

Risk/Return Detail 12-31-2018

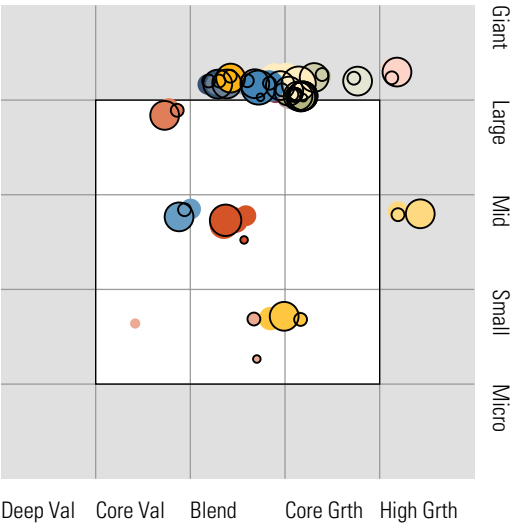
	Type	Std Dev 5 Yr	Mean 5 Yr	Alpha 5 Yr	Beta 5 Yr	R2 5 Yr	Information Ratio 5Yr	Treynor 5 Yr	Sharpe Ratio 5 Yr	Upside Capture 5 Yr	Downside Capture 5 Yr
Target-Date 2045(Fds)	Avg	8.54	4.30	0.01	0.97	96.61	-0.14	8.14	0.93	95.06	93.20
21 American Funds 2045 Trgt Date Retire R6	MF	9.31	6.17	1.71	0.94	96.74	0.88	5.84	0.62	99.42	85.37
Morningstar Lifetime Mod 2045 TR USD	Idx	9.76	4.60	—	—	—	—	—	0.44	—	—
Target-Date 2050(Fds)	Avg	8.59	4.33	0.21	0.95	94.89	-0.04	8.30	0.93	94.88	91.68
22 American Funds 2050 Trgt Date Retire R6	MF	9.39	6.19	1.82	0.94	96.68	0.92	5.88	0.61	99.61	84.84
Morningstar Lifetime Mod 2050 TR USD	Idx	9.85	4.51	—	—	—	—	—	0.43	—	—
Target-Date 2055(Fds)	Avg	8.73	4.42	0.39	0.97	96.45	0.12	8.38	0.94	97.37	92.65
23 American Funds 2055 Trgt Date Retire R6	MF	9.40	6.17	1.90	0.93	96.49	0.93	5.89	0.61	99.69	84.48
Morningstar Lifetime Mod 2055 TR USD	Idx	9.90	4.42	—	—	—	—	—	0.42	—	—
Target-Date 2060+(Fds)	Avg	8.49	4.16	0.43	0.95	97.33	0.07	8.31	0.93	95.24	90.20
American Funds 2060 Trgt Date Retire R6	MF	—	—	—	—	—	—	—	—	—	—
Morningstar Lifetime Mod 2060 TR USD	Idx	9.91	4.34	—	—	—	—	—	0.41	—	—
Money Market-Taxable(FM)	Avg	0.14	0.40	-0.33	0.36	10.19	-5.48	-0.73	-3.49	40.39	-185.32
24 Vanguard Treasury Money Market Investor	FM	0.20	0.57	-0.15	0.23	29.28	-5.17	-0.47	-3.83	66.37	-466.67
ICE BofAML USD 3M Dep OR CM TR USD	Idx	0.21	0.86	—	—	—	—	—	2.72	—	—

Cobb County Government 457 Deferred Compensation Plan

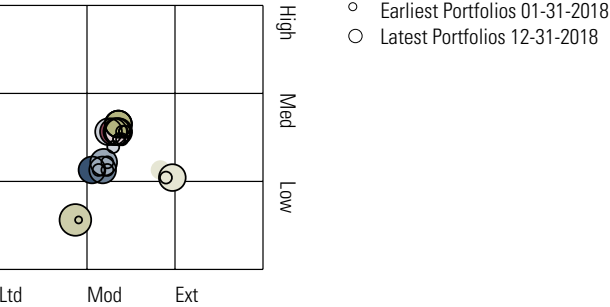
Style Drift

Style Orientation 12-31-2018

Equity Style Drift - 1 Year



Fixed-Income Style Drift - 1 Year



Equity Options

- American Funds 2010 Trgt Date Retire R6
- American Funds 2020 Trgt Date Retire R6
- American Funds 2030 Trgt Date Retire R6
- American Funds 2040 Trgt Date Retire R6
- American Funds 2050 Trgt Date Retire R6
- American Funds 2060 Trgt Date Retire R6
- American Funds New Perspective R6
- ClearBridge Small Cap I
- JHancock Fundamental Large Cap Core R6
- Oakmark International Institutional
- T. Rowe Price Growth Stock I
- Victory Sycamore Established Value R6
- American Funds 2015 Trgt Date Retire R6
- American Funds 2025 Trgt Date Retire R6
- American Funds 2035 Trgt Date Retire R6
- American Funds 2045 Trgt Date Retire R6
- American Funds 2055 Trgt Date Retire R6
- American Funds Europacific Growth R6
- American Funds Washington Mutual R6
- Harbor Mid Cap Growth Retirement
- Nuveen Real Estate Securities R6
- PGIM High Yield R6
- Vanguard 500 Index Admiral

Fixed-Income Options

- American Funds 2010 Trgt Date Retire R6
- American Funds 2020 Trgt Date Retire R6
- American Funds 2030 Trgt Date Retire R6
- American Funds 2040 Trgt Date Retire R6
- American Funds 2050 Trgt Date Retire R6
- American Funds 2060 Trgt Date Retire R6
- Western Asset Core Plus Bond IS
- American Funds 2015 Trgt Date Retire R6
- American Funds 2025 Trgt Date Retire R6
- American Funds 2035 Trgt Date Retire R6
- American Funds 2045 Trgt Date Retire R6
- American Funds 2055 Trgt Date Retire R6
- PGIM High Yield R6

Please refer to "Style Drift" in the back of this report for more complete information on the graphical illustrations above.

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Cobb County Government 457 Deferred Compensation Plan

Style Drift

Style Orientation 12-31-2018

*Data not available for 1 options/funds

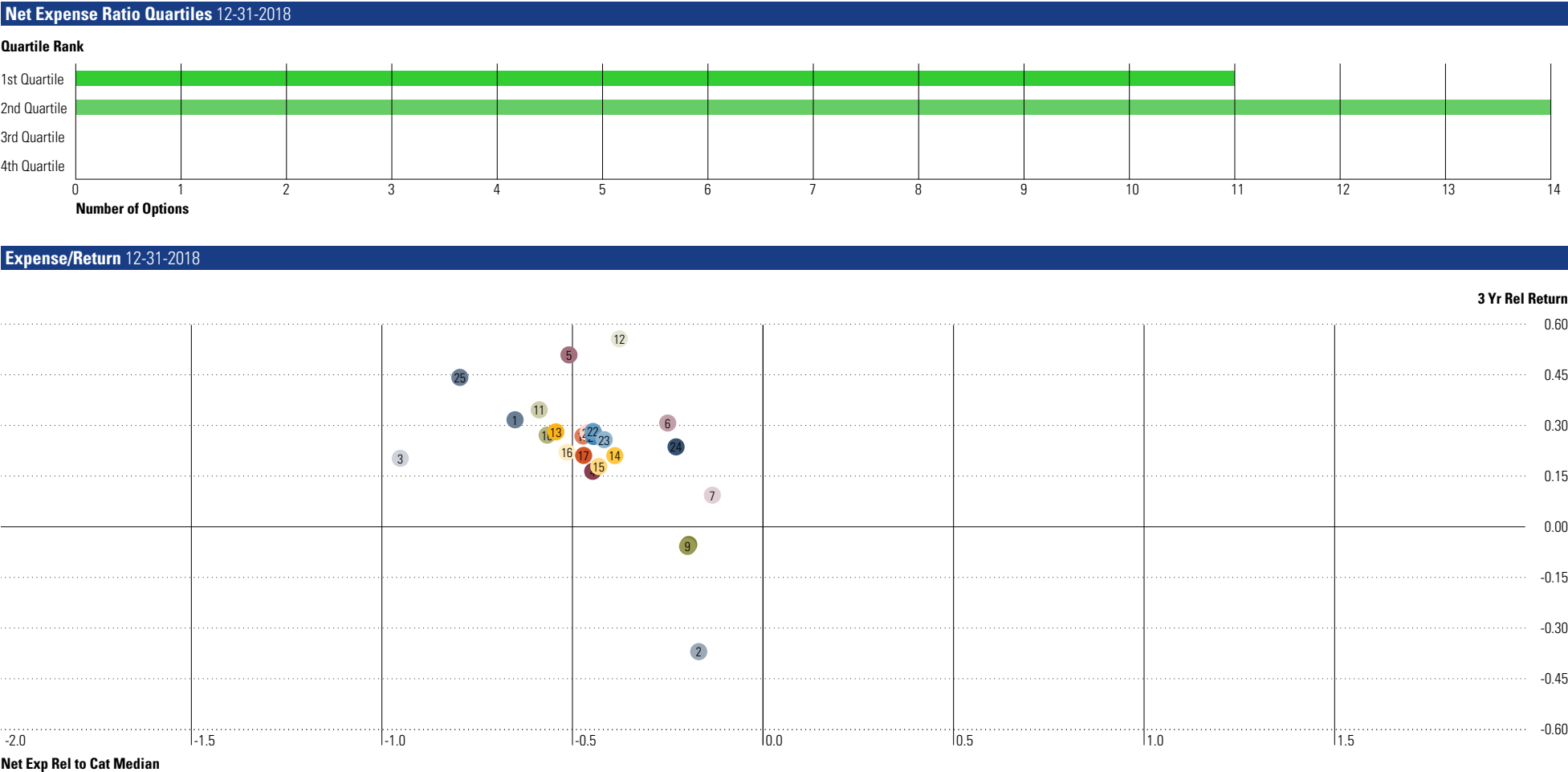
Please refer to "Style Drift" in the back of this report for more complete information on the graphical illustrations above.

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Cobb County Government 457 Deferred Compensation Plan

Investment Costs



Cost measures for mutual funds use Prospectus Net Expense Ratio. For VAs, total insurance expense is included in the Prospectus ratio. For CITs, CEs, and ETFs, Net Operating Expense Ratio is used. The Weighted Average Cost is the total of each security's Expense Ratio, multiplied by the weight of each security's assets in the plan, multiplied by 100.

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Cobb County Government 457 Deferred Compensation Plan

Investment Costs

Investment Costs 12-31-2018											
	Type	Market Value \$	% of Portfolio	Gross Exp Ratio %	Net Exp Ratio %	Net Fund Exp \$	Rel to Cat	Net Exp Median	Current 12b-1	Weighted Avg Cost	Net Exp % Rank in Cat
Large Blend(Fds)		Med	—	—	0.88	0.83	—	—	0.25	—	—
① American Funds Washington Mutual R6	MF	8,101,765.35	7.88	0.29	0.29	23,495.12	-0.65	—	—	0.0229	20
② JHancock Fundamental Large Cap Core R6	MF	9,369,477.71	9.11	0.69	0.69	64,649.40	-0.17	0.00	0.00	0.0629	39
③ Vanguard 500 Index Admiral	MF	811,593.43	0.79	0.04	0.04	324.64	-0.95	—	—	0.0003	6
Russell 1000 TR USD		Idx	—	—	—	—	—	—	—	—	—
Large Growth(Fds)		Med	—	—	0.97	0.94	—	—	0.25	—	—
④ T. Rowe Price Growth Stock I	MF	29,296,565.92	28.49	0.52	0.52	152,342.14	-0.45	—	—	0.1482	23
Russell 1000 Growth TR USD		Idx	—	—	—	—	—	—	—	—	—
Mid-Cap Value(Fds)		Med	—	—	1.11	1.10	—	—	0.25	—	—
⑤ Victory Sycamore Established Value R6	MF	1,935,106.44	1.88	0.54	0.54	10,449.57	-0.51	0.00	0.00	0.0102	16
Russell Mid Cap Value TR USD		Idx	—	—	—	—	—	—	—	—	—
Mid-Cap Growth(Fds)		Med	—	—	1.11	1.08	—	—	0.25	—	—
⑥ Harbor Mid Cap Growth Retirement	MF	6,156,646.12	5.99	0.81	0.81	49,868.83	-0.25	—	—	0.0485	30
Russell Mid Cap Growth TR USD		Idx	—	—	—	—	—	—	—	—	—
Small Growth(Fds)		Med	—	—	1.17	1.13	—	—	0.25	—	—
⑦ ClearBridge Small Cap I	MF	4,757,425.96	4.63	0.98	0.98	46,622.77	-0.13	—	—	0.0453	39
Russell 2000 Growth TR USD		Idx	—	—	—	—	—	—	—	—	—
Real Estate(Fds)		Med	—	—	1.10	1.08	—	—	0.25	—	—
⑧ Nuveen Real Estate Securities R6	MF	2,141,975.26	2.08	0.87	0.87	18,635.18	-0.19	0.00	0.00	0.0181	38
S&P United States REIT TR USD		Idx	—	—	—	—	—	—	—	—	—
Foreign Large Blend(Fds)		Med	—	—	1.04	0.96	—	—	0.25	—	—
⑨ Oakmark International Institutional	MF	2,408,017.32	2.34	0.82	0.77 ¹	18,541.73	-0.20	—	—	0.0180	42
MSCI ACWI Ex USA NR USD		Idx	—	—	—	—	—	—	—	—	—

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Cobb County Government 457 Deferred Compensation Plan

Investment Costs

Investment Costs 12-31-2018

	Type	Market Value \$	% of Portfolio	Gross Exp Ratio %	Net Exp Ratio %	Net Fund Exp \$	Rel to Cat	Net Exp Median	Current 12b-1	Weighted Avg Cost	Net Exp % Rank in Cat
Foreign Large Growth(Fds)	Med	—	—	1.13	1.13	—	—	—	0.25	—	—
¹⁰ American Funds Europacific Growth R6	MF	3,446,008.09	3.35	0.49	0.49	16,885.44	-0.57	—	—	0.0164	12
MSCI ACWI Ex USA Growth NR USD	Idx	—	—	—	—	—	—	—	—	—	—
World Large Stock(Fds)	Med	—	—	1.12	1.09	—	—	—	0.25	—	—
¹¹ American Funds New Perspective R6	MF	7,263,230.01	7.06	0.45	0.45	32,684.54	-0.59	—	—	0.0318	16
MSCI ACWI NR USD	Idx	—	—	—	—	—	—	—	—	—	—
Intermediate-Term Bond(Fds)	Med	—	—	0.74	0.69	—	—	—	0.25	—	—
¹² Western Asset Core Plus Bond IS	MF	3,502,810.03	3.41	0.43	0.43	15,062.08	-0.38	—	—	0.0146	30
BBgBarc US Agg Bond TR USD	Idx	—	—	—	—	—	—	—	—	—	—
High Yield Bond(Fds)	Med	—	—	0.96	0.92	—	—	—	0.25	—	—
¹³ PGIM High Yield R6	MF	1,747,493.85	1.70	0.42	0.42	7,339.47	-0.54	—	—	0.0071	13
ICE BofAML US High Yield TR USD	Idx	—	—	—	—	—	—	—	—	—	—
Target-Date 2000-2010(Fds)	Med	—	—	0.68	0.54	—	—	—	0.50	—	—
¹⁴ American Funds 2010 Trgt Date Retire R6	MF	1,343,308.57	1.31	0.33	0.33	4,432.92	-0.39	—	—	0.0043	24
Morningstar Lifetime Mod 2010 TR USD	Idx	—	—	—	—	—	—	—	—	—	—
Target-Date 2015(Fds)	Med	—	—	0.75	0.58	—	—	—	0.10	—	—
¹⁵ American Funds 2015 Trgt Date Retire R6	MF	2,039,649.87	1.98	0.33	0.33	6,730.84	-0.43	—	—	0.0065	25
Morningstar Lifetime Mod 2015 TR USD	Idx	—	—	—	—	—	—	—	—	—	—
Target-Date 2020(Fds)	Med	—	—	0.80	0.70	—	—	—	0.25	—	—
¹⁶ American Funds 2020 Trgt Date Retire R6	MF	2,932,622.86	2.85	0.34	0.34	9,970.92	-0.51	—	—	0.0097	25
Morningstar Lifetime Mod 2020 TR USD	Idx	—	—	—	—	—	—	—	—	—	—
Target-Date 2025(Fds)	Med	—	—	0.77	0.68	—	—	—	0.25	—	—
¹⁷ American Funds 2025 Trgt Date Retire R6	MF	2,780,981.17	2.70	0.36	0.36	10,011.53	-0.47	—	—	0.0097	31
Morningstar Lifetime Mod 2025 TR USD	Idx	—	—	—	—	—	—	—	—	—	—

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Cobb County Government 457 Deferred Compensation Plan

Investment Costs

Investment Costs 12-31-2018

	Type	Market Value \$	% of Portfolio	Gross Exp Ratio %	Net Exp Ratio %	Net Fund Exp \$	Rel to Cat Median	Current 12b-1	Weighted Avg Cost	Net Exp % Rank in Cat
Target-Date 2030(Fds)	Med	—	—	0.83	0.72	—	—	0.25	—	—
¹⁸ American Funds 2030 Trgt Date Retire R6	MF	4,202,092.18	4.09	0.38	0.38	15,967.95	-0.47	—	0.0155	27
Morningstar Lifetime Mod 2030 TR USD	Idx	—	—	—	—	—	—	—	—	—
Target-Date 2035(Fds)	Med	—	—	0.80	0.70	—	—	0.25	—	—
¹⁹ American Funds 2035 Trgt Date Retire R6	MF	2,658,124.21	2.59	0.39	0.39	10,366.68	-0.44	—	0.0101	31
Morningstar Lifetime Mod 2035 TR USD	Idx	—	—	—	—	—	—	—	—	—
Target-Date 2040(Fds)	Med	—	—	0.87	0.74	—	—	0.25	—	—
²⁰ American Funds 2040 Trgt Date Retire R6	MF	1,786,079.40	1.74	0.40	0.40	7,144.32	-0.46	—	0.0069	30
Morningstar Lifetime Mod 2040 TR USD	Idx	—	—	—	—	—	—	—	—	—
Target-Date 2045(Fds)	Med	—	—	0.85	0.72	—	—	0.25	—	—
²¹ American Funds 2045 Trgt Date Retire R6	MF	1,366,851.27	1.33	0.40	0.40	5,467.41	-0.44	—	0.0053	32
Morningstar Lifetime Mod 2045 TR USD	Idx	—	—	—	—	—	—	—	—	—
Target-Date 2050(Fds)	Med	—	—	0.90	0.74	—	—	0.25	—	—
²² American Funds 2050 Trgt Date Retire R6	MF	1,040,426.65	1.01	0.41	0.41	4,265.75	-0.45	—	0.0041	29
Morningstar Lifetime Mod 2050 TR USD	Idx	—	—	—	—	—	—	—	—	—
Target-Date 2055(Fds)	Med	—	—	0.94	0.72	—	—	0.25	—	—
²³ American Funds 2055 Trgt Date Retire R6	MF	492,431.47	0.48	0.42	0.42	2,068.21	-0.42	—	0.0020	34
Morningstar Lifetime Mod 2055 TR USD	Idx	—	—	—	—	—	—	—	—	—
Target-Date 2060+(Fds)	Med	—	—	0.91	0.57	—	—	0.25	—	—
²⁴ American Funds 2060 Trgt Date Retire R6	MF	36,253.69	0.04	0.44	0.44	159.52	-0.23	—	0.0002	33
Morningstar Lifetime Mod 2060 TR USD	Idx	—	—	—	—	—	—	—	—	—
Money Market-Taxable(FM)	Med	—	—	0.47	0.44	—	—	0.25	—	—
²⁵ Vanguard Treasury Money Market Investor	FM	1,197,463.36	1.16	0.09	0.09	1,077.72	-0.80	—	0.0010	6
ICE BofAML USD 3M Dep OR CM TR USD	Idx	—	—	—	—	—	—	—	—	—

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Cobb County Government 457 Deferred Compensation Plan

Investment Costs

Investment Costs 12-31-2018											
	Type	Market Value \$	% of Portfolio	Gross Exp Ratio %	Net Exp Ratio %	Net Fund Exp \$	Rel to Cat	Net Exp Median	Current 12b-1	Weighted Avg Cost	Net Exp % Rank in Cat
Total	—	102,814,400.19	100.00	—	—	534,564.69		—	—	0.5200	—

1. Contractual waiver; 01-28-2018.

Cost measures for mutual funds use Prospectus Net Expense Ratio. For VAs, total insurance expense is included in the Prospectus ratio. For CITs, CEs, and ETFs, Net Operating Expense Ratio is used. The Weighted Average Cost is the total of each security’s Expense Ratio, multiplied by the weight of each security’s assets in the plan, multiplied by 100.

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2010 Trgt Date Retire R6 (USD)

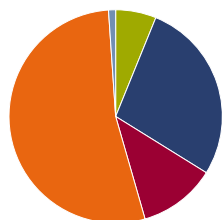
Details 12-31-2018

Ticker	RFTTX
Gross Expense Ratio %	0.33
Total Assets	\$3,021.01 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	11.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
118 TA	
Standard Deviation 3 Yr	4.37
Mean 3 Yr	4.97
Alpha 3 Yr	0.63
Beta 3 Yr	0.95
R-Squared 3 Yr	94.24
Upside Capture Ratio 3 Yr	97.57
Downside Capture Ratio 3 Yr	82.81
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2010 TR USD

Composition 09-30-2018

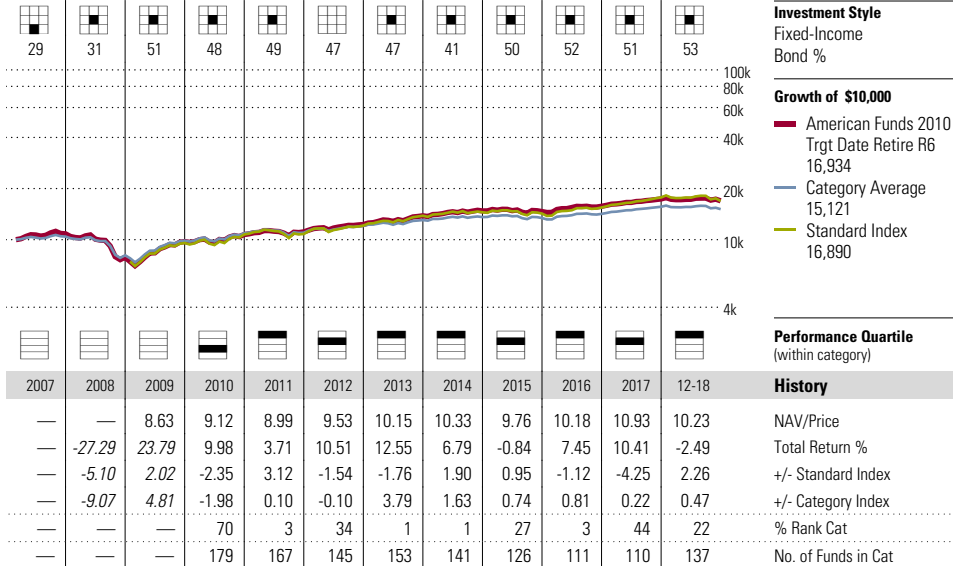


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	6.15	1.01
US Stocks	27.69	35.88
Non-US Stocks	11.72	23.19
Bonds	53.37	39.84
Other/Not Clsfd	1.07	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	33.0	0.80
Basic Materials	4.7	0.92
Consumer Cyclical	9.2	0.85
Financial Services	15.6	0.87
Real Estate	3.6	0.47
Sensitive	39.2	1.11
Communication Services	4.7	1.36
Energy	11.1	1.98
Industrials	8.9	0.81
Technology	14.5	0.95
Defensive	27.8	1.20
Consumer Defensive	10.3	1.26
Healthcare	13.0	1.17
Utilities	4.4	1.14

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Portfolio Statistics	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	15.9	1.15	0.98
Geo Avg Cap Plan (\$Mil)	85,535		
Geo Avg Cap Bmark (\$Mil)	28,486		
Value	40	32	22
Blend	3	2	1
Growth	0	0	0

Fixed-Income Investment Style Actual %

Avg Effective Duration (Yrs)	4.80
Avg Effective Maturity (Yrs)	—
Avg Credit Quality	—
Bond %	
AAA	68.89
AA	4.30
A	9.18
BBB	7.45
BB	4.37
B	4.21
Below B	1.30
NR	0.30

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period. The performance data represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the return data quoted. For performance data current to the most recent month-end, visit <http://advisor.morningstar.com/familyinfo.asp>. The "Overall Morningstar Rating" is based on risk-adjusted returns, derived from a weighted average of the three, five and ten-year (if applicable) Morningstar metrics. An investment in the fund is not insured or guaranteed by the FDIC or any other government agency.

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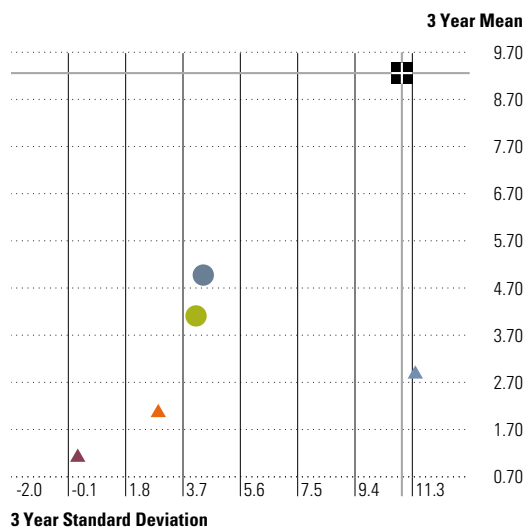
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2010 Trgt Date Retire R6 (USD)

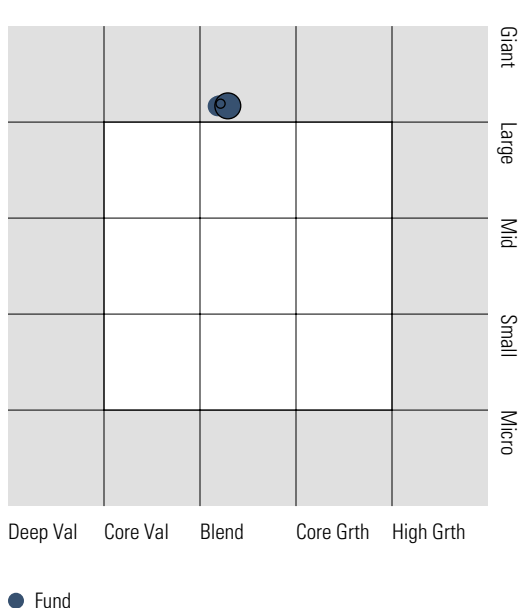
Risk/Return 12-31-2018



Benchmarks

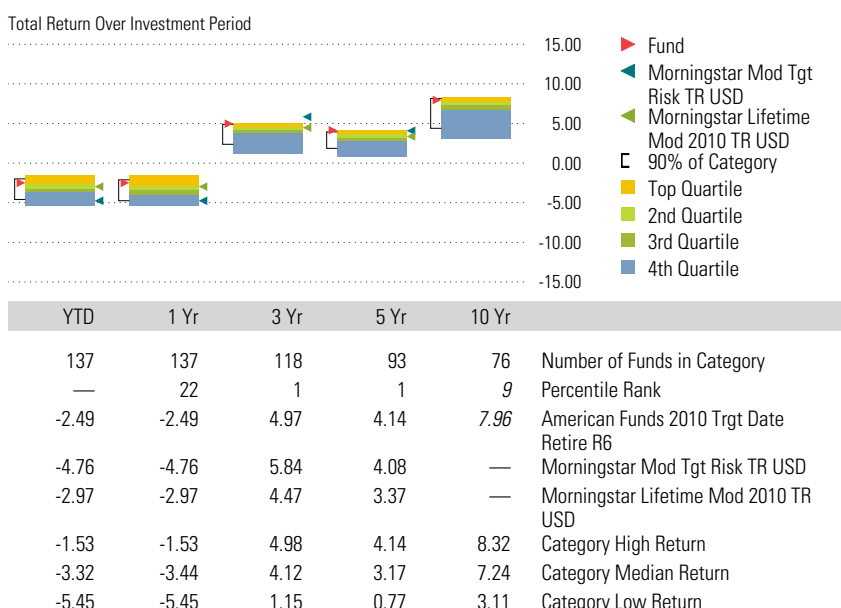
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Interm Bd Fd of Amer R6	12.76
American Funds Capital Income Bldr R6	11.99
American Funds Income Fund of Amer R6	11.99
American Funds Bond Fund of Amer R6	8.00
American Funds Inflation Linked Bd R6	6.98
American Funds Mortgage R6	6.00
American Funds American Mutual R6	5.26
American Funds American High-Inc R6	5.01
American Funds Capital World Bond R6	4.98
American Funds Invmt Co of Amer R6	4.27

Investment Strategy 12-31-2018

The investment seeks growth, income and conservation of capital.

The fund normally invests a greater portion of its assets in bond, equity-income and balanced funds as it passes its target date. The adviser will attempt to achieve the fund's investment objectives by investing in a mix of American Funds in different combinations and weightings. The underlying American Funds represent a variety of fund categories, including growth-and-income funds, equity-income funds, balanced funds and fixed income funds. The fund categories represent differing investment objectives.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2015 Trgt Date Retire R6 (USD)

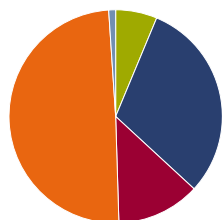
Details 12-31-2018

Ticker	RFJTX
Gross Expense Ratio %	0.33
Total Assets	\$4,755.95 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	11.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
118 TD	
Standard Deviation 3 Yr	4.69
Mean 3 Yr	5.17
Alpha 3 Yr	0.63
Beta 3 Yr	0.92
R-Squared 3 Yr	95.01
Upside Capture Ratio 3 Yr	95.25
Downside Capture Ratio 3 Yr	82.15
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2015 TR USD

Composition 09-30-2018

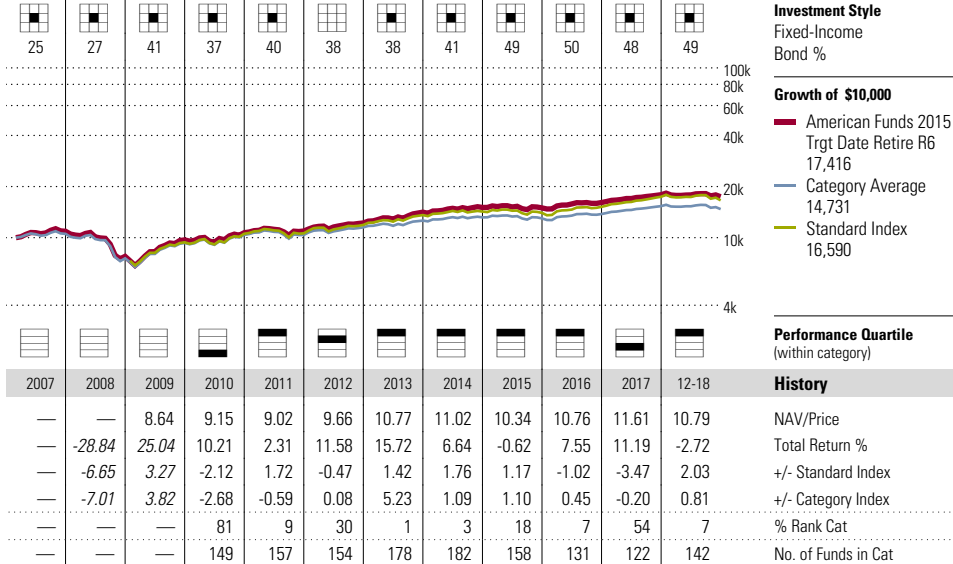


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	6.28	1.01
US Stocks	30.58	35.88
Non-US Stocks	12.65	23.19
Bonds	49.44	39.84
Other/Not Clsfd	1.05	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	33.0	0.79
Basic Materials	4.7	0.92
Consumer Cyclical	9.5	0.88
Financial Services	15.5	0.86
Real Estate	3.2	0.43
Sensitive	39.8	1.13
Communication Services	4.6	1.31
Energy	10.9	1.95
Industrials	9.0	0.83
Technology	15.2	1.00
Defensive	27.3	1.18
Consumer Defensive	10.1	1.23
Healthcare	13.1	1.18
Utilities	4.1	1.08

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

38	32	24	Large	Portfolio Statistics	Port Avg	Rel Index	Rel Cat	
3	2	1		Mid	P/E Ratio TTM	16.1	1.16	1.02
0	0	0		Small	Geo Avg Cap Plan (\$Mil)	85,755		
					Geo Avg Cap Bmark (\$Mil)	28,486		
Value	Blend	Growth						

Fixed-Income Investment Style Actual %

Ltd	Mod	Ext
0	0	0
0	100	0
0	0	0
Avg Effective Duration (Yrs)	5.20	
Avg Effective Maturity (Yrs)	—	
Avg Credit Quality	—	
Bond %		
AAA	70.17	
AA	3.18	
A	8.48	
BBB	7.45	
BB	4.60	
B	4.44	
Below B	1.37	
NR	0.31	

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period. The performance data represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the return data quoted. For performance data current to the most recent month-end, visit <http://advisor.morningstar.com/familyinfo.asp>. The "Overall Morningstar Rating" is based on risk-adjusted returns, derived from a weighted average of the three, five and ten-year (if applicable) Morningstar metrics. An investment in the fund is not insured or guaranteed by the FDIC or any other government agency.

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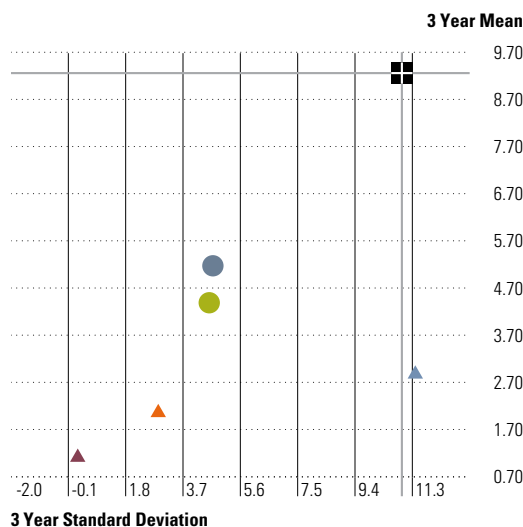
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2015 Trgt Date Retire R6 (USD)

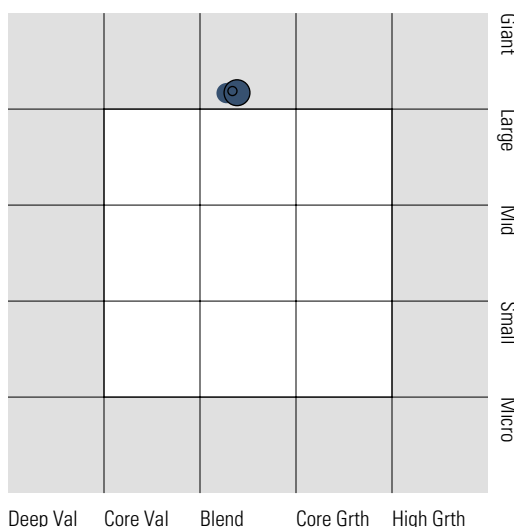
Risk/Return 12-31-2018



Benchmarks

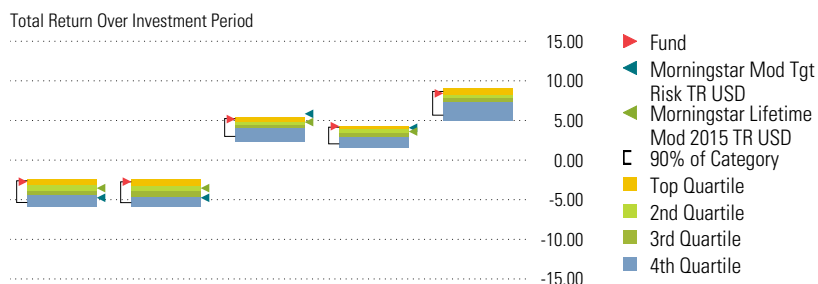
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



YTD	1 Yr	3 Yr	5 Yr	10 Yr	
142	142	118	82	49	Number of Funds in Category
—	7	9	1	14	Percentile Rank
-2.72	-2.72	5.17	4.28	8.42	American Funds 2015 Trgt Date Retire R6
-4.76	-4.76	5.84	4.08	—	Morningstar Mod Tgt Risk TR USD
-3.54	-3.54	4.79	3.61	—	Morningstar Lifetime Mod 2015 TR USD
-2.39	-2.39	5.40	4.27	9.08	Category High Return
-3.89	-3.93	4.42	3.40	7.80	Category Median Return
-5.90	-5.90	2.30	1.62	4.92	Category Low Return

Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Income Fund of Amer R6	11.26
American Funds Capital Income Bldr R6	11.24
American Funds Interm Bd Fd of Amer R6	8.99
American Funds Bond Fund of Amer R6	8.00
American Funds Inflation Linked Bd R6	6.98
American Funds American Mutual R6	6.01
American Funds Mortgage R6	5.98
American Funds Invmt Co of Amer R6	5.02
American Funds American High-Inc R6	5.01
American Funds Washington Mutual R6	5.00

Investment Strategy 12-31-2018

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2020 Trgt Date Retire R6 (USD)

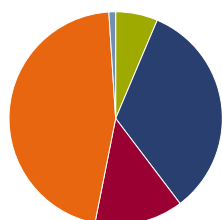
Details 12-31-2018

Ticker	RRCTX
Gross Expense Ratio %	0.34
Total Assets	\$13,842.51 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	11.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
206 TE	
Standard Deviation 3 Yr	5.19
Mean 3 Yr	5.55
Alpha 3 Yr	0.70
Beta 3 Yr	0.91
R-Squared 3 Yr	95.57
Upside Capture Ratio 3 Yr	95.38
Downside Capture Ratio 3 Yr	83.83
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2020 TR USD

Composition 09-30-2018

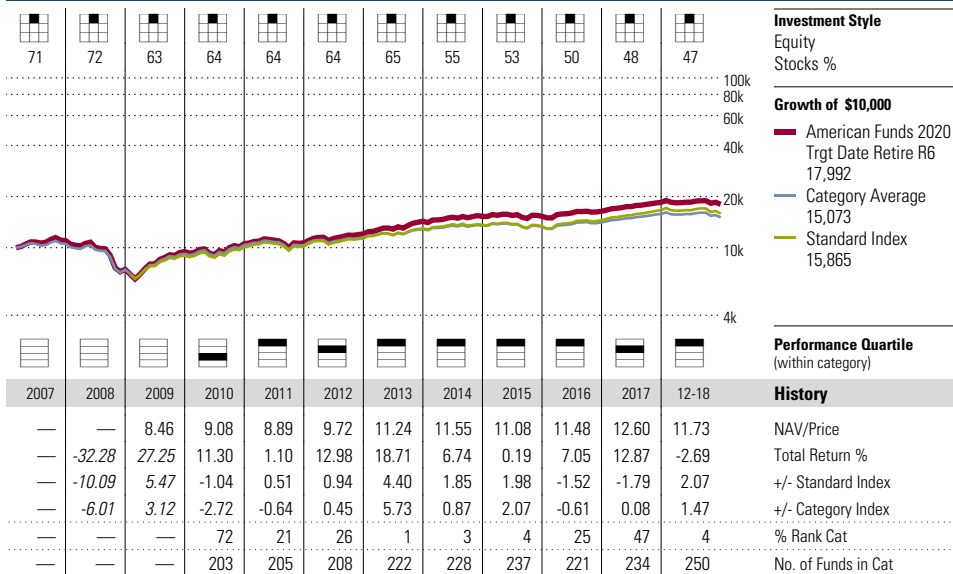


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	6.37	1.01
US Stocks	33.32	35.88
Non-US Stocks	13.43	23.19
Bonds	45.86	39.84
Other/Not Clsfd	1.02	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	33.2	0.80
Basic Materials	4.7	0.91
Consumer Cyclical	10.9	1.01
Financial Services	15.0	0.84
Real Estate	2.5	0.33
Sensitive	40.7	1.15
Communication Services	4.0	1.15
Energy	10.4	1.86
Industrials	9.1	0.84
Technology	17.2	1.12
Defensive	26.1	1.13
Consumer Defensive	9.3	1.13
Healthcare	13.4	1.20
Utilities	3.4	0.89

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Portfolio Statistics	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	16.8	1.21	1.04
Geo Avg Cap Plan (\$Mil)	85,581		
Geo Avg Cap Bmark (\$Mil)	28,486		
Value	Blend	Growth	

Fixed-Income Investment Style Actual %

Avg Effective Duration (Yrs)	5.20
Avg Effective Maturity (Yrs)	—
Avg Credit Quality	—
Bond %	
AAA	72.03
AA	3.36
A	8.86
BBB	7.42
BB	3.64
B	3.41
Below B	1.03
NR	0.25

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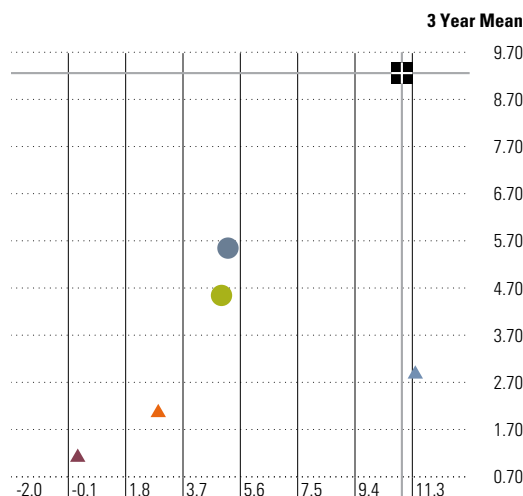
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2020 Trgt Date Retire R6 (USD)

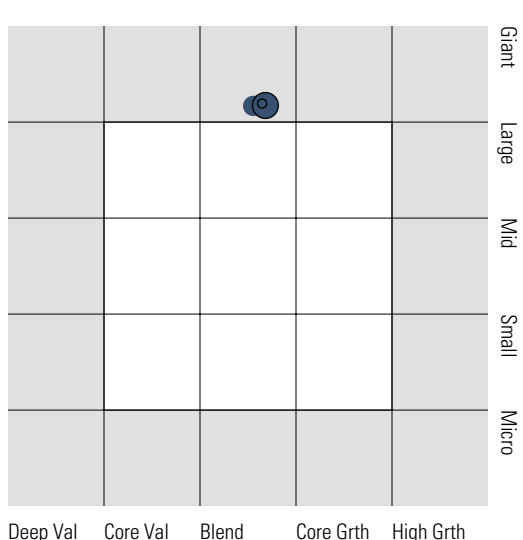
Risk/Return 12-31-2018



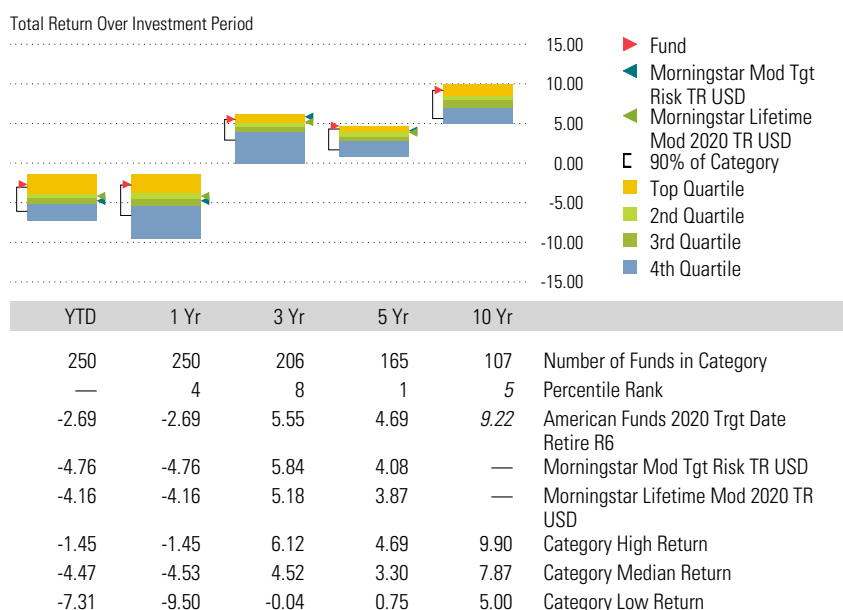
Benchmarks

- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Interm Bd Fd of Amer R6	8.98
American Funds Capital Income Bldr R6	7.69
American Funds Income Fund of Amer R6	7.67
American Funds Bond Fund of Amer R6	7.22
American Funds Inflation Linked Bd R6	6.45
American Funds American Mutual R6	6.08
American Funds Mortgage R6	5.72
American Funds Washington Mutual R6	5.33
American Funds Invmt Co of Amer R6	5.33
American Funds US Government Sec R6	5.22

Investment Strategy 12-31-2018

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2025 Trgt Date Retire R6 (USD)

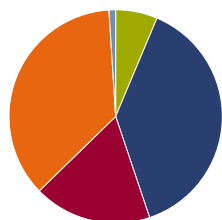
Details 12-31-2018

Ticker	RFDTX
Gross Expense Ratio %	0.36
Total Assets	\$17,849.28 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	11.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
189 TG	
Standard Deviation 3 Yr	6.21
Mean 3 Yr	6.12
Alpha 3 Yr	0.64
Beta 3 Yr	0.95
R-Squared 3 Yr	95.82
Upside Capture Ratio 3 Yr	99.40
Downside Capture Ratio 3 Yr	91.78
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2025 TR USD

Composition 09-30-2018

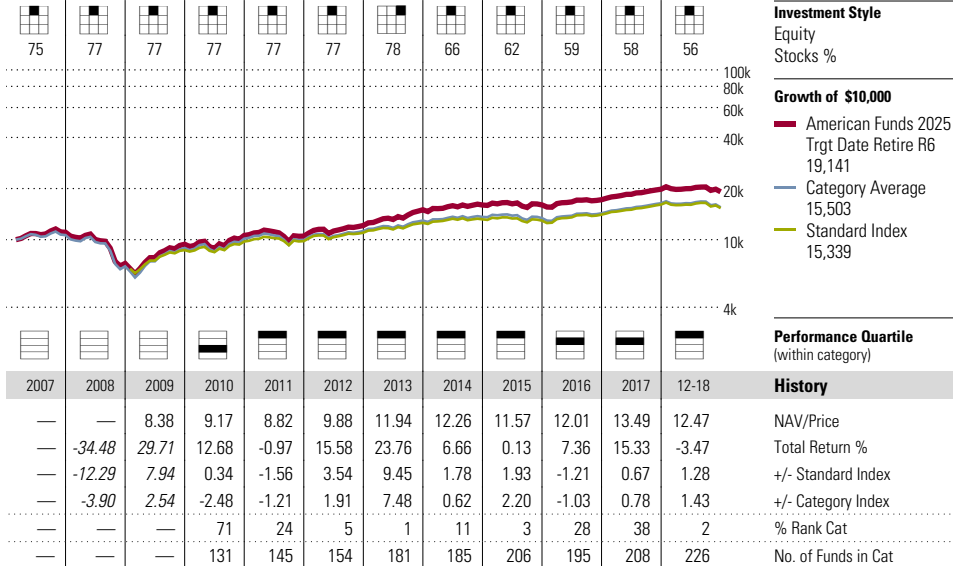


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	6.33	1.01
US Stocks	38.51	35.88
Non-US Stocks	17.86	23.19
Bonds	36.29	39.84
Other/Not Clsfd	1.01	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	33.9	0.82
Basic Materials	4.9	0.96
Consumer Cyclical	12.1	1.12
Financial Services	14.9	0.83
Real Estate	1.9	0.25
Sensitive	41.3	1.17
Communication Services	3.5	1.00
Energy	9.9	1.77
Industrials	9.2	0.84
Technology	18.7	1.22
Defensive	24.8	1.07
Consumer Defensive	8.6	1.05
Healthcare	13.4	1.20
Utilities	2.8	0.74

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Portfolio Statistics	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	17.1	1.24	1.08
Geo Avg Cap Plan (\$Mil)	79,140		
Geo Avg Cap Bmark (\$Mil)	28,486		

Fixed-Income Investment Style Actual %

Avg Effective Duration (Yrs)	5.40
Avg Effective Maturity (Yrs)	—
Avg Credit Quality	—
Bond %	
AAA	77.47
AA	3.64
A	9.62
BBB	7.25
BB	1.12
B	0.68
Below B	0.11
NR	0.11

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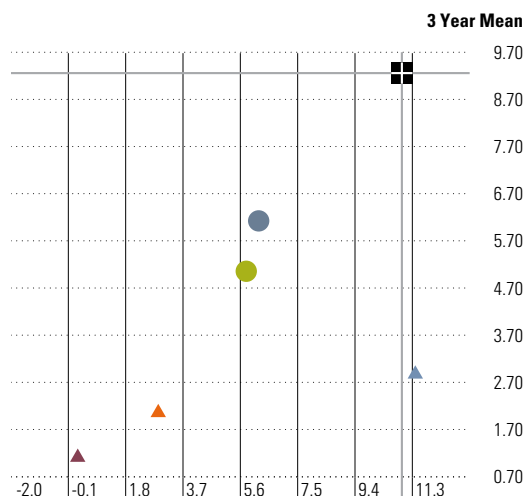
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2025 Trgt Date Retire R6 (USD)

Risk/Return 12-31-2018



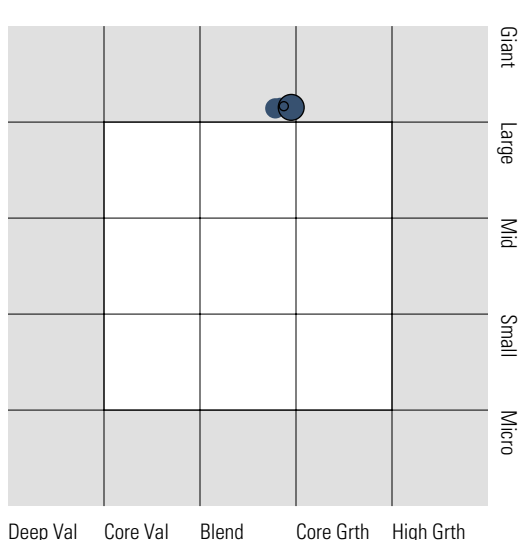
3 Year Standard Deviation

● Fund
● Target-Date 2025

Benchmarks

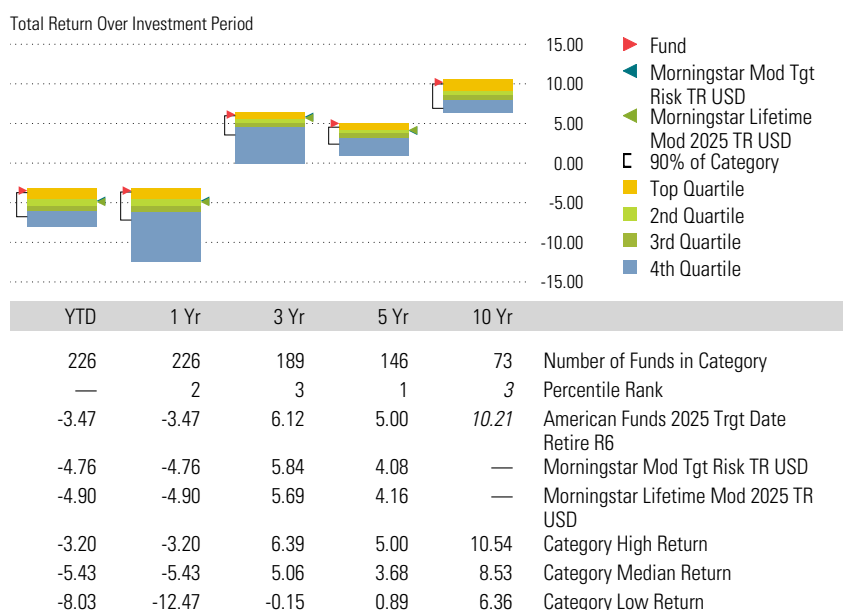
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



● Fund
○ Earliest Portfolios
○ Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Interm Bd Fd of Amer R6	7.76
American Funds Washington Mutual R6	6.49
American Funds US Government Sec R6	6.26
American Funds Invmt Co of Amer R6	6.24
American Funds American Mutual R6	6.01
American Funds Global Balanced R6	5.99
American Funds American Balanced R6	5.99
American Funds Fundamental Invs R6	5.24
American Funds Mortgage R6	5.00
American Funds Capital World Gr&Inc R6	4.99

Investment Strategy 12-31-2018

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2030 Trgt Date Retire R6 (USD)

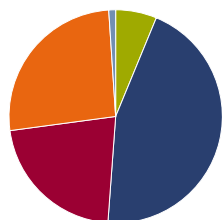
Details 12-31-2018

Ticker	RFETX
Gross Expense Ratio %	0.38
Total Assets	\$19,113.90 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	11.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
Standard Deviation 3 Yr	7.51
Mean 3 Yr	6.92
Alpha 3 Yr	0.70
Beta 3 Yr	0.99
R-Squared 3 Yr	96.56
Upside Capture Ratio 3 Yr	102.45
Downside Capture Ratio 3 Yr	95.49
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2030 TR USD

Composition 09-30-2018

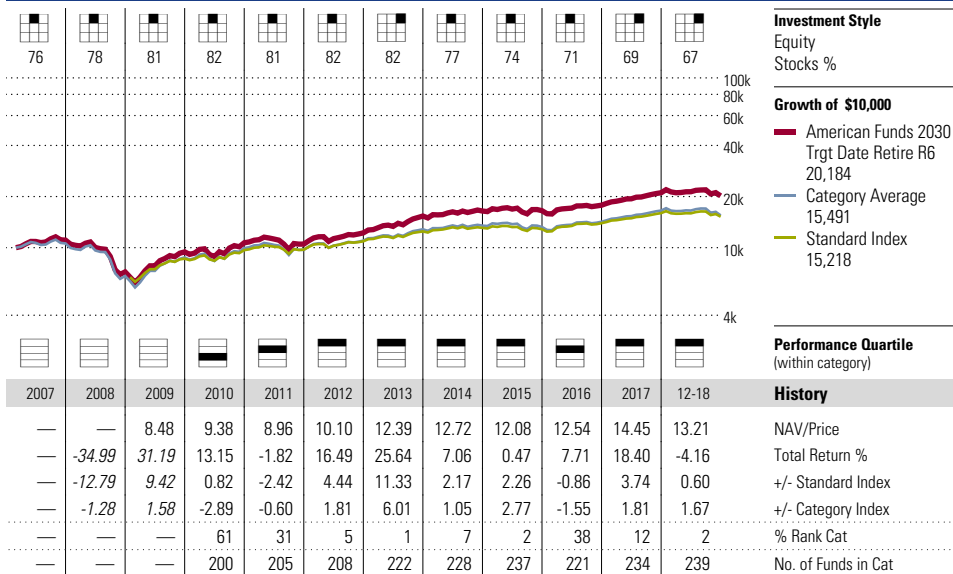


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	6.22	1.01
US Stocks	44.94	35.88
Non-US Stocks	21.71	23.19
Bonds	26.08	39.84
Other/Not Clsfd	1.04	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	34.4	0.83
Basic Materials	5.0	0.98
Consumer Cyclical	12.7	1.17
Financial Services	14.9	0.83
Real Estate	1.8	0.24
Sensitive	41.1	1.16
Communication Services	3.3	0.94
Energy	9.4	1.68
Industrials	9.3	0.85
Technology	19.1	1.25
Defensive	24.5	1.06
Consumer Defensive	8.3	1.01
Healthcare	13.5	1.21
Utilities	2.6	0.69

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

	28	26	32	Large
Portfolio Statistics				
P/E Ratio TTM	3	4	4	Mid
Geo Avg Cap Plan (\$Mil)	1	1	1	Small
Geo Avg Cap Bmark (\$Mil)				
Value				
Blend				
Growth				

Fixed-Income Investment Style Actual %

	0	100	0	High
Avg Effective Duration (Yrs)				5.50
Avg Effective Maturity (Yrs)				—
Avg Credit Quality				—
Bond %				
AAA				81.04
AA				2.83
A				8.00
BBB				6.08
BB				1.11
B				0.73
Below B				0.11
NR				0.10

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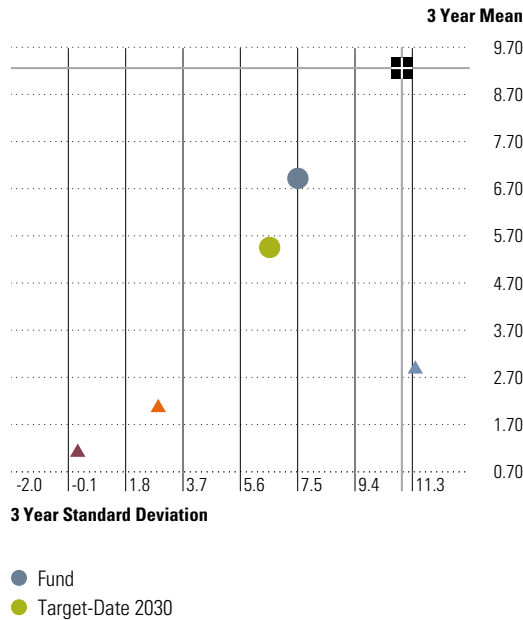
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2030 Trgt Date Retire R6 (USD)

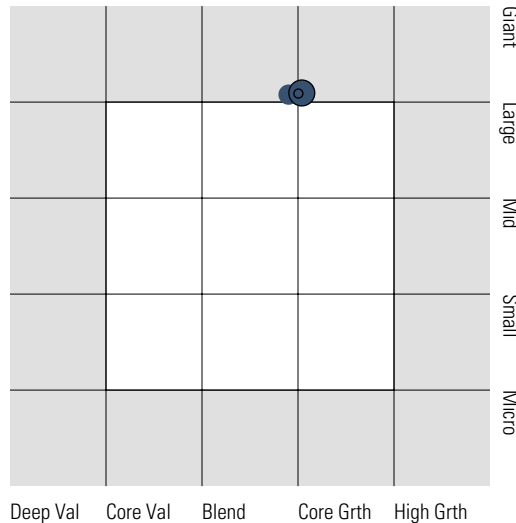
Risk/Return 12-31-2018



Benchmarks

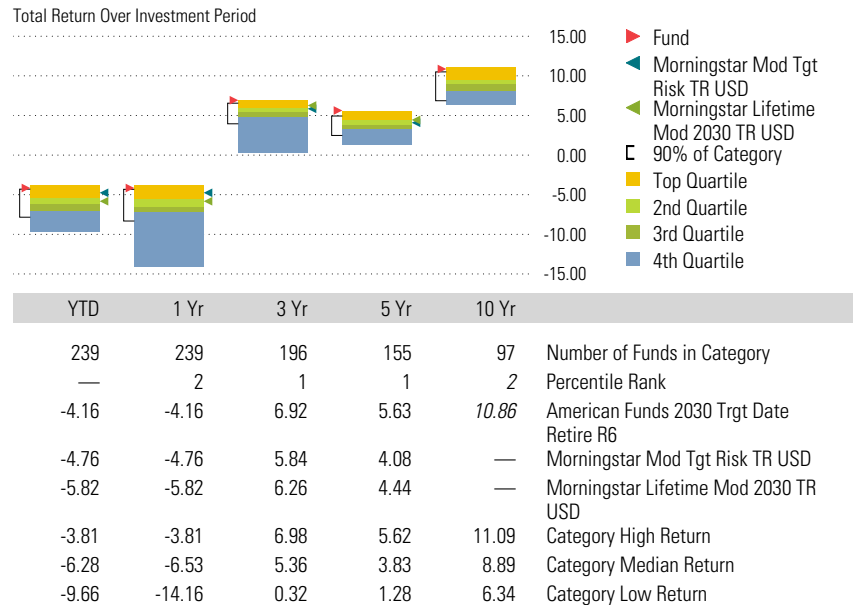
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Washington Mutual R6	7.99
American Funds US Government Sec R6	7.26
American Funds Invmt Co of Amer R6	6.99
American Funds American Balanced R6	5.99
American Funds Global Balanced R6	5.99
American Funds American Mutual R6	5.99
American Funds Fundamental Invs R6	5.99
American Funds New Perspective R6	5.44
American Funds Capital World Gr&Inc R6	5.01
American Funds AMCAP R6	4.46

Investment Strategy 12-31-2018

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2035 Trgt Date Retire R6 (USD)

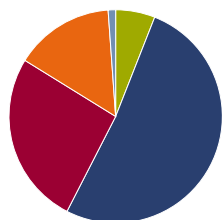
Details 12-31-2018

Ticker	RFCTX
Gross Expense Ratio %	0.39
Total Assets	\$14,996.10 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	11.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
Standard Deviation 3 Yr	8.65
Mean 3 Yr	7.43
Alpha 3 Yr	0.69
Beta 3 Yr	1.00
R-Squared 3 Yr	96.85
Upside Capture Ratio 3 Yr	103.25
Downside Capture Ratio 3 Yr	97.48
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2035 TR USD

Composition 09-30-2018

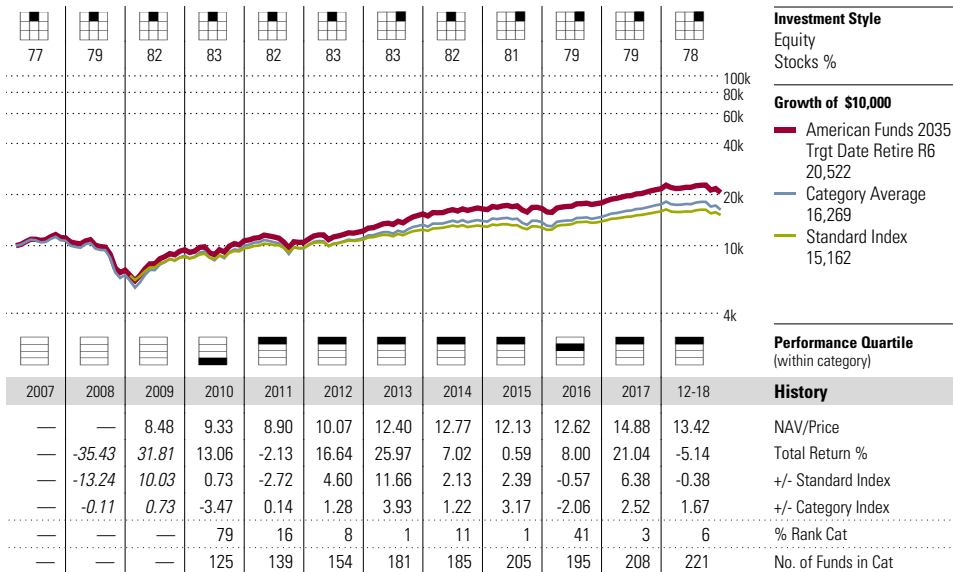


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	5.97	1.01
US Stocks	51.58	35.88
Non-US Stocks	26.27	23.19
Bonds	15.06	39.84
Other/Not Clsfd	1.13	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	34.9	0.84
Basic Materials	5.0	0.98
Consumer Cyclical	13.5	1.24
Financial Services	14.8	0.82
Real Estate	1.7	0.22
Sensitive	40.9	1.16
Communication Services	3.0	0.85
Energy	8.8	1.57
Industrials	9.3	0.85
Technology	19.8	1.29
Defensive	24.2	1.04
Consumer Defensive	8.0	0.97
Healthcare	13.8	1.24
Utilities	2.4	0.64

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Value	Blend	Growth
25	24	36
3	4	5
1	1	1

Fixed-Income Investment Style Actual %

Ltd	Mod	Ext
0	100	0
0	0	0
0	0	0

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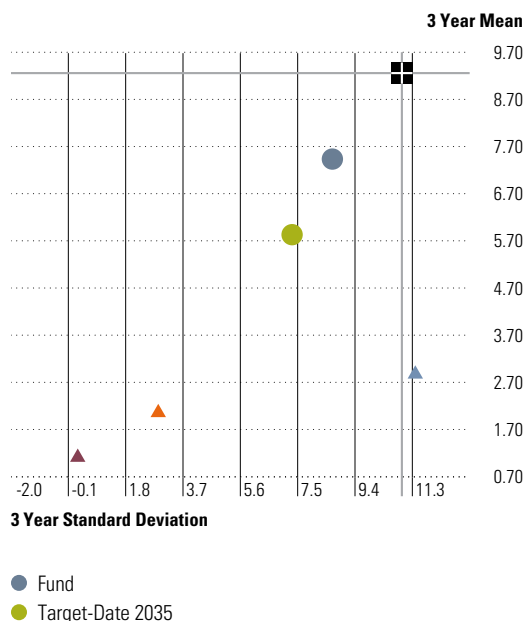
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2035 Trgt Date Retire R6 (USD)

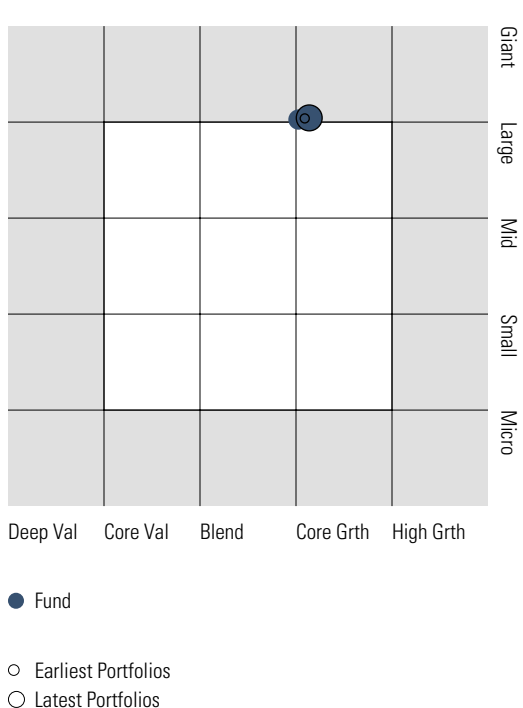
Risk/Return 12-31-2018



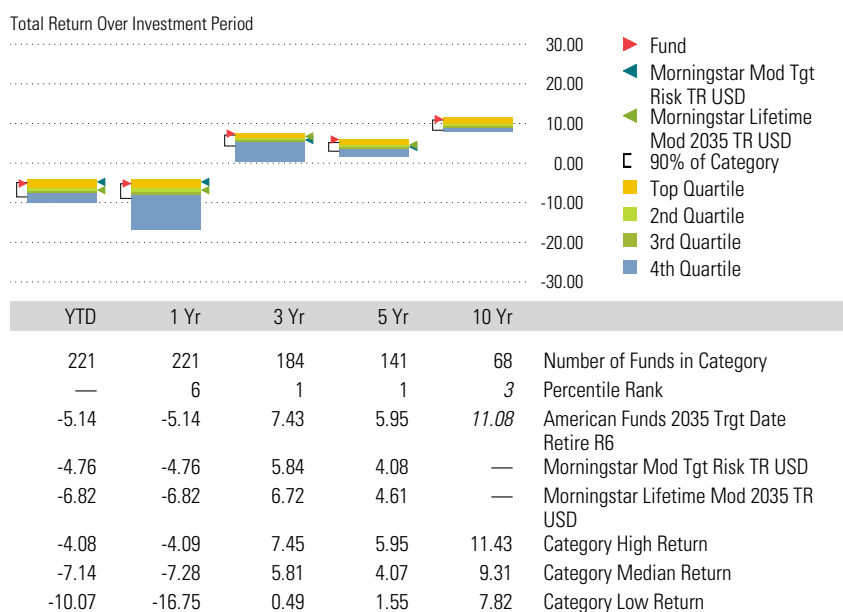
Benchmarks

- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Washington Mutual R6	8.00
American Funds US Government Sec R6	7.27
American Funds Invmt Co of Amer R6	7.00
American Funds New Perspective R6	6.99
American Funds AMCAP R6	6.30
American Funds Growth Fund of Amer R6	6.27
American Funds SMALLCAP World R6	6.20
American Funds American Mutual R6	6.01
American Funds American Balanced R6	6.00
American Funds Global Balanced R6	6.00

Investment Strategy 12-31-2018

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2040 Trgt Date Retire R6 (USD)

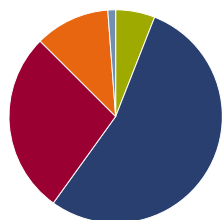
Details 12-31-2018

Ticker	RFGTX
Gross Expense Ratio %	0.40
Total Assets	\$12,982.35 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	11.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
Standard Deviation 3 Yr	9.04
Mean 3 Yr	7.62
Alpha 3 Yr	0.83
Beta 3 Yr	0.96
R-Squared 3 Yr	97.13
Upside Capture Ratio 3 Yr	100.08
Downside Capture Ratio 3 Yr	93.31
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2040 TR USD

Composition 09-30-2018

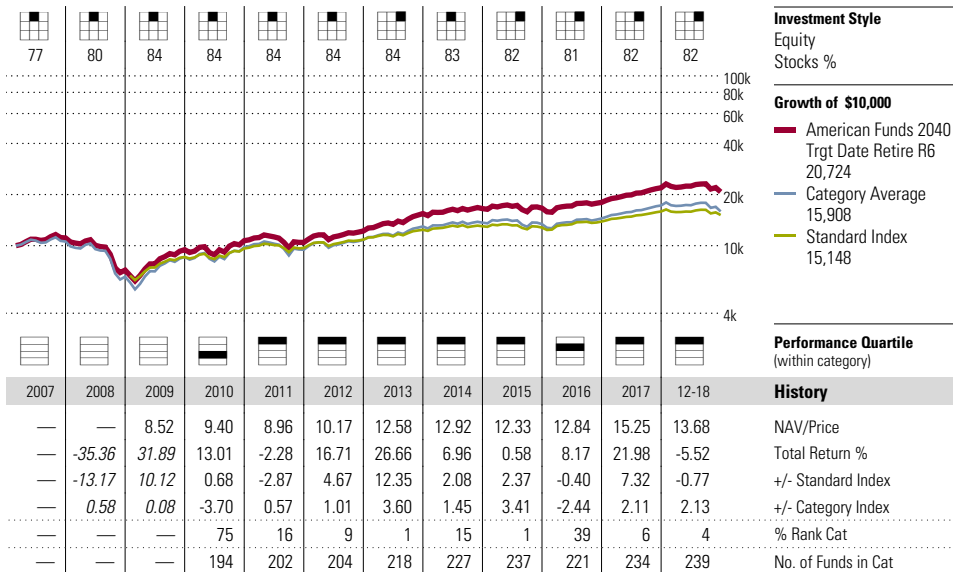


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	5.95	1.01
US Stocks	53.98	35.88
Non-US Stocks	27.54	23.19
Bonds	11.34	39.84
Other/Not Clsfd	1.18	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	35.0	0.84
Basic Materials	5.0	0.98
Consumer Cyclical	13.7	1.27
Financial Services	14.7	0.82
Real Estate	1.6	0.21
Sensitive	40.9	1.16
Communication Services	2.9	0.82
Energy	8.7	1.55
Industrials	9.4	0.86
Technology	20.0	1.31
Defensive	24.1	1.04
Consumer Defensive	7.8	0.95
Healthcare	13.9	1.25
Utilities	2.4	0.62

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Value	Blend	Growth
25	24	36
3	4	5
1	1	1

Fixed-Income Investment Style Actual %

Ltd	Mod	Ext
0	100	0
0	0	0
0	0	0

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period. The performance data represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the return data quoted. For performance data current to the most recent month-end, visit <http://advisor.morningstar.com/familyinfo.asp>. The "Overall Morningstar Rating" is based on risk-adjusted returns, derived from a weighted average of the three, five and ten-year (if applicable) Morningstar metrics. An investment in the fund is not insured or guaranteed by the FDIC or any other government agency.

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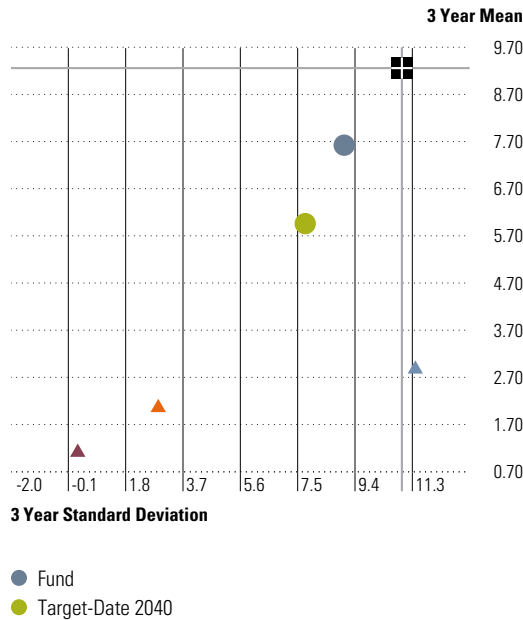
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2040 Trgt Date Retire R6 (USD)

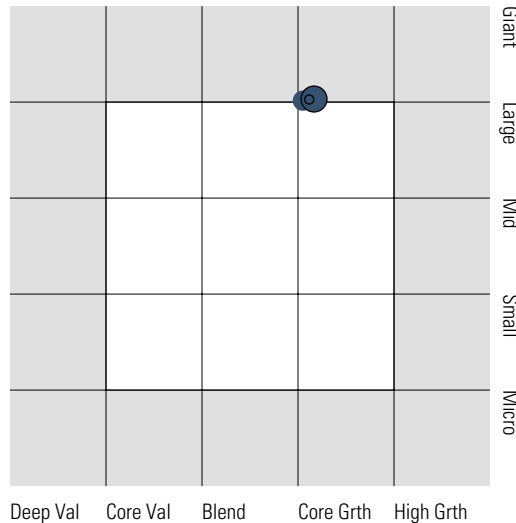
Risk/Return 12-31-2018



Benchmarks

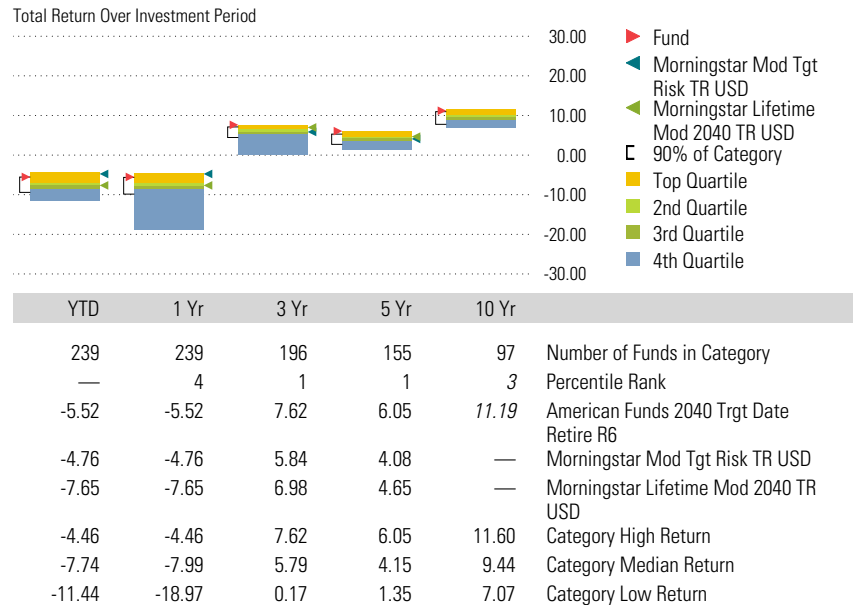
- S&P 500 TR USD
- BBgBarc US Agg Bond TR USD
- MSCI EAFE NR USD
- USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Washington Mutual R6	8.00
American Funds Invmt Co of Amer R6	7.25
American Funds AMCAP R6	7.04
American Funds Growth Fund of Amer R6	7.03
American Funds New Perspective R6	6.99
American Funds SMALLCAP World R6	6.94
American Funds American Mutual R6	6.25
American Funds Fundamental Invs R6	6.25
American Funds American Balanced R6	6.00
American Funds Global Balanced R6	5.75

Investment Strategy 12-31-2018

The investment seeks growth, income and conservation of capital.

The fund normally invests a greater portion of its assets in bond, equity-income and balanced funds as it approaches and passes its target date. The advisor attempts to achieve its investment objectives by investing in a mix of American Funds in different combinations and weightings. The underlying American Funds represent a variety of fund categories, including growth funds, growth-and-income funds, equity-income funds, balanced funds and fixed income funds. The fund categories represent differing investment objectives.

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2045 Trgt Date Retire R6 (USD)

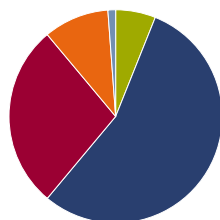
Details 12-31-2018

Ticker	RFHTX
Gross Expense Ratio %	0.40
Total Assets	\$9,360.73 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	11.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
Standard Deviation 3 Yr	9.22
Mean 3 Yr	7.77
Alpha 3 Yr	1.00
Beta 3 Yr	0.94
R-Squared 3 Yr	97.09
Upside Capture Ratio 3 Yr	98.85
Downside Capture Ratio 3 Yr	90.72
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2045 TR USD

Composition 09-30-2018

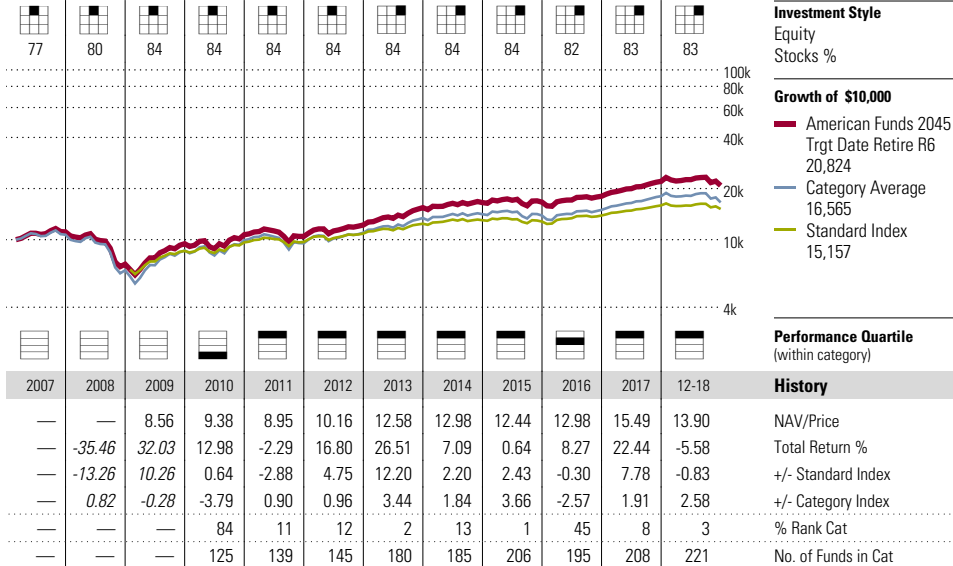


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	6.06	1.01
US Stocks	55.02	35.88
Non-US Stocks	27.84	23.19
Bonds	9.92	39.84
Other/Not Clsfd	1.17	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	34.9	0.84
Basic Materials	5.0	0.98
Consumer Cyclical	13.7	1.27
Financial Services	14.7	0.82
Real Estate	1.4	0.19
Sensitive	41.1	1.16
Communication Services	2.8	0.81
Energy	8.7	1.54
Industrials	9.4	0.86
Technology	20.2	1.32
Defensive	24.0	1.03
Consumer Defensive	7.7	0.94
Healthcare	13.9	1.25
Utilities	2.3	0.60

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Value	Blend	Growth
25	24	36
3	4	5
1	1	1

Fixed-Income Investment Style Actual %

Ltd	Mod	Ext
0	100	0
0	0	0
0	0	0

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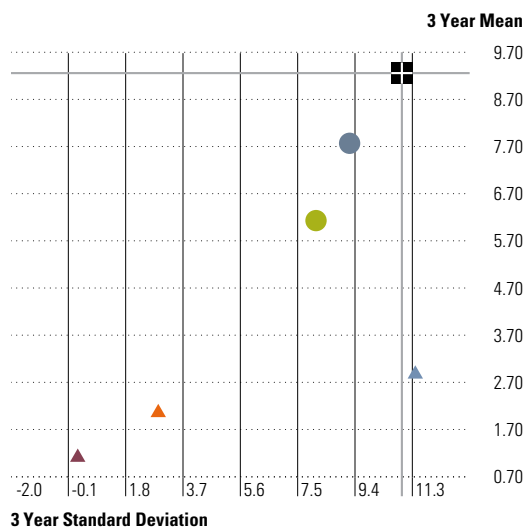
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2045 Trgt Date Retire R6 (USD)

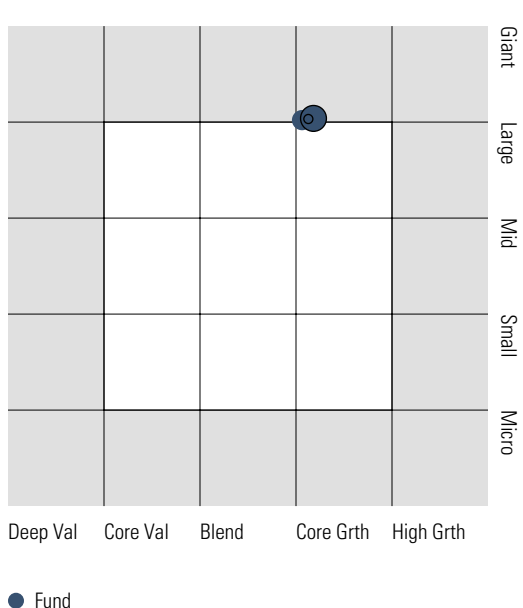
Risk/Return 12-31-2018



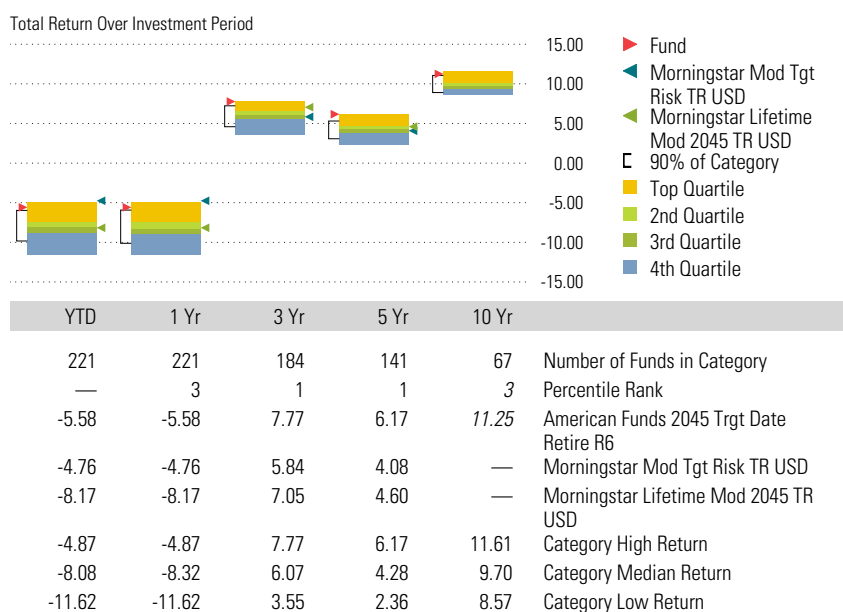
Benchmarks

- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Invmt Co of Amer R6	8.25
American Funds Washington Mutual R6	8.25
American Funds American Mutual R6	7.25
American Funds Fundamental Invs R6	7.25
American Funds AMCAP R6	7.03
American Funds Growth Fund of Amer R6	7.02
American Funds New Perspective R6	6.98
American Funds SMALLCAP World R6	6.97
American Funds Capital World Gr&Inc R6	6.25
American Funds American Balanced R6	5.75

Investment Strategy 12-31-2018

The investment seeks growth, income and conservation of capital.

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2050 Trgt Date Retire R6 (USD)

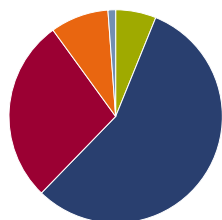
Details 12-31-2018

Ticker	RFITX
Gross Expense Ratio %	0.41
Total Assets	\$7,729.44 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	11.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
Standard Deviation 3 Yr	9.32
Mean 3 Yr	7.83
Alpha 3 Yr	1.06
Beta 3 Yr	0.94
R-Squared 3 Yr	97.10
Upside Capture Ratio 3 Yr	98.91
Downside Capture Ratio 3 Yr	90.31
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2050 TR USD

Composition 09-30-2018

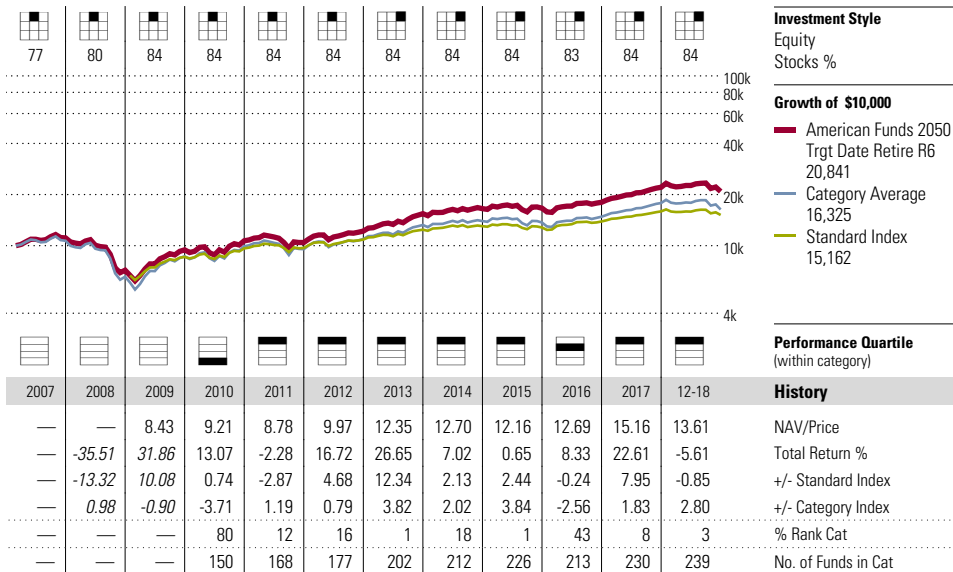


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	6.13	1.01
US Stocks	56.12	35.88
Non-US Stocks	27.75	23.19
Bonds	8.84	39.84
Other/Not Clsfd	1.16	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	34.7	0.84
Basic Materials	5.0	0.98
Consumer Cyclical	13.7	1.26
Financial Services	14.7	0.82
Real Estate	1.3	0.17
Sensitive	41.3	1.17
Communication Services	2.8	0.81
Energy	8.7	1.54
Industrials	9.5	0.87
Technology	20.4	1.33
Defensive	24.0	1.03
Consumer Defensive	7.7	0.94
Healthcare	14.0	1.26
Utilities	2.2	0.59

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

24	24	37	Large Mid Small	Portfolio Statistics	Port Avg	Rel Index	Rel Cat
3	4	5		P/E Ratio TTM	17.7	1.28	1.12
1	1	1		Geo Avg Cap Plan (\$Mil)			62,754
				Geo Avg Cap Bmark (\$Mil)			28,486
Value	Blend	Growth					

Fixed-Income Investment Style Actual %

Ltd	Mod	Ext
0	100	0
0	0	0
0	0	0
Avg Effective Duration (Yrs)	5.70	
Avg Effective Maturity (Yrs)	—	
Avg Credit Quality	—	
Bond %		
AAA	87.65	
AA	1.61	
A	4.91	
BBB	4.52	
BB	0.94	
B	0.34	
Below B	0.00	
NR	0.03	

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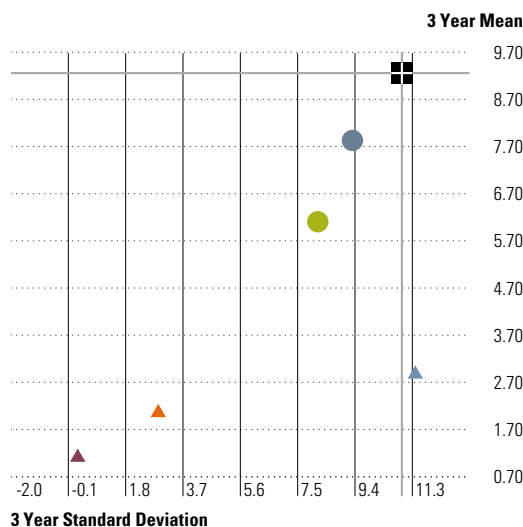
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2050 Trgt Date Retire R6 (USD)

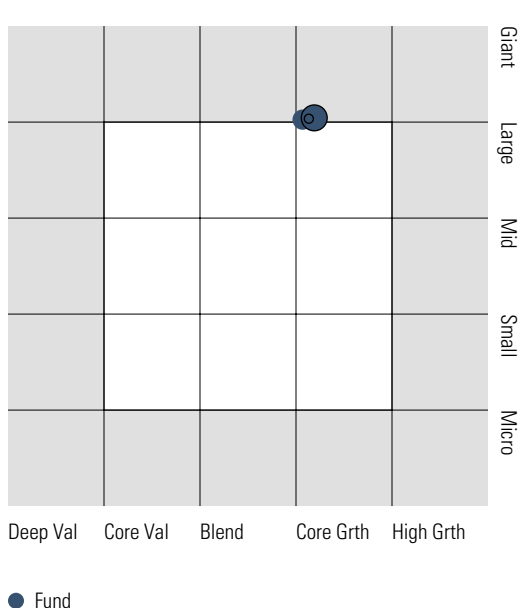
Risk/Return 12-31-2018



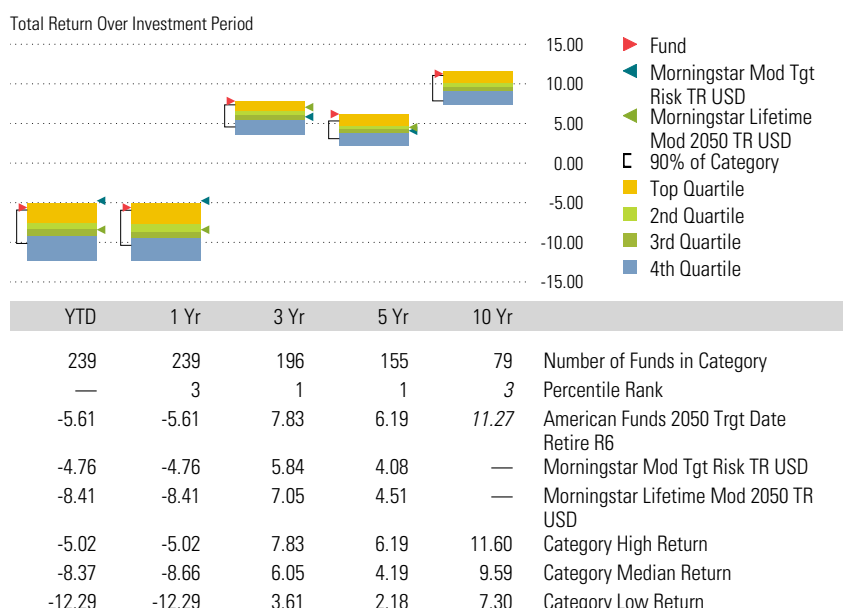
Benchmarks

- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Invmt Co of Amer R6	9.00
American Funds Washington Mutual R6	9.00
American Funds American Mutual R6	8.00
American Funds Fundamental Invs R6	8.00
American Funds AMCAP R6	7.03
American Funds Growth Fund of Amer R6	7.02
American Funds Capital World Gr&Inc R6	7.00
American Funds New Perspective R6	6.98
American Funds SMALLCAP World R6	6.98
American Funds US Government Sec R6	5.01

Investment Strategy 12-31-2018

The investment seeks growth, income and conservation of capital.

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2055 Trgt Date Retire R6 (USD)

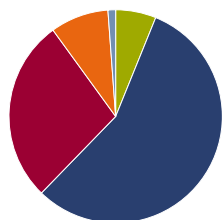
Details 12-31-2018

Ticker	RFKTX
Gross Expense Ratio %	0.42
Total Assets	\$3,956.19 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro,
Tenure	8.9 Years
Objective	Asset Allocation

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
Standard Deviation 3 Yr	182 TL
Mean 3 Yr	9.33
Alpha 3 Yr	7.81
Beta 3 Yr	1.07
R-Squared 3 Yr	0.94
Upside Capture Ratio 3 Yr	97.05
Downside Capture Ratio 3 Yr	98.92
Standard Index	90.50
Category Index	Morningstar Mod Tgt Risk TR USD
	Morningstar Lifetime Mod 2055 TR USD

Composition 09-30-2018

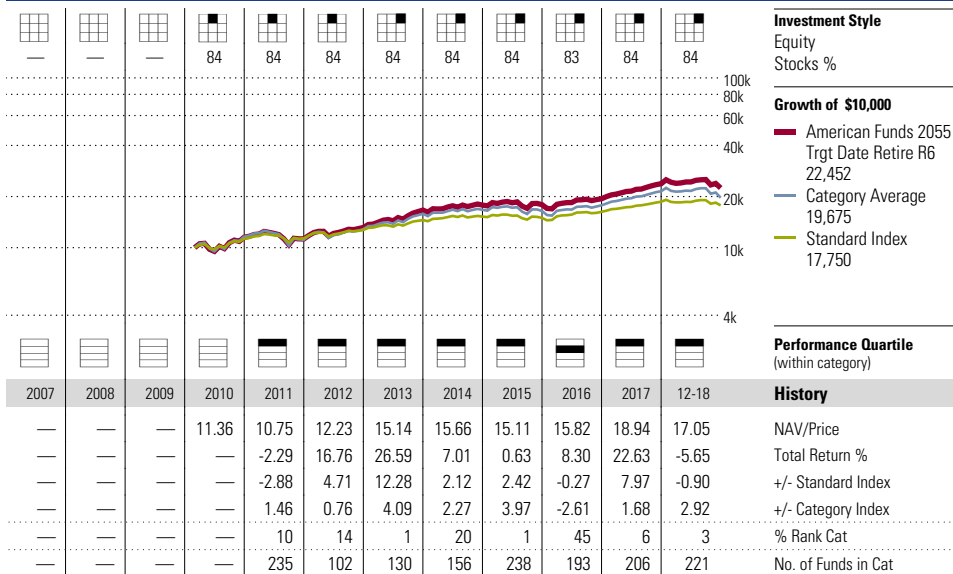


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	6.13	1.01
US Stocks	56.13	35.88
Non-US Stocks	27.75	23.19
Bonds	8.83	39.84
Other/Not Clsfd	1.16	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	34.7	0.84
Basic Materials	5.0	0.98
Consumer Cyclical	13.7	1.26
Financial Services	14.7	0.82
Real Estate	1.3	0.17
Sensitive	41.3	1.17
Communication Services	2.8	0.81
Energy	8.7	1.54
Industrials	9.5	0.87
Technology	20.4	1.33
Defensive	24.0	1.03
Consumer Defensive	7.7	0.94
Healthcare	14.0	1.26
Utilities	2.2	0.59

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Value	Blend	Growth
24	24	37
3	4	5
1	1	1

Fixed-Income Investment Style Actual %

Ltd	Mod	Ext
0	100	0
0	0	0
0	0	0

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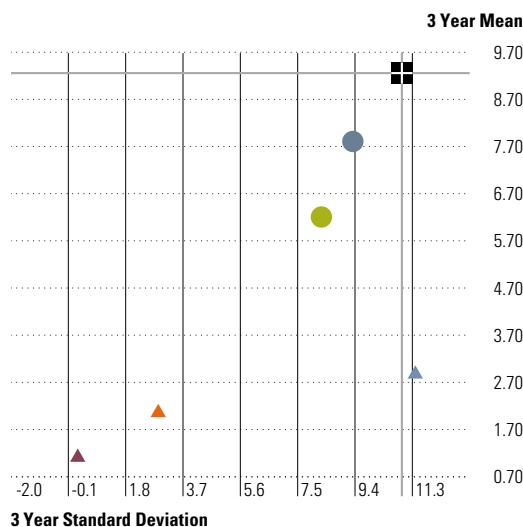
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2055 Trgt Date Retire R6 (USD)

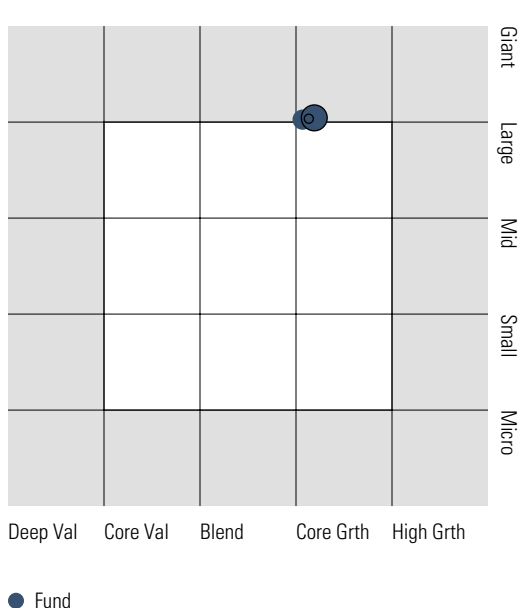
Risk/Return 12-31-2018



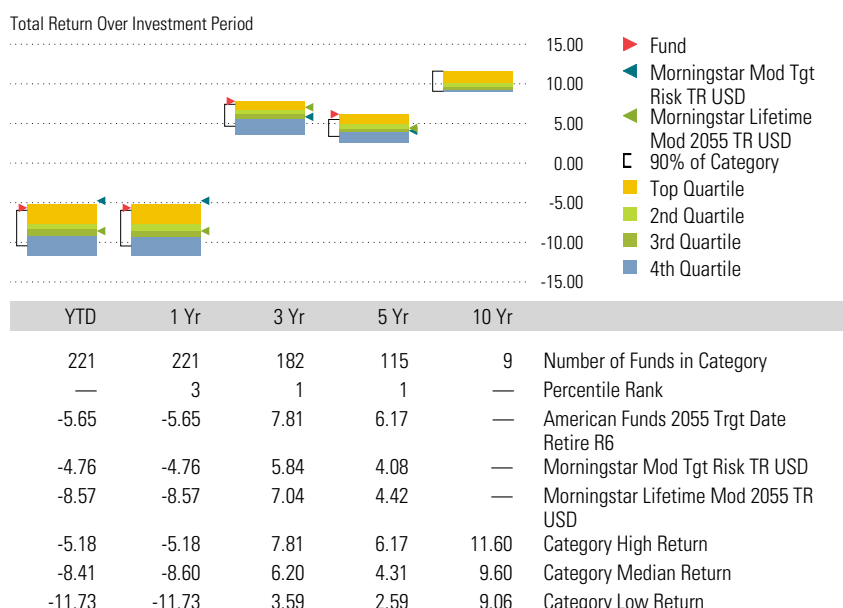
Benchmarks

- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Washington Mutual R6	9.00
American Funds Invmt Co of Amer R6	9.00
American Funds Fundamental Invs R6	8.00
American Funds American Mutual R6	8.00
American Funds AMCAP R6	7.03
American Funds Growth Fund of Amer R6	7.02
American Funds Capital World Gr&Inc R6	7.00
American Funds New Perspective R6	6.99
American Funds SMALLCAP World R6	6.99
American Funds US Government Sec R6	5.01

Investment Strategy 12-31-2018

The investment seeks growth, income and conservation of capital. The fund normally invests a greater portion of its assets in bond, equity-income and balanced funds as it approaches and passes its target date. The advisor attempts to achieve its investment objectives by investing in a mix of American Funds in different combinations and weightings. The underlying American Funds represent a variety of fund categories, including growth funds, growth-and-income funds, equity-income funds, balanced funds and fixed income funds. The fund categories represent differing investment objectives.

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Cobb County Government 457 Deferred Compensation Plan

American Funds 2060 Trgt Date Retire R6 (USD)

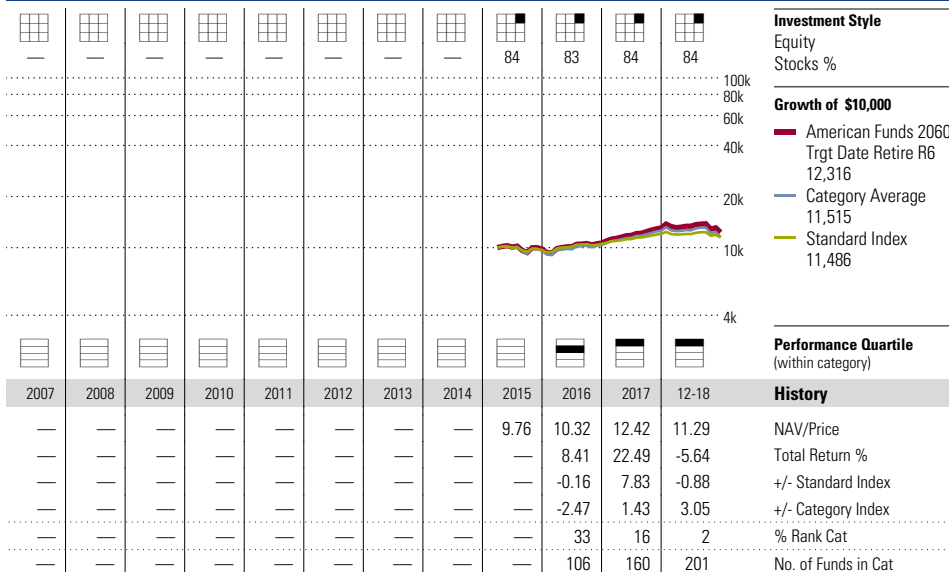
Details 12-31-2018

Ticker	RFUTX
Gross Expense Ratio %	0.44
Total Assets	\$1,138.73 mil
Family	American Funds
Manager	James Lovelace, John Smet, Alan Berro, Andrew Suzman, Jody Jonsson, Wesley Phoa, Bradley Vogt, 3.8 Years
Tenure	Asset Allocation
Objective	

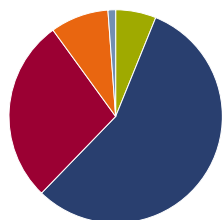
Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
Standard Deviation 3 Yr	9.28
Mean 3 Yr	7.81
Alpha 3 Yr	1.12
Beta 3 Yr	0.93
R-Squared 3 Yr	97.09
Upside Capture Ratio 3 Yr	98.53
Downside Capture Ratio 3 Yr	89.58
Standard Index	Morningstar Mod Tgt Risk TR USD
Category Index	Morningstar Lifetime Mod 2060 TR USD

Performance 12-31-2018



Composition 09-30-2018



Asset Allocation	Portfolio Net %	Bmark Net %
Cash	6.13	1.01
US Stocks	56.10	35.88
Non-US Stocks	27.77	23.19
Bonds	8.84	39.84
Other/Not Clsfd	1.16	0.08

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	34.7	0.84
Basic Materials	5.0	0.98
Consumer Cyclical	13.7	1.26
Financial Services	14.7	0.82
Real Estate	1.3	0.17
Sensitive	41.3	1.17
Communication Services	2.8	0.81
Energy	8.7	1.54
Industrials	9.5	0.87
Technology	20.4	1.33
Defensive	24.0	1.03
Consumer Defensive	7.7	0.94
Healthcare	14.0	1.26
Utilities	2.2	0.59

Style Analysis 09-30-2018

Equity Investment Style Actual %

Value	Blend	Growth
24	24	37
3	4	5
1	1	1
Portfolio Statistics	Port Avg	Rel Index
P/E Ratio TTM	17.7	1.28
Geo Avg Cap Plan (\$Mil)	62,707	
Geo Avg Cap Bmark (\$Mil)	28,486	

Fixed-Income Investment Style Actual %

Ltd	Mod	Ext
0	100	0
0	0	0
0	0	0
Avg Effective Duration (Yrs)	5.70	
Avg Effective Maturity (Yrs)	—	
Avg Credit Quality	—	
Bond %		
AAA	87.64	
AA	1.61	
A	4.91	
BBB	4.52	
BB	0.95	
B	0.34	
Below B	0.00	
NR	0.03	

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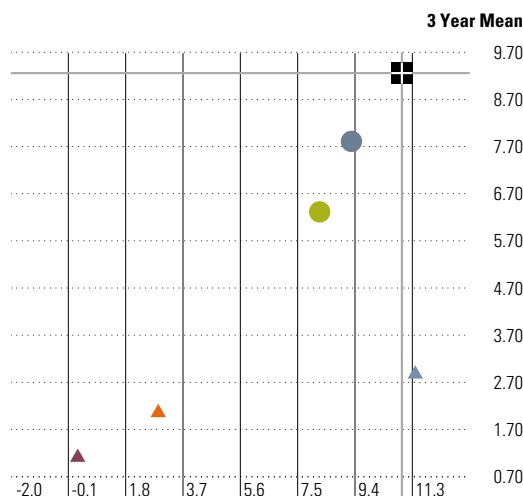
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Cobb County Government 457 Deferred Compensation Plan

American Funds 2060 Trgt Date Retire R6 (USD)

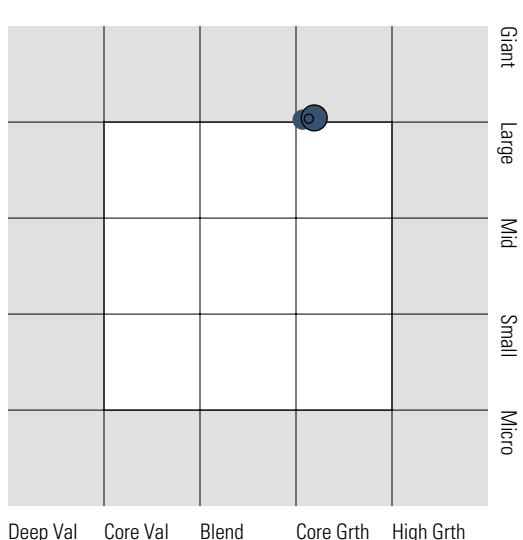
Risk/Return 12-31-2018



Benchmarks

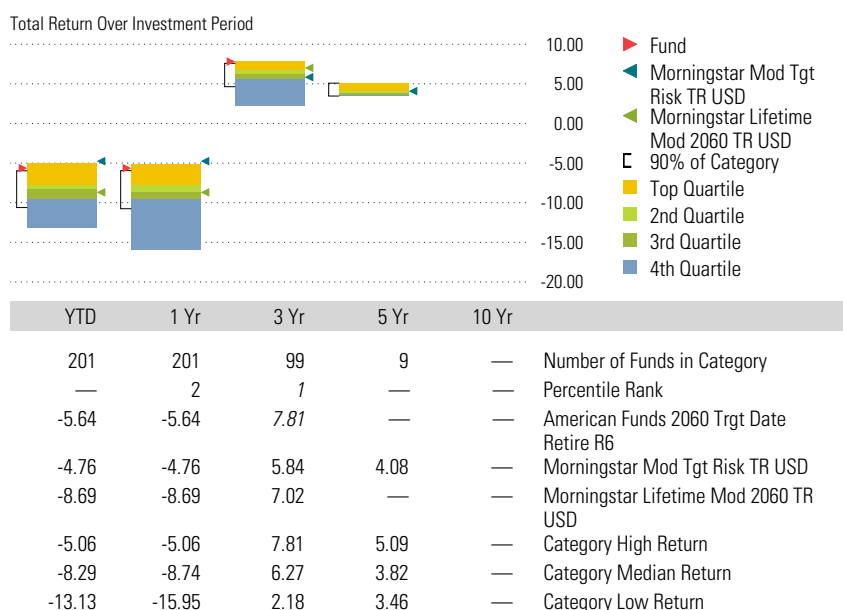
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Fund
- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
American Funds Invmt Co of Amer R6	9.00
American Funds Washington Mutual R6	9.00
American Funds American Mutual R6	8.00
American Funds Fundamental Invs R6	8.00
American Funds Growth Fund of Amer R6	7.00
American Funds New Perspective R6	7.00
American Funds SMALLCAP World R6	7.00
American Funds AMCAP R6	7.00
American Funds Capital World Gr&Inc R6	7.00
American Funds US Government Sec R6	5.01

Investment Strategy 12-31-2018

The investment seeks growth, income and conservation of capital.

The fund normally invests a greater portion of its assets in bond, equity income and balanced funds as it approaches and passes its target date. The advisor attempts to achieve its investment objectives by investing in a mix of American Funds in different combinations and weightings. The underlying American Funds represent a variety of fund categories, including growth funds, growth-and-income funds, equity-income funds, balanced funds and fixed income funds. The fund categories represent differing investment objectives.

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Cobb County Government 457 Deferred Compensation Plan

American Funds Europacific Growth R6 (USD)

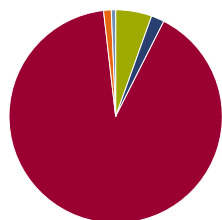
Details 12-31-2018

Ticker	REGX
Gross Expense Ratio %	0.49
Total Assets	\$143,360.77 mil
Family	American Funds
Manager	Mark Denning,
Tenure	27.1 Years
Objective	Foreign Stock

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★
Standard Deviation 3 Yr	11.90
Mean 3 Yr	4.08
Alpha 3 Yr	-0.03
Beta 3 Yr	0.99
R-Squared 3 Yr	93.94
Upside Capture Ratio 3 Yr	97.82
Downside Capture Ratio 3 Yr	98.01
Standard Index	MSCI ACWI Ex USA NR USD
Category Index	MSCI ACWI Ex USA Growth NR USD

Composition 09-30-2018

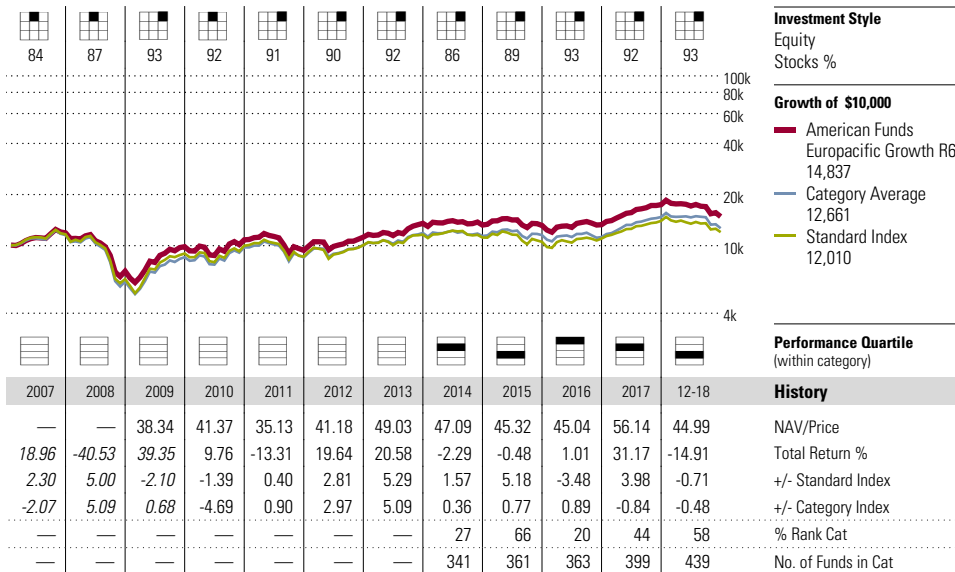


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	5.48	0.01
US Stocks	1.98	0.80
Non-US Stocks	90.72	99.12
Bonds	1.17	0.00
Other/Not Clsfd	0.65	0.07

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	41.0	0.92
Basic Materials	8.7	1.10
Consumer Cyclical	13.0	1.20
Financial Services	18.3	0.82
Real Estate	1.0	0.29
Sensitive	40.7	1.21
Communication Services	2.9	0.68
Energy	6.7	0.91
Industrials	11.1	1.03
Technology	20.1	1.75
Defensive	18.3	0.84
Consumer Defensive	7.5	0.74
Healthcare	8.1	0.96
Utilities	2.7	0.80

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

	20	19	54	Large
Portfolio Statistics				
P/E Ratio TTM	2	1	4	Mid
Geo Avg Cap Plan (\$Mil)	0	0	0	Small
Geo Avg Cap Bmark (\$Mil)				
Value				
Blend				
Growth				

Fixed-Income Investment Style Actual %

	High	Med	Low	Bond %
Avg Effective Duration (Yrs)				
Avg Effective Maturity (Yrs)				
Avg Credit Quality				
AAA				
AA				
A				
BBB				
BB				
B				
Below B				
NR				

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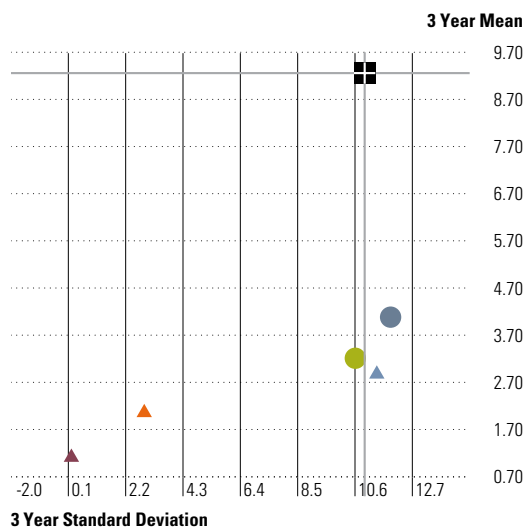
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Cobb County Government 457 Deferred Compensation Plan

American Funds Europacific Growth R6 (USD)

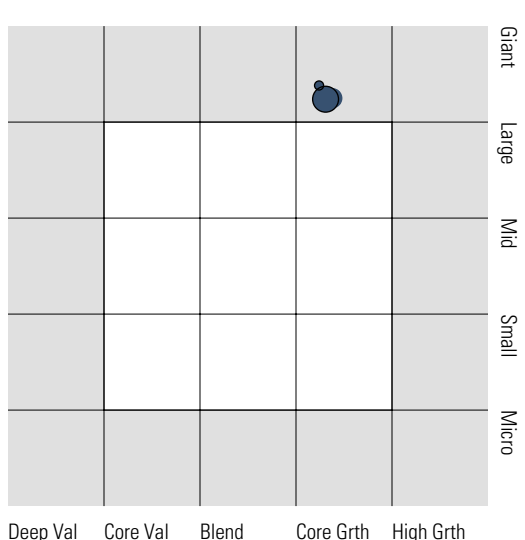
Risk/Return 12-31-2018



Benchmarks

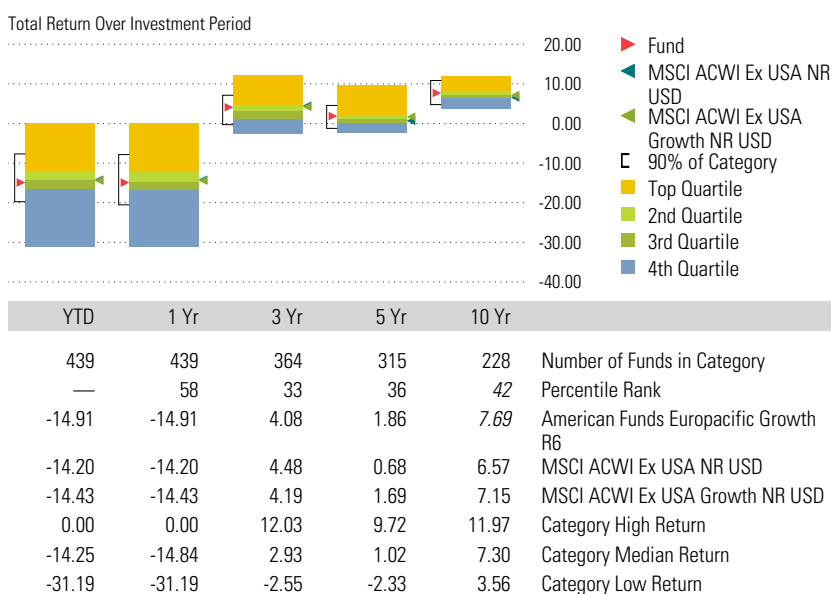
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
AIA Group Ltd	2.70
Airbus SE	2.49
Nintendo Co Ltd	2.35
Samsung Electronics Co Ltd	2.34
Reliance Industries Ltd	2.32
HDFC Bank Ltd	1.95
Alibaba Group Holding Ltd ADR	1.81
Sony Corp	1.66
ASML Holding NV	1.59
Taiwan Semiconductor Manufacturing Co Ltd	1.58

Investment Strategy 12-31-2018

The investment seeks long-term growth of capital. The fund invests primarily in common stocks of issuers in Europe and the Pacific Basin that the investment adviser believes have the potential for growth. Growth stocks are stocks that the investment adviser believes have the potential for above-average capital appreciation. It normally will invest at least 80% of its net assets in securities of issuers in Europe and the Pacific Basin. The fund may invest a portion of its assets in common stocks and other securities of companies in emerging markets.

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Cobb County Government 457 Deferred Compensation Plan

American Funds New Perspective R6 (USD)

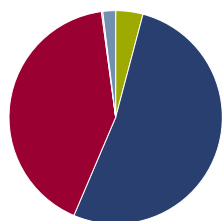
Details 12-31-2018

Ticker	RNPGX
Gross Expense Ratio %	0.45
Total Assets	\$77,669.88 mil
Family	American Funds
Manager	Robert Lovelace,
Tenure	18.1 Years
Objective	World Stock

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★
	729 WS
Standard Deviation 3 Yr	11.32
Mean 3 Yr	7.66
Alpha 3 Yr	0.62
Beta 3 Yr	1.03
R-Squared 3 Yr	90.55
Upside Capture Ratio 3 Yr	106.24
Downside Capture Ratio 3 Yr	103.42
Standard Index	MSCI ACWI Ex USA
	NR USD
Category Index	MSCI ACWI NR USD

Composition 09-30-2018

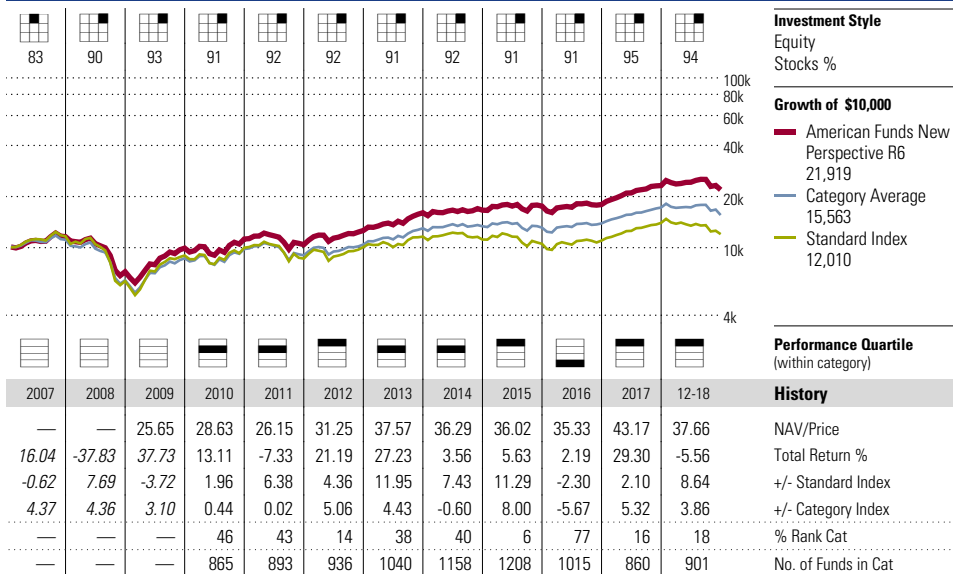


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	4.13	0.01
US Stocks	52.27	0.80
Non-US Stocks	41.46	99.12
Bonds	0.20	0.00
Other/Not Clsfd	1.93	0.07

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	39.6	0.89
Basic Materials	6.5	0.82
Consumer Cyclical	18.3	1.69
Financial Services	14.6	0.66
Real Estate	0.2	0.07
Sensitive	40.6	1.20
Communication Services	1.9	0.46
Energy	4.5	0.61
Industrials	8.0	0.74
Technology	26.3	2.28
Defensive	19.8	0.91
Consumer Defensive	8.6	0.85
Healthcare	10.0	1.19
Utilities	1.2	0.36

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

15	17	58	Large Mid Small	Portfolio Statistics	Port Avg	Rel Index	Rel Cat
2	3	5		P/E Ratio TTM	20.4	1.68	1.22
0	0	0		Geo Avg Cap Plan (\$Mil)	75,483		
				Geo Avg Cap Bmark (\$Mil)	30,558		
Value	Blend	Growth					

Fixed-Income Investment Style Actual %

High	Med	Low
Avg Effective Duration (Yrs)	—	
Avg Effective Maturity (Yrs)	—	
Avg Credit Quality	—	
Bond %	—	
AAA	—	
AA	—	
A	—	
BBB	—	
BB	—	
B	—	
Below B	—	
NR	—	

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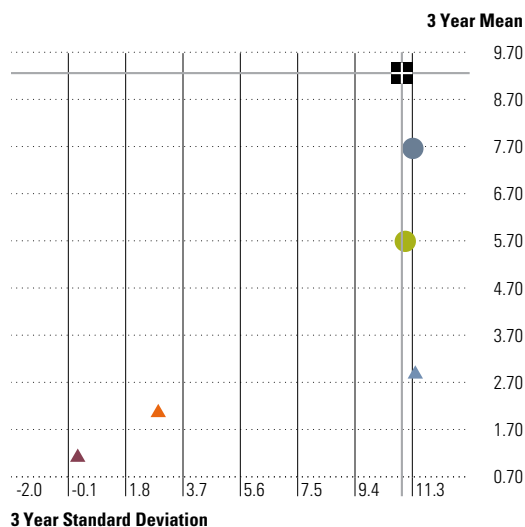
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Cobb County Government 457 Deferred Compensation Plan

American Funds New Perspective R6 (USD)

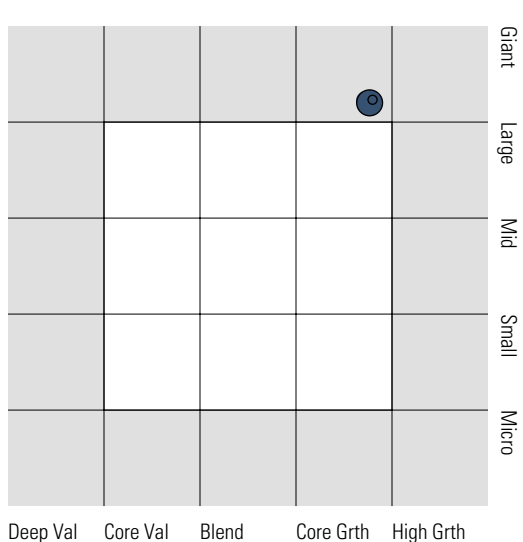
Risk/Return 12-31-2018



Benchmarks

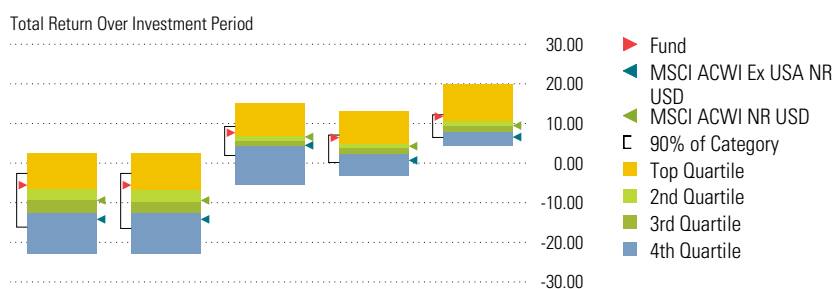
- S&P 500 TR USD
- BBgBarc US Agg Bond TR USD
- MSCI EAFE NR USD
- USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Fund
- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



	YTD	1 Yr	3 Yr	5 Yr	10 Yr	
901	901	729	618	360	11	Number of Funds in Category
—	18	19	11	11	11	Percentile Rank
-5.56	-5.56	7.66	6.42	11.76	11.76	American Funds New Perspective R6
-14.20	-14.20	4.48	0.68	6.57	6.57	MSCI ACWI Ex USA NR USD
-9.42	-9.42	6.60	4.26	9.46	9.46	MSCI ACWI NR USD
2.52	2.52	15.18	12.99	19.99	19.99	Category High Return
-9.55	-9.85	5.62	3.73	9.31	9.31	Category Median Return
-22.76	-22.76	-5.53	-3.31	4.41	4.41	Category Low Return

Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
Amazon.com Inc	5.22
Taiwan Semiconductor Manufacturing Co Ltd	2.24
Facebook Inc A	2.14
Microsoft Corp	2.12
Broadcom Inc	1.64
Mastercard Inc A	1.58
JPMorgan Chase & Co	1.56
Netflix Inc	1.49
Naspers Ltd Class N	1.48
Visa Inc Class A	1.42

Investment Strategy 12-31-2018

The investment seeks long-term growth of capital; future income is a secondary objective. The fund seeks to take advantage of investment opportunities generated by changes in international trade patterns and economic and political relationships by investing in common stocks of companies located around the world. In pursuing its primary investment objective, it invests primarily in common stocks that the investment adviser believes have the potential for growth. In pursuing its secondary objective, the fund invests in common stocks of companies with the potential to pay dividends in the future.

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Cobb County Government 457 Deferred Compensation Plan

American Funds Washington Mutual R6 (USD)

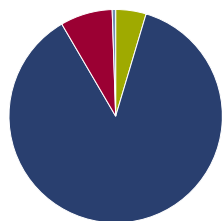
Details 12-31-2018

Ticker	RWMGX
Gross Expense Ratio %	0.29
Total Assets	\$104,255.30 mil
Family	American Funds
Manager	Alan Berro,
Tenure	21.5 Years
Objective	Growth and Income

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
	1,208 LB
Standard Deviation 3 Yr	9.73
Mean 3 Yr	10.09
Alpha 3 Yr	2.01
Beta 3 Yr	0.85
R-Squared 3 Yr	94.07
Upside Capture Ratio 3 Yr	94.48
Downside Capture Ratio 3 Yr	81.19
Standard Index	S&P 500 TR USD
Category Index	Russell 1000 TR USD

Composition 09-30-2018

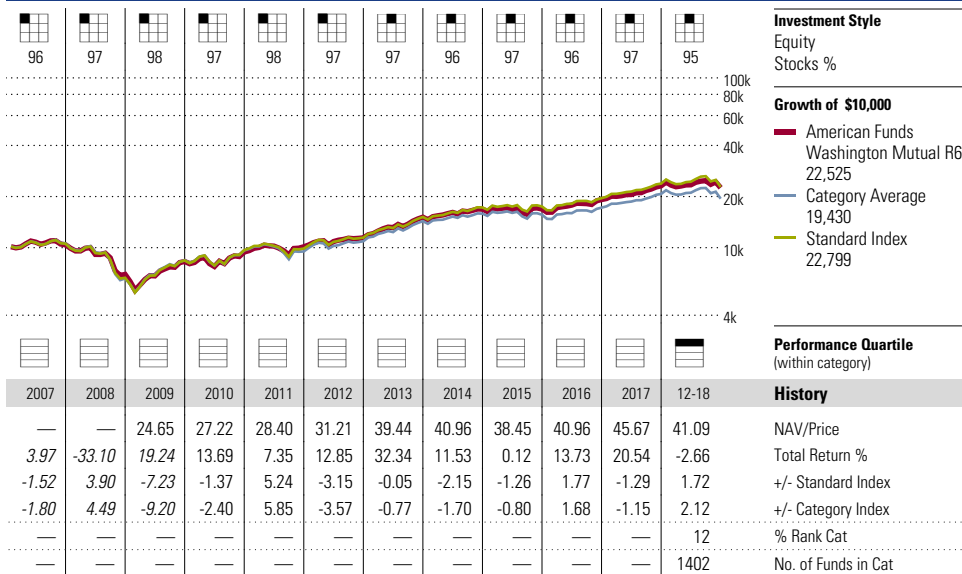


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	4.61	0.00
US Stocks	86.97	99.16
Non-US Stocks	7.90	0.84
Bonds	0.00	0.00
Other/Not Clsfd	0.53	0.00

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	29.8	0.91
Basic Materials	4.3	1.68
Consumer Cyclical	7.4	0.63
Financial Services	16.7	1.05
Real Estate	1.4	0.58
Sensitive	46.0	1.13
Communication Services	4.6	1.29
Energy	11.3	2.13
Industrials	12.5	1.26
Technology	17.6	0.81
Defensive	24.1	0.91
Consumer Defensive	6.2	0.80
Healthcare	15.1	0.98
Utilities	2.8	0.83

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Value	Blend	Growth
34	36	26
2	1	1
0	0	0
Portfolio Statistics	Port Avg	Rel Index
P/E Ratio TTM	19.7	1.15
Geo Avg Cap Plan (\$Mil)	120,066	
Geo Avg Cap Bmark (\$Mil)	93,688	

Fixed-Income Investment Style Actual %

High	Med	Low
Avg Effective Duration (Yrs)	—	—
Avg Effective Maturity (Yrs)	—	—
Avg Credit Quality	—	—
Bond %	—	—
AAA	—	—
AA	—	—
A	—	—
BBB	—	—
BB	—	—
B	—	—
Below B	—	—
NR	—	—

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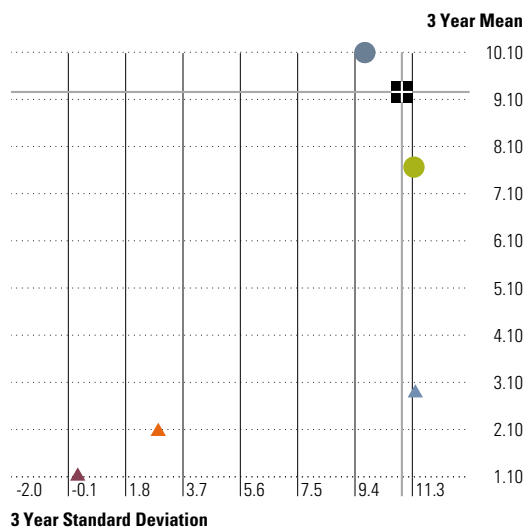
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Cobb County Government 457 Deferred Compensation Plan

American Funds Washington Mutual R6 (USD)

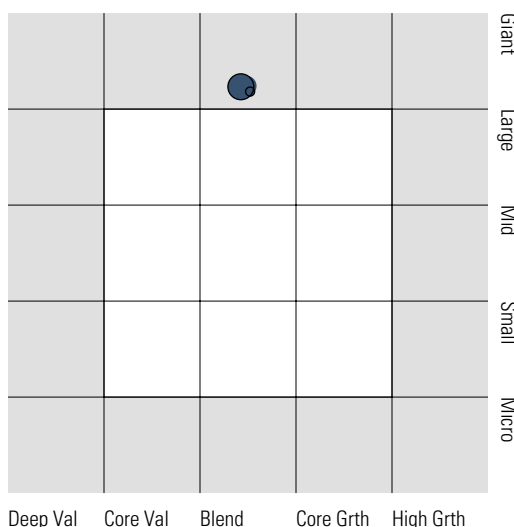
Risk/Return 12-31-2018



Benchmarks

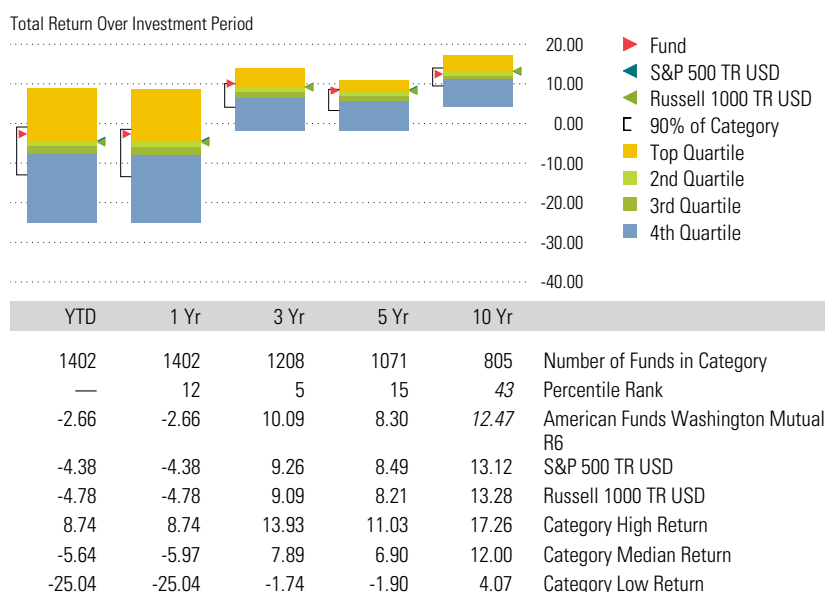
- S&P 500 TR USD
- BBgBarc US Agg Bond TR USD
- MSCI EAFE NR USD
- USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
Microsoft Corp	6.22
The Home Depot Inc	3.57
Intel Corp	2.76
Boeing Co	2.74
Royal Dutch Shell PLC ADR Class B	2.54
Merck & Co Inc	2.48
Broadcom Inc	2.33
DowDuPont Inc	2.25
Lockheed Martin Corp	2.23
Verizon Communications Inc	2.21

Investment Strategy 12-31-2018

The investment seeks to produce income and to provide an opportunity for growth of principal consistent with sound common stock investing. The fund invests primarily in common stocks of established companies that are listed on, or meet the financial listing requirements of, the New York Stock Exchange and have a strong record of earnings and dividends. Its advisor strives to maintain a fully invested, diversified portfolio, consisting primarily of high-quality common stocks.

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Cobb County Government 457 Deferred Compensation Plan

ClearBridge Small Cap I (USD)

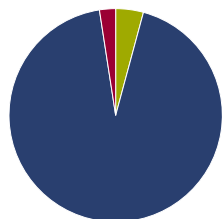
Details 12-31-2018

Ticker	LMNSX
Gross Expense Ratio %	0.98
Total Assets	\$1,029.05 mil
Family	Legg Mason
Manager	Albert Grosman,
Tenure	7.3 Years
Objective	Small Company

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★
Standard Deviation 3 Yr	15.45
Mean 3 Yr	9.27
Alpha 3 Yr	2.60
Beta 3 Yr	0.87
R-Squared 3 Yr	88.74
Upside Capture Ratio 3 Yr	94.36
Downside Capture Ratio 3 Yr	81.60
Standard Index	S&P 500 TR USD
Category Index	Russell 2000 Growth TR USD

Composition 09-30-2018

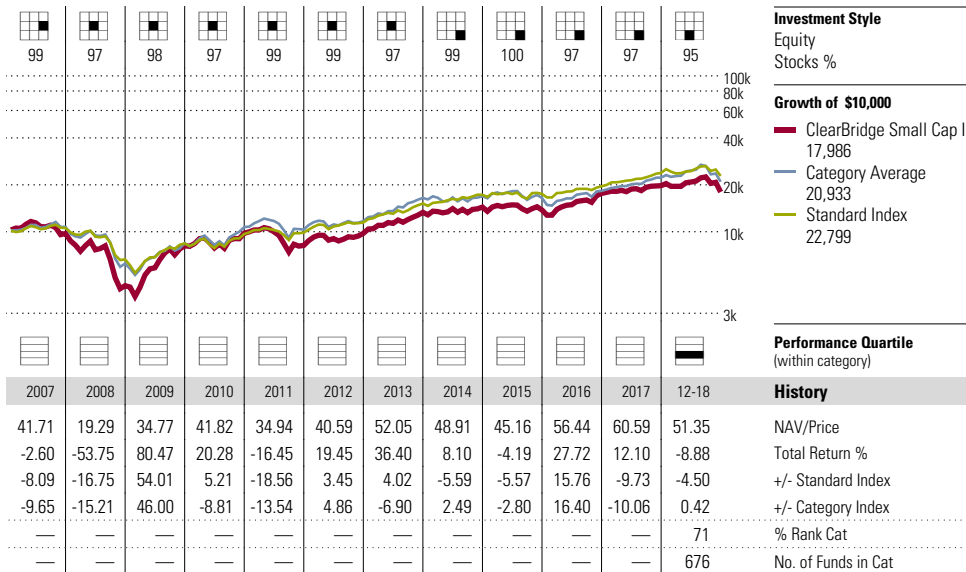


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	4.20	0.00
US Stocks	93.37	99.16
Non-US Stocks	2.44	0.84
Bonds	0.00	0.00
Other/Not Clsfd	0.00	0.00

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	43.7	1.34
Basic Materials	4.3	1.70
Consumer Cyclical	13.2	1.12
Financial Services	21.4	1.35
Real Estate	4.8	1.98
Sensitive	36.9	0.91
Communication Services	1.2	0.33
Energy	3.8	0.72
Industrials	14.7	1.48
Technology	17.2	0.79
Defensive	19.4	0.73
Consumer Defensive	4.4	0.57
Healthcare	12.0	0.78
Utilities	3.0	0.89

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

0	0	0	Large	Portfolio Statistics	Port Avg	Rel Index	Rel Cat
2	11	13	Mid	P/E Ratio TTM	12.8	0.74	0.51
20	26	28	Small	Geo Avg Cap Plan (\$Mil)			2,146
				Geo Avg Cap Bmark (\$Mil)			93,688
Value	Blend	Growth					

Fixed-Income Investment Style Actual %

High	Med	Low	Bond %
			Avg Effective Duration (Yrs)
			Avg Effective Maturity (Yrs)
			Avg Credit Quality
			AAA
			AA
			A
			BBB
			BB
			B
			Below B
			NR

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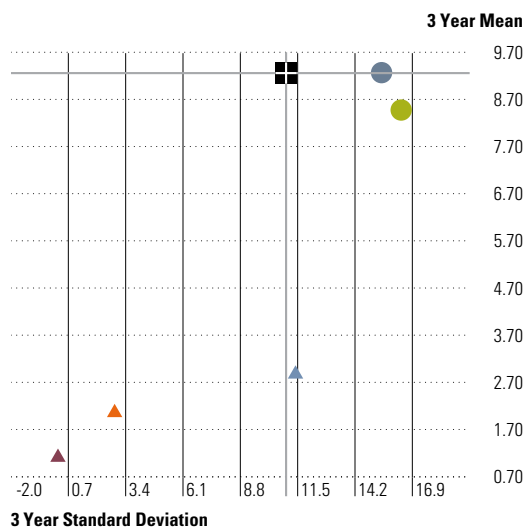
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Cobb County Government 457 Deferred Compensation Plan

ClearBridge Small Cap I (USD)

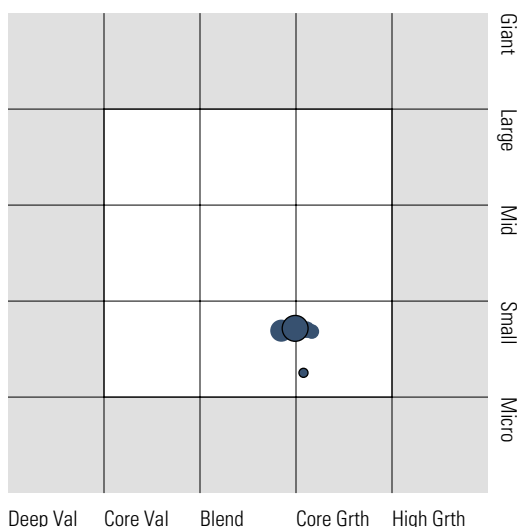
Risk/Return 12-31-2018



Benchmarks

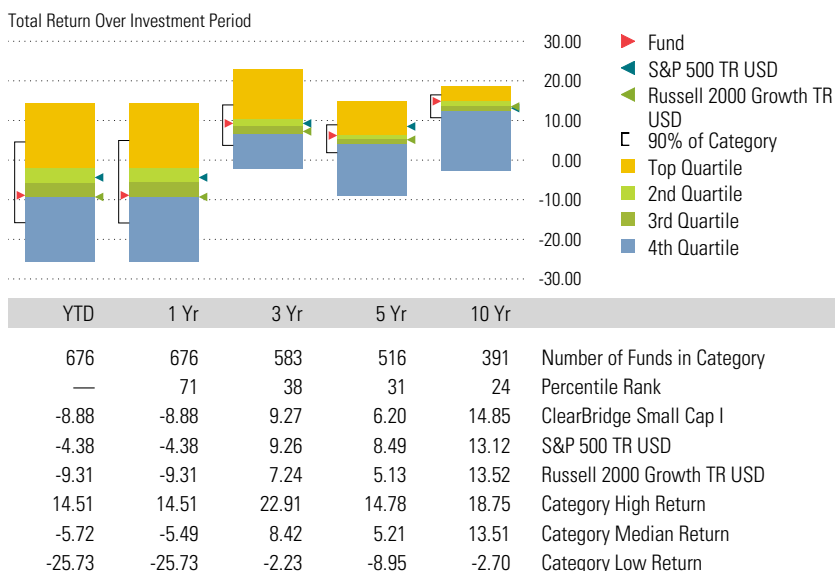
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
Amarin Corp PLC ADR	3.97
Gray Television Inc	2.83
Aaron's Inc	2.48
HealthEquity Inc	2.37
First Interstate BancSystem Inc	2.34
Cadence Bancorp A	2.22
Sprouts Farmers Market Inc	2.17
Encompass Health Corp	2.09
OneMain Holdings Inc	1.80
Black Hills Corp	1.74

Investment Strategy 12-31-2018

The investment seeks capital appreciation. Under normal circumstances, the fund invests at least 80% of its net assets plus borrowings for investment purposes, if any, in common stocks and other equity securities of small capitalization companies or in other investments that the portfolio managers believe have similar economic characteristics. The adviser does not currently intend to borrow for investment purposes.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

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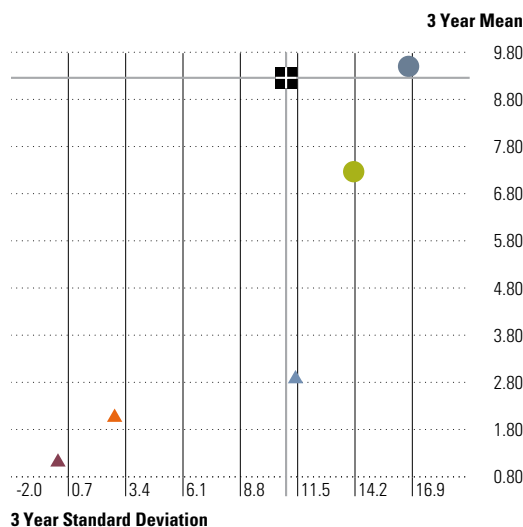
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Cobb County Government 457 Deferred Compensation Plan

Harbor Mid Cap Growth Retirement (USD)

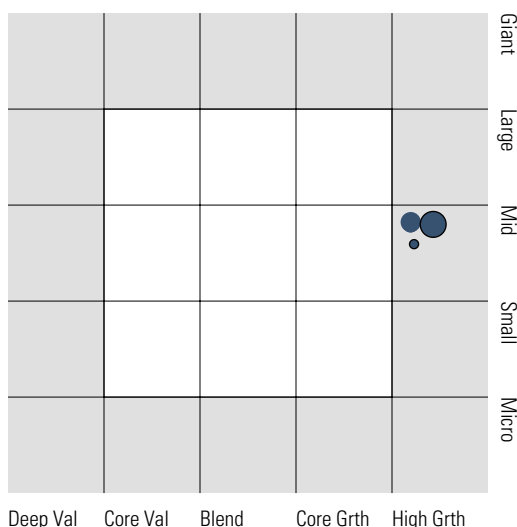
Risk/Return 12-31-2018



Benchmarks

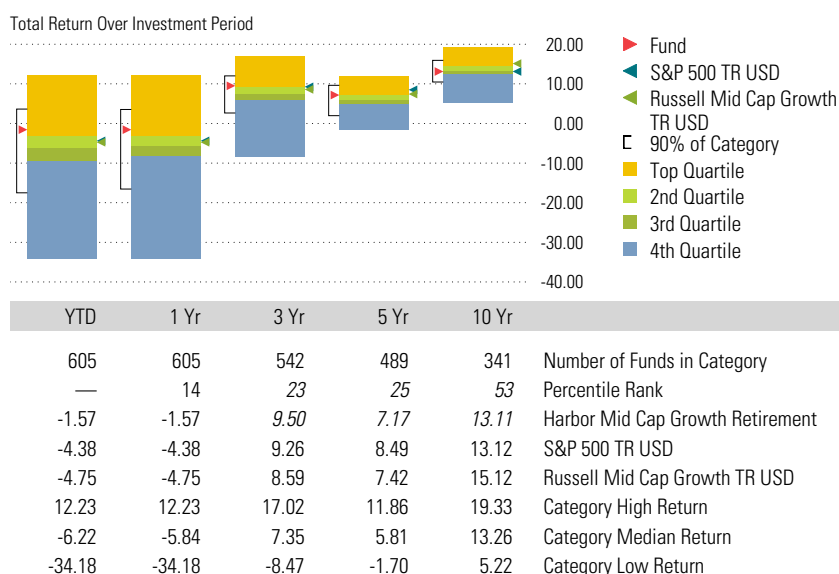
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
Exact Sciences Corp	4.23
ServiceNow Inc	3.81
Workday Inc Class A	3.68
Guidewire Software Inc	3.15
CoStar Group Inc	3.11
Align Technology Inc	2.86
Advanced Micro Devices Inc	2.57
DexCom Inc	2.55
Hilton Worldwide Holdings Inc	2.43
Wayfair Inc Class A	2.43

Investment Strategy 12-31-2018

The investment seeks long-term growth of capital. The fund invests primarily in equity securities, principally common and preferred stocks of mid cap companies. The adviser defines mid cap companies as those with market capitalizations that fall within the range of the Russell Midcap® Growth Index. It normally invests at least 80% of its net assets, plus borrowings for investment purposes, in a diversified portfolio of equity securities of mid cap companies. The fund may invest up to 25% of its total assets in the securities of foreign issuers, including issuers located or doing business in emerging markets.

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Cobb County Government 457 Deferred Compensation Plan

JHancock Fundamental Large Cap Core R6 (USD)

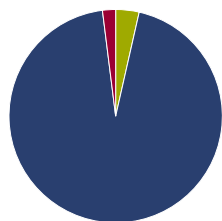
Details 12-31-2018

Ticker	JLCWX
Gross Expense Ratio %	0.69
Total Assets	\$4,589.62 mil
Family	John Hancock
Manager	Emory (Sandy) Sanders,
Tenure	7.1 Years
Objective	Growth

Risk and Return 12-31-2018

Overall Morningstar Rating	★★
	1,208 LB
Standard Deviation 3 Yr	13.09
Mean 3 Yr	4.83
Alpha 3 Yr	-4.72
Beta 3 Yr	1.12
R-Squared 3 Yr	89.51
Upside Capture Ratio 3 Yr	93.56
Downside Capture Ratio 3 Yr	126.64
Standard Index	S&P 500 TR USD
Category Index	Russell 1000 TR USD

Composition 10-31-2018

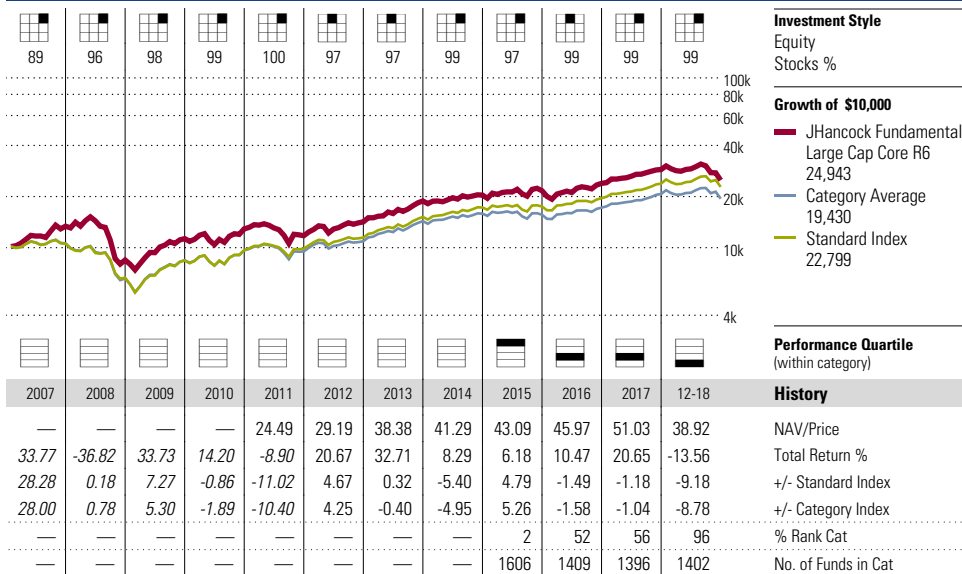


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	3.55	0.00
US Stocks	94.47	99.16
Non-US Stocks	1.98	0.84
Bonds	0.00	0.00
Other/Not Clsfd	0.00	0.00

Sector Weightings 11-30-2018

	Stocks %	Rel Std Index
Cyclical	44.7	1.37
Basic Materials	0.0	0.00
Consumer Cyclical	23.4	1.98
Financial Services	21.3	1.35
Real Estate	0.0	0.00
Sensitive	38.1	0.94
Communication Services	3.3	0.93
Energy	5.4	1.02
Industrials	6.1	0.62
Technology	23.2	1.06
Defensive	17.2	0.64
Consumer Defensive	6.7	0.86
Healthcare	10.4	0.67
Utilities	0.0	0.00

Performance 12-31-2018



Style Analysis 11-30-2018

Equity Investment Style Actual %

Value	Blend	Growth
31	16	39
0	9	3
0	0	2

Fixed-Income Investment Style Actual %

High	Med	Low

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period. The performance data represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the return data quoted. For performance data current to the most recent month-end, visit <http://advisor.morningstar.com/familyinfo.asp>. The "Overall Morningstar Rating" is based on risk-adjusted returns, derived from a weighted average of the three, five and ten-year (if applicable) Morningstar metrics. An investment in the fund is not insured or guaranteed by the FDIC or any other government agency.

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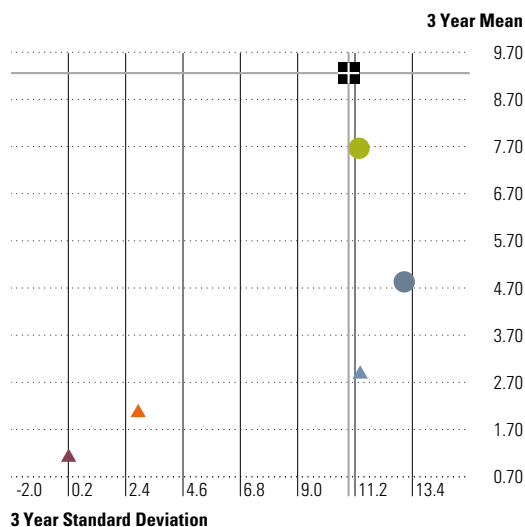
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Cobb County Government 457 Deferred Compensation Plan

JHancock Fundamental Large Cap Core R6 (USD)

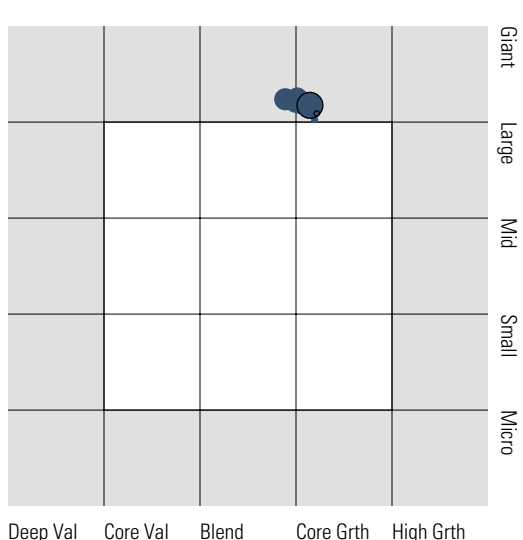
Risk/Return 12-31-2018



Benchmarks

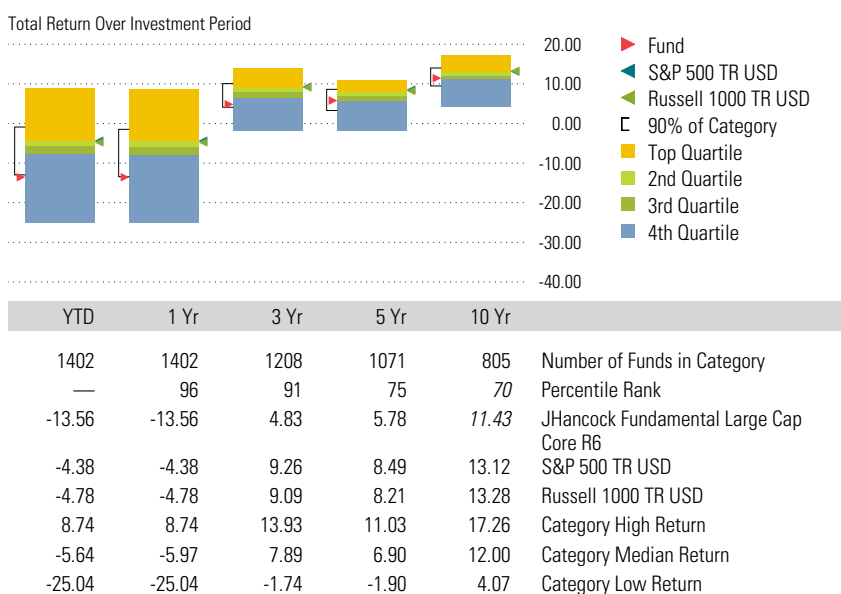
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 11-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 11-30-2018

Holding Name	% Net Assets
Amazon.com Inc	7.91
Lennar Corp	4.56
Bank of America Corporation	4.49
Alphabet Inc A	4.48
Apple Inc	4.20
Facebook Inc A	4.14
Polaris Industries Inc	3.58
Workday Inc Class A	3.53
Citigroup Inc	3.42
Anheuser-Busch InBev SA/NV ADR	2.50

Investment Strategy 12-31-2018

The investment seeks long-term capital appreciation.

The fund normally invests at least 80% of its net assets (plus any borrowings for investment purposes) in equity securities of large-capitalization companies. It may invest up to 20% of its assets in bonds of any maturity, including up to 15% of net assets in below investment grade bonds (i.e., junk bonds) rated as low as CC by Standard & Poor's Ratings Services or Ca by Moody's Investors' Service, Inc. and their unrated equivalents. The fund may invest up to 35% of its assets in foreign securities and may trade securities actively.

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Cobb County Government 457 Deferred Compensation Plan

Nuveen Real Estate Securities R6 (USD)

Details 12-31-2018

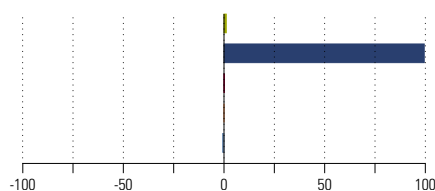
Ticker	FREGX
Gross Expense Ratio %	0.87
Total Assets	\$3,102.41 mil
Family	Nuveen
Manager	Jay Rosenberg,
Tenure	13.7 Years
Objective	Specialty - Real Estate

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
Standard Deviation 3 Yr	223 SR
Mean 3 Yr	13.03
Alpha 3 Yr	2.32
Beta 3 Yr	-0.48
R-Squared 3 Yr	0.94
Upside Capture Ratio 3 Yr	98.77
Downside Capture Ratio 3 Yr	91.81
Standard Index	93.86
Category Index	MSCI ACWI NR USD
	S&P United States
	REIT TR USD

Composition 10-31-2018

Asset Allocation

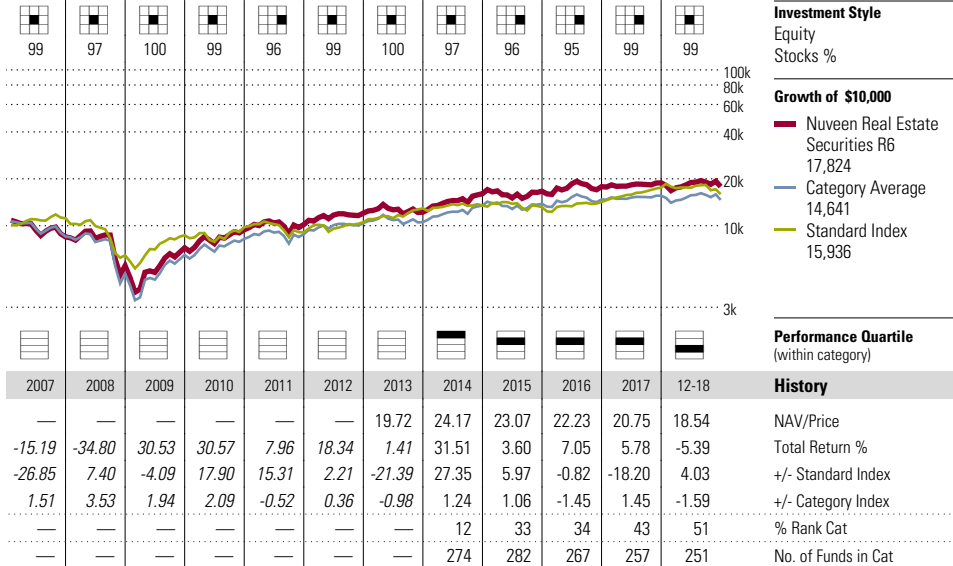


	Portfolio Net %	Bmark Net %
Cash	1.12	0.00
US Stocks	99.44	54.18
Non-US Stocks	0.15	45.79
Bonds	0.00	0.00
Other/Not Clsfd	-0.72	0.03
Total	100.00	100.00

Sector Weightings 10-31-2018

	Stocks %	Rel Std Index
Cyclical	98.9	2.60
Basic Materials	0.0	0.00
Consumer Cyclical	0.5	0.04
Financial Services	0.0	0.00
Real Estate	98.5	32.51
Sensitive	1.1	0.03
Communication Services	0.9	0.22
Energy	0.0	0.00
Industrials	0.2	0.02
Technology	0.0	0.00
Defensive	0.0	0.00
Consumer Defensive	0.0	0.00
Healthcare	0.0	0.00
Utilities	0.0	0.00

Performance 12-31-2018



Style Analysis 10-31-2018

Equity Investment Style Actual %

	0	31	5	Large
P/E Ratio TTM	12	36	4	Mid
Geo Avg Cap Plan (\$Mil)	5	4	3	Small
Geo Avg Cap Bmark (\$Mil)				
Value				
Blend				
Growth				

Fixed-Income Investment Style Actual %

	High	Med	Low	Bond %
Avg Effective Duration (Yrs)				
Avg Effective Maturity (Yrs)				
Avg Credit Quality				
AAA				
AA				
A				
BBB				
BB				
B				
Below B				
NR				

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period. The performance data represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the return data quoted. For performance data current to the most recent month-end, visit <http://advisor.morningstar.com/familyinfo.asp>. The "Overall Morningstar Rating" is based on risk-adjusted returns, derived from a weighted average of the three, five and ten-year (if applicable) Morningstar metrics. An investment in the fund is not insured or guaranteed by the FDIC or any other government agency.

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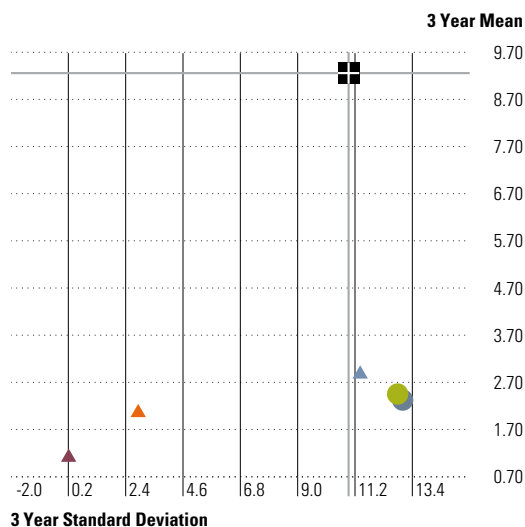
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Cobb County Government 457 Deferred Compensation Plan

Nuveen Real Estate Securities R6 (USD)

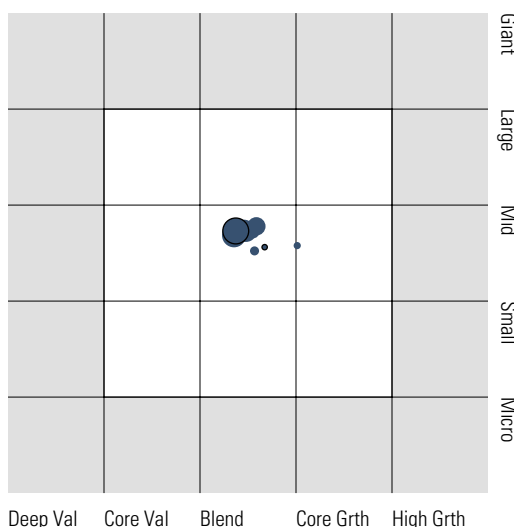
Risk/Return 12-31-2018



Benchmarks

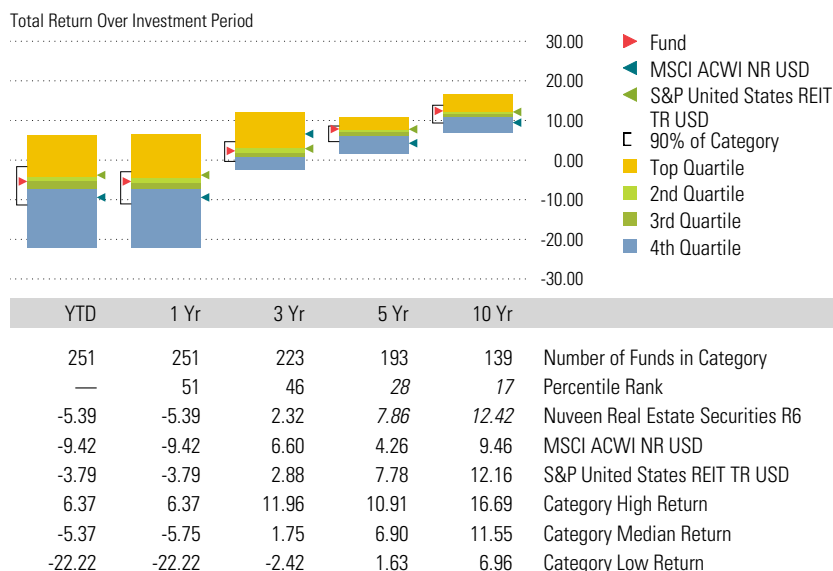
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 10-31-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 10-31-2018

Holding Name	% Net Assets
Simon Property Group Inc	6.72
Prologis Inc	4.56
Duke Realty Corp	4.27
Boston Properties Inc	3.68
Camden Property Trust	3.44
Alexandria Real Estate Equities Inc	3.40
Ventas Inc	3.25
Equinix Inc	3.09
AvalonBay Communities Inc	3.09
Public Storage	3.09

Investment Strategy 12-31-2018

The investment seeks to provide above average current income and long-term capital appreciation. The fund normally invests at least 80% of the sum of its net assets and the amount of any borrowings for investment purposes in income-producing common stocks of publicly traded companies engaged in the real estate industry. The advisor expects to emphasize investments in equity REITs, although it may invest in all three kinds of REITs. It may invest up to 15% of its total assets in non-dollar denominated equity securities of non-U.S. issuers. Up to 15% of the fund's total assets may be invested in equity securities of emerging market issuers.

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Cobb County Government 457 Deferred Compensation Plan

Oakmark International Institutional (USD)

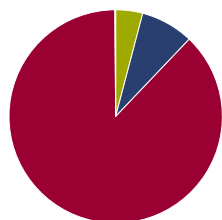
Details 12-31-2018

Ticker	OANIX
Gross Expense Ratio %	0.82
Total Assets	\$32,832.07 mil
Family	Oakmark
Manager	David Herro,
Tenure	26.3 Years
Objective	Foreign Stock

Risk and Return 12-31-2018

Overall Morningstar Rating	☆☆☆☆
Standard Deviation 3 Yr	15.61
Mean 3 Yr	2.48
Alpha 3 Yr	-2.36
Beta 3 Yr	1.25
R-Squared 3 Yr	85.04
Upside Capture Ratio 3 Yr	118.03
Downside Capture Ratio 3 Yr	136.67
Standard Index	MSCI ACWI Ex USA NR USD
Category Index	MSCI ACWI Ex USA NR USD

Composition 09-30-2018

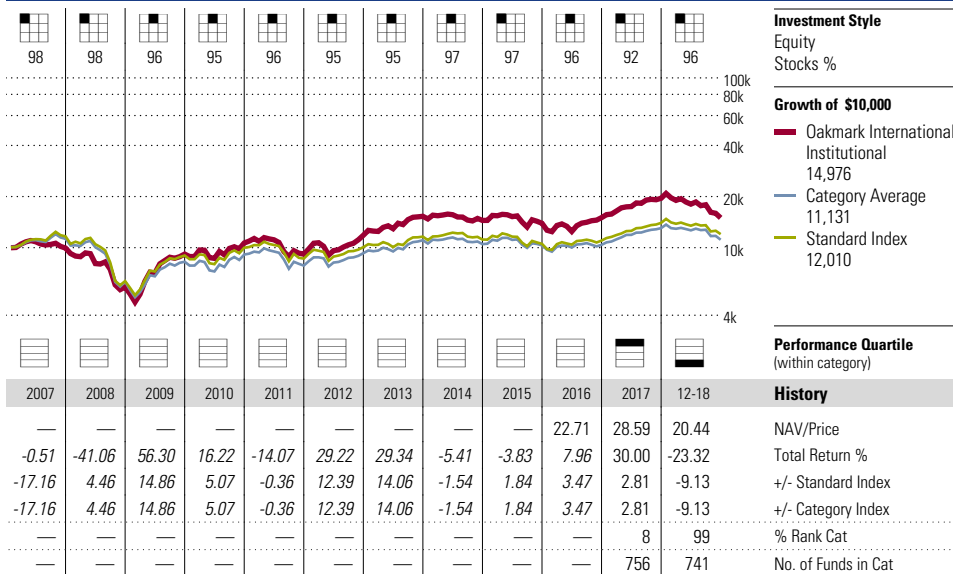


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	4.09	0.01
US Stocks	8.02	0.80
Non-US Stocks	87.77	99.12
Bonds	0.00	0.00
Other/Not Clsfd	0.12	0.07

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	65.2	1.47
Basic Materials	8.0	1.01
Consumer Cyclical	27.8	2.56
Financial Services	29.3	1.32
Real Estate	0.0	0.00
Sensitive	26.7	0.79
Communication Services	3.0	0.71
Energy	1.4	0.19
Industrials	15.8	1.48
Technology	6.5	0.56
Defensive	8.2	0.37
Consumer Defensive	4.2	0.42
Healthcare	3.9	0.47
Utilities	0.0	0.00

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Portfolio Statistics	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	12.1	1.00	0.98
Geo Avg Cap Plan (\$Mil)	35,878		
Geo Avg Cap Bmark (\$Mil)	30,558		
Value	Blend	Growth	

Fixed-Income Investment Style Actual %

High	Med	Low	Bond %
Avg Effective Duration (Yrs)			—
Avg Effective Maturity (Yrs)			—
Avg Credit Quality			—
AAA			—
AA			—
A			—
BBB			—
BB			—
B			—
Below B			—
NR			—

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period. The performance data represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the return data quoted. For performance data current to the most recent month-end, visit <http://advisor.morningstar.com/familyinfo.asp>. The "Overall Morningstar Rating" is based on risk-adjusted returns, derived from a weighted average of the three, five and ten-year (if applicable) Morningstar metrics. An investment in the fund is not insured or guaranteed by the FDIC or any other government agency.

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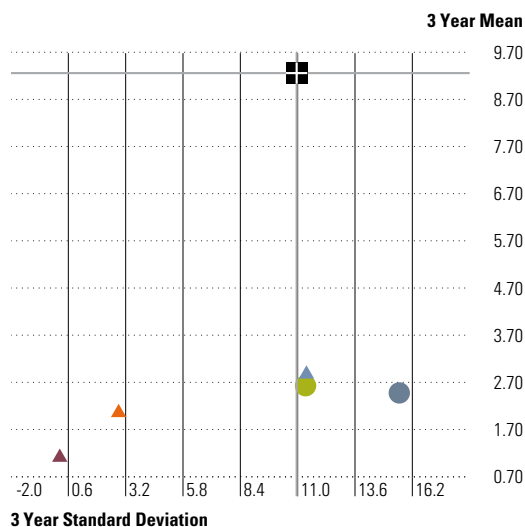
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Cobb County Government 457 Deferred Compensation Plan

Oakmark International Institutional (USD)

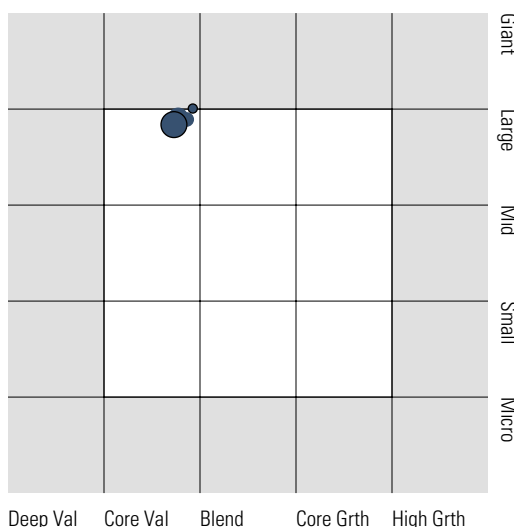
Risk/Return 12-31-2018



Benchmarks

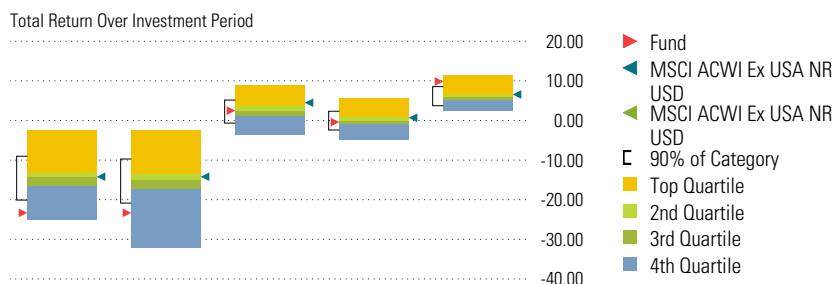
- S&P 500 TR USD
- BBgBarc US Agg Bond TR USD
- MSCI EAFE NR USD
- USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Fund
- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



	YTD	1 Yr	3 Yr	5 Yr	10 Yr	
	741	741	639	508	380	Number of Funds in Category
	—	99	59	70	2	Percentile Rank
	-23.32	-23.32	2.48	-0.42	9.83	Oakmark International Institutional
	-14.20	-14.20	4.48	0.68	6.57	MSCI ACWI Ex USA NR USD
	-14.20	-14.20	4.48	0.68	6.57	MSCI ACWI Ex USA NR USD
	-2.46	-2.46	9.00	5.60	11.50	Category High Return
	-14.45	-15.05	2.45	-0.12	5.80	Category Median Return
	-24.92	-32.11	-3.59	-4.93	2.34	Category Low Return

Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
Daimler AG	4.42
BNP Paribas	4.28
Hennes & Mauritz AB B	4.27
Lloyds Banking Group PLC	4.02
Intesa Sanpaolo	3.68
Glencore PLC	3.60
Bayerische Motoren Werke AG	3.34
Allianz SE	3.29
Credit Suisse Group AG	3.24
CNH Industrial NV	3.13

Investment Strategy 12-31-2018

The investment seeks long-term capital appreciation.

The fund invests primarily in a diversified portfolio of common stocks of non-U.S. companies. It may invest in non-U.S. markets throughout the world, including emerging markets. Ordinarily, the fund will invest in the securities of at least five countries outside of the U.S. There are no geographic limits on the fund's non-U.S. investments. The fund may invest in securities of large-, mid-, and small- capitalization companies.

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Cobb County Government 457 Deferred Compensation Plan

PGIM High Yield R6 (USD)

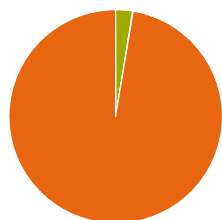
Details 12-31-2018

Ticker	PHYQX
Gross Expense Ratio %	0.42
Total Assets	\$7,634.99 mil
Family	PGIM Funds (Prudential)
Manager	Robert Spano,
Tenure	11.3 Years
Objective	Corporate Bond - High Yield

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
604 HY	
Standard Deviation 3 Yr	4.43
Mean 3 Yr	7.16
Alpha 3 Yr	0.31
Beta 3 Yr	0.93
R-Squared 3 Yr	97.56
Upside Capture Ratio 3 Yr	96.51
Downside Capture Ratio 3 Yr	91.71
Standard Index	BBgBarc US Agg Bond TR USD
Category Index	ICE BofAML US High Yield TR USD

Composition 11-30-2018

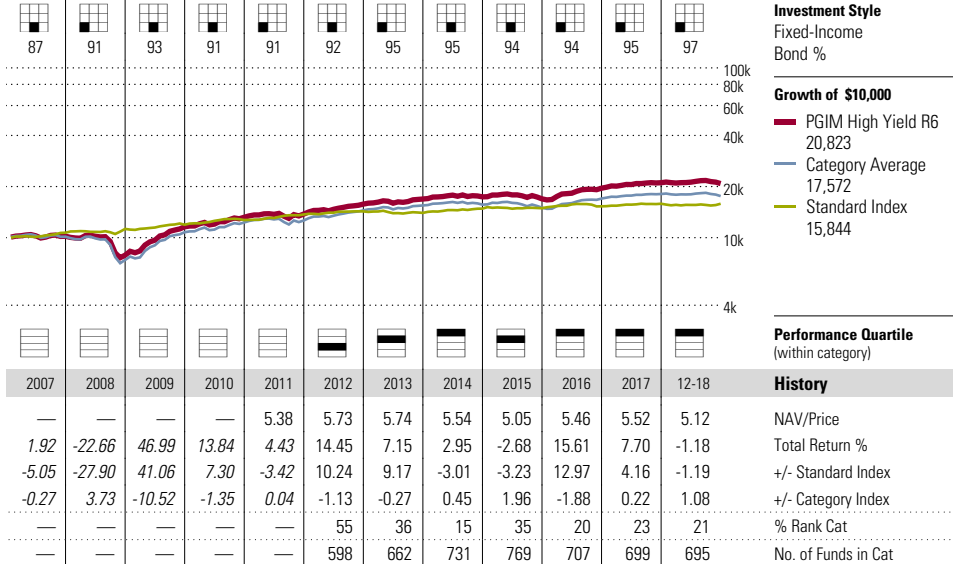


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	2.54	1.99
US Stocks	0.10	0.00
Non-US Stocks	0.01	0.00
Bonds	97.33	97.62
Other/Not Clsfd	0.03	0.39

Sector Weightings 11-30-2018

	Stocks %	Rel Std Index
Cyclical	1.5	—
Basic Materials	0.0	—
Consumer Cyclical	1.5	—
Financial Services	0.0	—
Real Estate	0.0	—
Sensitive	6.3	—
Communication Services	0.0	—
Energy	6.3	—
Industrials	0.0	—
Technology	0.0	—
Defensive	92.2	—
Consumer Defensive	0.0	—
Healthcare	0.0	—
Utilities	92.2	—

Performance 12-31-2018



Style Analysis 11-30-2018

Equity Investment Style Actual %

Portfolio Statistics	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	—	—	—
Geo Avg Cap Plan (\$Mil)	9,718		
Geo Avg Cap Bmark (\$Mil)	—		
Value Blend Growth			

Fixed-Income Investment Style Actual %

High	Med	Low	Bond %
0	0	0	Avg Effective Duration (Yrs) 3.88
0	0	0	Avg Effective Maturity (Yrs) —
100	0	0	Avg Credit Quality —
Ltd	Mod	Ext	AAA 10.26
			AA 0.00
			A 0.00
			BBB 4.45
			BB 32.71
			B 39.86
			Below B 11.70
			NR 1.03

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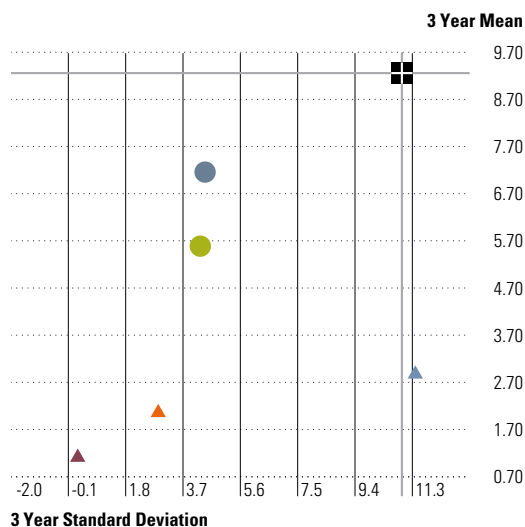
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Cobb County Government 457 Deferred Compensation Plan

PGIM High Yield R6 (USD)

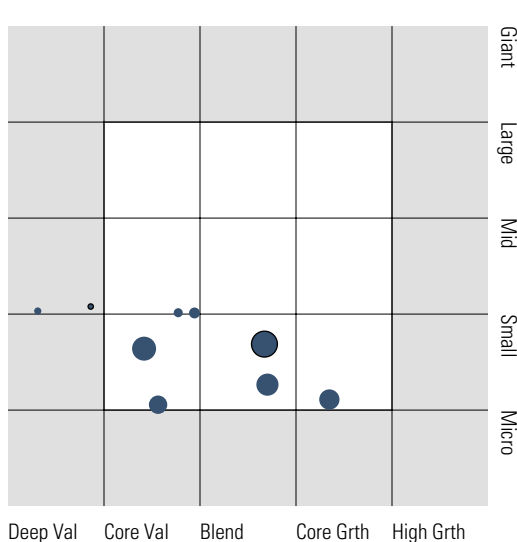
Risk/Return 12-31-2018



Benchmarks

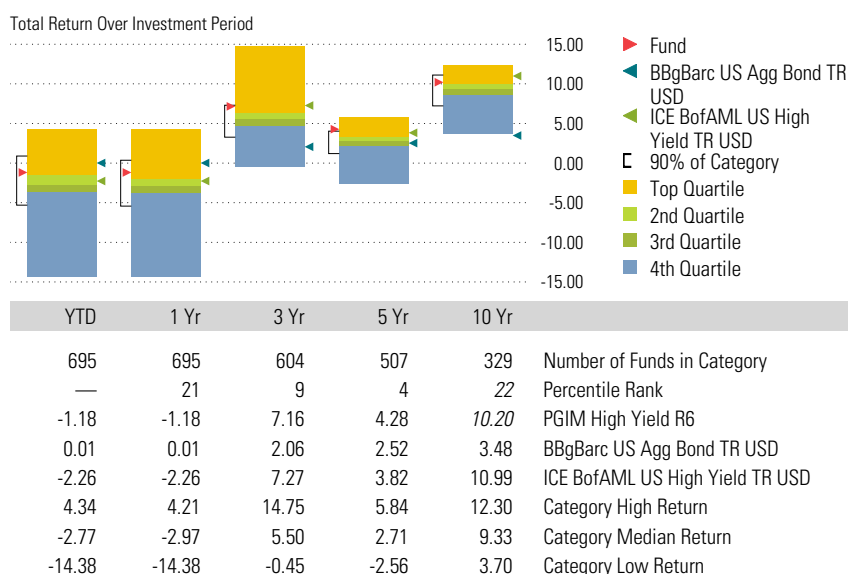
- S&P 500 TR USD
- BBgBarc US Agg Bond TR USD
- MSCI EAFE NR USD
- USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 03-31-2018



- Fund
- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 11-30-2018

Holding Name	% Net Assets
2 Year US Treasury Note Future Mar19	3.52
US 10 Year Note (CBT) Mar19	3.34
First Data Corporation 7%	1.68
US 5 Year Note (CBT) Mar19	1.63
DISH DBS Corporation 7.75%	1.35
Wind Tre S.p.A. 5%	1.11
Calpine Corporation 5.75%	1.03
Bombardier Inc. 7.5%	0.99
Wand Merger Corporation 9.12%	0.84
Clear Channel Worldwide Holdings Inc. 7.62%	0.79

Investment Strategy 12-31-2018

The investment seeks to maximize current income; and capital appreciation is a secondary objective. The fund normally invests at least 80% of its investable assets in a diversified portfolio of high yield fixed-income instruments rated Ba or lower by Moody's Investors Service (Moody's) or BB or lower by S&P Global Ratings (Standard & Poor's), and instruments either rated by another nationally recognized statistical rating organization (NRSRO), or considered to be of comparable quality, that is, junk bonds.

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Cobb County Government 457 Deferred Compensation Plan

T. Rowe Price Growth Stock I (USD)

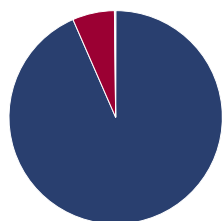
Details 12-31-2018

Ticker	PRUFX
Gross Expense Ratio %	0.52
Total Assets	\$49,608.75 mil
Family	T. Rowe Price
Manager	Joseph Fath
Tenure	5.0 Years
Objective	Growth

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★
	1,247 LG
Standard Deviation 3 Yr	13.39
Mean 3 Yr	10.45
Alpha 3 Yr	-0.79
Beta 3 Yr	1.03
R-Squared 3 Yr	89.28
Upside Capture Ratio 3 Yr	102.00
Downside Capture Ratio 3 Yr	109.21
Standard Index	S&P 500 TR USD
Category Index	Russell 1000 Growth TR USD

Composition 09-30-2018

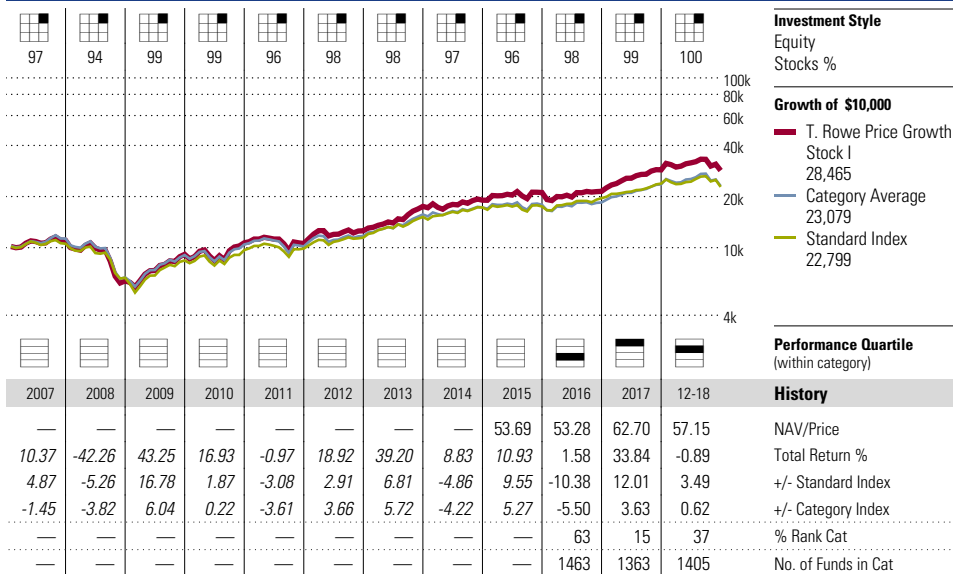


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	0.03	0.00
US Stocks	93.42	99.16
Non-US Stocks	6.37	0.84
Bonds	0.00	0.00
Other/Not Clsfd	0.18	0.00

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	40.7	1.25
Basic Materials	0.6	0.23
Consumer Cyclical	25.6	2.17
Financial Services	13.2	0.83
Real Estate	1.3	0.52
Sensitive	39.9	0.98
Communication Services	0.0	0.00
Energy	0.0	0.00
Industrials	10.5	1.06
Technology	29.4	1.34
Defensive	19.4	0.73
Consumer Defensive	2.9	0.37
Healthcare	15.0	0.97
Utilities	1.5	0.45

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Value	Blend	Growth
4	12	78
1	2	3
0	0	0

Fixed-Income Investment Style Actual %

High	Med	Low

Performance rankings are based on each fund's total returns relative to other funds in its Morningstar Category for each period. The performance data represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the return data quoted. For performance data current to the most recent month-end, visit <http://advisor.morningstar.com/familyinfo.asp>. The "Overall Morningstar Rating" is based on risk-adjusted returns, derived from a weighted average of the three, five and ten-year (if applicable) Morningstar metrics. An investment in the fund is not insured or guaranteed by the FDIC or any other government agency.

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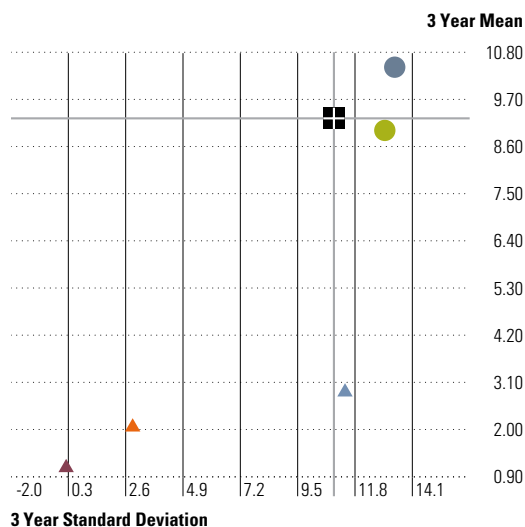
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Cobb County Government 457 Deferred Compensation Plan

T. Rowe Price Growth Stock I (USD)

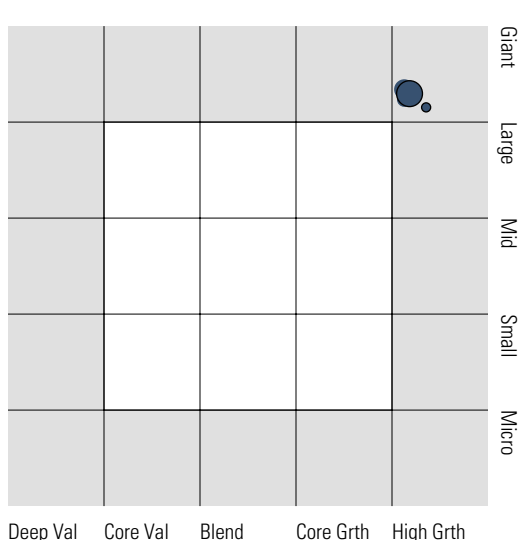
Risk/Return 12-31-2018



Benchmarks

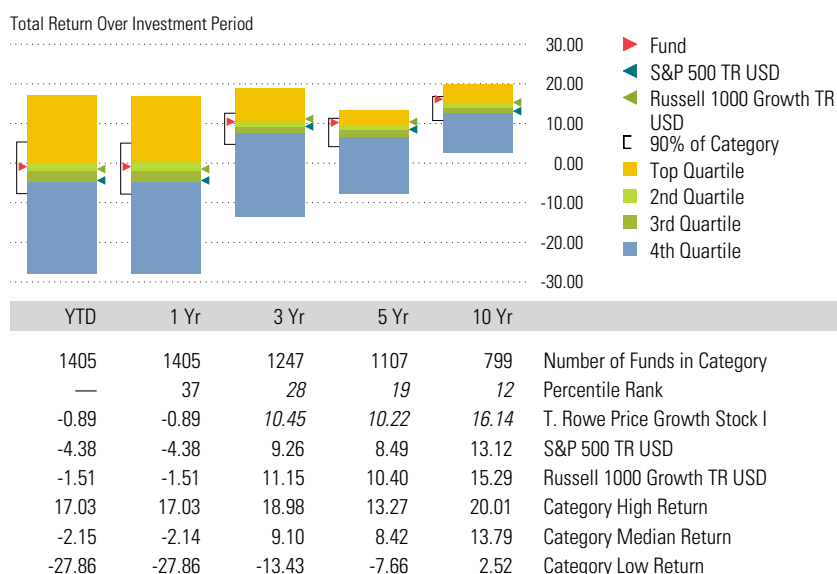
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
Amazon.com Inc	10.16
Microsoft Corp	5.42
Visa Inc Class A	3.48
Boeing Co	3.40
Alphabet Inc Class C	3.07
Mastercard Inc A	2.92
Facebook Inc A	2.90
Alphabet Inc A	2.77
Booking Holdings Inc	2.68
UnitedHealth Group Inc	2.63

Investment Strategy 12-31-2018

The investment seeks long-term capital growth through investments in stocks. The fund will normally invest at least 80% of its net assets (including any borrowings for investment purposes) in the common stocks of a diversified group of growth companies. While most assets will typically be invested in U.S. common stocks, the fund may invest in foreign stocks in keeping with the fund's objective.

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Cobb County Government 457 Deferred Compensation Plan

Vanguard 500 Index Admiral (USD)

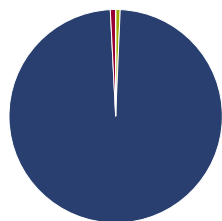
Details 12-31-2018

Ticker	VFIAX
Gross Expense Ratio %	0.04
Total Assets	\$400,586.80 mil
Family	Vanguard
Manager	Donald Butler,
Tenure	2.8 Years
Objective	Growth

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★
	1,208 LB
Standard Deviation 3 Yr	10.96
Mean 3 Yr	9.22
Alpha 3 Yr	0.22
Beta 3 Yr	0.99
R-Squared 3 Yr	99.81
Upside Capture Ratio 3 Yr	99.73
Downside Capture Ratio 3 Yr	98.41
Standard Index	S&P 500 TR USD
Category Index	Russell 1000 TR USD

Composition 11-30-2018

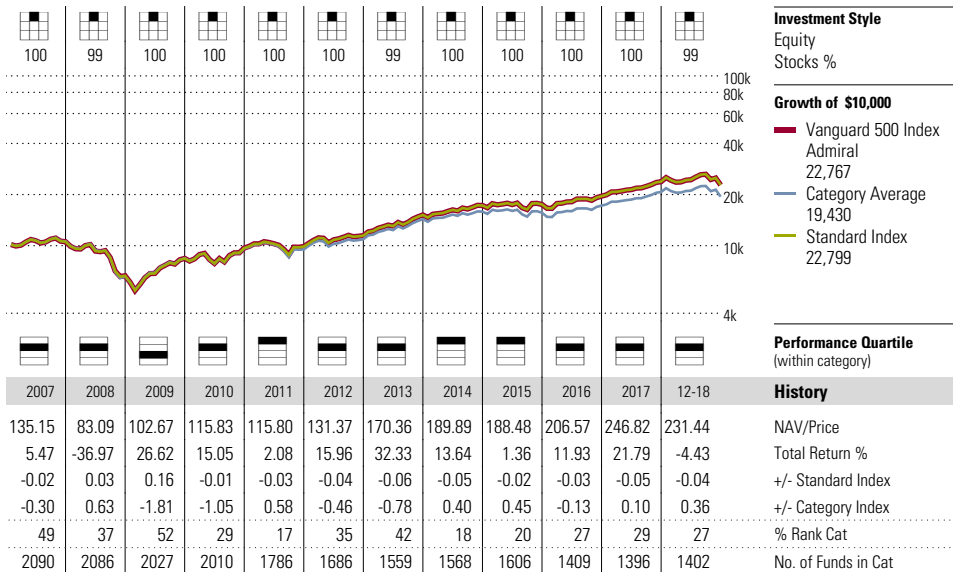


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	0.68	0.00
US Stocks	98.51	99.16
Non-US Stocks	0.79	0.84
Bonds	0.01	0.00
Other/Not Clsfd	0.00	0.00

Sector Weightings 11-30-2018

	Stocks %	Rel Std Index
Cyclical	32.6	1.00
Basic Materials	2.4	0.95
Consumer Cyclical	11.7	0.99
Financial Services	16.1	1.02
Real Estate	2.4	0.98
Sensitive	40.9	1.00
Communication Services	3.6	1.00
Energy	5.5	1.04
Industrials	10.1	1.02
Technology	21.7	0.99
Defensive	26.5	0.99
Consumer Defensive	7.8	1.00
Healthcare	15.5	1.00
Utilities	3.1	0.94

Performance 12-31-2018



Style Analysis 11-30-2018

Equity Investment Style Actual %

	Value	Blend	Growth
Large	29	29	32
Mid	4	4	2
Small	0	0	0
Portfolio Statistics	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	18.8	1.10	0.93
Geo Avg Cap Plan (\$Mil)		101,94	5
Geo Avg Cap Bmark (\$Mil)		93,688	

Fixed-Income Investment Style Actual %

	High	Med	Low
Avg Effective Duration (Yrs)	—	—	—
Avg Effective Maturity (Yrs)	—	—	—
Avg Credit Quality	—	—	—
Bond %	—	—	—
AAA	—	—	—
AA	—	—	—
A	—	—	—
BBB	—	—	—
BB	—	—	—
B	—	—	—
Below B	—	—	—
NR	—	—	—

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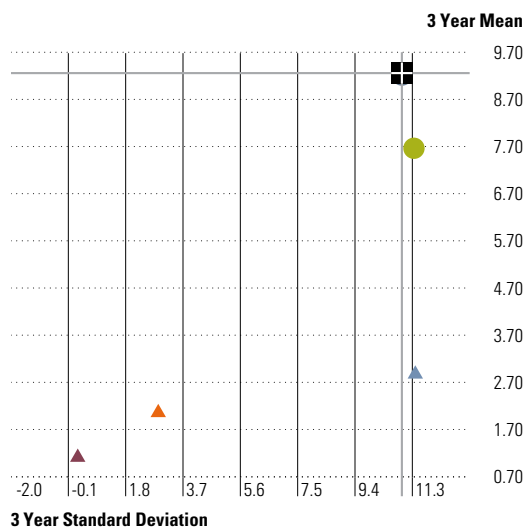
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Cobb County Government 457 Deferred Compensation Plan

Vanguard 500 Index Admiral (USD)

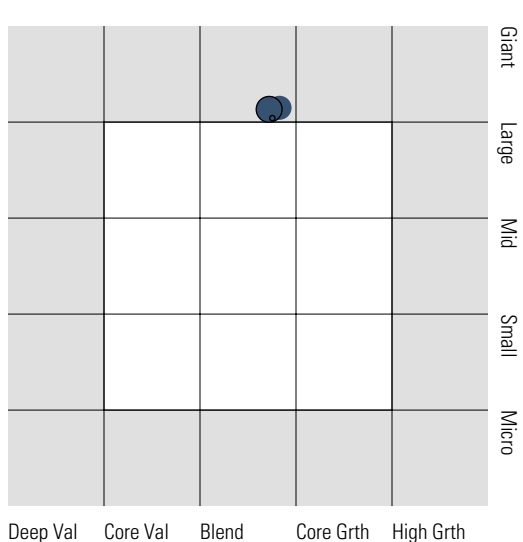
Risk/Return 12-31-2018



Benchmarks

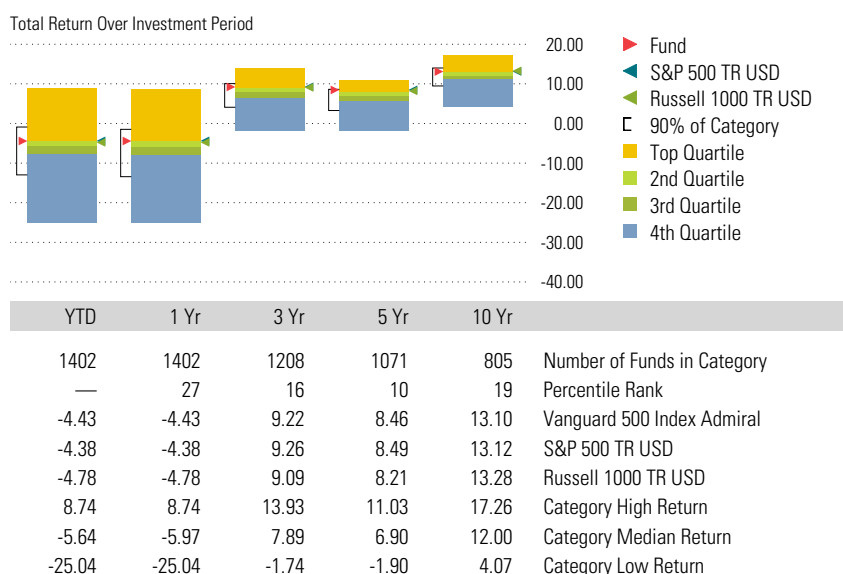
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 11-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 11-30-2018

Holding Name	% Net Assets
Microsoft Corp	3.62
Apple Inc	3.49
Amazon.com Inc	2.95
Berkshire Hathaway Inc B	1.75
Johnson & Johnson	1.68
JPMorgan Chase & Co	1.59
Facebook Inc A	1.44
Alphabet Inc Class C	1.44
Exxon Mobil Corp	1.43
Alphabet Inc A	1.41

Investment Strategy 12-31-2018

The investment seeks to track the performance of a benchmark index that measures the investment return of large-capitalization stocks. The fund employs an indexing investment approach designed to track the performance of the Standard & Poor's 500 Index, a widely recognized benchmark of U.S. stock market performance that is dominated by the stocks of large U.S. companies. The advisor attempts to replicate the target index by investing all, or substantially all, of its assets in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting in the index.

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Cobb County Government 457 Deferred Compensation Plan

Victory Sycamore Established Value R6 (USD)

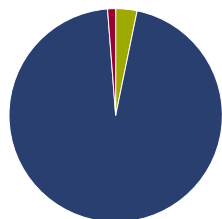
Details 12-31-2018

Ticker	VEVRX
Gross Expense Ratio %	0.54
Total Assets	\$10,056.83 mil
Family	Victory
Manager	Gary Miller,
Tenure	20.5 Years
Objective	Growth

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★
Standard Deviation 3 Yr	11.63
Mean 3 Yr	8.18
Alpha 3 Yr	2.31
Beta 3 Yr	0.93
R-Squared 3 Yr	94.44
Upside Capture Ratio 3 Yr	99.27
Downside Capture Ratio 3 Yr	82.51
Standard Index	S&P 500 TR USD
Category Index	Russell Mid Cap Value TR USD

Composition 09-30-2018

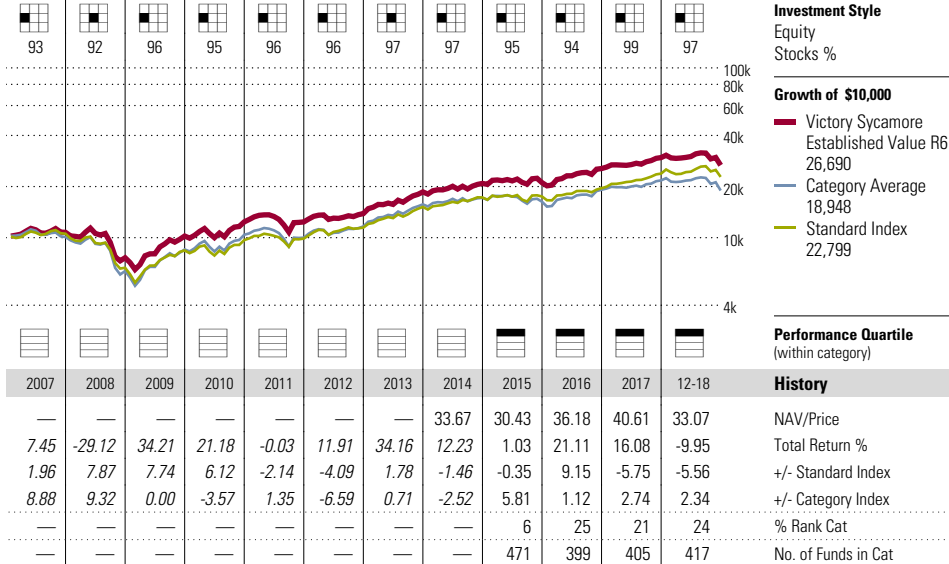


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	3.23	0.00
US Stocks	95.55	99.16
Non-US Stocks	1.22	0.84
Bonds	0.00	0.00
Other/Not Clsfd	0.00	0.00

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	46.6	1.43
Basic Materials	5.7	2.25
Consumer Cyclical	15.7	1.33
Financial Services	19.5	1.23
Real Estate	5.7	2.34
Sensitive	35.2	0.86
Communication Services	0.0	0.00
Energy	5.7	1.08
Industrials	15.7	1.58
Technology	13.8	0.63
Defensive	18.2	0.68
Consumer Defensive	8.0	1.02
Healthcare	6.7	0.43
Utilities	3.5	1.05

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

Value	Blend	Growth
13	18	3
26	32	7
0	1	0

Fixed-Income Investment Style Actual %

Ltd	Mod	Ext
—	—	—
—	—	—
—	—	—
—	—	—
—	—	—
—	—	—
—	—	—
—	—	—
—	—	—
—	—	—
—	—	—

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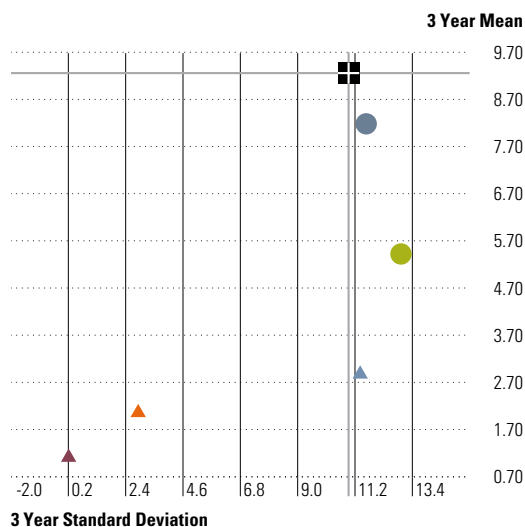
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Victory Sycamore Established Value R6 (USD)

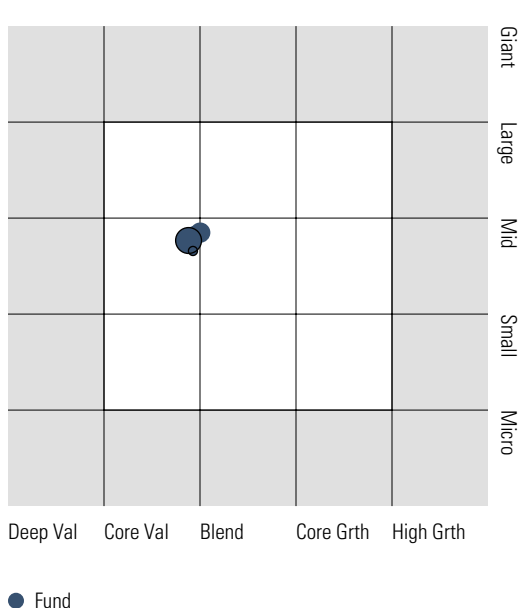
Risk/Return 12-31-2018



Benchmarks

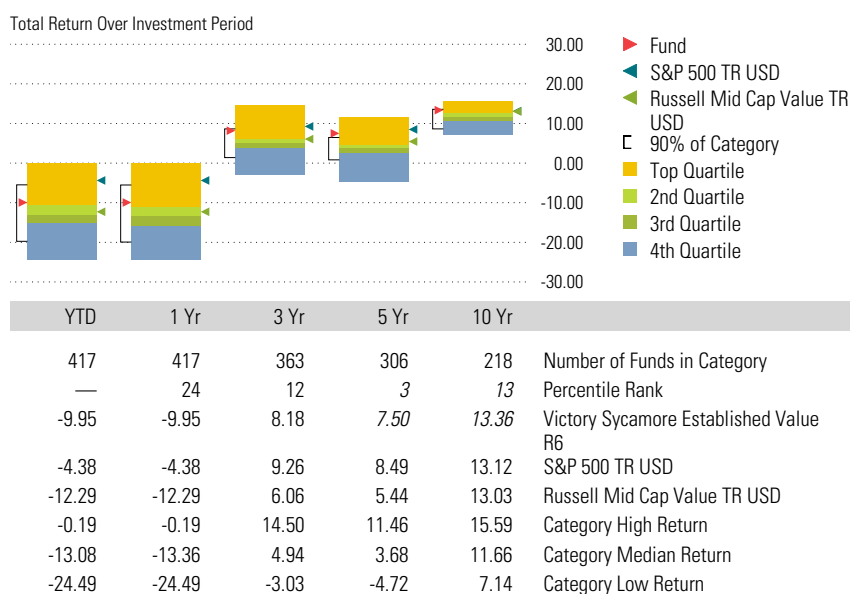
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 09-30-2018



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
Archer-Daniels Midland Co	2.52
National Retail Properties Inc	2.39
Allegheny Corp	2.34
SunTrust Banks Inc	2.29
Hasbro Inc	2.08
Textron Inc	1.98
Quest Diagnostics Inc	1.88
WR Berkley Corp	1.88
Reliance Steel & Aluminum Co	1.85
Cinemark Holdings Inc	1.68

Investment Strategy 12-31-2018

The investment seeks long-term capital growth by investing primarily in common stocks. The fund pursues its investment objective by investing, under normal circumstances, at least 80% of its assets in equity securities of companies with market capitalizations, at the time of purchase, within the range of companies comprising the Russell MidCap® Value Index. The fund may invest a portion of its assets in equity securities of foreign companies traded in the U.S., including American Depositary Receipts and Global Depositary Receipts (ADRs and GDRs).

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Cobb County Government 457 Deferred Compensation Plan

Western Asset Core Plus Bond IS (USD)

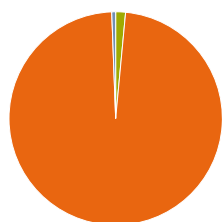
Details 12-31-2018

Ticker	WAPSX
Gross Expense Ratio %	0.43
Total Assets	\$23,722.29 mil
Family	Legg Mason
Manager	Carl Eichstaedt,
Tenure	20.5 Years
Objective	Corporate Bond - General

Risk and Return 12-31-2018

Overall Morningstar Rating	★★★★★
876 CI	
Standard Deviation 3 Yr	3.43
Mean 3 Yr	3.35
Alpha 3 Yr	1.23
Beta 3 Yr	1.06
R-Squared 3 Yr	77.77
Upside Capture Ratio 3 Yr	119.03
Downside Capture Ratio 3 Yr	88.13
Standard Index	BBgBarc US Agg Bond TR USD
Category Index	BBgBarc US Agg Bond TR USD

Composition 09-30-2018

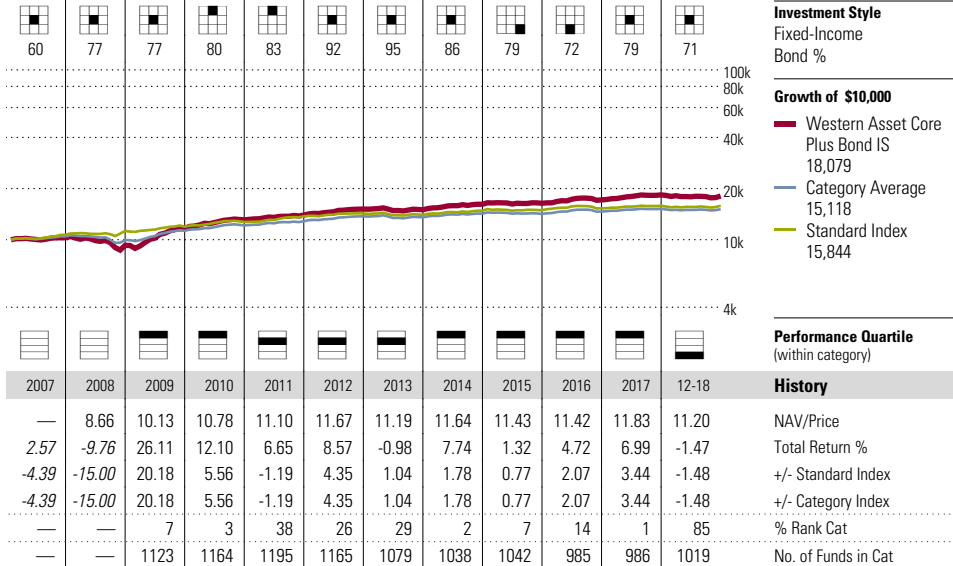


Asset Allocation	Portfolio Net %	Bmark Net %
Cash	1.49	1.99
US Stocks	0.00	0.00
Non-US Stocks	0.00	0.00
Bonds	97.92	97.62
Other/Not Clsfd	0.59	0.39

Sector Weightings 09-30-2018

	Stocks %	Rel Std Index
Cyclical	—	—
Basic Materials	—	—
Consumer Cyclical	—	—
Financial Services	—	—
Real Estate	—	—
Sensitive	—	—
Communication Services	—	—
Energy	—	—
Industrials	—	—
Technology	—	—
Defensive	—	—
Consumer Defensive	—	—
Healthcare	—	—
Utilities	—	—

Performance 12-31-2018



Style Analysis 09-30-2018

Equity Investment Style Actual %

	Value	Blend	Growth
Large			
Mid			
Small			
P/E Ratio TTM	—	—	—
Geo Avg Cap Plan (\$Mil)	—	—	—
Geo Avg Cap Bmark (\$Mil)	—	—	—

Fixed-Income Investment Style Actual %

	Ltd	Mod	Ext
High	0	0	0
Med	0	100	0
Low	0	0	0
Avg Effective Duration (Yrs)	7.49		
Avg Effective Maturity (Yrs)	10.28		
Avg Credit Quality	—		
Bond %			
AAA	55.84		
AA	3.47		
A	15.27		
BBB	13.57		
BB	6.44		
B	2.54		
Below B	3.08		
NR	-0.21		

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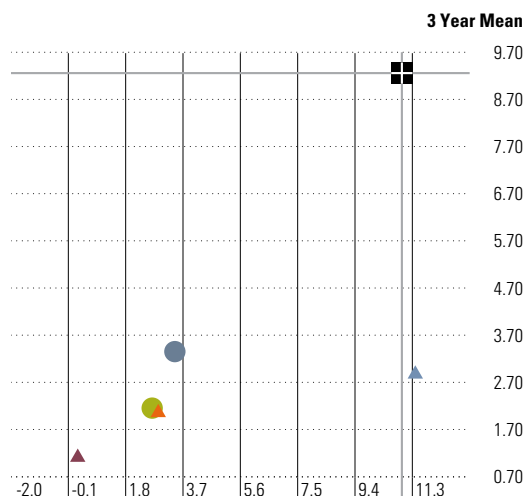
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Cobb County Government 457 Deferred Compensation Plan

Western Asset Core Plus Bond IS (USD)

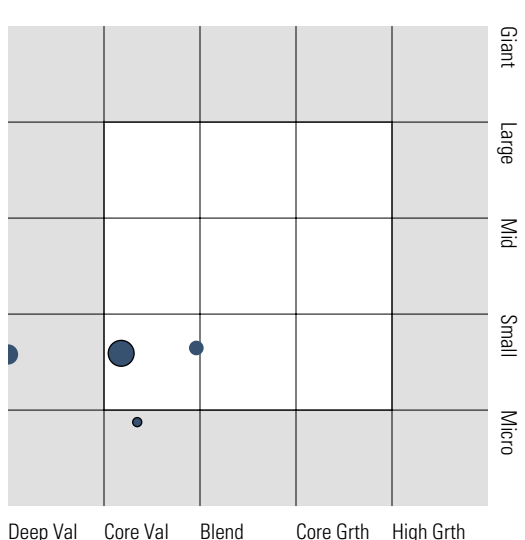
Risk/Return 12-31-2018



Benchmarks

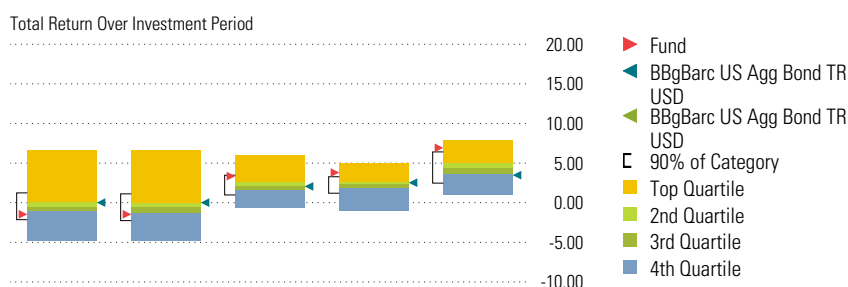
- S&P 500 TR USD
- ▲ BBgBarc US Agg Bond TR USD
- ▲ MSCI EAFE NR USD
- ▲ USTREAS T-Bill Auction Ave 3 Mon

Equity Style Drift 06-30-2017



- Earliest Portfolios
- Latest Portfolios

Return vs Category Quartiles 12-31-2018



YTD	1 Yr	3 Yr	5 Yr	10 Yr	
1019	1019	876	767	560	Number of Funds in Category
—	85	6	3	2	Percentile Rank
-1.47	-1.47	3.35	3.80	6.92	Western Asset Core Plus Bond IS
0.01	0.01	2.06	2.52	3.48	BBgBarc US Agg Bond TR USD
0.01	0.01	2.06	2.52	3.48	BBgBarc US Agg Bond TR USD
6.62	6.62	6.05	5.02	7.93	Category High Return
-0.51	-0.62	2.06	2.26	4.37	Category Median Return
-4.78	-4.78	-0.60	-0.97	0.99	Category Low Return

Top 10 Holdings 09-30-2018

Holding Name	% Net Assets
Ir Swap 3m-Libor-Bba	-8.94
Ir Swap 1d-Fed101 31 Bps	8.94
Federal National Mortgage Association 4.5%	2.78
United States Treasury Bonds 3%	2.73
United States Treasury Bonds 3%	2.55
Government National Mortgage Association 4.5%	2.44
Fx Fut Mexican Peso Fut Dec18	-2.21
Fx Fut Mexican Peso Fut Dec18	2.21
United States Treasury Bonds 2.88%	2.14
United States Treasury Bonds 3.75%	1.90

Investment Strategy 12-31-2018

The investment seeks to maximize total return, consistent with prudent investment management and liquidity needs.

The fund invests in a portfolio of fixed income securities of various maturities and, under normal market conditions, will invest at least 80% of its net assets in debt and fixed income securities. Although the fund may invest in securities of any maturity, it will normally maintain a dollar-weighted average effective duration within 30% of the average duration of the domestic bond market as a whole as estimated by the fund's subadvisers. The fund may invest up to 20% of its total assets in non-U.S. dollar denominated securities.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

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See Important Information and Disclosures at the end of this Report

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The Defined Contribution Plan Status Report is supplemental sales literature, and therefore must be preceded or accompanied by the fund's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Defined Contribution Plan Status Report. Morningstar is not itself a FINRA-member firm. All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

The information and data in the presentation may be deemed reliable; however, their accuracy and completeness is not guaranteed by UBS Financial Services Inc and providing you with this information is not to be considered a solicitation on our part with respect to the purchase or sale of any securities, investments, strategies or products that may be mentioned. In addition, the information and data used are subject to change without notice.

Morningstar and its employees are not affiliated with UBS Financial Services Inc. or its affiliates.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities.

Prior to 2016, Morningstar's methodology evaluated open-end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most-recent month-end reflect the updated methodology. Following this change, we expect some movement in the UBS Fund Score. For example, some mutual funds could score a little worse than ETFs after the category merge. Alerts that were set using UBS MF (or US ETF) category

returns/ranking could be triggered.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns, and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publically-offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution. **Although the money market seeks to preserve a stable per share value (i.e. \$1.00 per share), it is possible to lose money by investment in the fund.**

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual

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fund itself, or through an intermediary, but cannot be traded on a secondary market, such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

Mutual Fund Performance Information

Additional information regarding each fund analyzed is presented in the Fact Sheets included with this analysis. Note that the information contained in this analysis was obtained from a variety of sources and UBS has not verified the accuracy of this information.

Mutual Funds are sold by prospectus and you should carefully consider important information on the fund's investment objectives, risk, charges and expenses. Please read the prospectus and offering documents carefully before you invest. Your Financial Advisor can provide a copy of the prospectus. For current month-end returns:
<http://advisor.morningstar.com/familyinfo.asp>.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales

charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net asset value minus a deferred sales charge, and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

Comparison of Other Security Types

A bond is a debt security. When an investor purchases a bond, the purchase amount is lent to a government, municipality, corporation or other entity known as an issuer. The issuer promises to pay a specified rate of interest during the life of the bond and repay the face value of the bond when it matures. U.S. Treasuries can be purchased directly from the Treasury or through a brokerage firm. Most other newly issued bonds are offered through an underwriter. Older bonds are traded throughout the day on the secondary market and can be purchased through a brokerage firm, who will charge transaction fees and commission for the purchase or sale. Price evaluations are provided by Interactive Data Corporation (IDC).

A commingled pool or collective investment trust (CIT) is a product where assets from several accounts are pooled and managed together. This strategy reduces management and administrative costs. Typically a collection of participants with the same strategy is pooled together.

Insurance group separate accounts (IGSA) are unregistered group annuities, primarily used in 401(k) qualified, but also 403(b) and 457 retirement plans. They are segregated (usually pooled) investment portfolios, separate from the general investment portfolios established by life insurance companies. These products are regulated by state insurance boards, but not the SEC.

A separate account is a professionally managed portfolio of individual securities. Generally, it is an investment consulting relationship in which a client's money is placed with one or more money managers, and

all administrative and management fees, along with commissions, are wrapped into one comprehensive fee, often paid quarterly.

A stock is an ownership interest in a company. When an investor purchases a stock, they become a business owner, and the value of their ownership stake will rise and fall according to the underlying business. Stockholders are entitled to the profits, if any, generated by the company after everyone else — employees, vendors, lenders — get paid. Companies usually pay out their profits to investors in the form of dividends, or they reinvest the money back into the business. Stocks trade on exchanges throughout the day, through a brokerage firm who will charge a commission for the purchase or sale of shares. Income distributions and capital gains of the stock are subject to income tax upon their sale, if held in a taxable account.

Variable annuities are tax-deferred investments structured to convert a sum of money into a series of payments over time. Variable annuity policies have limitations and are not viewed as short-term liquid investments. An insurance company's fulfillment of a commitment to pay a minimum death benefit, a schedule of payments, a fixed investment account guaranteed by the insurance company, or another form of guarantee depends on the claims-paying ability of the issuing insurance company. Any such guarantee does not affect or apply to the investment return or principal value of the separate account and its subaccount. The financial ratings quoted for an insurance company do not apply to the separate account and its subaccount. The insurance company offering a variable life contract will charge several fees to investors, including annual contract charges that compensate the insurance company for the cost of maintaining and administering the variable life contract, mortality and expense risk (M&E Risk) charges based on a percentage of a subaccount's assets to cover costs associated with mortality and expense risk, and administration fees that are based on a percentage of a subaccount's assets to cover the costs involved in offering and administering the subaccount. A variable life investor will also be charged a front-end load by the insurance company on their initial contribution, ongoing fees related to the management of the fund, and surrender charges if the investor makes a withdrawal prior to a specified time. If the variable annuity subaccount is invested in a money-market fund, the money market fund is not FDIC-insured, may lose money, and is

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not guaranteed by a bank or other financial institution.

Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Fund portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the Medicare surcharge. As of 2016, this rate is 39.6% plus 0.9% Medicare surcharge, or 40.5%, this has been unchanged since 2013. This rate changes periodically in accordance with changes in federal law.

Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the

pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

The information contained in this report is from the most recent information available to Morningstar as of the release date, and may or may not be an accurate reflection of the current composition of the securities included in the plan. There is no assurance that the weightings, composition and ratios will remain the same.

Benchmark Returns

Benchmark performance is based on market total returns for market indices and NAV total returns for category averages. NAV total return reflects performance without adjusting for sales charges or the effects of taxation, but is adjusted to reflect all actual ongoing security expenses (management, administrative, 12b-1 fees and other costs taken out of fund assets), and assumes reinvestment of dividends and capital gains. A fund's portfolio may differ significantly from the securities in the benchmark.

Returns for custom benchmarks are calculated by applying user-supplied weightings to each benchmark's returns every month. Trailing returns are calculated by geometrically linking these weighted-average monthly returns. Custom benchmark returns thus assume monthly rebalancing.

12b1 Expense %

Current 12b-1 is the maximum annual charge deducted from fund assets to pay for distribution and marketing costs. This information is taken directly from the fund's prospectus.

ALERTS

The Alerts displayed in this report are being provided to assist retirement plan fiduciaries in evaluating the investment options offered under a defined contribution retirement plan. A number of different factors should be considered when choosing to add, remove or maintain a retirement plan investment options.

General

The Alerts section identifies alerts that you and your financial advisor set to help identify changes and/or potential problems in securities. The Alerts section is intended to be for client reporting purposes on implemented strategies or for advisor use only. It is not intended for use as supplemental sales literature. Morningstar is not itself a FINRA member firm.

The content of this section is driven by measurement criteria that were selected by you and your advisor.

Alerts may be set on performance, risk, ratings, composition, and other characteristics. Alerts may be set on an absolute basis, where a measure is compared against a set value, or on a relative basis, where a security value is compared with the value of a benchmark or category.

Triggering of alerts is based on comparisons of data points that are available to Morningstar, Inc., applying mechanical checking mechanisms. Although best efforts are made by Morningstar, Inc. to maintain accurate and complete data and functional mechanical processes, there are no guarantees with regard to either.

You and your financial advisor determined the criteria for setting alerts. There is no guarantee that the alerts set are appropriate. Setting alerts does not provide or guarantee protection against losses, market risk, or any other factors impacting securities. The presence of triggered alerts does not necessarily indicate weaknesses or problems with the securities, and is not necessarily a cause for action or changes in the implemented securities. The absence of triggered alerts also does not necessarily indicate security strength. Alerts are checked on a schedule (daily, weekly, monthly) selected by the advisor. The checking schedule set may be insufficient to trigger a current alert even if an alert criterion is met currently.

Any performance data given in the report represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when redeemed, may be worth more or less than the original investment. Most securities covered in this report are not FDIC-insured, may lose value and are not guaranteed by a bank or other financial institution.

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Alert Terminology

Security Alert: An alert rule that is based on characteristics of a single security, e.g. a mutual fund. Note that it is possible to set one alert rule to multiple securities at a time.

Status: The status of an alert will be either “triggered” or “not triggered.” A status of “triggered” means that the criteria set in the alert is currently met. A status of “not triggered” means that conditions set in the alert were not met when last checked.

Initial Trigger Date: This represents the first date on which the alert was checked and for which alert conditions were met. Note that it is possible that conditions for triggering the alert were met prior to the first check.

Initial Trigger Value: This represents the measure that caused an alert’s conditions to first be met. For example, if an alert is set to trigger when one-year trailing return is less than 2%, and one year trailing return is 1.9% when checked, 1.9 will appear as the trigger value.

Current Trigger Value: This represents the measure that causes an alert’s conditions to continue to be met when most recently checked.

Current Comparison Value: This represents the value that is being compared to determine if the alert is triggered. For example, if an alert is set to trigger when one-year trailing return is less than 2.0%, a value of 2 will appear as the Comparison Value. If the alert is set to trigger when one-year trailing performance for a security is less than one-year performance for a benchmark, the comparison value will show the performance of the benchmark.

Current Comparison Subject: This represents the entity against which the security or aggregate is compared. For example, if an alert is set to trigger if one-year return is less than the return of a benchmark, the benchmark name will be shown as the comparison subject.

Security Name: When a security alert is triggered, the name of any impacted security will be listed.

Frequency: Alerts may be set on monthly, weekly, and daily frequencies.

Monthly alerts compare data based on the last business day of the month and continue monthly. Weekly alerts compare data based on the last business day of the week and continue weekly. Daily alerts compare data based on the previous business day and continue daily.

Alpha

Alpha is a measure of the difference between a security or portfolio’s actual returns and its expected performance, given its level of risk (as measured by beta.) Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The “Other” category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the fund against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the fund’s managers are buying and how they are positioning the fund’s portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the fund’s exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security’s price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most fund portfolios hold fairly conventional securities, such as long

positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while other have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart’s generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of fund holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of fund holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the fund only.

Average Effective Duration

Duration is a time measure of a bond’s interest-rate sensitivity. Average effective duration is a weighted average of the duration of the fixed-income securities within a portfolio.

Average Effective Maturity

Average Effective Maturity is a weighted average of the maturities of all bonds in a portfolio.

Best Fit Index

Alpha, beta, and R-squared statistics are presented for a broad market index and a “best fit” index. The Best Fit Index identified in this report was determined by Morningstar by calculating R-squared for the fund against approximately 100 indexes tracked by Morningstar. The index representing the highest R-squared is identified as the best fit index. The best fit index may not be the fund’s benchmark, nor does it

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necessarily contain the types of securities that may be held by the fund or portfolio.

Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

Capture Ratios

Capture Ratios compare the fund's results to their peer group index in periods of both positive and negative returns. The Downside Capture Ratio uses the annualized cumulative returns for both the fund and the S&P 500 for all the quarters when the S&P500 had negative returns.

Dividing the fund's return during the down quarters by the S&P 500's return during the same quarters provides the downside capture ratio. The Upside Capture Ratio uses the annualized cumulative returns for both the fund and the S&P 500 for all quarters when the S&P 500 had positive returns. Dividing the fund's return during the positive quarters by the S&P 500's return during the same quarters provides the upside capture ratio.

Composition By Fund

The pie chart displays the funds' exposure by their respective percentage allocation. The corresponding table provides the fund name, ticker, plan percentage, and amount (\$) of funds in the plan. If your plan has more than 26 funds only the top 26 based on their percentage of plan assets will be listed.

Concentration Ratio

The concentration ratio depicts how much of the plan's aggregate investment options are within the top 10 stock holdings.

Correlation Matrix Graph

The Correlation Matrix is based on the correlation coefficient calculated for the monthly returns of each investment showing in the report against the other investments in the report. The correlation coefficient is a number between -1.0 and 1.0.

If there is a perfect positive linear relationship between the returns of investments, the correlation will be 1.0. A correlation close to 1.0 means that two investments perform similarly—when one investment is performing above its average return, the other performs above its average return. The opposite is also true—when one investment performs below its average return, the other also performs below its average.

A correlation coefficient of 0.0 means that there is no linear relationship between the returns of two investments. Securities with a correlation coefficient at or near 0 indicate a pattern of returns between two securities that are unrelated.

If there is a perfect negative linear relationship between two investments the correlation coefficient is -1.0. If there is a perfectly negative relationship between two investments, when one investment performs above its average return, the other performs below its average, and vice versa.

Correlation between securities is a helpful measure because it indicates the extent to which securities may serve to improve diversification within a portfolio. Portfolios containing securities with low correlation of returns produce portfolio risk that is lower than the average risk of the individual securities. The lower the correlation between securities, the greater the impact in lowering portfolio risk. Securities with correlations equal to 1.0 indicate a pattern of returns that do not contribute to beneficial diversification in a portfolio and do not lower overall portfolio risk when the securities are combined in a portfolio. Securities with correlations equal to 0.0 or close to 0.0 indicate a pattern of returns that serve to improve diversification effects in a portfolio. Securities with correlations equal to -1.0 or close to -1.0 indicate a pattern of returns that serve to strongly improve diversification effects in a portfolio, notably, lower overall portfolio risk. Note that it is very unusual to have investments with extremely strong negative correlation patterns. Most securities have a correlation above 0.

Note that return patterns between securities may change over time. The correlation coefficient between two investments over one period may differ from that of another period.

Further, note that while combining securities with correlation coefficients less than 1.0 in a portfolio can reduce risk, risk cannot be completely eliminated with diversification. There is no guarantee that any particular mix of securities will eliminate risk, reduce your current exposure to risk, or manage your exposure to risk in a way that is tolerable for you.

Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a fund. The percentage of the load charged generally declines the longer the fund's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

Expense Ratio %

Prospectus Gross Expense Ratio is the maximum expense ratio which a fund may charge as detailed in the prospectus. The purpose of this data point is to identify the maximum exposure an investor has to fund expenses. The Prospectus Gross Expense Ratio may not equal the actual expenses paid.

Prospectus Net Expense Ratio reflects actual expenses paid by the fund as well as any voluntary waivers, reductions from brokerage service arrangements and any other expense offset arrangements.

Expense Ratio Quartile Rank

The expense ratio quartile rank of a holding is calculated by dividing the expense ratio of the holding by the expense ratio of its Morningstar Category. The graph, ranging from Q1 (best/lowest) to Q4 (worse/highest), displays the number of funds that fall into each of the resulting quartiles.

Expense/Return Graph

Cost measures for mutual funds use Prospectus Net Expense Ratio. For VAs, total insurance expense is included in the Prospectus ratio. For CITs, CEs, and ETFs, Net Operating Expense Ratio is used. The expense/return graph is used to capture each security's return and expense performance relative to its category peers. It's important to understand the context in which returns and expenses are experienced.

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For example, slightly higher than category median expenses may be acceptable if the option provides much higher than category average returns. The desirable quadrant of the expense/return graph is the upper left, where options have demonstrated lower expenses and higher returns than their category peers. The 3 Yr Relative Return measures the fund's 3 year performance relative to the median of its Morningstar Category. The Median Relative Expense measures the security's Net Expense relative to the median of its Morningstar Category.

Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

IMPORTANT INFORMATION ON FUND SCORING

The fund scores illustrated in this report are derived from a UBS proprietary process using a number of different standards and criteria to measure a fund's overall performance, risk and history. UBS does not make any representation regarding the effectiveness of this process, and makes no guarantee regarding the funds earning strong scores from this process. These scores are being provided to assist retirement plan fiduciaries in evaluating the investment options offered under a defined contribution retirement plan. These scores do not constitute fiduciary advice or judgment, and should not be used in place of the retirement plan fiduciaries' prudent review of the investment options. The fund scores are only one element for consideration when evaluating the appropriateness of such investment options. This process does not factor other considerations that affect future performance, such as whether a manager's investing style is recently out of favor. For this reason, many investment options that receive low scores may outperform peers. A number of different factors should be considered when choosing to add, remove or maintain a retirement plan investment option.

The Fund Scoring Process

The following is a description of the proprietary process we use to arrive at the fund score. The process is comprised of ten individual scoring measures (as further discussed below under "More Detail on Individual Scoring Measures") and one Overall Fund Score. The formula in each

individual category calculates a percentile ranking relative to the funds in their respective Morningstar peer group. The percentile rank is then assigned a numerical value as indicated the chart below.

Transforming Percentile Ranks to Fund Scores

When transforming a percentile rank into a fund score for any given measure, or overall score, the following rules will be followed:

- 91st percentile or greater - 5
- Between 71st and 90th Percentile - 4
- Between 31st and 70th percentile - 3
- Between 11th and 30th percentile - 2
- Less than 11th percentile - 1

Note: A score of 5 represents the best possible score - and a 1 represents the worst. If a security is missing any measure among the 10, no overall score will be calculated.

Overall Score

The Overall score is derived from the final percentage rankings for each measure, weighting them at the percentages noted below:

- Criteria 1 - Information Ratio vs. Category Benchmark: 7.143%
- Criteria 2 - Information Ratio vs. Category Average: 7.143%
- Criteria 3 - Sharpe Ratio : 14.286%
- Criteria 4 - Batting Average vs. Category Benchmark: 7.143%
- Criteria 5 - Batting Average vs. Category Average: 7.143%
- Criteria 6 - Performance vs. Peers: 14.286%
- Criteria 7 - Capture Ratios vs. Category Benchmark: 7.143%
- Criteria 8 - Capture Ratios vs. Category Average: 7.143%
- Criteria 9 - Manager Tenure: 14.286%
- Criteria 10 - Expense Ratio: 14.286%

Rolling Periods

All metrics, with the exception of batting average, manager tenure, and expense ratio, are for 36-month periods, rolled monthly. The first period begins 96 months before the most recent month-end and ends 60 months before the most recent month end. For periods of less than 96 months, the score will be calculated based on the data available, provided there is a minimum of 36 months.

For rolling period scores, each period's score is calculated and then

transformed into a percentile. The percentiles for all periods are averaged and then transformed into a final percentile used to assign the scores 1-5, as noted above.

More Detail on Individual Scoring Measures

1.) Modified Information Ratio Versus Category Benchmark--Has the fund demonstrated value added over the category benchmark for available rolling three year rolling periods ending over the last five years? [7.143% of the overall score]

This measure looks at excess returns over the category benchmark for all available rolling 36-month periods going back monthly, ending over the last 5 years.

The Information Ratio is an investment's active premium (its annualized geometric return minus the benchmark's annualized geometric return) divided by its tracking error. This calculation of the information ratio uses excess returns over the benchmark for 36 months ending with the most recent month.

2.) Modified Information Ratio Versus Category Average--Has the fund demonstrated value added over the category average for available rolling three year periods ending over the last five years? [7.143% of the overall score]

This measure looks at excess returns over the category average for available rolling 36-month periods going back monthly, ending over the last five years.

The Information Ratio is an investment's active premium (its annualized geometric return minus the benchmark's annualized geometric return) divided by its tracking error. This calculation of the information ratio uses excess returns over the category average for each 36-month period evaluated.

3.) Modified Sharpe Ratio- Did the fund perform well against a relevant peer universe for the rolling three year monthly periods ended over the last five years in terms of Sharpe ratios? [14.286% of the overall score]

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The Sharpe Ratio is calculated by using standard deviation and excess return to determine reward per unit of risk. The higher the Sharpe Ratio, the better the portfolio's historical risk-adjusted performance. The Sharpe Ratios are calculated for all rolling periods available (e.g. all 36-month periods ending in the past five years). Each fund's rolling period Sharpe ratios are averaged. Within each category, the average rolling Sharpe ratios for included funds is ranked.

4.) Batting Average Versus Category Benchmark- Did the fund perform well versus its category benchmark over the most recent eight years? [7.143% of the overall score]

The batting average versus category benchmark is the average number of times, expressed in percentage, that the fund's returns beat the category benchmark over the past 96 months. (For periods of less than 96 months, the score will be calculated based on the data available, provided there is a minimum of 36 months.) For example, if the fund has a better record than the category benchmark in 66 out of the last 96 months, the batting average for this period would be 0.6875 (66/96).

Using all monthly returns available over the last eight years (96 months), the fund's batting average is calculated compared to the category benchmark. All batting averages are ranked within the category.

5.) Batting Average Versus Category Average- Did the fund perform well versus its category average over the most recent eight years? [7.143% of the overall score]

The batting average versus category average is the average number of times the fund's returns beat the category average over the past 96 months. (For periods of less than 96 months, the score will be calculated based on the data available, provided there is a minimum of 36 months.) For example, if the fund has a better record than the category average in 66 out of the last 96 months, the batting average for this period was 0.6875 (66/96).

Using all monthly returns available over the last eight years (96 months), the fund's batting average is calculated compared to the category benchmark. All batting averages are ranked within the category.

5.) Batting Average Versus Category Average- Did the fund perform well versus its category average over the most recent eight years? [7.143% of the overall score]

The batting average versus category average is the average number of times the fund's returns beat the category average over the past 96 months. (For periods of less than 96 months, the score will be calculated based on the data available, provided there is a minimum of 36 months.) For example, if the fund has a better record than the category average in 66 out of the last 96 months, the batting average for this period was 0.6875 (66/96).

Using all monthly return data available over the last eight years (96 months), the fund's batting average is calculated compared to the category average. All batting averages are ranked within the category.

6.) Performance vs. Peers--Did the fund perform well against a relevant peer universe for the available three year rolling periods ended over the last five years? [14.286% of the overall score]

For the available 36-month rolling periods ending in the most recent 5 years, the fund's average return is calculated. All funds in the category are ranked, and the fund's score is assigned based on its percentile rank.

7.) Capture Ratios Vs. Category Benchmark- Has the fund achieved an acceptable up-side to down-side performance capture ratio relative to its category benchmark? [7.143% of the overall score] This metric evaluates a fund's capture ratios, which reflect the percentage of the market's performance that the fund participated in over time, including up and down markets.

The upside capture ratio is the compound return of the portfolio for all periods in which the benchmark was up, divided by the compound return of the benchmark during the same periods.

The downside capture ratio is the compound return of the portfolio for all periods in which the benchmark was down, divided by the compound return of the benchmark during the same periods.

Capture ratios are usually expressed as a percent, so if a portfolio's compound return during positive markets was 21% and the benchmark's return was 20%, the upside capture ratio would be 105 (21/20). A good upside capture ratio is greater than 100 and a good downside capture ratio is less than 100. Because it is difficult to devise a strategy that will outperform in both up and down markets, an investment fund may choose to focus on one side, e.g., create an aggressive or defensive portfolio. This metric awards its best value to funds that perform well in both up and down markets.

Capture ratios are calculated as follows: All rolling periods' capture ratios are averaged for the fund. The percentile rankings are calculated for each score (Upside and Downside). The score for each fund is then applied from the average of these two percentiles.

8.) Capture Ratios Vs Category Average- Has the fund achieved an acceptable up-side to down-side performance capture ratio relative to its category average? [7.143% of the overall score]

This metric evaluates a fund's capture ratios, which reflect the percentage of the market's performance in which the fund participated over time, including up and down markets.

The upside capture ratio is the compound return of the portfolio for all periods in which the benchmark was up, divided by the compound return of the benchmark during the same periods.

The downside capture ratio is the compound return of the portfolio for all periods in which the benchmark was down, divided by the compound return of the benchmark during the same periods.

Capture ratios are usually expressed as a percent, so if a portfolio's compound return during positive markets was 21% and the benchmark's return was 20%, the upside capture ratio would be 105 (21/20). A good upside capture ratio is greater than 100 and a good downside capture ratio is less than 100. Because it is difficult to devise a strategy that will outperform in both up and down markets, an investment fund may choose to focus on one side, e.g., create an aggressive or defensive portfolio. This metric awards its best value to funds that perform well in

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both up and down markets.

All rolling periods' capture ratios are averaged for the fund. The percentile rankings for each score (Upside and Downside) are calculated. The score for each fund is then applied from the average of these two percentiles.

9.) Manager Tenure—Percent rank of the average tenure of the portfolio management among those funds in its peer group. It is assumed that a longer tenure is more desirable than a shorter tenure. [14.286% of the overall score]

10.) Expense ratio relative to peer group- The percent rank of a fund's operating expense among those funds in its peer group with the same load structure. It is assumed that a lower expense ratio is more desirable than a higher expense ratio. [14.286% of the overall score]

Note: Net prospectus expense ratios are used for open-end mutual funds, operating expense ratios are used for closed-end funds, exchange-traded funds, and CITs, and prospectus net expense ratio plus total insurance expense are used for variable annuity subaccounts.

Pre-Inception Returns

Monthly returns for the security, category, category benchmark, and a risk-free rate proxy are required to perform most of the calculations. When actual return is lacking for a mutual fund or variable annuity subaccount, pre-inception return will be applied. The US 3-month Treasury bill return will be used for the risk-free rate.

For ETFs and closed-end funds, NAV return will be applied, rather than market return, in all calculations.

Notes

In the Fund Scoring report, a "Note" column is included next to each investment option (security) analyzed and will be populated as follows:

Null Value

A null value (dash) will be populated in the "note" column if the score is calculated for a fund.

Value of "A"

If a fund has less than 36 months of consecutive, recent monthly return history, only Expense Ratio and Manager Tenure will be scored. No overall score will be generated and a value of "A" will be populated in the Note column.

Value of "B"

If a fund has at least 36 but less than 96 months of consecutive, recent monthly return, the measurement values and scores will be calculated. A value of "B" will be populated in the Note column.

Value of "C"

If a category average or category benchmark has less than the number of included return available for the fund (i.e., any month's return applied in calculating scores for the fund is unavailable for the category average or category benchmark), measurement values and scores will be calculated for the fund. A value of "C" will be populated in the Note column of the table.

Value of "D"

If a fund has less than \$25MM in total assets, no scores will be calculated and a value of "D" will be populated in the Note column.

Geometric Average Market Capitalization

Geometric Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

Holding Portfolio Date

The Portfolio Date is the date that the fund's portfolio was last updated. When making comparisons among funds, it is an important date to keep in mind. Although Morningstar tries to ensure timely information, Morningstar does not always receive current information from fund companies. By law, funds need only report this information two times during the calendar year, and they have two months after the report date to actually release the shareholder report and portfolio. Therefore, it is possible that a fund's portfolio could be up to eight months old at the time of publication.

Information Ratio

Information ratio is a risk-adjusted performance measure. It is similar in structure to the Sharpe Ratio as a ratio of excess return per unit of risk. In the Sharpe Ratio, excess return and risk are measured relative to a risk-free rate. In comparison, the Information Ratio measures excess return and risk relative to a specific benchmark index.

The numerator for the Information Ratio is the difference between the annualized returns of the fund and the annualized returns of the benchmark. The denominator is the fund's annualized tracking error, which is the standard deviation of the fund's monthly excess returns over the benchmark returns.

Information Ratio is especially helpful for evaluating active managers. Index funds will typically have an Information Ratio close to zero, because these funds achieve very little excess return over the benchmark. In contrast, active managers deviate from the benchmark in an attempt to add value. The Information Ratio measures how much the fund outperformed the benchmark per unit of additional risk taken.

Investment Fees and Expenses

Please note that all data in the Fees and Expenses section are entered by your financial advisor. This section of the report itemizes costs at a plan level and investment level based on information entered by the advisor.

Investment Strategy

The investment strategy displayed in this report summarizes the fund's plan of investing assets among various investments/securities. These plans take into consideration such factors as goals, what kinds of companies they look for, what market cap range they invest in, where they are located and how much will they pay. Morningstar pulls this information directly from the fund's prospectus.

Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

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Maximum Redemption Fee %

The Maximum Redemption Fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase (for example, 30, 180, or 365 days).

Mean

Mean is the annualized geometric return for the period shown.

Morningstar Analyst Rating™

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates funds based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five pillar evaluation to determine how they believe funds are likely to perform relative to a benchmark, or in the case of exchange-traded funds and index mutual funds, a relevant peer group, over the long term on a risk-adjusted basis. They consider quantitative and qualitative factors in their research, and the weight of each pillar may vary. The Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. A Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's conviction in a fund's prospects for outperformance. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months. For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to global.morningstar.com/managerdisclosures/.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating a fund, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the fund.

Morningstar Category

For Institutional Use Only – Not For Participant Distribution

Morningstar Category is assigned by placing funds into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a fund's prospectus may not be sufficiently detailed for our proprietary classification methodology. Funds are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the fund is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

Morningstar Ownership Zone

The Morningstar Ownership Zone provides a graphic representation of the size and investment style of long stocks in fund's portfolio. The Ownership Zone is derived by plotting each stock in the portfolio within the Morningstar Style Box™. The Ownership Zone is the shaded area that represents 75% of the assets in the portfolio and indicates the level of concentration in the holdings. The "centroid" in the middle of the Ownership Zone represents the weighted average of all the holdings. The Ownership Zone helps investors differentiate between portfolios that may otherwise look similar. Investors can also use the Ownership Zone to construct diversified portfolios and model how multiple funds complement one another in a portfolio.

Morningstar Pillar Ratings

Morningstar Pillar Ratings are subjective evaluations of funds performed by manager research analysts of Morningstar. Morningstar evaluates funds based on five key pillars, which are process, performance, people, parent, and price. Morningstar's analysts assign each pillar a rating of Positive, Neutral, or Negative. Morningstar Pillar Scores are then used to help determine the fund's Morningstar Analyst Rating.

The Morningstar Pillar Rating should not be used as the sole basis in evaluating a fund. Morningstar Pillar Ratings involve unknown risks and uncertainties which may cause Morningstar's expectations not to occur or to differ significantly from what we expected.

Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a fund at the time of calculation.

Morningstar Rating™

The Morningstar Rating™ for funds, or "star rating", is calculated for managed products (including mutual funds, variable annuity and variable life subaccounts, exchange-traded funds, closed-end funds, and separate accounts) with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product's monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. The weights are: 100% three-year rating for 36-59 months of total returns, 60% five-year rating/40% three-year rating for 60-119 months of total returns, and 50% 10-year rating/30% five-year rating/20% three-year rating for 120 or more months of total returns. While the 10-year overall star rating formula seems to give the most weight to the 10-year period, the most recent three-year period actually has the greatest impact because it is included in all three rating periods.

The subaccounts of unregistered variable annuities, as well as those of registered group variable annuities that are solely available for use in qualified plans, are rated based on their position within the bell curve of the open-end/ETF fund peer group (a.k.a. category), rather than the variable annuity subaccount peer group. These ratings are calculated by using an overlay of the open-end/ETF fund peer group break points and therefore do not contribute to the category average or number of funds within the subaccount peer group.

See Important Information and Disclosures at the end of this Report

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The Morningstar Rating for separate accounts is based on the same methodology that Morningstar uses to rate other investments, such as open- end mutual funds, closed-end mutual funds, and variable annuity subaccounts. There are some differences between the separate account rating methodology and the rating methodologies for other investments because of the unique way that separate account managers calculate and report investment performance. All separate account performance data is reported to Morningstar as a “composite” of similarly managed portfolios. Morningstar rates separate accounts based on total returns that have not been adjusted for investment management fees.

Morningstar does not tax-adjust the returns of separate accounts that invest in municipal bonds. The Morningstar Rating for separate accounts is based on quarter-end performance data. It will be recalculated quarterly, because many managers do not provide monthly returns until the end of each quarter.

Please note that some Morningstar proprietary calculations, including the Morningstar Rating, may be calculated based on adjusted historical returns (pre- inception returns). If the extended performance rating is in effect, the “stars” are represented as unshaded stars.

Morningstar Return

The Morningstar Return rates a fund’s performance relative to other managed products in its Morningstar Category. It is an assessment of a product’s excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Ave), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Risk

Morningstar Risk evaluates a fund’s downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations,

in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Style Box™

The Morningstar Style Box™ reveals a fund’s investment strategy as of the date noted on this report.

For equity funds, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened square in the style box indicates the weighted average style of the portfolio.

For fixed-income funds, the vertical axis shows the credit quality of the long bonds owned and the horizontal axis shows interest-rate sensitivity as measured by a bond’s effective duration. Morningstar seeks credit rating information from fund companies on a periodic basis (for example, quarterly). In compiling credit rating information, Morningstar accepts credit ratings reported by fund companies that have been issued by all Nationally Recognized Statistical Rating Organizations. For a list of all NRSROs, please visit <http://www.sec.gov/divisions/marketreg/ratingagency.htm>. Additionally, Morningstar accepts foreign credit ratings from widely recognized or registered rating agencies. If two rating organizations/ agencies have rated a security, fund companies are to report the lower rating; if three or more organizations/agencies have rated a security, fund companies are to report the median rating; and in cases where there are more than two organization/agency ratings and a median rating does not exist, fund companies are to use the lower of the two middle ratings.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the fund. NRSRO or rating agency ratings can change from time to time.

For credit quality, Morningstar combines the credit rating information provided by the fund companies with an average default rate calculation to come up with a weighted-average credit quality. The weighted-average credit quality is currently a letter that roughly corresponds to the scale used by a leading NRSRO. Bond funds are assigned a style box placement of “low,” “medium,” or “high” based on their average credit quality. Funds with a “low” credit quality are those whose weighted-average credit quality is determined to be less than “BBB-”; “medium” are those less than “AA-”, but greater or equal to “BBB-”; and “high” are those with a weighted-average credit quality of “AA-” or higher. When classifying a bond portfolio, Morningstar first maps the NRSRO credit ratings of the underlying holdings to their respective default rates (as determined by Morningstar’s analysis of actual historical default rates). Morningstar then averages these default rates to determine the average default rate for the entire bond fund. Finally, Morningstar maps this average default rate to its corresponding credit rating along a convex curve.

For interest-rate sensitivity, Morningstar obtains from fund companies the average effective duration. Generally, Morningstar classifies a fixed-income fund’s interest-rate sensitivity based on the effective duration of the Morningstar Core Bond Index, which is currently three years. The classification of Limited will be assigned to those funds whose average effective duration is between 25% to 75% of MCB’s average effective duration; funds whose average effective duration is between 75% to 125% of the MCB will be classified as Moderate; and those that are at 125% or greater of the average effective duration of the MCB will be classified as Extensive.

For municipal-bond funds, Morningstar also obtains from fund companies the average effective duration. In these cases, static breakpoints are used. These breakpoints are as follows: (i) Limited: 4.5 years or less; (ii) Moderate: more than 4.5 years but less than 7 years; and (iii) Extensive: more than 7 years. In addition, for non-U.S. taxable and non-U.S. domiciled fixed-income funds, static duration breakpoints are used: (i) Limited: less than or equal to 3.5 years; (ii) Moderate: more than 3.5 years but less than or equal to 6 years; (iii) Extensive: more than 6 years.

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Interest-rate sensitivity for non-U.S. domiciled funds (excluding funds in convertible categories) may be measured with modified duration when effective duration is not available.

Net Expense Relative to Category Median

This ratio shows how an individual fund compares to the median of all funds within its Morningstar Category. The category median is always set to equal 0.0. For example, a Large Blend fund with a Relative Expense Ratio weighting of 0.5 has 50% more expense than its median peer. The Net Expense Relative to Category Median is calculated by dividing the fund's Expense Ratio by the Category Net Expense Ratio median, then subtracting 1.

P/B Ratio TTM

The Price/Book Ratio (or P/B Ratio) for a fund is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

P/C Ratio TTM

The Price/Cash Flow Ratio (or P/C Ratio) for a fund is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

P/E Ratio TTM

The Price/Earnings Ratio (or P/E Ratio) for a fund is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is the stock's current price divided by the company's trailing 12-month earnings per share. A high P/E Ratio usually indicates the market will pay more to obtain the company's earnings because it believes in the company's abilities to increase their earnings. A low P/E Ratio indicates the market has less confidence that the company's earnings will increase, however value investors may believe such stocks have an

overlooked or undervalued potential for appreciation.

Percentage of Investments

The Percentage of Investments column indicates the percentage of net assets that any given security (either as an individual holding or as an underlying stock makes up as an overall position of the plan's investment options.

Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, funds within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

Performance Quartile

Performance Quartile reflects a fund's Morningstar Rank.

Plan Growth of 10,000

This graph shows how an investment of \$10,000 invested in the plan would have grown over time based on historical monthly returns and compares it with that of a benchmark index. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing fund expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. The growth of \$10,000 begins at the earliest common inception date of each investment option within the trailing ten years.

The benchmark index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The benchmark index does not reflect any initial or ongoing expenses. A fund's portfolio may differ significantly from the securities in the benchmark index. The index is chosen by Morningstar.

Plan Trailing Total Returns

Plan Trailing Total Returns reflect the weighted average of the underlying holdings' non-standardized returns during the same periods. The plan-level performance is calculated by applying the holding weightings supplied by the user to an individual holding's monthly returns. When monthly returns are unavailable for a holding (i.e. due to it not being in existence during the historical period being reported), the remaining portfolio holdings are re-weighted to maintain consistent proportions. Inception dates are listed in the Standardized and Tax Adjusted Returns Disclosure Statement. Trailing returns are calculated by geometrically linking these weighted-average monthly returns. The plan-level returns thus assume monthly rebalancing. Returns for individual holdings are simple time-weighted trailing returns. Neither portfolio returns nor holding returns are adjusted for loads or taxes. If they were, the returns shown would be reduced. The returns stated assume the reinvestment of dividends and capital gains. Mutual fund returns include all ongoing fund expenses. VA/VL returns reflect subaccount level fund expenses, including M&E expenses, administration fees, and actual ongoing fund-level expenses. Benchmark returns may or may not be adjusted to reflect ongoing expenses such as sales charges. An investment's portfolio may differ significantly from the securities in the benchmark. Returns for custom benchmarks are calculated by applying user-supplied weighting to each benchmark's return every month. Trailing returns are calculated by geometrically linking these weighted-average monthly returns. Custom benchmark returns thus assume monthly rebalancing.

Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

Quarterly Returns

Quarterly Return is calculated applying the same methodology as Total Return except it represents return through each quarter-end.

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R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

Regional Exposure

The regional exposure is a display of the portfolio's assets invested in the regions shown on the report.

Return vs. Category Quartiles Graph

This graph shows how the total return of a single investment matches up to the returns of its category each year for up to the past 10 years.

Relative Return

Relative Return is a ratio that shows how an individual fund compares to the average return of all funds in its Morningstar Category. The category average is always set to equal 0.00. For example, a Large Blend fund with a Relative Return of 0.5 has 50 more return than its average peer. The relative return is calculated by dividing the difference between the fund's return and the category average return by the absolute value of the category average return.

Risk/Reward Scatterplot

The risk/reward scatterplot graph plots the return and risk (measured by standard deviation) for a selection of securities and a benchmark index for the trailing period identified in the report. The table beneath the graph identifies the specific risk and return plot points for the graphed securities and the benchmark index.

The returns noted for a security reflect any sales charges that were applied in the illustration over the time period selected, but do not reflect impacts of taxation. If impacts of taxation were reflected, the returns would be lower than those indicated in the report.

The return plotted in the graph is mean geometric return. Standard

deviation is a statistical measure of the volatility of the security's or portfolio's returns in relation to the mean return. The larger the standard deviation, the greater the volatility of return in relation to the mean return.

Sector Delta

The sector delta is an equilateral triangle that depicts a fund's super sector allocation, relative to a benchmark. The sector delta is divided into four parts of equal area representing the diversified, defensive, sensitive, and cyclical classifications of a fund's portfolio and is used to represent a fund's allocation at a single point in time or over a historical period.

Sector Weightings

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Security Types

The following security types may be represented herein: bond (BD), closed-end fund (CE), collective investment trust (CIT), exchange-traded fund (ETF), holding company depository receipt (HOLDR), insurance group separate account (IGSA), index (IDX), money market mutual fund (MM), open-end mutual fund (MF), separate account (SA), stock (ST), and variable annuity/life (VA/L).

Share Change

Shares Change represents the number of shares of a stock bought or sold by a fund since the previously reported portfolio of the fund.

Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a

security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk. The higher the Sharpe Ratio, the better the portfolio's historical risk-adjusted performance. It can be used to compare two portfolios directly on how much excess return each portfolio achieved for a certain level of risk.

Sortino Ratio

Sortino Ratio is similar to the Sharpe ratio, except that it uses downside risk (downside deviation). Since upside volatility is not necessarily undesirable, the Sortino ratio is sometimes preferable to a Sharpe ratio. It measures the annualized rate of return for a given level of downside risk.

Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experience if the security was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Style Drift

The Equity Style Drift graph visually depicts a historical view of the holdings in a fund's portfolio and where they have fallen in the Morningstar Style Box™. A larger circle within the graph denotes a more recent portfolio. All circles represent a distinct month-end date where a maximum of 12 circles are available for fund companies that submit monthly portfolios and a maximum of 4 circles are available for fund companies that submit quarterly portfolios.

Stock Intersection

The stock intersection report reviews the top 25 stock holdings across

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the plan's investment option offerings. It identifies (both at the plan level and the fund level) the overall weightings of a particular security. While this report only displays the top 25 holdings, your plan portfolio may hold substantially more. For purposes of this report, all investment option offerings in the plan are considered on an equally weighted basis, regardless of the actual amount of plan assets invested in each fund.

This report is being provided to help plan fiduciaries evaluate overlap and diversification within the plan's investment option offerings and not intended to be a promotion, offer or recommendation by UBS Financial Services Inc. or Morningstar to purchase or liquidate any security listed. While the plan does not own the securities held by an open-end fund, closed-end fund, group annuity separate account or similar investment, the holdings are relevant in reviewing the overall asset allocation and diversification.

Style Count

Style count is a derivation of the Morningstar Style Box that reveals a plan's investment strategy. For equity holdings, the vertical axis shows the market capitalization of the stocks owned and the horizontal axis shows investment style (value, blend, or growth). For fixed-income holdings, the vertical axis shows the average credit quality of the bonds owned and the horizontal axis shows interest rate sensitivity as measured by a bond's duration (limited, moderate, or extended). The boxes contain the count of funds in the plan for which the weighted average of holdings falls in that box.

Style Orientation

Style orientation is a graph that visually depicts a historical view of the holdings in the portfolio and where they have fallen in the Morningstar Style Box. A larger circle within the graph denotes a more recent portfolio. All circles represent a distinct month-end date where a maximum of 12 circles are available for companies that submit monthly portfolios and a maximum of 4 circles are available for companies that submit quarterly portfolios.

Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of

taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes reinvestment of dividends and capital gains. It is the return an investor would have experienced if the fund was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Trailing Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the fund was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Treynor Ratio

Treynor Ratio is a risk-adjusted measure of return based on systematic risk. It is the annualized monthly excess return of the strategy divided by the beta of the strategy's excess returns relative to the strategy's benchmark. It is similar to the Sharpe ratio with the difference being that it uses beta as the measurement of volatility (rather than standard deviation). In using beta, the Treynor ratio assumes a portfolio is fully diversified and all unsystematic risk has been eliminated. Investors

should look for a higher Treynor number, especially relative to a strategy's benchmark, indicating a higher level of return per unit of risk.

UBS Fund Eligibility

Investment options that are not available through UBS, as well as investment options recently removed from the UBS fund eligibility list are specifically noted on the "Performance" page. These investment options are included at your request and such inclusion does not constitute an endorsement that the Plan continue to hold these investment options. Please speak with your financial advisor for additional information.

World Regions

Broad breakdown of a portfolio's geographical exposure, by region and by market maturity. Only non-cash equity assets are evaluated in determining the exposures. "Not Available" indicates the percentage of the equity portion of the portfolio for which Morningstar is unable to assess region or origin.

Investment Risks

Some of the general risk considerations associated with the investment options included in this report are described below. The descriptions are not meant to be a complete list of all investment risks. For more complete information regarding fees, expenses, risks and restrictions associated with these investments please review the offering documents and marketing materials. Investors should consult their tax advisor about their specific tax situation before investing in any securities. In addition, clients should familiarize themselves with the particular market risks and the other risks associated with the specific investment. **All investments contain risk and may lose value.**

International/Emerging Market Equities: Investing in international securities involve special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

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Sector Strategies: Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor to increased industry-specific risks.

Non-Diversified Strategies: Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

Small Cap Equities: Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and are not as well established as larger blue-chip companies. Historically, smaller company stocks have experienced a greater degree of market volatility than the overall market average.

Mid Cap Equities: Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

High-Yield Bonds: Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

Tax-Free Municipal Bonds: The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

Bonds: Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

HOLDERS: The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a

fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDER might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

Hedge Funds: The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

Bank Loan/Senior Debt: Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

Exchange Traded Notes (ETNs): ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its obligations. ETNs do not typically pay interest.

Leveraged ETFs: Levered investments are designed to meet multiples of the return performance of the index they track and seek to meet their fund objectives on a daily basis (or other time period stated within the Fund objective). The leverage/gearing ratio is the amount of excess return that a levered investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, -200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the fund to be either greater or less than the index performance multiplied by the multiple stated within the funds objective over a stated time period.

Short Positions: When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more

collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

Long-Short: Due to the strategies used by long-short funds, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these funds may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

Liquidity Risk: Closed-end fund, ETF, and HOLDER trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

Market Price Risk: The market price of ETFs, HOLDERS, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV which will affect an investor's value.

Market Risk: The market prices of ETF's and HOLDERS can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

Target-Date Funds: Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date of when investors expect to begin withdrawing their money. Target-date fund's investment objective/strategy typically becomes more conservative over time primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at anytime, including at the fund's target date.

High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

The information and data presented may be deemed reliable; however, their accuracy and completeness is not guaranteed by UBS Financial

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Benchmark Disclosure

The past performance of an index is not a guarantee of future results. Each index reflects an unmanaged universe of securities without any deduction for advisory fees or other expenses that would reduce actual returns. An actual investment in the securities included in the index would require an investor to incur transaction costs, which would lower the performance results. Indices are not actively managed and investors cannot invest directly in the indices.

BBgBarc US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which includes the daily

reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond ETF.

MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices: Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information.

S&P 500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the U.S. stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core S&P 500 ETF.

USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months. Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

Risk and Return Benchmark Disclosure

Investment Name

MPT Index

American Funds 2010 Trgt Date Retire R6	Morningstar Lifetime Mod 2010 TR USD
American Funds 2015 Trgt Date Retire R6	Morningstar Lifetime Mod 2015 TR USD
American Funds 2020 Trgt Date Retire R6	Morningstar Lifetime Mod 2020 TR USD
American Funds 2025 Trgt Date Retire R6	Morningstar Lifetime Mod 2025 TR USD
American Funds 2030 Trgt Date Retire R6	Morningstar Lifetime Mod 2030 TR USD
American Funds 2035 Trgt Date Retire R6	Morningstar Lifetime Mod 2035 TR USD
American Funds 2040 Trgt Date Retire R6	Morningstar Lifetime Mod 2040 TR USD
American Funds 2045 Trgt Date Retire R6	Morningstar Lifetime Mod 2045 TR USD
American Funds 2050 Trgt Date Retire R6	Morningstar Lifetime Mod 2050 TR USD
American Funds 2055 Trgt Date Retire R6	Morningstar Lifetime Mod 2055 TR USD
American Funds 2060 Trgt Date Retire R6	Morningstar Lifetime Mod 2060 TR USD
American Funds Europacific Growth R6	MSCI ACWI Ex USA Growth NR USD
American Funds New Perspective R6	MSCI ACWI NR USD
American Funds Washington Mutual R6	Russell 1000 TR USD
ClearBridge Small Cap I	Russell 2000 Growth TR USD
Harbor Mid Cap Growth Retirement	Russell Mid Cap Growth TR USD
JHancock Fundamental Large Cap Core R6	Russell 1000 TR USD
Nuveen Real Estate Securities R6	S&P United States REIT TR USD
Oakmark International Institutional	MSCI ACWI Ex USA NR USD
PGIM High Yield R6	ICE BofAML US High Yield TR USD
T. Rowe Price Growth Stock I	Russell 1000 Growth TR USD
Vanguard 500 Index Admiral	Russell 1000 TR USD
Vanguard Treasury Money Market Investor	ICE BofAML USD 3M Dep OR CM TR USD

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Disclosure

Victory Sycamore Established Value R6	Russell Mid Cap Value TR USD
Western Asset Core Plus Bond IS	BBgBarc US Agg Bond TR USD

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Cobb County Government 457 – 4Q 2018 Alert Summary

The following fund(s) in the DC Plan failed at least one primary alert: 5-Year Total Return (% Rank in Category), Equity Style Box Change, MorningStar Category Change, Manager Change, Prospectus Net Expense Ratio (% Rank in Category) as of 1/11/2019.

1. American Funds 2030 Target Date – Recommend no action
 - Trigger: Equity Style Box Change
 - Historically Large Cap Core, Currently Large Cap Growth
 - 5-Star MorningStar Rating
 - Ranked in 2nd Percentile in 2018, 1st for trailing 3-Years, 1st for trailing 5-Years
 - Fund normally invests a greater portion of its assets in bonds, equity-income and balanced funds as it approaches and passes its target date.
2. American Funds Washington Mutual – Recommend no action
 - Trigger: MorningStar Category Change
 - Historically Large Value, Currently Large Blend
 - 5-Star MorningStar Rating
 - Ranked in 12th Percentile in 2018, 5th for trailing 3-Years, 15th for trailing 5-Years
 - The fund invests primarily in common stocks of established companies that are listed on, or meet the financial listing requirements of the New York Stock Exchange and have a strong record of earnings and dividends.
3. John Hancock Fundamental Large Cap Core – Recommend no action
 - Trigger: 5-Year Total Return (% Rank in Category)
 - Currently 75th Percentile
 - 2-Star MorningStar Rating
 - Ranked in 96th Percentile in 2018, 91st for trailing 3-Years, 75th for trailing 5-Years
 - On a rolling 3 year, the strategy outperforms 94% of the time and on a rolling 5 year, the strategy outperforms 98% of the time.
 - Fund normally invests at least 80% of its net assets (plus any borrowing for investment purposes) in equity securities of large-capitalization companies.
 - In 2018, the fund held a significant overweight to banks (approximately 20-25%).
 - Held a 4-6% position in GE most of the year

4. Oakmark International – Recommend no action

- Trigger: 5-Year Total Return (% Rank in Category)
- Currently 70th Percentile
- 4-Star MorningStar Rating
- Ranked in 99th Percentile in 2018, 59th for trailing 3-Years, 70th for trailing 5-Years, 2nd percentile for trailing 10-Years.
- Fund invests primarily in a diversified portfolio of common stocks of non-U.S. companies. It may invest in non-U.S. markets throughout the world, including emerging markets.
- Deep value, cyclical investing style often experiences periods of over/under performance.

5. Vanguard Treasury Money Market – Recommend no action

- Trigger: MorningStar Category Change
- Historically Money Market – Taxable, Currently Money Market – Taxable
 - Database nuance – No Category Change