

BOARD OF TRUSTEES
Cobb County Government Employees' Pension Plan Trust
Other Post Employment Benefits (OPEB) Trust
Meeting of December 4, 2024
2nd Floor BOC Meeting Room, 9:00 A.M. to 10:00 A.M.

Agenda

- I. Invitation for Public Comment
- II. Approval of Minutes – *Jim Harner*
- III. Invoice Payments Approval – *Bill Volckmann*
- IV. Actuarial Study - *Bill Volckmann*
- V. Advisor Report – UBS – *Earle Dodd, Austin Dodd, Hampton Clark*
- VI. 2025 Proposed Calendar
- VII. New Business
 - a. New Experience Study – *Bill Volckmann*
- VIII. Adjourn
- IX. Next Trustee Meeting – TBD

2025 Board of Trustees Meeting Calendar

Wednesday, March 5th, 2025 Meeting at 10:00 a.m.

4th Quarter Reports

2nd Floor BOC Meeting Room

Wednesday, May 7th, 2025 Meeting at 10:00 a.m.

1st Quarter Reports

2nd Floor BOC Meeting Room

Wednesday, June 25th, 2025 Meeting at 9:00 a.m.

Actuary Report Review

2nd Floor BOC Meeting Room

Wednesday, September 24th, 2025 Meeting at 10:00 a.m.

2nd Quarter Reports

2nd Floor BOC Meeting Room

Wednesday, December 3rd, 2025 Meeting at 10:00 a.m.

3rd Quarter Reports

2nd Floor BOC Meeting Room

REGULAR MEETING for December 4, 2024

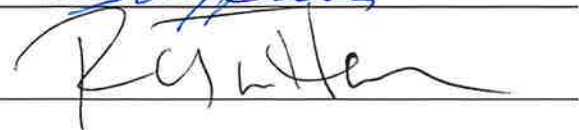
PURPOSE

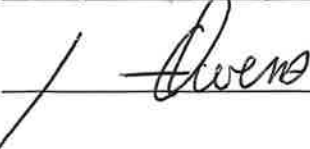
To seek authorization from the Board of Trustees of the Cobb County Employees Retirement Plan to ratify the following invoices which have already been processed for payment;

1	HAMLIN CAPITAL MANAGEMENT LLC	\$11,315.79
2	EAGLE CAPITAL MANAGEMENT LLC	\$37,747.66
3	VAUGHAN NELSON	\$15,398.52
4	RICHMOND CAPITAL MANAGEMENT INC	\$9,281.00
5	WESTFIELD CAPITAL MANAGEMENT	\$20,523.69
6	UBS FINANCIAL	\$48,548.44
7	TCW INVESTMENT MANAGEMENT	\$23,399.81
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TOTAL		\$166,214.91

APPROVAL







REGULAR MEETING for December 4, 2024

PURPOSE

To seek authorization from the Board of Trustees of the Cobb County Employees Retirement Plan to ratify the following invoices which have already been processed for payment;

1	UBS FINANCIAL	\$23,948.54
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TOTAL		\$23,948.54

APPROVAL



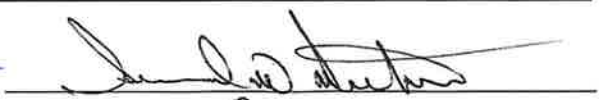
REGULAR MEETING for December 4, 2024

PURPOSE

To seek authorization from the Board of Trustees of the Cobb County Employees Retirement Plan to ratify the following invoices which have already been processed for payment;

1	CAVANAUGH MACDONALD CONSULTING, LLC	\$5,974.00
2	CAVANAUGH MACDONALD CONSULTING, LLC	\$3,500.00
3	EAGLE CAPITAL MANAGEMENT LLC	\$186,013.59
4	HAMLIN CAPITAL MANAGEMENT LLC	\$55,241.80
5	RICHMOND CAPITAL MANAGEMENT INC	\$46,290.00
6	VAUGHAN NELSON	\$84,488.05
7	WESTFIELD CAPITAL MANAGEMENT CO LP	\$99,710.03
8	UBS FINANCIAL	\$0.00
9	TROUTMAN PEPPER HAMILTON SANDERS LLP	\$10,249.30
10	TROUTMAN PEPPER HAMILTON SANDERS LLP	\$4,900.25
11	TRUIST BANK	\$59,631.81
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24		
TOTAL		\$555,998.83

APPROVAL





BOARD OF TRUSTEES
Cobb County Government Employees' Pension Plan Trust
Other Post-Employment Benefits (OPEB) Trust
Meeting of September 25th, 2024
2nd Floor BOC Meeting Room/WebEx, 10:00am

Present:

Jim Harner, Trustee/Secretary
Sam Heaton, Vice Chair
Roger Tutterow, Chair
Bill Volckmann, Trustee
Sheriff Craig Owens, Trustee

Absent:

A scheduled meeting of the Board of Trustees of the Cobb County Employees Retirement Plan was called to order by Roger Tutterow at 10:00am in Person and via WebEx. Sheriff Owens arrived after vote to approve invoice payments.

The following items of business were discussed:

I. Invitation for Public Comment

No comments

II. Approval of Minutes

A motion was made by Bill Volckmann and seconded by Jim Harner to approve the minutes for the meeting of July 24th 2024.

Vote: 4 – 0, in favor.

III. Ratify Invoice Payments Approval

A motion was made by Sam Heaton and seconded by Jim Harner to approve eight (8) invoices totaling \$189254.62 for OPEB, one (1) invoice totaling \$23,494.86 for the Employees Defined Comp, and nine (13) invoices totaling \$882,217.87 for the Employees Retirement Plan, Roger Tutterow abstained regarding the invoice from Troutman Pepper Hamilton Sanders.

Vote: 4-0, in favor.

IV. Manager Report – Belle Haven Matt Thomas, Stan Satler, and Kyle Turner presented

V. Truist Report – Lisa Allen presented via WebEx

VI. Advisor Report – Earle Dodd, Austin Dodd, & Hampton Clark with UBS Presented

It was recommended that Dodge & Cox replace Western for Fixed Income in the DC Plan. A motion was made by Bill Volckmann and seconded by Sheriff Craig Owens to approve.

Vote 5-0, in favor.

VII. New Business

A tentative schedule for 2025 will be on the Agenda for the December meeting.

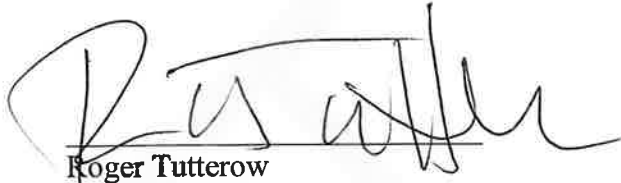
VIII. Adjourn

Pension Meeting was adjourned at 11:08am.

The next scheduled meeting date is Wednesday, December 4th. Location set for 2nd floor BOC Meeting Room, 100 Cherokee Street, Bldg. A., Marietta, Georgia

CERTIFIED CORRECT:



Jim Harner
Secretary

Roger Tutterow
Chair

Cobb County Government Employees' Pension plan



GASB Statement No. 67 & 68 Report

Prepared as of September 30, 2024



November 21, 2024

Board of Trustees of the
Cobb County Government Employees' Pension Plan
100 Cherokee Street, Suite 200
Marietta, GA 30090-9679

Members of the Board:

Presented in this report is information to assist the Cobb County Government Employees' Pension Plan in providing necessary Governmental Accounting Standards Board (GASB) Statement Nos. 67 and 68 disclosure information to participating employers. This report has been prepared for the fiscal year ending September 30, 2024 (The Measurement Date).

The annual actuarial valuation used as a basis for much of the information presented in this report was performed as of January 1, 2024 (The Valuation Date). The valuation was based upon data, furnished by the Plan's staff, concerning active, inactive and retired members along with pertinent financial information. While not verifying data at the source, the actuary performed tests for consistency and reasonableness. The valuation results depend on the integrity of the data. If any of the information is inaccurate or incomplete, our results may be different and our calculations may need to be revised. Please see the actuarial valuation for additional details on the funding requirements for the Plan.

To the best of our knowledge, the information contained in this report is complete and accurate. The calculations were performed by qualified actuaries according to generally accepted actuarial principles and practices, as well as in conformity with Actuarial Standards of Practice issued by the Actuarial Standards Board. In order to prepare the results in this report, we have utilized actuarial models that were developed to measure liabilities and develop actuarial costs. These models include tools that we have produced and tested, along with commercially available valuation software that we have reviewed to confirm the appropriateness and accuracy of the output. In utilizing these models, we develop and use input parameters and assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.

The calculations are based on the current provisions of the Plan, and on actuarial assumptions that are, individually and in the aggregate, internally consistent and reasonably based on the actual experience of the Plan. In addition, the calculations were completed in compliance with the laws governing the Plan and, in our opinion, meet the requirements of GASB 67 and 68. Edward Koebel and Ben Mobley are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.



Board of Trustees
November 21, 2024
Page 2

The calculation of the liability associated with the benefits described in this report was performed for the purpose of providing reporting and disclosure information that satisfies the requirements of GASB 67 and 68 for accounting valuation purposes and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 67 and 68 may produce significantly different results. Future actuarial results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.

Respectfully submitted,

A handwritten signature in blue ink that reads "Edward J. Koebel".

Edward J. Koebel, EA, FCA, MAAA
Chief Executive Officer

A handwritten signature in blue ink that reads "Ben Mobley".

Ben Mobley, ASA, FCA, MAAA
Consulting Actuary



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SECTION I – SUMMARY

**REPORT OF THE ANNUAL GASB STATEMENT NO. 67 AND 68
REQUIRED INFORMATION FOR THE
COBB COUNTY GOVERNMENT EMPLOYEES' PENSION PLAN
PREPARED AS OF SEPTEMBER 30, 2024**

Valuation Date (VD):	January 1, 2024
Measurement Date (MD):	September 30, 2024
Reporting Date (RD):	September 30, 2024
Single Equivalent Interest Rate (SEIR):	
Long-Term Expected Rate of Return	7.25%
Municipal Bond Index Rate at Prior Measurement Date	4.09%
Municipal Bond Index Rate at Measurement Date	3.81%
Fiscal Year in which Plan's Fiduciary Net Position is projected to be depleted from future benefit payments for current members	N/A
Single Equivalent Interest Rate at Prior Measurement Date	7.25%
Single Equivalent Interest Rate at Measurement Date	7.25%
Net Pension Liability (Fiscal Year Ended 2023):	
Total Pension Liability (TPL)	\$ 1,613,046,732
Fiduciary Net Position (FNP)	<u>859,969,874</u>
Net Pension Liability (NPL = TPL – FNP)	\$ 753,076,858
FNP as a percentage of TPL	53.31%
Net Pension Liability (Fiscal Year Ended 2024):	
Total Pension Liability (TPL)	\$ 1,698,193,344
Fiduciary Net Position (FNP)	<u>1,085,633,178</u>
Net Pension Liability (NPL = TPL – FNP)	\$ 612,560,166
FNP as a percentage of TPL	63.93%
Pension Expense (PE):	\$ 59,663,788
Deferred Outflows of Resources:	\$ 85,852,011
Deferred Inflows of Resources:	\$ 103,408,158





SECTION II – INTRODUCTION

This report, prepared as of September 30, 2024 (the Measurement Date), presents information to assist the Plan in providing the required information under GASB 67 and 68 to the participating employers of the Cobb County Government Employees' Pension Plan for fiscal year ending September 30, 2024 (the Reporting Date).

GASB 67 and 68 create disclosure and reporting requirements that may or may not be consistent with the basis used for funding the Plan.

GASB 67 and 68 require measurement of the Net Pension Liability (NPL) and recognition of a Pension Expense (PE) in the Cobb County financial statements.

Pension Expense includes amounts for service cost (the normal cost under the Entry Age Normal actuarial cost method for the year), interest on the Total Pension Liability (TPL), changes in benefit structure, amortization of increases/decreases in liability due to actuarial experience and actuarial assumption changes, and amortization of investment gains/losses. The actuarial experience and assumption change impacts are amortized over the average expected remaining service life of the Plan membership as of the Measurement Date, and investment gains/losses are amortized over five years. The development of the PE is shown in Section V.

The unrecognized portions of each year's experience, assumption changes and investment gains/losses are used to develop deferred inflows and outflows, which also must be included in the employer's financial statements. The development of the deferred inflows and outflows is shown in Section III.

Section I of this report is a summary of the principal results of the amounts under GASB 67 and 68. Section III and Section IV provides the results of all the necessary calculations, presented in the order laid out in GASB 67 and 68 for note disclosure and Required Supplementary Information (RSI).





SECTION III – FINANCIAL STATEMENT NOTES

The material presented herein will follow the order presented in GASB 67 and 68. Paragraph numbers are provided for ease of reference. Amounts are shown in aggregate.

GASB 67 Paragraph 30(a) (4) and GASB 68 Paragraph 40(c): The data required regarding the membership of the Cobb County Government Employees' Pension Plan were furnished by the Plan's Staff. The following table summarizes the membership of the Plan as of January 1, 2024, the Valuation Date.

Membership

	Number
Inactive Members Or Their Beneficiaries Currently Receiving Benefits*	3,264
Inactive Members Entitled To But Not Yet Receiving Benefits	947
Active Members	4,428
Total	8,639

* Retirees and beneficiaries covered under an annuity contract with CIGNA are not included above.

GASB 67 Paragraph 31(a) (1)-(4): As stated above, the NPL is equal to the TPL minus the FNP. That result as of September 30, 2024 is presented in the table below.

	Fiscal Year Ending September 30, 2024
Total Pension Liability	\$ 1,698,193,344
Fiduciary Net Position	<u>1,085,633,178</u>
Net Pension Liability	\$ 612,560,166
Ratio of Fiduciary Net Position to Total Pension Liability	63.93%





SECTION III – FINANCIAL STATEMENT NOTES

GASB 67 Paragraph 31(b) and GASB 68 Paragraph 41: This paragraph requires information regarding the actuarial assumptions used to measure the TPL. The actuarial assumptions utilized in developing the TPL are outlined in Schedule B. The total pension liability was determined by an actuarial valuation as of January 1, 2024, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50 percent
Salary increases	3.00 to 4.50 percent, including inflation
Investment rate of return	7.25 percent, net of pension plan investment expense, and including inflation
Mortality	Pre-retirement mortality: RP-2000 Employee projected to 2025 using scale BB, sex distinct; No Set back / Set forward Post-retirement mortality: RP-2000 Combined projected to 2025 using scale BB, sex distinct; Set forward 2 years for both Male & Female lives

GASB 67 Paragraph 31(b) (1) and GASB 68 Paragraph 42:

- (a) **Discount rate.** The discount rate used to measure the total pension liability was 7.25 percent.
- (b) **Projected cash flows:** The projection of cash flows used to determine the discount rate assumed that Employer contributions will be made at the greater of the actuarially determined contribution rates and the rates adopted by the County.
- (c) **Long term rate of return:** The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.
- (d) **Municipal bond rate:** The discount rate determination does not use a municipal bond rate.
- (e) **Periods of projected benefit payments:** Projected future benefit payments for all current plan members were projected through 2122.





SECTION III – FINANCIAL STATEMENT NOTES

- (f) **Assumed Asset Allocation:** The most recent target asset allocation and best estimates of arithmetic real rates of return for each major asset class as of September 30, 2024 are summarized in the following table. The information was provided by the Plan's investment consultant and are based on their capital market assumptions. The expected rates of return below are provided for informational purposes and do not directly determine the long-term expected actuarial rate of return. The Board reviews the long-term expected rate of return periodically and bases the adoption of the rate on many considerations.

Asset Classes	Target Asset Allocation	Long-Term Expected Real Rate of Return
Large Cap Growth	11%	5.20%
Large Cap Blend	11%	5.50%
Large Cap Value	11%	5.70%
Mid Cap Blend	6%	5.60%
Small Cap Growth	3%	5.40%
Small Cap Value	3%	5.90%
Global	10%	6.10%
International	20%	7.00%
Fixed Income	25%	1.70%

- (g) **Sensitivity analysis:** This paragraph requires disclosure of the sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the Plan, calculated using the discount rate of 7.25 percent, as well as what the Plan's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate:

	1% Decrease 6.25%	Current Discount Rate 7.25%	1% Increase 8.25%
Plan's net pension liability	\$799,273,542	\$612,560,166	\$454,336,213





SECTION III – FINANCIAL STATEMENT NOTES

GASB 68 Paragraph 44: This paragraph requires a schedule of changes in Net Pension Liability. The needed information is provided in the table below.

CHANGES IN THE NET PENSION LIABILITY

	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) – (b)
Balances at September 30, 2023	\$ 1,613,046,732	\$ 859,969,874	\$ 753,076,858
Changes for the year:			
Service cost	20,718,121		20,718,121
Interest	115,277,788		115,277,788
Benefit changes	215,883		215,883
Difference between expected and actual experience	46,808,079		46,808,079
Changes in assumptions	0		0
Contributions - employer		76,295,834	(76,295,834)
Contributions - employee		16,697,263	(16,697,263)
Net investment income		231,203,192	(231,203,192)
Benefit payments, including refunds of employee contributions	(97,873,259)	(97,873,259)	0
Administrative expense		(443,198)	443,198
Other changes	0	(216,528)	216,528
Net changes	\$ 85,146,612	\$ 225,663,304	\$ (140,516,692)
Balances at September 30, 2024	<u>\$ 1,698,193,344</u>	<u>\$1,085,633,178</u>	<u>\$ 612,560,166</u>





SECTION III – FINANCIAL STATEMENT NOTES

GASB 67 Paragraph 31(c) and GASB 68 Paragraph 45(a): January 1, 2024 is the actuarial valuation date upon which the TPL is based. An expected TPL is determined as of September 30, 2024 using standard roll-forward techniques. The roll-forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year and then applies the expected investment rate of return for the year. The difference between this amount and the roll-forward of the actual TPL is reflected as an experience gain or loss for the year. The change in benefit plan provisions due to the vesting requirement for Hybrid members being decreased from 10 years to 7 years is then reflected. These procedures are shown in the following table:

	(1)	(2)	(3)
	TPL Reported for Fiscal Year End 2023	Development of TPL for Fiscal Year End 2024	Development of TPL for Fiscal Year End 2024 with Plan Change
(a) Interest Rate	7.25%	7.25%	7.25%
(b) Valuation Date for Measurement	January 1, 2023	January 1, 2024	January 1, 2024
(c) TPL as of September 30, 2023	\$ 1,613,046,732		
(d) Entry Age Normal Cost for the period October 1, 2023 - December 31, 2023	4,671,566		
(e) Actual Benefit Payments and Refunds for the period October 1, 2023 - December 31, 2023	23,660,051		
(f) TPL as of December 31, 2023 ¹	1,623,418,988	1,667,813,136	1,667,992,482
(g) Entry Age Normal Cost for the period January 1, 2024 - September 30, 2024	14,897,798	14,897,798	14,923,201
(h) Actual Benefit Payments and Refunds for the period January 1, 2024 - September 30, 2024	74,213,208	74,213,208	74,213,208
(i) TPL as of September 30, 2024 ²	1,651,169,382	1,697,977,461	1,698,193,344
(j) Experience Actuarial (Gain)/Loss: (2i- 1i)		\$ 46,808,079	
(k) Benefit Change Actuarial (Gain)/Loss: (3i- 2i)			\$ 215,883

¹ Column (1) is calculated as $[(c) \times (1+(a) \times 0.25)] + [(d) \times (1+a)] - [(e) \times (1+(a) \times 0.25 \times 0.5)]$

² Calculated as $[(f+g) \times (1+(a) \times 0.75)] - [(h) \times (1+(a) \times 0.75 \times 0.5)]$

GASB 68 Paragraph 45(c): There were no changes in assumptions or other inputs since the prior measurement date.

GASB 68 Paragraph 45(d): Since the prior measurement date, there was a change in the benefit terms. The vesting requirement for Hybrid members was decreased from 10 years to 7 years.

GASB 68 Paragraph 45(f): There were no changes in assumptions between the measurement date of the net pension liability and the employer's reporting date that are expected to have a significant effect on the net pension liability, and the amount of the expected resultant change in the net pension liability, if known.





SECTION III – FINANCIAL STATEMENT NOTES

GASB 68 Paragraph 45(h): Since certain expense items are amortized over closed periods each year, the deferred portions of these items must be tracked annually. If the amounts serve to reduce pension expense they are labeled deferred inflows. If they will increase pension expense they are labeled deferred outflows. As noted in the previous section, the amortization of these amounts is accomplished on a level dollar basis, with no interest included in the deferred amounts. Experience gains/losses and the impact of changes in actuarial assumptions, if any, are amortized over the average remaining service life of the active and inactive Plan members at the beginning of the fiscal year. Investment gains and losses are amortized over a fixed five-year period.

The table below provide a summary of the deferred inflows and outflows as of September 30, 2024.

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 80,526,010	\$ 10,233,880
Changes of assumptions	5,326,001	0
Net difference between projected and actual earnings on plan investments	0	93,174,278
Employer contributions subsequent to the Measurement Date	<u>0</u>	<u>0</u>
Total	<u>\$ 85,852,011</u>	<u>\$ 103,408,158</u>





SECTION III – FINANCIAL STATEMENT NOTES

GASB 68 Paragraph 45(i): Employer contributions subsequent to the Measurement Date will be recognized as a reduction of the net pension liability in the year ended September 30, 2024. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Deferred Amounts to be recognized in Fiscal Years Ending				
		Deferred Outflows of Resources		Deferred Inflows of Resources
2025	\$	29,276,277	\$	21,739,871
2026		27,657,993		3,721,411
2027		17,537,793		50,858,689
2028		13,237,648		33,811,241
2029		4,865,354		0
Thereafter		0		0





SECTION IV – REQUIRED SUPPLEMENTARY INFORMATION

There are several tables of Required Supplementary Information (RSI) that need to be included in the Plan's financial statements:

GASB 67 Paragraphs 32 (a) and (b) and GASB 68 Paragraphs 46(a) and (b): The required tables are provided in Schedule C and the information is as of the Measurement dates.

GASB 67 Paragraph 32 (c) and GASB Paragraph 46(c): The required table is provided in Schedule C and the information is as of the Employer's Fiscal Year End.

GASB 67 Paragraph 34 and GASB Paragraph 47: In addition, the following should be noted regarding the RSI:

Changes of benefit terms: The following changes to the plan provisions have been adopted within the past few plan years:

1. Effective January 1, 2017:
 - a. The benefits provided under Appendix A for Superior Court Judges were extended to certain State Court Judges. The benefits for these Judges are outlined in Appendix B.
 - i. Credited Service includes the service recognized by the Georgia Judicial Retirement System, not to exceed 24 years.
 - ii. Final Salary equals the annual amount of the salary supplement paid by Cobb County in excess of the state salary cap for Judges.
 - iii. Normal Retirement Date is the later of age 60 or the completion of 10 years of service.
 - iv. Vesting requires 10 years of completed service.
 - v. Supplemental Retirement Benefit is calculated as 4.167% of Final Salary for Credited Service up to 16 years, plus 1% for each additional year of Credited Service, up to a maximum of 24 years.
 - vi. The Supplemental Retirement Benefit is paid as a single life annuity.
 - vii. Late retirement increases are applied if the Judge continues employment after his/her Normal Retirement Date.
 - viii. No benefit is payable upon the death of the Judge, whether such death occurs before or after commencement of the Supplemental Retirement Benefit.
 - ix. The Judge is not required or permitted to make contributions to the Plan.





SECTION IV – REQUIRED SUPPLEMENTARY INFORMATION

2. Effective April 7, 2019:

Each former employee of the City of Powder Springs responsible for services and tasks related to the operation of the water and/or sewer system who is an employee of the Cobb County Board of Commissioners as of April 7, 2019 shall become a Participant. Service for vesting under the Plan will be counted from the Participant's original date of hire with the City of Powder Springs. Benefit Accrual Service shall be counted from April 7, 2019 for those employees who have a vested benefit under the City of Powder Springs' retirement plan on April 7, 2019. Employees who are not vested under the City of Powder Springs' retirement plan will receive Benefit Accrual Service from their original date of hire with the City of Powder Springs.

3. Effective January 1, 2024:

The vesting requirement for Hybrid members was decreased from 10 years to 7 years.

Changes of assumption: The following changes to the actuarial assumptions were made as identified:

1. Effective January 1, 2018:

a. As a result of the Experience Study for the 5-year period ending December 31, 2016, the following assumptions were changed:

- 1) Pre-Retirement Mortality Table was updated to RP-2000 Employee projected to 2025 using scale BB with No Set back / Set forward
- 2) Post-retirement Mortality Table was updated to RP-2000 Combined projected to 2025 using scale BB; Set forward 2 years for both Male & Female lives
- 3) Retirement rates were updated for Public Safety and General Employees
- 4) Withdrawal rates were modified for both Public Safety and General Employees
- 5) Salary merit scale was updated for all members

2. Effective January 1, 2020:

The investment return assumption was decreased from 7.50% to 7.25% per year.





SECTION IV – REQUIRED SUPPLEMENTARY INFORMATION

Methods and assumptions used in calculations of actuarially determined contributions.

The actuarially determined contribution rates are determined on an annual basis. The following actuarial methods and assumptions were used to determine the fiscal year ending 2024 contribution rate reported in that schedule:

Actuarial cost method	Projected unit credit
Amortization method	Level percent of pay, closed
Remaining amortization period	20 years
Asset valuation method	5-year smoothed market
Inflation	2.5 percent
Salary increase	3.0 to 4.5 percent, including inflation
Investment rate of return	7.25 percent, net of pension plan investment expense, and including inflation.





SECTION V – PENSION EXPENSE

As noted earlier, the Pension Expense (PE) consists of a number of different items. GASB 68 refers to the first as Service Cost which is the Normal Cost using the Entry Age Normal actuarial funding method. To this is added interest on the TPL at the rate of return in effect as of the prior measurement date.

The next three items refer to any changes that occurred in the TPL (i.e., actuarial accrued liability (AAL) under EAN) due to:

1. Benefit changes,
2. Actual versus expected experience or
3. Changes in actuarial assumptions.

Benefit changes, which are reflected immediately in PE, can be positive, if there is a benefit improvement for existing Plan members, or negative if there is a benefit reduction. Since the prior measurement date, the vesting requirement for Hybrid members was decreased from 10 years to 7 years. For the year ended September 30, 2024, the total amount recognized in PE due to the plan change is \$215,883.

The next item to be recognized is the portion of current year changes in TPL due to actual versus expected experience for the year. The portion to recognize in the current year is determined by spreading the total change over the average expected remaining service life of the entire Plan membership. For the fiscal year ended September 30, 2024, there is a portion of the current year changes in TPL attributed to actual versus expected experience for the year. The total amount to be recognized is \$46,808,079.

For illustrative purposes, the remaining service life of active members is the average number of years the active members are expected to remain active. For the year ended September 30, 2024 this number is 10.88. The remaining service life of the inactive members is zero. The figure to use for the amortization is the weighted average of these two amounts, or 5.58. The development of the average remaining service life is shown in the table on the following page.





SECTION V – PENSION EXPENSE

Calculation of Weighted Average Years of Working Lifetime

Category	Number (1)	Average Years of Working Lifetime (2)
a. Active Members	4,428	10.88
b. Inactive Members	<u>4,211</u>	0.00
c. Total	8,639	
Weighted Average Years of Working Lifetime [(a1 * a2) + (b1 * b2)]/c1		5.58

The last item under changes in TPL are changes in actuarial assumptions. The portion to recognize in the current year is determined by spreading the total change over the average expected remaining service life of the entire Plan membership, similar to the way experience gains and losses are recognized. For the fiscal year ended September 30, 2024, there were no changes in actuarial assumptions to be recognized.

Member contributions for the year and projected earnings on the FNP at the discount rate serve to reduce the expense. One-fifth of current-period difference between actual and projected earning on the FNP are recognized in the pension expense. For the fiscal year ended September 30, 2024 the actual investment return for the year was \$231,203,192. The projected earnings for the year were \$62,146,995. The total investment gain for the year ended September 30, 2024 was \$169,056,197. The development of the expected return on assets is shown in the table on the following page.

The current year portions of previously determined experience, assumption, and earnings amounts, recognized as deferred inflows and outflows are included. Deferred outflows are added to the PE and deferred inflows are subtracted from the PE. Finally, administrative expenses and other miscellaneous items are included.





SECTION V – PENSION EXPENSE

Calculation of Expected Return on Assets For the Fiscal Year Ending September 30, 2024		
(1)	Market Value of Assets - Beginning of Year	\$ 859,969,874
(2)	Expected Return on Market Value [(1) x 0.0725]	62,347,816
(3)	a. Employee Contributions	16,697,263
	b. Employer Contributions	76,295,834
	c. Benefit Payments & Refund of Contributions	(97,873,259)
	d. Administrative Expenses	(443,198)
	e. Other Changes	(216,528)
	f. Net Cash Flow	(5,539,888)
	[(3)a. + (3)b. + (3)c. + (3)d. + (3)e.]	
(4)	Expected Return on Cash Flow Items [(3)f. x 0.0725 x 0.5]	(200,821)
(5)	Expected Return on Assets [(2) + (4)]	62,146,995





SECTION V – PENSION EXPENSE

The calculation of the Pension Expense for the year ended September 30, 2024 for the Plan is shown in the following table.

Pension Expense Determined as of the Measurement Date	
Service Cost	\$ 20,718,121
Interest on the TPL and Cash Flow	115,277,788
Current-period benefit changes	215,883
Expensed portion of current-period difference between expected and actual experience in the total pension liability	8,388,545
Expensed portion of current-period changes of assumptions	0
Member contributions	(16,697,263)
Projected earnings on plan investments	(62,146,995)
Expensed portion of current-period differences between actual and projected earnings on plan investments	(33,811,239)
Administrative expense	443,198
Other	216,528
Recognition of beginning deferred outflows of resources as pension expense	30,780,633
Recognition of beginning deferred inflows of resources as pension expense	<u>(3,721,411)</u>
Pension Expense	<u>\$ 59,663,788</u>





SCHEDULE A – PLAN PROVISIONS

A. Effective Date

January 1, 1971

B. Participation

Any Employee who is employed in the Eligible Class shall be a participant in this plan. An individual is in the Eligible Class at any time if he or she is an Employee and:

- a) does not participate in any retirement plan sponsored by the State of Georgia under which contributions are made in his/her behalf; or
- b) is an elected Commissioner of Cobb County; or
- c) is employed by the Cobb County District Attorney's Office or in another Salary-Share Position that is paid in part by the Employer.

An Employee who has qualified for participation in the Plan is defined as either a Traditional or Hybrid Participant as follows:

- a) A Traditional Participant is a Participant who either:
 - i. had 7 or more years of Service for vesting purposes as of December 31, 2009
 - ii. had less than 7 years of Service for vesting purposes as of December 31, 2009 and did not elect to become a Hybrid Participant.
- b) Hybrid Participant is a Participant who either:
 - i. was first hired on or after January 1, 2010, or rehired on or after January 1, 2010 (a "New Hire Hybrid Participant")
 - d) had less than 7 years of Service for vesting purposes as of December 31, 2009 and elected to become a Hybrid Participant (an "Electing Hybrid Participant").

C. Accrued Benefit

The pension payable at normal retirement based on the Participant's Final Average Compensation and Credited Service at the date of determination.





SCHEDULE A – PLAN PROVISIONS

D. Credited Service

The period of a Participant’s service that is used to determine his/her eligibility for benefits under the Plan and the amount of benefits payable, excluding service in excess of 35 years. Service prior to December 16, 1984 is excluded for employees employed by Marietta-Cobb Community Service Center prior to that date. Service prior to February 1, 1997 is excluded for former employees of the City of Marietta 911 Services who had already vested with the City’s retirement plan prior to that date. Service prior to January 1, 2005 is excluded for former employees of the City of Kennesaw Water and Sewer Department who had already vested with the City’s retirement plan prior to that date. A Participant will be granted Credited Service for unused Sick Leave after reaching the retirement eligibility (Normal, Early, Late, or Rule of 80) at the time of retirement in accordance with the following schedule, provided they have made contributions for at least one year.

Unused Hours of Sick Leave

<u>40 Hour</u>	<u>56 Hour</u>	<u>Credited Service</u>
Less than 173 hours	Less than 242 hours	0
173-345	243-484	1/12
346-519	485-727	2/12
520-692	728-969	3/12
693-865	970-1,212	4/12
866-1,039	1,213-1,455	5/12
1,040 or more hours	1,456 or more hours	6/12

E. Compensation

The Participant’s W-2 earnings including salary reduction amounts.





SCHEDULE A – PLAN PROVISIONS

F. Final Average Compensation (FAC)

The average of the 5 highest consecutive years of compensation out of the last 10 years. No overtime will be used in the final average compensation calculation for Hybrid Participants.

G. Normal Retirement Pension

Eligibility

Traditional Participants hired before January 1, 2009: the first day of the calendar month coinciding with or next following the participant's 65th birthday, or if later, the day the participant completes 7 years of service. However, for any participant who has met all of the requirements to be eligible to retire under the Normal Retirement or Rule of 80 provisions as of December 31, 2008, the Normal Retirement Date shall remain the later of age 65 and the completion of 5 years of service.

Traditional Participants hired on or after January 1, 2009: the later of age 65 or 10 years of service.

Hybrid Participants: the later of Social Security Normal Retirement Age or 7 years of service.

Benefit Amount

Traditional Participants: 2.5% of a participant's FAC multiplied by years of Credited Service. A Participant's benefit shall not be less than \$76 multiplied by the Participant's total years of Credited Service.

Electing Hybrid Participants: 2.5% of FAC multiplied by years of Credited Service up to December 31, 2009 plus 1.0% of FAC multiplied by years of Credit Service accrued after December 31, 2009.

Hybrid Participants: 1.0% of FAC multiplied by years of Credited Service.

Credited service cannot exceed 35 years for all Participants.





SCHEDULE A – PLAN PROVISIONS

H. Rule of 80 Retirement

Eligibility

Traditional Participants hired before January 1, 2007: age and service must total 80.

Traditional Participants hired on or after January 1, 2007 and Hybrid Participants: must attain a minimum of age 55 or 35 years of service in addition to the meeting Rule of 80 age and service requirement

Benefit Amount

Normal Retirement Pension

I. Early Retirement Pension

Eligibility

Traditional Participants hired before January 1, 2009, Electing Hybrid & New Hybrid Participants: age 55 and 7 years of service.

Traditional Participants hired on or after January 1, 2009: age 55 and 10 years of service.

Benefit Amount

Normal Retirement Pension accrued to Early Retirement Date, reduced for the number of years the Early Retirement Date precedes the Normal Retirement Date.





SCHEDULE A – PLAN PROVISIONS

J. Late Retirement Pension

Eligibility

Date participant actually retires from employment with the County after his/her Normal Retirement Date.

Benefit Amount

Computed as the sum of:

- a) The Participant's Accrued Benefit as of the Participant's Retirement Date based only upon the Credited Service and Final Average Compensation as of their Normal Retirement Date.
- b) The sum of the greater, determined for each Plan Year (or portion thereof) ending after the Participant's Normal Retirement Date:
 - i. The excess, if any, of (a) the Accrued Benefit as of the end of such Plan Year over (b) the Accrued Benefit as of the immediately preceding Plan Year, but with such excess being reduced (but not below zero) by (c) the actuarial value of any benefit payments made or due to be made from the Plan during such Plan Year, or
 - ii. The excess, if any, of (a) the Accrued Benefit as of the end of the immediately preceding Plan Year adjusted by the applicable late retirement Adjustment Factor over (b) the Accrued Benefit as of the immediately preceding Plan Year.





SCHEDULE A – PLAN PROVISIONS

K. Pre-Retirement Spouse Death Benefit

Active Employees

Eligibility

Seven years of service (or 10 depending on date of hire) and has been married one full year prior to death. If the Participant was killed in the line of duty, there is no minimum service requirement.

Benefit Amount

45% of the Participant's Accrued Benefit determined as if death had occurred at their Normal Retirement Date, assuming Credited Service continued until Normal Retirement Date and Compensation remained the same. The benefit commences immediately and is reduced if the spouse is more than 10 years younger than the Participant.

L. Terminated Vested Participants

Eligibility

Terminated Participant who is entitled to a Deferred Vested Benefit and has been married one full year prior to death.

Benefit Amount

If the Participant has less than 15 years of service, the benefit is 30% of the Accrued Benefit payable when the Participant could have first retired.

If the Participant has 15 or more years of service, the benefit is 45% of the Accrued Benefit payable when the Participant could have first retired.





SCHEDULE A – PLAN PROVISIONS

M. Vested Termination

Eligibility

All Traditional Participants are 100% Vested as of the valuation date.

Hybrid Participants: 7 years of service.

State Court and Superior Court Judges: 10 years of service.

Benefit Amount

Accrued Benefit as of the date of termination payable at the Normal Retirement Date.

N. Non-Vested Termination

A participant terminating from the plan who is not 100% vested in the Accrued Benefit is entitled to a refund of their employee contributions with interest. The annual interest crediting rate for Employee Contributions changed from 5% to 2.5% for periods on or after January 1, 2013. Interest is compounded annually from the end of the Plan Year to which such Employee Contributions are attributable through the month preceding distribution.

O. Cost-of-Living Adjustments

As approved by the Board.

P. Normal Form of Benefit

Single Life Annuity





SCHEDULE A – PLAN PROVISIONS

Q. Optional Forms of Benefit

In lieu of the Normal Form of benefit, a participant may elect to receive one of the following optional forms of payment:

- **Contingent Pensioner Option** – Participant receives a reduced pension during their lifetime so that after their death, 100%, 66-2/3%, or 50% of the Participant's benefit will be paid for the life of the surviving Contingent Pensioner designated by the Participant.
- **Years Certain and Life Option** – Participant receives a reduced Pension during their lifetime so that if their death occurs within the years certain period (5, 10, or 15 years), the pension will continue to the Beneficiary for the balance of the period.
- **Social Security Option** – Participant receives an increased pension before Social Security commences and a reduced pension thereafter, so that the total benefit under this Plan and the Social Security Act will be paid in a generally level amount throughout retirement.

R. Employee Contributions

For employees in the Traditional Plan, the employee contribution rate is 8.75% of compensation.

For employees in the Hybrid Plan, the employee contribution rate is 3.00% of compensation.





SCHEDULE A – PLAN PROVISIONS

S. Superior Court and State Court Judge Supplemental Retirement Benefit

These benefit provisions described below apply only to Superior and State Court Judges eligible for membership in the Plan:

- Credited Service includes the service recognized by the Georgia Judicial Retirement System, not to exceed 24 years.
- Final Salary equals the annual amount of the salary supplement paid by Cobb County in excess of the state salary cap for Judges.
- Normal Retirement Date is the later of age 60 or the completion of 10 years of service.
- Vesting requires 10 years of completed service.
- Supplemental Retirement Benefit is calculated as 4.167% of Final Salary for Credited Service up to 16 years, plus 1% for each additional year of Credited Service, up to a maximum of 24 years.
- The Supplemental Retirement Benefit is paid as a single life annuity.
- Late retirement increases are applied if the Judge continues employment after his/her Normal Retirement Date.
- No benefit is payable upon the death of the Judge, whether such death occurs before or after commencement of the Supplemental Retirement Benefit.
- The Judge is not required or permitted to make contributions to the Plan.





SCHEDULE B – ACTUARIAL ASSUMPTIONS AND METHODS

Actuarial assumptions and methods adopted by the Board after the Experience Study for the 5-year period ending December 31, 2016. Investment return adopted by the Board for the January 1, 2020 valuation. The combined effect of the assumptions is expected to have no significant bias.

A. Investment Rate of Return:

7.25% per year, compounded annually, net of expenses paid by trust.

B. Salary Increases:

- Representative values of the assumed annual rates of salary increases for Public Safety and General Employees are shown in the following table.

Age	Annual Increase*
20	4.00%
25	4.00
30	4.00
35	3.50
40	3.25
45	3.25
50 & Over	3.00

* Includes allowance for inflation of 2.5% per year

- Salary increases for Superior Court and State Court Judges are assumed to be 4.5% annually.

C. Mortality:

Pre-retirement mortality:

RP-2000 Employee projected to 2025 using scale BB, sex distinct
No Set back / Set forward

Post-retirement mortality:

RP-2000 Combined projected to 2025 using scale BB, sex distinct
Set forward 2 years for both Male & Female lives



SCHEDULE B – ACTUARIAL ASSUMPTIONS AND METHODS



D. Separation from Active Service:

Representative values of the assumed annual rates of withdrawal are shown in the following tables.

General Employees – Male

Age	Years of Service											
	< 1	1	2	3	4	5	6	7	8	9	10	11+
20	30.00%	25.00%	20.00%	13.00%	12.00%	12.00%	10.00%	10.00%	6.00%	6.00%	6.00%	4.00%
25	27.00	25.00	20.00	13.00	12.00	12.00	10.00	10.00	6.00	6.00	6.00	4.00
30	26.00	25.00	20.00	13.00	12.00	12.00	10.00	10.00	6.00	6.00	6.00	4.00
35	25.00	20.00	15.00	13.00	12.00	10.50	10.00	10.00	6.00	6.00	6.00	3.00
40	24.00	17.50	13.00	13.00	12.00	9.00	9.00	9.00	5.00	5.00	5.00	2.00
45	20.00	15.00	10.00	9.00	7.00	6.00	8.00	8.00	4.00	4.00	4.00	2.00
50	15.00	12.50	8.00	8.00	5.00	3.00	5.00	5.00	3.00	3.00	3.00	2.00
55	7.50	8.00	6.00	7.00	5.00	2.00	3.00	3.00	2.00	2.00	2.00	1.50
60	2.50	4.00	3.00	6.00	5.00	1.50	1.50	1.50	1.00	1.00	1.00	1.00
65	0.00	0.00	0.00	5.00	5.00	1.00	1.00	1.00	0.50	0.50	0.50	0.25

General Employees – Female

Age	Years of Service											
	< 1	1	2	3	4	5	6	7	8	9	10	11+
20	30.00%	22.50%	17.00%	17.00%	14.00%	12.00%	9.00%	9.00%	9.00%	7.00%	6.00%	4.50%
25	30.00	22.50	17.00	17.00	14.00	12.00	9.00	9.00	9.00	7.00	6.00	4.50
30	30.00	22.50	17.00	17.00	13.00	12.00	9.00	8.00	8.50	7.00	6.00	4.50
35	30.00	22.50	13.00	15.00	9.00	12.00	7.50	7.00	7.50	7.00	6.00	3.75
40	25.00	22.50	9.00	9.00	7.00	10.50	6.50	6.00	6.00	6.00	5.00	2.75
45	20.00	16.00	9.00	7.00	7.00	7.00	5.50	4.50	4.50	4.50	4.00	2.00
50	15.00	12.00	9.00	6.00	6.00	6.00	4.50	3.00	3.50	3.50	3.00	1.50
55	15.00	8.00	9.00	5.00	5.00	5.00	3.50	2.00	2.00	2.00	2.00	1.00
60	15.00	8.00	9.00	4.00	4.00	4.00	2.50	1.00	1.50	1.50	1.00	0.75
65	15.00	8.00	9.00	4.00	4.00	4.00	1.50	0.50	0.50	0.50	0.50	0.50



SCHEDULE B – ACTUARIAL ASSUMPTIONS AND METHODS



Public Safety

Age	Years of Service											
	< 1	1	2	3	4	5	6	7	8	9	10	11+
20	15.00%	8.00%	10.00%	8.00%	7.50%	5.00%	6.50%	6.00%	2.50%	3.50%	2.50%	2.50%
25	15.00	8.00	10.00	8.00	7.50	5.00	6.50	6.00	2.50	3.50	2.50	2.50
30	15.00	8.00	10.00	8.00	7.50	5.00	6.50	5.00	2.50	3.50	2.50	2.50
35	15.00	8.00	10.00	8.00	7.50	5.00	6.50	4.00	2.50	3.50	2.50	2.35
40	15.00	8.00	10.00	8.00	7.50	5.00	6.50	3.00	2.50	3.50	2.50	1.25
45	15.00	8.00	10.00	8.00	7.50	5.00	6.50	2.00	2.50	3.50	2.50	0.85
50	15.00	8.00	10.00	8.00	7.50	5.00	6.50	1.00	2.50	3.50	2.50	0.25

Superior Court and State Court Judges

Age	Rate
20	4.0%
25	4.0
30	4.0
35	4.0
40	6.0
45	4.0
50	3.0
55	2.5
60	2.5
65	2.5



SCHEDULE B – ACTUARIAL ASSUMPTIONS AND METHODS



Representative values of the assumed annual rates of retirement are shown in the following tables.

Traditional & Hybrid Plan General Employees hired prior to January 1, 2007

Age	Years of Service				
	10	15	20	25	30
50	0.0%	0.0%	0.0%	0.0%	60.0%
55	5.0	5.0	5.0	35.0	20.0
60	5.0	5.0	35.0	5.0	5.0
65	35.0	35.0	35.0	35.0	35.0
66	31.0	31.0	31.0	31.0	31.0
67	27.5	27.5	27.5	27.5	27.5
68	27.5	27.5	27.5	27.5	27.5
69	27.5	27.5	27.5	27.5	27.5
70	100.0	100.0	100.0	100.0	100.0

Traditional & Hybrid Plan General Employees hired on or after January 1, 2007

Age	Years of Service				
	10	15	20	25	30
55	5.0%	5.0%	5.0%	35.0%	35.0%
60	5.0	5.0	35.0	5.0	5.0
65	35.0	35.0	35.0	35.0	35.0
66	31.0	31.0	31.0	31.0	31.0
67	27.5	27.5	27.5	27.5	27.5
68	27.5	27.5	27.5	27.5	27.5
69	27.5	27.5	27.5	27.5	27.5
70	100.0	100.0	100.0	100.0	100.0



SCHEDULE B – ACTUARIAL ASSUMPTIONS AND METHODS



Traditional & Hybrid Plan Public Safety Employees hired prior to January 1, 2007

Age	Years of Service				
	10	15	20	25	30
50	0.0%	0.0%	0.0%	0.0%	70.0%
55	7.5	7.5	7.5	50.0	25.0
60	3.5	3.5	45.0	25.0	25.0
65	50.0	50.0	50.0	50.0	50.0
66	50.0	50.0	50.0	50.0	50.0
67	100.0	100.0	100.0	100.0	100.0

Traditional & Hybrid Plan Public Safety hired on or after January 1, 2007

Age	Years of Service				
	10	15	20	25	30
55	7.5%	7.5%	7.5%	50.0%	50.0%
60	3.5	3.5	45.0	25.0	25.0
65	50.0	50.0	50.0	50.0	50.0
66	50.0	50.0	50.0	50.0	50.0
67	100.0	100.0	100.0	100.0	100.0





SCHEDULE B – ACTUARIAL ASSUMPTIONS AND METHODS

Superior Court and State Court Judges

Age	Rate
60	15%
61	10
62	12
63-64	10
65-69	15
70-74	25
75	100

E. Assets:

Market value of assets.

F. Actuarial Cost Method:

Individual Entry Age Normal cost method. Actuarial gains and losses are reflected in the net pension liability.

G. Percent Married:

For the purposes of valuing the spouse pre-retirement survivor annuity, 90% of the plan participants are assumed married with males three years older than females.





SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY GASB 67 Paragraph 32(a) and GASB 68 Paragraph 46(a)

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Total pension liability										
Service Cost	\$ 20,718,121	\$ 19,630,604	\$ 19,315,172	\$ 19,706,997	\$ 18,659,042	\$ 18,657,791	\$ 19,655,059	\$ 18,734,601	\$ 18,841,426	\$ 18,980,542
Interest	115,277,788	109,103,579	108,013,719	103,536,827	100,299,842	96,782,967	84,474,307	80,415,811	76,728,937	72,176,032
Benefit changes	215,883	0	0	0	46,430	0	58,281	3,079,947	(319,947)	463,821
Difference between expected and actual experience	46,808,079	50,595,343	(21,398,113)	23,618,246	15,824,298	6,564,079	21,523,872	17,244,138	14,497,396	25,359,233
Changes of assumptions	0	0	0	0	35,587,356	0	86,852,659	0	0	0
Benefit payments & Refunds	(97,873,259)	(93,332,002)	(88,555,441)	(83,245,136)	(78,103,610)	(73,212,386)	(67,874,292)	(62,848,129)	(58,330,873)	(54,217,584)
Refunds of contributions	0	0	0	0	0	0	0	0	0	0
Net change in total pension liability	\$ 85,146,612	\$ 85,997,524	\$ 17,375,337	\$ 63,616,934	\$ 92,313,358	\$ 48,792,451	\$ 144,689,886	\$ 56,626,368	\$ 51,416,939	\$ 62,762,044
Total pension liability - beginning	\$ 1,613,046,732	\$ 1,527,049,208	\$ 1,509,673,871	\$ 1,446,056,937	\$ 1,353,743,579	\$ 1,304,951,128	\$ 1,160,261,242	\$ 1,103,634,874	\$ 1,052,217,935	\$ 989,455,891
Total pension liability - ending (a)	\$ 1,698,193,344	\$ 1,613,046,732	\$ 1,527,049,208	\$ 1,509,673,871	\$ 1,446,056,937	\$ 1,353,743,579	\$ 1,304,951,128	\$ 1,160,261,242	\$ 1,103,634,874	\$ 1,052,217,935
Plan net position										
Contributions - employer	\$ 76,295,834	\$ 71,835,723	\$ 68,432,958	\$ 62,971,304	\$ 60,853,499	\$ 55,665,704	\$ 47,521,805	\$ 44,749,719	\$ 42,300,849	\$ 39,097,981
Contributions - member	16,697,263	16,091,890	14,490,794	14,108,468	13,940,999	13,446,185	13,941,429	12,461,897	12,981,148	12,083,766
Net investment income	231,203,192	124,797,237	(205,130,261)	179,940,927	91,530,777	22,381,214	56,169,683	75,860,411	46,845,674	(5,922,327)
Benefit payments	(97,873,259)	(93,332,002)	(88,555,441)	(83,245,136)	(78,103,610)	(73,212,386)	(67,874,292)	(62,848,129)	(58,330,873)	(54,217,584)
Administrative expense	(443,198)	(335,862)	(321,186)	(202,916)	(268,107)	(296,056)	(248,784)	(239,862)	(250,846)	(241,372)
Refunds of contributions	0	0	0	0	0	0	0	0	0	0
Other	(216,528)	(197,740)	(135,563)	(120,297)	7,207	336,968	22,161	69,649	231,006	564,599
Net change in plan net position	\$ 225,663,304	\$ 118,859,246	\$ (211,218,699)	\$ 173,452,350	\$ 87,960,765	\$ 18,321,629	\$ 49,532,002	\$ 70,053,685	\$ 43,776,958	\$ (8,634,937)
Plan net position - beginning	\$ 859,969,874	\$ 741,110,628	\$ 952,329,327	\$ 778,876,977	\$ 690,916,212	\$ 672,594,583	\$ 623,062,581	\$ 553,008,896	\$ 509,231,938	\$ 517,866,875
Plan net position - ending (b)	\$ 1,085,633,178	\$ 859,969,874	\$ 741,110,628	\$ 952,329,327	\$ 778,876,977	\$ 690,916,212	\$ 672,594,583	\$ 623,062,581	\$ 553,008,896	\$ 509,231,938
Net pension liability - ending (a) - (b)	\$ 612,560,166	\$ 753,076,858	\$ 785,938,580	\$ 557,344,544	\$ 667,179,960	\$ 662,827,367	\$ 632,356,545	\$ 537,198,661	\$ 550,625,978	\$ 542,985,997





SCHEDULE OF THE NET PENSION LIABILITY GASB 67 Paragraph 32(b) and GASB 68 Paragraph 46(b)

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Total pension liability	\$1,698,193,344	\$1,613,046,732	\$1,527,049,208	\$1,509,673,871	\$1,446,056,937	\$1,353,743,579	\$1,304,951,128	\$1,160,261,242	\$1,103,634,874	\$1,052,217,935
Plan net position	<u>1,085,633,178</u>	<u>859,969,874</u>	<u>741,110,628</u>	<u>952,329,327</u>	<u>778,876,977</u>	<u>690,916,212</u>	<u>672,594,583</u>	<u>623,062,581</u>	<u>553,008,896</u>	<u>509,231,938</u>
Net pension liability	\$ 612,560,166	\$ 753,076,858	\$ 785,938,580	\$ 557,344,544	\$ 667,179,960	\$ 662,827,367	\$ 632,356,545	\$ 537,198,661	\$ 550,625,978	\$ 542,985,997
Ratio of plan net position to total pension liability	63.93%	53.31%	48.53%	63.08%	53.86%	51.04%	51.54%	53.70%	50.11%	48.40%
Covered-employee payroll	\$ 314,808,067	\$ 283,630,892	\$ 260,401,757	\$ 261,530,890	\$ 254,105,154	\$ 242,278,837	\$ 241,522,135	\$ 226,975,245	\$ 220,949,172	\$ 214,354,687
Net pension liability as a percentage of covered-employee payroll	194.58%	265.51%	301.82%	213.11%	262.56%	273.58%	261.82%	236.68%	249.21%	253.31%





SCHEDULE OF EMPLOYER CONTRIBUTIONS GASB 67 Paragraph 32(c) and GASB 68 Paragraph 46(c)

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Actuarially calculated employer contribution	TBD	\$ 62,001,713	\$ 61,428,774	\$ 63,159,710	\$ 59,841,764	\$ 54,706,561	\$ 45,712,814	\$ 43,482,797	\$ 41,391,890	\$ 38,791,424
Actual employer contributions	<u>76,295,834</u>	<u>71,835,723</u>	<u>68,432,958</u>	<u>62,971,304</u>	<u>60,853,499</u>	<u>55,665,704</u>	<u>47,521,805</u>	<u>44,749,719</u>	<u>42,300,849</u>	<u>39,097,981</u>
Annual contribution deficiency (excess)	TBD	\$ (9,834,010)	\$ (7,004,184)	\$ 188,406	\$ (1,011,735)	\$ (959,143)	\$ (1,808,991)	\$ (1,266,922)	\$ (908,959)	\$ (306,557)
Covered-employee payroll*	\$ 314,808,067	\$ 283,630,892	\$ 260,401,757	\$ 261,530,890	\$ 254,105,154	\$ 242,278,837	\$ 241,522,135	\$ 226,975,245	\$ 220,949,172	\$ 214,354,687
Actual contributions as a percentage of covered-employee payroll	24.24%	25.33%	26.28%	24.08%	23.95%	22.98%	19.68%	19.72%	19.15%	18.24%



SCHEDULE D – DEFERRED OUTFLOWS AND DEFERRED INFLOWS OF RESOURCES



SCHEDULE OF DIFFERENCES BETWEEN EXPECTED AND ACTUAL EARNINGS ON PENSION PLAN INVESTMENTS

Measurement Date	Difference between Expected and Actual Earnings on Pension Plan Investments	Recognition Period (Years)	Increase/(Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences Between Expected and Actual Earnings on Pension Plan Investments						
			2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Thereafter
September 30, 2020	\$ (39,845,936)	5.00	(7,969,188)	0	0	0	0	0	0
September 30, 2021	(123,707,557)	5.00	(24,741,511)	(24,741,513)	0	0	0	0	0
September 30, 2022	273,953,431	5.00	54,790,686	54,790,686	54,790,687	0	0	0	0
September 30, 2023	(71,281,968)	5.00	(14,256,394)	(14,256,394)	(14,256,394)	(14,256,392)	0	0	0
September 30, 2024	(169,056,197)	5.00	(33,811,239)	(33,811,239)	(33,811,239)	(33,811,239)	(33,811,241)	0	0
			\$ (25,987,646)	\$ (18,018,460)	\$ 6,723,054	\$ (48,067,631)	\$ (33,811,241)	\$ 0	\$ 0

DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES ARISING FROM INVESTMENT EARNINGS

Measurement Date	Difference between Expected and Actual Investment Earnings		Amounts Recognized in Pension Expense through September 30, 2024		Deferred (Inflows)/Outflows of Resources	
	(a)		(b)		(a) - (b)	
September 30, 2020	\$	(39,845,936)	\$	(39,845,936)	\$	0
September 30, 2021		(123,707,557)		(98,966,044)		(24,741,513)
September 30, 2022		273,953,431		164,372,058		109,581,373
September 30, 2023		(71,281,968)		(28,512,788)		(42,769,180)
September 30, 2024		(169,056,197)		(33,811,239)		(135,244,958)
				\$ (36,763,949)		\$ (93,174,278)



SCHEDULE D – DEFERRED OUTFLOWS AND DEFERRED INFLOWS OF RESOURCES



SCHEDULE OF CHANGES OF ASSUMPTIONS

Measurement Date	Changes of Assumptions	Recognition Period (Years)	Increase/(Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences Due to Changes in Assumptions						
			2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Thereafter
September 30, 2019	\$ 0	5.92	0	0	0	0	0	0	0
September 30, 2020	35,587,356	5.88	6,052,271	5,326,001	0	0	0	0	0
September 30, 2021	0	5.84	0	0	0	0	0	0	0
September 30, 2022	0	5.75	0	0	0	0	0	0	0
September 30, 2023	0	5.53	0	0	0	0	0	0	0
September 30, 2024	0	5.58	0	0	0	0	0	0	0
			\$ 6,052,271	\$ 5,326,001	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES ARISING FROM CHANGES OF ASSUMPTIONS

Measurement Date	Differences Due to Changes in Assumptions (Decreases)/Increases		Amounts Recognized in Pension Expense through September 30, 2024		Deferred (Inflows)/Outflows of Resources	
	(a)		(b)		(a) - (b)	
September 30, 2019	\$	0	\$	0	\$	0
September 30, 2020		35,587,356		30,261,355		5,326,001
September 30, 2021		0		0		0
September 30, 2022		0		0		0
September 30, 2023		0		0		0
September 30, 2024		0		0		0
			\$	30,261,355	\$	5,326,001



SCHEDULE D – DEFERRED OUTFLOWS AND DEFERRED INFLOWS OF RESOURCES



SCHEDULE OF DIFFERENCES BETWEEN EXPECTED AND ACTUAL EXPERIENCE

Measurement Date	Difference between Expected and Actual	Recognition Period (Years)	Increase/(Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences Between Expected and Actual Experience						
			2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Thereafter
September 30, 2019	\$ 6,564,079	5.92	1,020,094	0	0	0	0	0	0
September 30, 2020	15,824,298	5.88	2,691,207	2,368,263	0	0	0	0	0
September 30, 2021	23,618,246	5.84	4,044,220	4,044,220	3,397,146	0	0	0	0
September 30, 2022	(21,398,113)	5.75	(3,721,411)	(3,721,411)	(3,721,411)	(2,791,058)	0	0	0
September 30, 2023	50,595,343	5.53	9,149,248	9,149,248	9,149,248	9,149,248	4,849,103	0	0
September 30, 2024	46,808,079	5.58	8,388,545	8,388,545	8,388,545	8,388,545	8,388,545	4,865,354	0
			\$ 21,571,903	\$ 20,228,865	\$ 17,213,528	\$ 14,746,735	\$ 13,237,648	\$ 4,865,354	\$ 0

DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES ARISING FROM EXPERIENCE

Measurement Date	Difference between Expected and Actual Experience (a)	Amounts Recognized in Pension Expense through September 30, 2024 (b)	Deferred (Inflows)/Outflows of Resources (a) - (b)
September 30, 2019	\$ 6,564,079	\$ 6,564,079	\$ 0
September 30, 2020	15,824,298	13,456,035	2,368,263
September 30, 2021	23,618,246	16,176,880	7,441,366
September 30, 2022	(21,398,113)	(11,164,233)	(10,233,880)
September 30, 2023	50,595,343	18,298,496	32,296,847
September 30, 2024	46,808,079	8,388,545	38,419,534
		\$ 51,719,802	\$ 70,292,130



SCHEDULE D – DEFERRED OUTFLOWS AND DEFERRED INFLOWS OF RESOURCES



SUMMARY OF RECOGNIZED OUTFLOWS AND INFLOWS OF RESOURCES

	Net Increase/(Decrease) in Pension Expense						
	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Thereafter
Difference between Expected and Actual Earnings on Pension Plan Investments	\$ (25,987,646)	\$ (18,018,460)	\$ 6,723,054	\$ (48,067,631)	\$ (33,811,241)	\$ 0	\$ 0
Changes of Assumptions	6,052,271	5,326,001	0	0	0	0	0
Difference between Expected and Actual Experience	<u>21,571,903</u>	<u>20,228,865</u>	<u>17,213,528</u>	<u>14,746,735</u>	<u>13,237,648</u>	<u>4,865,354</u>	<u>0</u>
	\$ 1,636,528	\$ 7,536,406	\$ 23,936,582	\$ (33,320,896)	\$ (20,573,593)	\$ 4,865,354	\$ 0



Cobb County Government Health Benefit Plan



GASB Statements No. 74 & 75 Report

Prepared as of September 30, 2024



November 21, 2024

Board of Trustees of the
Cobb County Government Health Benefit Plan
100 Cherokee Street, Suite 200
Marietta, GA 30090-9679

Dear Members of the Board:

Presented in this report is information to assist the Cobb County Government Health Benefit Plan in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement Nos. 74 and 75. The information is presented for the one-year period ending September 30, 2024. These calculations have been made on a basis that is consistent with our understanding of these accounting standards.

The annual actuarial valuation performed as of January 1, 2024 was used as the basis for much of the information presented as of September 30, 2024 in this report. The valuation was based upon data furnished by Cobb County concerning active, inactive, and retired members along with pertinent claims data and financial information. This information was reviewed for completeness and internal consistency but was not audited. The valuation results depend on the integrity of the data. If any of the information is inaccurate or incomplete, our results may be different, and our calculations may need to be revised.

To the best of our knowledge, the information contained in this report is complete and accurate. These calculations were performed by, and under the supervision of, independent consulting actuaries with experience in performing valuations for public retirement systems and retiree health benefit plans. In addition, the valuation was prepared in accordance with generally accepted actuarial principles and practices as well as with Actuarial Standards of Practice prescribed by the Actuarial Standards Board.

Our calculation of the liability associated with the benefits described in this report was performed for the purpose of providing reporting and disclosure information that satisfies the requirements of GASB Statement Nos. 74 and 75. The calculation of the plan's liability for this report may not be applicable for funding purposes of the plan. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB Nos. 74 and 75 may produce significantly different results.

In order to prepare the results in this report, we have utilized actuarial models that were developed to measure liabilities and develop actuarial costs. These models include tools that we have produced and tested, along with commercially available valuation software that we have reviewed to confirm the appropriateness and accuracy of the output. In utilizing these models, we develop and use input parameters and assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.



This is to certify that the independent consulting actuary, Alisa Bennett, is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems and retiree health benefit plans, that the valuations were prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the medical plans and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of each plan.

Respectfully submitted,

Alisa Bennett, FSA, EA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Chief Executive Officer

AB/EK:nh



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SECTION I – SUMMARY OF PRINCIPAL RESULTS

REPORT OF THE ANNUAL GASB STATEMENT NOS. 74 AND 75 REQUIRED INFORMATION FOR THE COBB COUNTY GOVERNMENT HEALTH BENEFIT PLAN

PREPARED AS OF SEPTEMBER 30, 2024

Valuation Date (VD):	January 1, 2024
Measurement Date (MD):	September 30, 2024
Reporting Date (RD):	September 30, 2024
Single Equivalent Interest Rate (SEIR):	
Long-Term Expected Rate of Return	7.25%
Municipal Bond Index Rate	N/A
Fiscal Year in which Plan's Fiduciary Net Position is projected to be depleted from future benefit payments for current members	N/A
Single Equivalent Interest Rate	7.25%
Net OPEB Liability (Fiscal Year Ended 2023):	
Total OPEB Liability (TOL)	\$ 380,352,325
Fiduciary Net Position (FNP)	174,832,008
Net OPEB Liability (NOL = TOL – FNP)	\$ 205,520,317
FNP as a percentage of TOL	45.97%
Net OPEB Liability (Fiscal Year Ended 2024):	
Total OPEB Liability (TOL)	\$ 360,184,975
Fiduciary Net Position (FNP)	221,897,308
Net OPEB Liability (NOL = TOL – FNP)	\$ 138,287,667
FNP as a percentage of TOL	61.61%
OPEB Expense (OE):	\$ 11,599,285
Deferred Outflows of Resources:	\$ 22,276,379
Deferred Inflows of Resources:	\$ 65,613,449





SECTION II – INTRODUCTION

The Governmental Accounting Standards Board issued Statement No. 74 (GASB 74), “*Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*” and Statement No. 75 (GASB 75), “*Accounting and Financial Reporting for Postemployment Benefit Plans Other Than Pensions*” in June 2015. GASB 74’s effective date is for a plan’s fiscal year beginning after June 15, 2016. If an OPEB plan does not issue a stand-alone financial report, the employer should make the note disclosures required by Statement 74 for an OPEB plan within the employer’s financial report. GASB 75’s effective date is for an employer’s fiscal year beginning after June 15, 2017. For the purposes of reporting under GASB 74 and 75, the Plan is assumed to be a single-employer defined benefit OPEB plan without a special funding situation where assets are accumulated in a trust that meets the criteria in paragraph 3 of GASB 74 and paragraph 4 of GASB 75.

This report, prepared as of September 30, 2024 (Measurement Date or MD), presents information to assist the County in meeting the requirements of GASB 74 and 75. Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of the Plan, as of January 1, 2024 (Valuation Date or VD).

GASB 74 and 75 require the determination of the Total OPEB Liability (TOL) utilizing the Entry Age Normal (EAN) actuarial cost method. If the valuation date at which the TOL is determined is before the measurement date, as is the case here, the TOL must be rolled forward to the measurement date. The Net OPEB Liability (NOL) is then set equal to the rolled forward TOL minus the plan’s Fiduciary Net Position (FNP) (basically, the market value of assets as of the measurement date). The plan provisions recognized in the calculation of the TOL are summarized in Schedule B. The development of the roll-forward of the TOL is shown in the table in Section III.

Among the items needed for the liability calculation is the discount rate, as defined by GASB, or a Single Equivalent Interest Rate (SEIR). To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable under the Plan’s provisions applicable to the membership and beneficiaries of the Plan on the Measurement Date. If the FNP is not projected to be depleted at any point in the future, the long term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR.

If, however, at a future measurement date the FNP is projected to be depleted, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long-term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate (Municipal Bond Index Rate). The Municipal Bond Index Rate used, if necessary, for this purpose is the General Obligation 20-year Municipal Bond Rate published at the last Thursday of September by The Bond Buyer (www.bondbuyer.com). For the purpose of this report, we have determined that a discount rate of 7.25% as of September 30, 2024 meets the requirements of GASB 74, since it is our understanding that Cobb County intends to pay the full Actuarially Determined Contribution every year.





SECTION II – INTRODUCTION

The FNP projections are based upon the Plan's financial status on the Valuation Date, the indicated set of methods and assumptions, and the requirements of GASB 74. As such, the FNP projections are not reflective of the cash flows and asset accumulations that would occur on an ongoing plan basis, reflecting the impact of future members. Therefore, the results of this test do not necessarily indicate whether or not the fund will actually run out of money, the financial condition of the Plan, or the Plan's ability to make benefit payments in future years.

GASB 75 also requires the determination and disclosure of an OPEB Expense (OE) in the Notes to Financial Statements. The OE includes amounts for Service Cost (the Normal Cost under EAN for the year), interest on the TOL, benefit payments, recognition of increases/decreases in the TOL due to changes in benefit structure, actuarial experience, actuarial assumption changes, and increases/decreases in the FNP due to investment experience. The actuarial experience and assumption change impacts are recognized over the average expected remaining service life of the plan membership (active employees and inactive employees) at the beginning of the measurement period. The investment experience is recognized over a fixed five-year period. The development of the OE is shown in Section IV.

The unrecognized portions of each year's experience and assumption changes are used to develop the Deferred Outflows of Resources and Deferred Inflows of Resources that must be included on the Statement of Net Position.

The sections that follow provide the results of all the necessary calculations, presented in the order laid out in GASB 74 and 75, for note disclosure and Required Supplementary Information (RSI) of the reporting trust's and entity's financial reports.





SECTION III – FINANCIAL STATEMENT NOTES

The actuarial related information presented herein will follow the order presented in GASB 74. Paragraph numbers are provided for ease of reference.

GASB 74 Paragraphs 34.a. (1)-(3) and GASB 75, Paragraphs 50(a)-(b): This information will be supplied by the Plan.

GASB 74 Paragraph 34.a. (4) and GASB 75, Paragraph 50(c): The data required regarding the membership of the Cobb County Government Health Benefit Plan were furnished by the Plan's staff. The following table summarizes the membership of the Fund as of January 1, 2024, the date of the valuation used to determine the September 30, 2024 Total OPEB Liability.

Membership

	Number
Inactive Members Or Their Beneficiaries Currently Receiving Benefits	2,009
Inactive Members Entitled To But Not Yet Receiving Benefits*	219
Active Members	4,551
Total	6,779

*Includes 10 deferred vested participants on Long Term Disability and 209 regular retirees not currently electing medical benefits who will be eligible to receive the premium reimbursement stipend upon Medicare eligibility.

GASB 74 Paragraphs 34.a. (5)-(6) and GASB 75, Paragraphs 50(d)-(e): This information will be supplied by the Plan.





SECTION III – FINANCIAL STATEMENT NOTES

GASB 74 Paragraphs 35.a. (1)-(4): As stated earlier, the NOL is equal to the TOL minus the FNP. That result, as of September 30, 2024, is presented in the following table.

Fiscal Year Ending September 30, 2024	
Total OPEB liability	\$ 360,184,975
Fiduciary net position	<u>221,897,308</u>
Net OPEB liability	\$ 138,287,667
Ratio of plan net position to Total OPEB Liability	61.61%

GASB 74, Paragraphs 35(b)(1) – (2)(e) and 35(c) and GASB 75, Paragraph 51: This paragraph requires information regarding the actuarial assumptions used to measure the TOL. The actuarial assumptions utilized in developing the TOL are outlined in Schedule C. The Total OPEB Liability as of September 30, 2024 was determined based on an actuarial valuation prepared as of January 1, 2024, using the following actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of September 30, 2024:

Inflation	2.50 percent
Salary increases	3.00-4.00 percent, including 2.50 percent wage inflation
Long-term investment rate of return	7.25 percent compounded annually, net of investment expense, and including inflation
Municipal Bond Index Rate at Measurement Date	3.81 percent
Municipal Bond Index Rate at Prior Measurement Date	4.09 percent
Year FNP is projected to be depleted	N/A
Single Equivalent Interest Rate at Measurement Date	7.25 percent
Single Equivalent Interest Rate at Prior Measurement Date	7.25 percent





SECTION III – FINANCIAL STATEMENT NOTES

Healthcare cost trend rate

Pre-Medicare Eligible	6.75 percent
Medicare Eligible	4.50 percent

Ultimate trend rate

Pre-Medicare Eligible	4.50 percent
Medicare Eligible	4.50 percent

Year of Ultimate trend rate

Pre-Medicare Eligible	2033
Medicare Eligible	2024

Mortality

Pre-retirement mortality:
RP-2000 Employee projected to 2025 using scale BB, sex distinct, No Set back / Set forward

Post-retirement mortality:
RP-2000 Combined projected to 2025 using scale BB, sex distinct, Set forward 2 years for both Male & Female lives





SECTION III – FINANCIAL STATEMENT NOTES

The decremental assumptions and methods, initial per capita costs, health care cost trends, rate of plan participation, rates of plan election, etc. are the same as those used in the January 1, 2024 actuarial valuation.

Several factors should be considered in evaluating the long-term rate of return assumption, including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation) are developed for each major asset class. These ranges should be combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The assumption is intended to be a long-term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

The target asset allocation and best estimates of expected geometric real rates of return for each major asset class as of September 30, 2024 are summarized in the following table. The information was provided by the Plan's investment consultant and is based on their capital market assumptions. The expected rates of return below are provided for informational purposes and do not directly determine the long-term expected actuarial rate of return. The Board reviews the long-term expected rate of return periodically and bases the adoption of the rate on many considerations.

Asset Classes	Target Asset Allocation	Long-Term Expected Real Rate of Return
Large Cap Growth	11%	5.20%
Large Cap Blend	11%	5.50%
Large Cap Value	11%	5.70%
Mid Cap Blend	6%	5.60%
Small Cap Growth	3%	5.40%
Small Cap Value	3%	5.90%
Global	10%	6.10%
International	20%	7.00%
Fixed Income	25%	1.70%

Discount rate (SEIR). For the purpose of this report, we have determined that a discount rate of 7.25% as of September 30, 2024 meets the requirements of GASB 74.





SECTION III – FINANCIAL STATEMENT NOTES

GASB 74, Paragraph 35(b)(1) and GASB 75, Paragraph 52(e): Disclosure of the sensitivity of the Net OPEB Liability to changes in the healthcare cost trend rate. The following presents the Net OPEB Liability of the Fund, calculated using the current healthcare trend rates, as well as the Net OPEB Liability calculated using healthcare trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current rates:

	1% Decrease (5.75% for pre-Medicare and 3.5% for Medicare eligible, pre-Medicare decreasing to 3.5%)	Current Healthcare Trend Rate (6.75% for pre-Medicare and 4.5% for Medicare eligible, pre-Medicare decreasing to 4.5%)	1% Increase (7.75% for pre-Medicare and 5.5% for Medicare eligible, pre-Medicare decreasing to 5.5%)
Plan's Net OPEB liability	\$98,712,857	\$138,287,667	\$186,038,782

GASB 74, Paragraphs 35(b)(2)(g) and GASB 75, Paragraph 53(g): This paragraph requires disclosure of the sensitivity of the Net OPEB Liability to changes in the discount rate. The following presents the Net OPEB Liability, calculated using the discount rate of 7.25 percent, as well as the Net OPEB Liability calculated using a discount rate that is 1-percentage-point lower (6.25 percent) or 1-percentage-point higher (8.25 percent) than the current rate:

	1% Decrease 6.25%	Current Discount Rate 7.25%	1% Increase 8.25%
Plan's Net OPEB liability	\$179,333,241	\$138,287,667	\$103,613,423





SECTION III – FINANCIAL STATEMENT NOTES

GASB 74, Paragraph 35(c) and GASB 75, Paragraphs 55(a)-(c) and 56(a): The TOL is based upon an actuarial valuation performed as of the Valuation Date, January 1, 2024. The procedure used to determine the TOL, as of September 30, 2024, is shown in the following table:

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) – (b)
Balances at September 30, 2023	\$ 380,352,325	\$ 174,832,008	\$ 205,520,317
Changes for the year:			
Service cost	5,343,665		5,343,665
Interest	26,844,985		26,844,985
Benefit changes*	0		0
Difference between expected and actual experience	(32,294,393)		(32,294,393)
Changes in assumptions	91,746		91,746
Contributions - employer		20,153,353	(20,153,353)
Contributions - employee		0	0
Net investment income		47,065,300	(47,065,300)
Benefit payments, including refunds of employee contributions	(20,153,353)	(20,153,353)	0
Administrative expense	0	0	0
Other changes	0	0	0
Net changes	\$ (20,167,350)	\$ 47,065,300	\$ (67,232,650)
Balances at September 30, 2024	<u>\$ 360,184,975</u>	<u>\$ 221,897,308</u>	<u>\$ 138,287,667</u>

*Effective January 1, 2024, the vesting requirement for Hybrid members was decreased from 10 years to 7 years. There was no change to the OPEB liability due to the change in benefit.





SECTION III – FINANCIAL STATEMENT NOTES

GASB 75, Paragraph 55(d): Our understanding is that the employer does not have a special funding situation.

GASB 75, Paragraph 56(b): Our understanding is that the employer does not have a special funding situation.

GASB 75, Paragraph 56(c): Since the Prior Measurement Date, long-term health care cost trend rates and participation assumptions for members retiring with 15-19 years of service were updated.

GASB 75, Paragraph 56(d): Effective January 1, 2024, the vesting requirement for Hybrid members was decreased from 10 years to 7 years. There was no change to the OPEB liability due to the change in benefit.

GASB 75, Paragraph 56(e): No benefit payments are attributable to the purchase of allocated insurance contracts.

GASB 75, Paragraph 56(f): CavMac was not expected to supply this information.

GASB 75, Paragraph 56(g): Please see Section IV for the development of the OPEB Expense (OE).

GASB 75, Paragraphs 56(h)(1)-(2): Since certain expense items are recognized over closed periods each year, the deferred portions of these items must be tracked annually. If the amounts will increase OPEB Expense, they are labeled Deferred Outflows of Resources. If they serve to reduce OPEB Expense, they are labeled Deferred Inflows of Resources. The recognition of these amounts is accomplished on a level dollar basis, with no interest included in the deferred amounts. Experience gains/losses and the impact of changes in actuarial assumptions or other inputs, if any, are recognized over the average expected remaining service life of the active and inactive Plan members at the beginning of the measurement period. Investment gains and losses are recognized over a fixed five-year period.





SECTION III – FINANCIAL STATEMENT NOTES

The following table provides a summary of the Deferred Outflows of Resources and Deferred Inflows of Resources as of September 30, 2024:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 6,708,717	\$ 44,417,101
Changes of assumptions	15,567,662	2,733,863
Net difference between projected and actual earnings on plan investments	-	18,462,485
Employer contributions subsequent to the Measurement Date	-	-
Total	<u>\$ 22,276,379</u>	<u>\$ 65,613,449</u>

Deferred Outflows and Deferred Inflows of Resources subsequent to the Measurement Date may need to be reported by the employer. CavMac will not provide or incorporate these amounts in this report.

GASB 75, Paragraph 56(h)(4): Our understanding is that the employer does not have a special funding situation.

GASB 75, Paragraph 56(h)(5): CavMac was not expected to supply this information.





SECTION III – FINANCIAL STATEMENT NOTES

GASB 75, Paragraphs 56(i)(1)-(2): Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB benefits will be recognized in OPEB Expense as follows:

Deferred Amounts to be recognized in Fiscal Years Ending				
		Deferred Outflows of Resources		Deferred Inflows of Resources
2025	\$	17,614,073	\$	26,432,204
2026		16,580,797		20,929,691
2027		5,007,784		18,430,684
2028		3,390,525		12,073,878
2029		1,814,312		4,442,145
Thereafter		205,564		5,641,523

GASB 75, Paragraph 56(i)(3): Our understanding is that the employer does not have a special funding situation.

GASB 75, Paragraph 56(j): CavMac was not expected to supply this information.





SECTION IV – OPEB EXPENSE

The OPEB Expense (OE) consists of a number of different items. GASB 75 refers to the first item as Service Cost, which is the Normal Cost using the Entry Age Normal actuarial funding method. The second item is interest on the TOL at 7.25%, the Discount Rate in effect as of the Prior Measurement Date.

The next three items refer to any changes that occurred in the TOL due to:

- benefit changes, or
- actual versus expected experience, or
- changes in assumptions or other inputs.

Benefit changes, which are reflected immediately, will increase OE, if there is a benefit improvement for existing Plan members, or decrease OE, if there is a benefit reduction. For the year ended September 30, 2024, there was one change to benefit provisions. Effective January 1, 2024, the vesting requirement for Hybrid members was decreased from 10 years to 7 years. There was no change to the OPEB liability due to the change in benefit.

The next item to be recognized is the portion of current year changes in TOL due to actual versus expected Plan experience for the year. The portion to recognize in the current year is determined by spreading the total change over the average expected remaining service life of the entire Plan membership at the beginning of the measurement period. The average expected remaining service life of active members is the average number of years the active members are expected to remain in covered employment. The average expected remaining service life of the inactive members is zero. The recognition period is the weighted average of these two amounts (not less than 1 year). The recognition period is 7.27 years.

The last item under changes in TOL is changes in assumptions or other inputs. There was a change in the TOL since the Prior Measurement Date due to the update of expected health care trend and expected participation. Therefore, the change in TOL resulting from the change in actuarial assumptions is to be recognized in the OPEB Expense (OE), beginning in the current measurement period, over a closed period equal to 7.27 years, using the same approach applied to Plan experience as described in the prior paragraph.

Active member contributions for the year and projected earnings on FNP at the discount rate serve to reduce the expense. One-fifth of current-period difference between actual and projected earnings on the FNP is recognized in the OE.





SECTION IV – OPEB EXPENSE

The current year portions of previously determined experience and assumption amounts, recognized as Deferred Outflows of Resources and Deferred Inflows of Resources (see Section III), are included on the following page. Deferred Outflows of Resources are added to the OE while Deferred Inflows of Resources are subtracted from the OE. Finally, other miscellaneous items are included.

The calculation of the expected return on assets is shown in the following table:

Calculation of Expected Return on Assets For the Fiscal Year Ending September 30, 2024		
(1)	Market Value of Assets - Beginning of Year	\$ 174,832,008
(2)	Expected Return on Market Value [(1) x 0.0725]	\$ 12,675,321
(3)	a. Employee Contributions	\$ -
	b. Employer Contributions	20,153,353
	c. Benefit Payments & Refund of Contributions	(20,153,353)
	d. Administrative Expenses	-
	e. Other Changes	-
	f. Net Cash Flow [(3)a. + (3)b. + (3)c. + (3)d. + (3)e.]	\$ -
(4)	Expected Return on Cash Flow Items [(3)f. x 0.0725 x 0.5]	\$ -
(5)	Expected Return on Assets [(2) + (4)]	\$ 12,675,321
(6)	Actual Net Investment Income	\$ 47,065,300
(7)	(Gain)/loss due to Difference between Expected and Actual Earnings on Investments [(5) - (6)]	\$ (34,389,979)





SECTION IV – OPEB EXPENSE

The calculation of the OE for the year ended September 30, 2024 is shown in the following table:

OPEB Expense Determined as of the Measurement Date		
Service Cost	\$	5,343,665
Interest on the TOL and Cash Flow		26,844,985
Current-period benefit changes		-
Expensed portion of current-period difference between expected and actual experience in the total OPEB liability		(4,442,145)
Expensed portion of current-period changes of assumptions		12,620
Member contributions		-
Projected earnings on plan investments		(12,675,321)
Expensed portion of current-period differences between actual and projected earnings on plan investments		(6,877,996)
Administrative expense		-
Other		-
Recognition of beginning deferred outflows of resources as OPEB expense		21,264,887
Recognition of beginning deferred inflows of resources as OPEB expense		<u>(17,871,410)</u>
OPEB Expense	\$	<u>11,599,285</u>





SECTION V – REQUIRED SUPPLEMENTARY INFORMATION

There are several tables of Required Supplementary Information (RSI) that need to be included in the Plan's financial statements. Paragraph numbers are provided for ease of reference.

GASB 74, Paragraphs 36(a)-(c) and GASB 75, Paragraphs 57(a)-(c): The required tables of schedules are provided in Schedule A.

GASB 74, Paragraphs 36(d) and 37 and GASB 75, Paragraph 57(d): The required schedule presenting the annual money-weighted rates of return is to be supplied by the Plan.

GASB 74, Paragraph 38 and GASB 75, Paragraph 58: The information that should be noted regarding the RSI, particularly for the *Schedule of Employer Contribution*, is as follows.

Changes to benefit terms:

September 30, 2023 (Valuation Date: January 1, 2023)

- None

September 30, 2024 (Valuation Date: January 1, 2024)

- Effective January 1, 2024, the vesting requirement for Hybrid members was decreased from 10 years to 7 years. There was no change to the OPEB liability due to the change in benefit.

Changes to assumptions or other inputs:

September 30, 2023 (Valuation Date: January 1, 2023)

- Long-term health care cost trend rates were updated.

September 30, 2024 (Valuation Date: January 1, 2024)

- Long-term health care cost trend rates were updated.
- Participation assumptions for members retiring with 15-19 years of service were raised from 70% to 80%.





SECTION V – REQUIRED SUPPLEMENTARY INFORMATION

Methods and assumptions used in calculations of actuarially determined contributions (ADC). The actuarially determined contribution rates in the schedule of employer contributions are calculated as of January 1, one year prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine the most recent contribution rate reported in that schedule:

Valuation date	1/1/2023
Actuarial cost method	Projected unit credit
Amortization method	Level percent of pay, closed
Remaining amortization period	20 years
Asset valuation method	Market Value of Assets 5-year smoothed
Actuarial assumptions	
Investment Rate of Return*	7.25%
Medical cost trend rate*	
Pre-Medicare	7.00%
Medicare Eligible	4.50%
Ultimate trend rate*	
Pre-Medicare	4.50%
Medicare Eligible	4.50%
Year of Ultimate trend rate	
Pre-Medicare	2032
Medicare Eligible	2023
*Includes inflation at	2.50%

Please see the Report of Actuary on the Other Post-Employment Benefit Valuation prepared as of January 1, 2023 for additional information regarding the valuation used to calculate the ADC.





SCHEDULE A – REQUIRED SUPPLEMENTARY INFORMATION TABLES

SCHEDULE OF CHANGES IN THE NET OPEB LIABILITY GASB 74 Paragraph 36.a. & GASB 75 Paragraph 57.a.

	2024	2023	2022	2021	2020
Total OPEB liability					
Service Cost	\$ 5,343,665	\$ 5,449,617	\$ 5,439,874	\$ 4,966,465	\$ 4,676,304
Interest	26,844,985	25,528,415	24,193,560	23,447,459	25,120,675
Benefit changes	0	0	0	0	88,836
Difference between expected and actual experience	(32,294,393)	3,904,969	6,421,403	(8,628,598)	(33,435,719)
Changes of assumptions	91,746	3,267,475	3,610,453	12,158,718	11,585,764
Benefit payments	(20,153,353)	(19,828,430)	(22,678,567)	(20,627,435)	(18,502,502)
Refunds of contributions	0	0	0	0	0
Net change in total OPEB liability	\$ (20,167,350)	\$ 18,322,046	\$ 16,986,723	\$ 11,316,609	\$ (10,466,642)
Total OPEB liability - beginning	\$ 380,352,325	\$ 362,030,279	\$ 345,043,556	\$ 333,726,947	\$ 344,193,589
Total OPEB liability - ending (a)	\$ 360,184,975	\$ 380,352,325	\$ 362,030,279	\$ 345,043,556	\$ 333,726,947
Plan net position					
Contributions - employer	\$ 20,153,353	\$ 20,828,430	\$ 22,816,576	\$ 20,861,094	\$ 20,502,502
Contributions - member	0	0	0	0	0
Net investment income	47,065,300	24,968,770	(42,008,495)	35,278,144	17,897,128
Benefit payments	(20,153,353)	(19,828,430)	(22,678,567)	(20,627,435)	(18,502,502)
Administrative expense	0	0	0	0	0
Refunds of contributions	0	0	0	0	0
Other	0	0	0	0	0
Net change in plan net position	\$ 47,065,300	\$ 25,968,770	\$ (41,870,486)	\$ 35,511,803	\$ 19,897,128
Plan net position - beginning	\$ 174,832,008	\$ 148,863,238	\$ 190,733,724	\$ 155,221,921	\$ 135,324,793
Plan net position - ending (b)	221,897,308	174,832,008	148,863,238	190,733,724	155,221,921
Net OPEB liability - ending (a) - (b)	\$ 138,287,667	\$ 205,520,317	\$ 213,167,041	\$ 154,309,832	\$ 178,505,026





SCHEDULE A – REQUIRED SUPPLEMENTARY INFORMATION TABLES

SCHEDULE OF THE NET OPEB LIABILITY GASB 74 Paragraph 36.b. & GASB 75 Paragraph 57.b.

	2024	2023	2022	2021	2020
Total OPEB liability	\$ 360,184,975	\$ 380,352,325	\$ 362,030,279	\$ 345,043,556	\$ 333,726,947
Plan net position	<u>221,897,308</u>	<u>174,832,008</u>	<u>148,863,238</u>	<u>190,733,724</u>	<u>155,221,921</u>
Net OPEB liability	\$ 138,287,667	\$ 205,520,317	\$ 213,167,041	\$ 154,309,832	\$ 178,505,026
Ratio of plan net position to total OPEB liability	61.61%	45.97%	41.12%	55.28%	46.51%
Covered-employee payroll	\$ 323,332,433	\$ 291,371,825	\$ 266,942,904	\$ 268,319,995	\$ 261,550,378
Net OPEB liability as a percentage of covered-employee payroll	42.77%	70.54%	79.85%	57.51%	68.25%





SCHEDULE A – REQUIRED SUPPLEMENTARY INFORMATION TABLES

SCHEDULE OF EMPLOYER CONTRIBUTIONS GASB 74 Paragraph 36.c. & GASB 75 Paragraph 57.c.

	2024	2023	2022	2021	2020
Actuarially determined contribution (ADC)	\$ 18,949,248	\$ 18,248,971	\$ 17,626,476	\$ 17,528,302	\$ 18,847,127
Actual employer contributions	<u>20,153,353</u>	<u>20,828,430</u>	<u>22,816,576</u>	<u>20,861,094</u>	<u>20,502,502</u>
Annual contribution deficiency (excess)	\$ (1,204,105)	\$ (2,579,459)	\$ (5,190,100)	\$ (3,332,792)	\$ (1,655,375)
Covered-employee payroll	\$ 323,332,433	\$ 291,371,825	\$ 266,942,904	\$ 268,319,995	\$ 261,550,378
Actual contributions as a percentage of covered-employee payroll	6.23%	7.15%	8.55%	7.77%	7.84%





SCHEDULE B – SUMMARY OF BENEFIT PROVISIONS VALUED

ELIGIBILITY: Eligible employees will include employees retiring from Cobb County and electing medical coverage at retiree rates.

RETIREMENT:

Normal Retirement

For employees hired before January 1, 2009, the first day of the calendar month coinciding with or next following the participant's 65th birthday, or if later, the day the participant completes 7 years of service. However, for any participant who has met all of the requirements to be eligible to retire under the Normal Retirement or Rule of 80 provisions as of December 31, 2008, the Normal Retirement Date shall remain the later of age 65 and the completion of 5 years of service.

For employees hired on or after January 1, 2009, the later of age 65 or 10 years of service.

For hybrid participants, the later of Social Security Normal Retirement Age or 7 years of service.

Rule of 80 Retirement

For employees hired before January 1, 2007, age and service must total 80.

Traditional participants hired on or after January 1, 2007 and hybrid participants will only qualify for the Rule of 80 if they reach a minimum of age 55 or 35 years of service in addition to meeting the Rule of 80 age and service requirement.

Early Retirement

For traditional participants hired before January 1, 2009, electing hybrid, and new hybrid participants: 55 with 7 years of service

For traditional participants hired on or after January 1, 2009: 55 with 10 years of service

Judges

The Normal Retirement Date for Judges is the later of Age 60 or the completion of 10 years of service.

Disability

10 years of service





SCHEDULE B – SUMMARY OF BENEFIT PROVISIONS VALUED

ELIGIBILITY FOR HEALTH BENEFITS:

Effective January 1, 2007 (for Employees hired prior to January 1, 2006):

- All full-time employees with seven (7) or more years of service as of the effective date will be eligible to continue medical coverage with ten (10) years of service at termination of employment immediately before commencement of retirement benefits.
- All full-time employees with less than seven (7) years of service as of the effective date will be eligible to continue medical coverage with fifteen (15) years of service at termination of employment immediately before commencement of retirement benefits.
 - Effective January 1, 2010 – Employees within this definition of eligibility who elect to retire prior to age 65 and prior to 15 years of service may participate in the health benefit until the end of the month of their 65th birthday. Cobb County will contribute 2.5 percent of health premium cost for each full year of service up to a maximum of 30 years of service (75%).

Effective January 1, 2006 (Employees hired on or after January 1, 2006):

- All full-time new hires will be eligible to continue medical coverage with twenty (20) years of service at termination of employment to immediately commence retirement.

Effective January 1, 2009:

- All full-time new hires or rehires will be eligible to continue medical coverage with thirty (30) years of service at termination of employment to immediately commence retirement.

Effective January 1, 2010:

- Cobb County will continue 2.5 percent of health premium cost for each year of service up to a maximum of 30 years of service (75%). Those employees meeting eligibility requirements for retiree health coverage prior to January 1, 2010 will not be subject to this provision.
- All disabled Employees of Cobb County Government if:
 - They were disabled on or after November 1, 1998;
 - They are eligible and receive monthly compensation benefits from the Cobb County Government Board of Commissioners group Long Term Disability Plan; and
 - They have been continuously covered for medical care benefits for at least ten years as an Employee (or as a dependent) under the Health Benefit Plan or under any other policy or plan sponsored or arranged by the sponsor, just before the date of disability.





SCHEDULE B – SUMMARY OF BENEFIT PROVISIONS VALUED

RETIREE CONTRIBUTIONS: Effective January 1, 2013, Cobb County Medicare Eligible retirees will no longer be covered under the Cobb County Group Plan and instead will be extended coverage through individual health insurance policies administered by Extend Health. Premiums will be reimbursed by Cobb County through a stipend into a non-taxable HRA (health reimbursement account). In 2013, the monthly stipend was \$335 for retirees and \$255 for spouses. This amount remained level for 2014 and increased 4% for 2015 to \$348.40 for retirees and \$265.20 for spouses. The amount has remained level through 2024. We have assumed the stipend amount will increase at a rate of 4.5% annually. Pre-Medicare eligible retiree premiums are determined based on a cost-sharing arrangement and, therefore, increase with medical trend as claims costs increase.

Effective January 1, 2010, Cobb County will contribute 2.5% of the health premium cost or stipend for each year of service up to a maximum of 30 years of service. Therefore, Cobb County will pay a portion of the retiree health premium or stipend, up to a maximum of 75%, with the retiree paying the remaining premium amount. Current retirees or those eligible to retire by January 1, 2010 with at least 10 years of service are not impacted by the change.

Effective January 1, 2012, a spousal surcharge of \$100 per month will be charged to all employees who elect spousal coverage if the spouse has coverage available. The spousal surcharge is not assumed to increase.





SCHEDULE C – ACTUARIAL ASSUMPTIONS AND METHODS

VALUATION DATE: January 1, 2024

DISCOUNT RATE: 7.25% per annum, compounded annually.

ASSET VALUATION METHOD: Market Value of Assets.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Year	Pre-Medicare Medical Trend	Medicare Eligible Medical Trend
2024	6.750%	4.500%
2025	6.500	4.500
2026	6.250	4.500
2027	6.000	4.500
2028	5.750	4.500
2029	5.500	4.500
2030	5.250	4.500
2031	5.000	4.500
2032	4.750	4.500
2033 and beyond	4.500	4.500

AGING ADJUSTMENT: Per capita pre-Medicare eligible costs are adjusted to reflect expected cost changes related to age. Following is a chart detailing the assumed increase to the net incurred claims.

Participant Age	Annual Increase
< 50	0.0%
50 – 54	3.3
55 – 59	3.6
60 – 64	4.2





SCHEDULE C – ACTUARIAL ASSUMPTIONS AND METHODS

FUTURE PARTICIPATION AND COVERAGE ELECTIONS

Current retirees are assumed to maintain current plan and coverage tier elections. Current active employees are assumed to make the following plan, coverage tier and participation elections:

Future Retiree Plan Election

Pre-Medicare		Medicare Eligible	
65%	Anthem HMO	100%	Extend Health
15%	Anthem POS		
5%	Anthem HRA		
15%	Kaiser HMO		

Future Retiree Participation: All rates are for active employees currently electing medical coverage. For active employees currently waiving coverage, 0% participation is assumed.

Grandfathered Future Retirees 95%

Non - Grandfathered Future Retirees	Based on service at retirement	
	10 – 14 years service at retirement	60%
	15 – 19 years service at retirement	80%
	20 – 24 years service at retirement	80%
	25 – 29 years service at retirement	90%
	30+ years service at retirement	95%

Future Retiree Spouse Coverage 70% for Males
25% for Females

Current retirees waiving coverage and eligible vested Long Term Disability participants are assumed to elect the stipend at the rates stated above following the date of eligibility, if applicable. Spouse stipend coverage for these records was based on client-provided information. For all active members and for retirees for whom spouse date of birth is not provided, wives are assumed to be 3 years younger than their husbands.

It is assumed that 3% of terminations are due to disability. These participants are eligible for the benefits for disabled employees as described in Schedule B.

MONTHLY MEDICAL/RX CLAIMS (Anthem HMO, POS, HRA, Kaiser HMO): Following is a chart detailing expected claims for pre-Medicare for the year following the valuation date. Claims are age-adjusted to age 65.

	Anthem Open Access HMO	Anthem Open Access POS	Anthem Open Access HRA	Kaiser Permanente HMO
Pre-65	\$ 1,919.45	\$ 1,758.92	\$ 1,544.76	\$ 1,083.86

The monthly stipend did not increase in 2024 and remained at \$348.40 for retirees and \$265.20 for spouses. We have assumed the stipend will increase at a rate of 4.5% annually in future years.





SCHEDULE C – ACTUARIAL ASSUMPTIONS AND METHODS

MONTHLY MEDICAL/RX CONTRIBUTIONS: Following is a chart detailing expected premium or stipend amounts upon which the service-based contributions will be based for the year following the valuation date. Amounts shown are for Single coverage and for additional coverage of a Spouse as of January 1, 2024.

Tier of Coverage	Anthem Open Access HMO	Anthem Open Access POS	Anthem Open Access HRA	Kaiser Permanente HMO	Medicare Eligible
Single	\$957.71	\$1,185.12	\$980.65	\$674.51	\$348.40
Add Spouse	\$952.90	\$1,179.61	\$975.31	\$674.52	\$265.20

Effective January 1, 2012, a spousal surcharge of \$100 per month will be charged to all employees who elect spousal coverage if the spouse has coverage available. It is assumed that 5% of pre-Medicare eligible retirees who cover spouses pay the spousal surcharge. The spousal surcharge is not assumed to increase.

MORTALITY: Pre-retirement mortality:
 RP-2000 Employee projected to 2025 using scale BB, sex distinct
 No Set back / Set forward

Post-retirement mortality:
 RP-2000 Combined projected to 2025 using scale BB, sex distinct
 Set forward 2 years for both Male & Female lives





SCHEDULE C – ACTUARIAL ASSUMPTIONS AND METHODS

TERMINATION: Representative values of the assumed annual rates of withdrawal are shown in the following tables.

General Employees – Male

Age	Years of Service											
	< 1	1	2	3	4	5	6	7	8	9	10	11+
20	30.00%	25.00%	20.00%	13.00%	12.00%	12.00%	10.00%	10.00%	6.00%	6.00%	6.00%	4.00%
25	27.00	25.00	20.00	13.00	12.00	12.00	10.00	10.00	6.00	6.00	6.00	4.00
30	26.00	25.00	20.00	13.00	12.00	12.00	10.00	10.00	6.00	6.00	6.00	4.00
35	25.00	20.00	15.00	13.00	12.00	10.50	10.00	10.00	6.00	6.00	6.00	3.00
40	24.00	17.50	13.00	13.00	12.00	9.00	9.00	9.00	5.00	5.00	5.00	2.00
45	20.00	15.00	10.00	9.00	7.00	6.00	8.00	8.00	4.00	4.00	4.00	2.00
50	15.00	12.50	8.00	8.00	5.00	3.00	5.00	5.00	3.00	3.00	3.00	2.00
55	7.50	8.00	6.00	7.00	5.00	2.00	3.00	3.00	2.00	2.00	2.00	1.50
60	2.50	4.00	3.00	6.00	5.00	1.50	1.50	1.50	1.00	1.00	1.00	1.00
65	0.00	0.00	0.00	5.00	5.00	1.00	1.00	1.00	0.50	0.50	0.50	0.25

General Employees – Female

Age	Years of Service											
	< 1	1	2	3	4	5	6	7	8	9	10	11+
20	30.00%	22.50%	17.00%	17.00%	14.00%	12.00%	9.00%	9.00%	9.00%	7.00%	6.00%	4.50%
25	30.00	22.50	17.00	17.00	14.00	12.00	9.00	9.00	9.00	7.00	6.00	4.50
30	30.00	22.50	17.00	17.00	13.00	12.00	9.00	8.00	8.50	7.00	6.00	4.50
35	30.00	22.50	13.00	15.00	9.00	12.00	7.50	7.00	7.50	7.00	6.00	3.75
40	25.00	22.50	9.00	9.00	7.00	10.50	6.50	6.00	6.00	6.00	5.00	2.75
45	20.00	16.00	9.00	7.00	7.00	7.00	5.50	4.50	4.50	4.50	4.00	2.00
50	15.00	12.00	9.00	6.00	6.00	6.00	4.50	3.00	3.50	3.50	3.00	1.50
55	15.00	8.00	9.00	5.00	5.00	5.00	3.50	2.00	2.00	2.00	2.00	1.00
60	15.00	8.00	9.00	4.00	4.00	4.00	2.50	1.00	1.50	1.50	1.00	0.75
65	15.00	8.00	9.00	4.00	4.00	4.00	1.50	0.50	0.50	0.50	0.50	0.50





SCHEDULE C – ACTUARIAL ASSUMPTIONS AND METHODS

Public Safety

Age	Years of Service											
	< 1	1	2	3	4	5	6	7	8	9	10	11+
20	15.00%	8.00%	10.00%	8.00%	7.50%	5.00%	6.50%	6.00%	2.50%	3.50%	2.50%	2.50%
25	15.00	8.00	10.00	8.00	7.50	5.00	6.50	6.00	2.50	3.50	2.50	2.50
30	15.00	8.00	10.00	8.00	7.50	5.00	6.50	5.00	2.50	3.50	2.50	2.50
35	15.00	8.00	10.00	8.00	7.50	5.00	6.50	4.00	2.50	3.50	2.50	2.35
40	15.00	8.00	10.00	8.00	7.50	5.00	6.50	3.00	2.50	3.50	2.50	1.25
45	15.00	8.00	10.00	8.00	7.50	5.00	6.50	2.00	2.50	3.50	2.50	0.85
50	15.00	8.00	10.00	8.00	7.50	5.00	6.50	1.00	2.50	3.50	2.50	0.25

Superior Court and State Court Judges

Age	Rate
20	4.0%
25	4.0
30	4.0
35	4.0
40	6.0
45	4.0
50	3.0
55	2.5
60	2.5
65	2.5





SCHEDULE C – ACTUARIAL ASSUMPTIONS AND METHODS

RETIREMENT: Representative values of the assumed annual rates of retirement are shown in the following tables.

Traditional & Hybrid Plan General Employees hired prior to January 1, 2007

Age	Years of Service				
	10	15	20	25	30
50	0.0%	0.0%	0.0%	0.0%	60.0%
55	5.0	5.0	5.0	35.0	20.0
60	5.0	5.0	35.0	5.0	5.0
65	35.0	35.0	35.0	35.0	35.0
66	31.0	31.0	31.0	31.0	31.0
67	27.5	27.5	27.5	27.5	27.5
68	27.5	27.5	27.5	27.5	27.5
69	27.5	27.5	27.5	27.5	27.5
70	100.0	100.0	100.0	100.0	100.0

Traditional & Hybrid Plan General Employees hired on or after January 1, 2007

Age	Years of Service				
	10	15	20	25	30
55	5.0%	5.0%	5.0%	35.0%	35.0%
60	5.0	5.0	35.0	5.0	5.0
65	35.0	35.0	35.0	35.0	35.0
66	31.0	31.0	31.0	31.0	31.0
67	27.5	27.5	27.5	27.5	27.5
68	27.5	27.5	27.5	27.5	27.5
69	27.5	27.5	27.5	27.5	27.5
70	100.0	100.0	100.0	100.0	100.0





SCHEDULE C – ACTUARIAL ASSUMPTIONS AND METHODS

Traditional & Hybrid Plan Public Safety Employees hired prior to January 1, 2007

Age	Years of Service				
	10	15	20	25	30
50	0.0%	0.0%	0.0%	0.0%	70.0%
55	7.5	7.5	7.5	50.0	25.0
60	3.5	3.5	45.0	25.0	25.0
65	50.0	50.0	50.0	50.0	50.0
66	50.0	50.0	50.0	50.0	50.0
67	100.0	100.0	100.0	100.0	100.0

Traditional & Hybrid Plan Public Safety Employees hired on or after January 1, 2007

Age	Years of Service				
	10	15	20	25	30
55	7.5%	7.5%	7.5%	50.0%	50.0%
60	3.5	3.5	45.0	25.0	25.0
65	50.0	50.0	50.0	50.0	50.0
66	50.0	50.0	50.0	50.0	50.0
67	100.0	100.0	100.0	100.0	100.0

Superior Court and State Court Judges

Age	Rate
60	15%
61	10
62	12
63-64	10
65-69	15
70-74	25
75	100





SCHEDULE C – ACTUARIAL ASSUMPTIONS AND METHODS

SALARY INCREASES:

Public Safety and General Employees: Representative values of the assumed annual rates of salary increases are shown in the following table.

Age	Annual Increase*
20	4.00%
25	4.00
30	4.00
35	3.50
40	3.25
45	3.25
50 & Over	3.00

* Includes allowance for inflation of 2.5% per year

Superior Court and State Court Judges: Salary increases for Superior Court and State Court Judges are assumed to be 4.5% annually.

FEDERAL LEGISLATION: The impacts of the Affordable Care Act (ACA) and the Inflation Reduction Act (IRA) were addressed in this valuation. Review of the information currently available did not identify any specific provisions of the legislation that are anticipated to directly impact results at this time other than plan design features and fees currently mandated by the ACA and incorporated in the plan designs, which are included in the current baseline claims costs. In anticipation of potential changes to Medicare due to the IRA, Medicare eligible trend assumptions are frequently altered. However, since the benefit offered by Cobb County is a flat dollar stipend and has not changed since the prior valuation, our current Medicare eligible trend assumption is assumed to be sufficient to account for any potential cost increases. Continued monitoring of the impact on the Plan's liability due to this and other legislation, if applicable, will be required.

COVID-19: The impact of the COVID-19 pandemic was considered in this valuation; however, no changes were incorporated at this time due to the level of uncertainty regarding the impact on both plan costs and contribution levels going forward. Given the uncertainty regarding COVID-19 (e.g., the impact of routine care being deferred, direct COVID-19 treatment and prevention costs, changes in contribution and budget projections), continued monitoring of the impact on the Plan's liability will be required.





SCHEDULE D – ACTUARIAL COST METHOD

The valuation is prepared on the projected benefit basis, which is used to determine the present value of each member's expected benefit payable at retirement, disability or death. The calculations are based on the member's age, years of service, sex, compensation, expected future salary increases, and an assumed future investment rate of return. The calculations consider the probability of a member's death or termination of employment prior to becoming eligible for a benefit and the probability of the member terminating with a service, disability, or survivor's benefit. The present value of the expected benefits payable to active members is added to the present value of the expected future payments to current benefit recipients to obtain the present value of all expected benefits payable to the present group of members and survivors.

The actuarial cost method is a procedure for allocating the actuarial present value of postemployment benefits and expenses to time periods. The method used for financial accounting purposes is known as the Entry Age Normal (Level Percentage of Pay) actuarial cost method and has the following characteristics:

- (i) The annual service costs for each individual active participant are sufficient to accumulate the value of the participant's postemployment benefits at time of retirement.
- (ii) Each annual service cost is a constant percentage of the participant's year-by-year projected covered compensation.

The Entry Age Normal (Level Percentage of Pay) actuarial cost method allocates the actuarial present value of each participant's projected benefits on a level basis over the participant's assumed compensation rates between the entry age of the participant and the assumed ages at which the participant will leave active service. However, as required under GASB rules, this period may be cut short when both the member and spouse can no longer be members of the plan as of some future date.

The portion of the actuarial present value allocated to the valuation year is called the service cost (SC). The portion of the actuarial present value of expected benefits not provided for by the actuarial present value of future service costs is called the Total OPEB Liability (TOL). The difference between the TOL and the Plan Fiduciary Net Position (PFNP)—the market value of the financial accounting asset—is the Net OPEB Liability (NOL).

The actuarial cost method is prescribed by GASB 75 for financial accounting purposes.





SCHEDULE E – DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES

Measurement Date	Difference between Expected and Actual Earnings on Investments	Recognition Period (Years)	Increase/(Decrease) in OPEB Expense Arising from the Recognition of the Effects of Differences Between Expected and Actual Earnings on Investments						
			2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Thereafter
September 30, 2020	\$ (7,672,769)	5.00	\$ (1,534,553)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
September 30, 2021	\$ (24,016,085)	5.00	\$ (4,803,217)	\$ (4,803,217)	\$ -	\$ -	\$ -	\$ -	\$ -
September 30, 2022	\$ 55,841,693	5.00	\$ 11,168,339	\$ 11,168,339	\$ 11,168,337	\$ -	\$ -	\$ -	\$ -
September 30, 2023	\$ (14,139,935)	5.00	\$ (2,827,987)	\$ (2,827,987)	\$ (2,827,987)	\$ (2,827,987)	\$ -	\$ -	\$ -
September 30, 2024	\$ (34,389,979)	5.00	\$ (6,877,996)	\$ (6,877,996)	\$ (6,877,996)	\$ (6,877,996)	\$ (6,877,995)	\$ -	\$ -
			\$ (4,875,414)	\$ (3,340,861)	\$ 1,462,354	\$ (9,705,983)	\$ (6,877,995)	\$ -	\$ -

Measurement Date	Difference between Expected and Actual Investment Earnings (a)	Amounts Recognized in OPEB Expense through September 30, 2024 (b)	Deferred (Inflows)/Outflows of Resources (a) - (b)
September 30, 2020	\$ (7,672,769)	\$ (7,672,769)	\$ -
September 30, 2021	\$ (24,016,085)	\$ (19,212,868)	\$ (4,803,217)
September 30, 2022	\$ 55,841,693	\$ 33,505,017	\$ 22,336,676
September 30, 2023	\$ (14,139,935)	\$ (5,655,974)	\$ (8,483,961)
September 30, 2024	\$ (34,389,979)	\$ (6,877,996)	\$ (27,511,983)
		\$ (5,914,590)	\$ (18,462,485)





SCHEDULE E – DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES

Measurement Date	Changes of Assumptions	Recognition Period (Years)	Increase/(Decrease) in OPEB Expense Arising from the Recognition of Changes of Assumptions						
			2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Thereafter
September 30, 2018	\$ 33,910,230	7.22	\$ 4,696,708	\$ 1,033,274	\$ -	\$ -	\$ -	\$ -	\$ -
September 30, 2019	\$ (11,897,639)	7.79	\$ (1,527,296)	\$ (1,527,296)	\$ (1,206,567)	\$ -	\$ -	\$ -	\$ -
September 30, 2020	\$ 11,585,764	7.73	\$ 1,498,805	\$ 1,498,805	\$ 1,498,805	\$ 1,094,129	\$ -	\$ -	\$ -
September 30, 2021	\$ 12,158,718	7.67	\$ 1,585,231	\$ 1,585,231	\$ 1,585,231	\$ 1,585,231	\$ 1,062,101	\$ -	\$ -
September 30, 2022	\$ 3,610,453	7.61	\$ 474,435	\$ 474,435	\$ 474,435	\$ 474,435	\$ 474,435	\$ 289,408	\$ -
September 30, 2023	\$ 3,267,475	7.19	\$ 454,447	\$ 454,447	\$ 454,447	\$ 454,447	\$ 454,447	\$ 454,447	\$ 86,346
September 30, 2024	\$ 91,746	7.27	\$ 12,620	\$ 12,620	\$ 12,620	\$ 12,620	\$ 12,620	\$ 12,620	\$ 16,026
			\$ 7,194,950	\$ 3,531,516	\$ 2,818,971	\$ 3,620,862	\$ 2,003,603	\$ 756,475	\$ 102,372

Measurement Date	Differences Due to Changes in Assumptions (Decreases)/Increases		Amounts Recognized in OPEB Expense through September 30, 2024		Deferred (Inflows)/Outflows of Resources	
	(a)		(b)		(a) - (b)	
September 30, 2018	\$	33,910,230	\$	32,876,956	\$	1,033,274
September 30, 2019	\$	(11,897,639)	\$	(9,163,776)	\$	(2,733,863)
September 30, 2020	\$	11,585,764	\$	7,494,025	\$	4,091,739
September 30, 2021	\$	12,158,718	\$	6,340,924	\$	5,817,794
September 30, 2022	\$	3,610,453	\$	1,423,305	\$	2,187,148
September 30, 2023	\$	3,267,475	\$	908,894	\$	2,358,581
September 30, 2024	\$	91,746	\$	12,620	\$	79,126
			\$	39,892,948	\$	12,833,799





SCHEDULE E – DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES

Measurement Date	Difference between Expected and Actual Experience	Recognition Period (Years)	Increase/(Decrease) in OPEB Expense Arising from the Recognition of the Effects of Differences Between Expected and Actual Experience						
			2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Thereafter
September 30, 2018	\$ (11,337,230)	7.22	\$ (1,570,253)	\$ (345,459)	\$ -	\$ -	\$ -	\$ -	\$ -
September 30, 2019	\$ (1,228,292)	7.79	\$ (157,675)	\$ (157,675)	\$ (124,567)	\$ -	\$ -	\$ -	\$ -
September 30, 2020	\$ (33,435,719)	7.73	\$ (4,325,449)	\$ (4,325,449)	\$ (4,325,449)	\$ (3,157,576)	\$ -	\$ -	\$ -
September 30, 2021	\$ (8,628,598)	7.67	\$ (1,124,980)	\$ (1,124,980)	\$ (1,124,980)	\$ (1,124,980)	\$ (753,738)	\$ -	\$ -
September 30, 2022	\$ 6,421,403	7.61	\$ 843,811	\$ 843,811	\$ 843,811	\$ 843,811	\$ 843,811	\$ 514,726	\$ -
September 30, 2023	\$ 3,904,969	7.19	\$ 543,111	\$ 543,111	\$ 543,111	\$ 543,111	\$ 543,111	\$ 543,111	\$ 103,192
September 30, 2024	\$ (32,294,393)	7.27	\$ (4,442,145)	\$ (4,442,145)	\$ (4,442,145)	\$ (4,442,145)	\$ (4,442,145)	\$ (4,442,145)	\$ (5,641,523)
			\$ (10,233,580)	\$ (9,008,786)	\$ (8,630,219)	\$ (7,337,779)	\$ (3,808,961)	\$ (3,384,308)	\$ (5,538,331)

Measurement Date	Difference between Expected and Actual Experience (a)	Amounts Recognized in OPEB Expense through September 30, 2024 (b)	Deferred (Inflows)/Outflows of Resources (a) - (b)
September 30, 2018	\$ (11,337,230)	\$ (10,991,771)	\$ (345,459)
September 30, 2019	\$ (1,228,292)	\$ (946,050)	\$ (282,242)
September 30, 2020	\$ (33,435,719)	\$ (21,627,245)	\$ (11,808,474)
September 30, 2021	\$ (8,628,598)	\$ (4,499,920)	\$ (4,128,678)
September 30, 2022	\$ 6,421,403	\$ 2,531,433	\$ 3,889,970
September 30, 2023	\$ 3,904,969	\$ 1,086,222	\$ 2,818,747
September 30, 2024	\$ (32,294,393)	\$ (4,442,145)	\$ (27,852,248)
		\$ (38,889,476)	\$ (37,708,384)





SCHEDULE E – DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES

	Net Increase/(Decrease) in OPEB Expense						
	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Thereafter
Difference between Expected and Actual Earnings on OPEB Plan Investments	\$ (4,875,414)	\$ (3,340,861)	\$ 1,462,354	\$ (9,705,983)	\$ (6,877,995)	\$ -	\$ -
Changes of Assumptions	7,194,950	3,531,516	2,818,971	3,620,862	2,003,603	756,475	102,372
Difference between Expected and Actual Experience	<u>(10,233,580)</u>	<u>(9,008,786)</u>	<u>(8,630,219)</u>	<u>(7,337,779)</u>	<u>(3,808,961)</u>	<u>(3,384,308)</u>	<u>(5,538,331)</u>
	\$ (7,914,044)	\$ (8,818,131)	\$ (4,348,894)	\$ (13,422,900)	\$ (8,683,353)	\$ (2,627,833)	\$ (5,435,959)



 Cobb County Government Employees' Pension Plan Asset Class Summary												
Style Analysis												
As of September 30, 2024												
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	Total Cash
Portfolio												
TCW	XXXXX76	6.8%	\$ 73,257,963									\$ 73,257,963
Westfield Capital Management	XXXXX32	6.8%	\$ 73,548,261									\$ 73,548,261
Vanguard S&P 500 (VINIX)	XXXXX66	12.9%		\$ 138,624,971								\$ 138,624,971
Eagle Capital	XXXXX85	7.7%			\$ 83,122,775							\$ 83,122,775
Hamlin Capital Mgmt	XXXXX87	5.3%			\$ 56,985,684							\$ 56,985,684
Vanguard Mid Cap (VMCIX)	XXXXX66	6.9%				\$ 74,694,123						\$ 74,694,123
Fuller & Thaler SCG	XXXXX85	3.2%					\$ 34,228,934					\$ 34,228,934
Vaughan Nelson	XXXXX49	3.5%						\$ 38,217,299				\$ 38,217,299
BlackRock Global Allocation (MALOX)	XXXXX66	2.6%							\$ 27,640,072			\$ 27,640,072
First Eagle Global (SGIIX)	XXXXX66	3.5%							\$ 37,188,257			\$ 37,188,257
Loomis Sayles Global Equity & Income(LSWWX)	XXXXX66	3.2%							\$ 34,756,743			\$ 34,756,743
Vanguard Total Int'l Stock (VTSNX)	XXXXX66	5.1%								\$ 55,134,971		\$ 55,134,971
Vanguard International Growth (VWILX)	XXXXX66	5.6%								\$ 60,171,477		\$ 60,171,477
Tweedy Browne Global Value (TBGVX)	XXXXX66	4.4%								\$ 47,837,767		\$ 47,837,767
Richmond	XXXXX37	9.3%									\$ 100,130,397	\$ 100,130,397
BlackRock Strategic Income Opps (BSIIX)	XXXXX66	6.8%									\$ 72,709,133	\$ 72,709,133
Delaware Diversified Income (CIT & MF)	XXXXX84	6.4%									\$ 68,398,110	\$ 68,398,110
Total		100%	\$ 146,806,224	\$ 138,624,971	\$ 140,108,459	\$ 74,694,123	\$ 34,228,934	\$ 38,217,299	\$ 99,585,072	\$ 163,144,215	\$ 241,237,640	\$ - \$1,076,646,937
Current Allocation			13.64%	12.88%	13.01%	6.94%	3.18%	3.55%	9.25%	15.15%	22.41%	0.00%
Target Allocation			11.00%	11.00%	11.00%	6.00%	3.00%	3.00%	10.00%	20.00%	25.00%	100%
Difference in %			2.64%	1.88%	2.01%	0.94%	0.18%	0.55%	-0.75%	-4.85%	-2.59%	

Earle Dodd & Austin Dodd
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Senior Vice President - Wealth Management
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Dollar values above are rounded to the nearest dollar.

Cobb County Employees' Pension Plan
Asset Class Summary
Market Value As of: September 30, 2024

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Sources: Custodial Statement; IPS; Client Request or Advisor Recommendation

Review code: IS1602740

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb County Employees Retirement System
 October 22, 2024

Prepared by:
 Earle Dodd, Austin Dodd

Total Portfolio - Pension

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 September 30, 2024

Accounts Included in this Report

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Account Name	Account Number	Custodian Name
Vaughan Nelson	79xxx49	SunTrust Bank
Hamlin Equity Income	79xxx87	SunTrust Bank
Tweedy Browne Global Value	79xxx35	SunTrust Bank
Multiple Funds	11xxx66	SunTrust Bank
Blackrock Global Allocation Fund	79xxx61	SunTrust Bank
First Eagle Global Fund	79xxx62	SunTrust Bank
Natixis Loomis Sayles Global Equity	79xxx63	SunTrust Bank
Vanguard Total International Stock Fund	79xxx53	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
Multiple Funds	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 US 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 US Aggregate Bond
15% MSCI Net EAFE
10% HFRX Global Hedge Fund Index

04/01/2010 - 09/30/2010

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

10/01/2009 - 03/31/2010

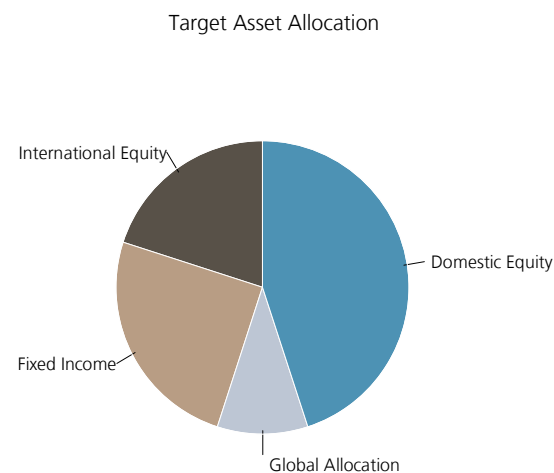
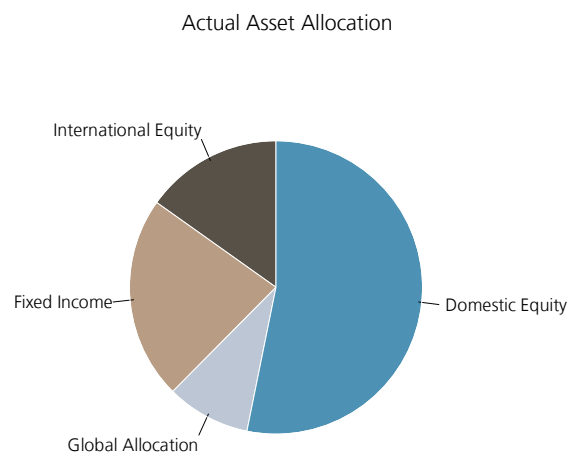
50% Russell 3000
35% Bloomberg US Aggregate Bond
15% MSCI Net EAFE

06/30/1994 - 09/30/2009

45% Bloomberg US Aggregate Bond
45% Russell 3000
10% MSCI Net EAFE

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Actual vs Target Asset Allocation As of September 30, 2024



	Market Value Actual	Percent Actual	Market Value Target	Percent Target	Market Value Difference	Percent Difference
Fixed Income	241,237,639.5	22.4%	269,161,733.8	25.0%	(27,924,094.3)	(2.6%)
Domestic Equity	572,680,009.3	53.2%	484,491,120.8	45.0%	88,188,888.5	8.2%
International Equity	163,144,215.1	15.2%	215,329,387.0	20.0%	(52,185,171.9)	(4.8%)
Global Allocation	99,585,071.3	9.2%	107,664,693.5	10.0%	(8,079,622.3)	(0.8%)
Total Fund	\$1,076,646,935.2	100.0%	\$1,076,646,935.2	100.0%	\$0.0	0.0%

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Performance Summary - Gross of Fees
Cobb County Employees Retirement System
As of September 30, 2024

Account	Inception Date	09/30/2024 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	\$1,076,646,935	5.43%		15.62%		27.78%		5.54%		10.61%		9.40%		8.58%
Policy Index			5.92%		13.61%		24.13%		5.38%		8.96%		8.06%		7.89%
Dynamic Index			6.24%		13.44%		24.16%		5.08%		8.94%		8.07%		
Fixed Income															
Richmond Capital Management	07/31/2007	\$100,130,397	5.22%	28	5.01%	20	12.61%	6	-0.68%	8	1.07%	8	2.16%	1	3.82%
Barclays Govt/Credit			5.10%	54	4.39%	76	11.31%	76	-1.50%	51	0.41%	51	1.64%	31	3.31%
Blackrock Strategic Income Opps Fund	05/31/2011	\$72,709,133	4.37%	25	5.92%	53	11.77%	29	2.31%	39	3.40%	24	3.35%	19	3.34%
Bloomberg US Agg			5.20%	6	4.45%	84	11.57%	31	-1.39%	91	0.33%	89	1.47%	76	2.19%
Delaware Diversified Income Fund	05/31/2011	\$51,953,430	5.10%	67	5.15%	52	13.07%	25	-1.00%	30	1.44%	14	2.22%	14	2.73%
BB Agg Bond			5.20%	50	4.45%	86	11.57%	85	-1.39%	48	0.33%	73	1.47%	63	2.19%
Delaware Diversified Income I	05/08/2023	\$16,444,680	5.75%	5	5.13%	54	13.02%	25							7.15%
BB Universal			5.20%	49	4.91%	66	12.08%	68							6.44%
Large Cap Value															
Eagle Capital Large Value	12/31/2002	\$83,122,775	4.95%	99	24.99%	1	38.09%	1	10.60%	46	16.78%	1	15.01%	1	13.89%
Russell 1000 Value			9.43%	26	16.68%	47	27.76%	53	9.03%	76	10.69%	85	9.53%	82	9.40%
50%SP500/50%Rus1V			7.68%	61	19.43%	23	32.10%	20	10.53%	47	13.39%	28	12.05%	18	10.31%
Hamlin Equity Income	07/29/2024	\$56,985,684													5.67%
Russell 1000 Value															4.11%
Large Cap Core															
Vanguard 500 Index	05/31/1999	\$138,624,971	5.88%	39	22.06%	21	36.33%	22	11.89%	17	15.96%	15	14.45%	7	8.11%
S&P 500 Index			5.89%	38	22.08%	20	36.35%	22	11.91%	17	15.98%	14	14.50%	6	8.04%
Large Cap Growth															
TCW Large Cap Growth	04/30/2013	\$73,257,963	1.54%	87	24.72%	25	45.77%	7	7.90%	66	17.75%	37	17.24%	33	15.57%
Russell 1000 Growth			3.19%	57	24.55%	27	42.19%	32	12.02%	12	19.74%	10	18.20%	11	16.89%
Westfield Capital Large Growth	07/31/2007	\$73,548,261	3.12%	59	24.16%	33	43.90%	19	11.37%	24	19.38%	16	17.38%	27	12.10%
Russell 1000 Growth			3.19%	57	24.55%	27	42.19%	32	12.02%	12	19.74%	10	18.20%	11	12.99%
Mid Cap Core															
Vanguard Midcap Index Fund	05/31/2004	\$74,694,123	9.36%	15	14.72%	31	28.81%	23	5.31%	63	11.23%	40	10.43%	20	10.39%
Russell Midcap			9.21%	19	14.63%	33	29.33%	17	5.75%	56	11.30%	36	10.48%	17	10.19%
Small Cap Value															
Vaughan Nelson	04/30/2009	\$38,217,299	5.00%	98	8.57%	74	24.75%	57	11.88%	2	14.20%	10	11.31%	6	14.22%
Russell 2000 Value			10.15%	24	9.22%	66	25.88%	40	3.77%	90	9.29%	85	6.60%	92	11.12%
Small Cap Growth															
Fuller & Thaler Small Cap Growth	05/16/2023	\$34,228,934	3.88%	98	21.25%	12	37.37%	5							31.68%
Russell 2000 Growth			8.41%	31	13.22%	53	27.66%	44							20.43%

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Performance Summary - Gross of Fees
Cobb County Employees Retirement System
As of September 30, 2024

Account	Inception Date	09/30/2024 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	\$55,134,971	8.03%	24	13.83%	33	25.17%	35	4.10%	50	7.82%	48	5.54%	45	4.08%
<i>International Index</i>			8.06%	23	14.21%	26	25.35%	31	4.14%	49	7.59%	58	5.44%	51	3.66%
Vanguard International Growth	02/06/2019	\$60,171,477	7.43%	31	15.77%	15	28.94%	28	-3.65%	88	10.76%	3			9.92%
<i>MSCI AC Wld x US Grw</i>			6.98%	33	14.35%	31	27.12%	40	1.12%	41	7.41%	52			7.64%
Tweedy Browne Global Value	04/10/2019	\$47,837,767	2.42%	99	8.30%	95	14.48%	99	5.80%	75	5.85%	97			5.20%
<i>MSCI AC Wld x US Val</i>			9.41%	14	15.10%	17	24.90%	15	8.25%	29	8.49%	39			7.21%
Global Allocation															
Natixis Loomis Sayles Global Equity	11/30/2015	\$34,756,743	6.35%	45	14.96%	5	29.01%	1	4.69%	34	8.86%	3	8.85%	1	9.12%
<i>HFRX Global Hedge</i>			2.12%	99	5.08%	99	6.86%	99	1.20%	92	3.30%	99	2.38%	99	2.52%
First Eagle Global Fund	03/31/2010	\$37,188,257	9.97%	1	18.55%	1	27.39%	1	9.35%	1	10.02%	1	8.42%	1	8.44%
<i>HFRX Global Hedge</i>			2.12%	99	5.08%	99	6.86%	99	1.20%	92	3.30%	99	2.38%	99	1.61%
Blackrock Global Allocation Fund	03/31/2010	\$27,640,072	5.01%	77	11.56%	45	22.66%	34	2.77%	73	7.77%	16	6.29%	19	6.14%
<i>HFRX Global Hedge</i>			2.12%	99	5.08%	99	6.86%	99	1.20%	92	3.30%	99	2.38%	99	1.61%
Composite Global Allocation	03/31/2010	\$99,585,071	7.29%	22	15.29%	4	26.59%	2	5.75%	24	8.97%	3	7.93%	2	7.61%
<i>HFRX Global Hedge</i>			2.12%	99	5.08%	99	6.86%	99	1.20%	92	3.30%	99	2.38%	99	1.61%

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Performance Summary - Net of Fees
Cobb County Employees Retirement System
As of September 30, 2024

Account	Inception Date	09/30/2024 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	\$1,076,646,935	5.36%		15.48%		27.57%		5.35%		10.38%		9.16%		8.32%
Policy Index			5.92%		13.61%		24.13%		5.38%		8.96%		8.06%		7.89%
Dynamic Index			6.24%		13.44%		24.16%		5.08%		8.94%		8.07%		
Fixed Income															
Richmond Capital Management	07/31/2007	\$100,130,397	5.17%	38	4.87%	29	12.40%	12	-0.87%	10	0.88%	15	1.96%	8	3.61%
Barclays Govt/Credit			5.10%	54	4.39%	76	11.31%	76	-1.50%	51	0.41%	51	1.64%	31	3.31%
Blackrock Strategic Income Opps Fund	05/31/2011	\$72,709,133	4.37%	25	5.92%	53	11.77%	29	2.31%	39	3.40%	24	3.35%	19	3.34%
Bloomberg US Agg			5.20%	6	4.45%	84	11.57%	31	-1.39%	91	0.33%	89	1.47%	76	2.19%
Delaware Diversified Income Fund	05/31/2011	\$51,953,430	5.10%	67	5.15%	52	13.07%	25	-1.00%	30	1.44%	14	2.22%	14	2.73%
BB Agg Bond			5.20%	50	4.45%	86	11.57%	85	-1.39%	48	0.33%	73	1.47%	63	2.19%
Delaware Diversified Income I	05/08/2023	\$16,444,680	5.75%	5	5.13%	54	13.02%	25							7.15%
BB Universal			5.20%	49	4.91%	66	12.08%	68							6.44%
Large Cap Value															
Eagle Capital Large Value	12/31/2002	\$83,122,775	4.61%	99	24.59%	1	37.66%	1	10.25%	51	16.22%	1	14.38%	1	13.05%
Russell 1000 Value			9.43%	26	16.68%	47	27.76%	53	9.03%	76	10.69%	85	9.53%	82	9.40%
50%SP500/50%Rus1V			7.68%	61	19.43%	23	32.10%	20	10.53%	47	13.39%	28	12.05%	18	10.31%
Hamlin Equity Income	07/29/2024	\$56,985,684													5.67%
Russell 1000 Value															4.11%
Large Cap Core															
Vanguard 500 Index	05/31/1999	\$138,624,971	5.88%	39	22.06%	21	36.33%	22	11.89%	17	15.96%	15	14.45%	7	8.11%
S&P 500 Index			5.89%	38	22.08%	20	36.35%	22	11.91%	17	15.98%	14	14.50%	6	8.04%
Large Cap Growth															
TCW Large Cap Growth	04/30/2013	\$73,257,963	1.23%	92	24.00%	33	44.43%	16	7.16%	76	16.99%	51	16.49%	44	14.87%
Russell 1000 Growth			3.19%	57	24.55%	27	42.19%	32	12.02%	12	19.74%	10	18.20%	11	16.89%
Westfield Capital Large Growth	07/31/2007	\$73,548,261	2.99%	63	23.66%	37	43.07%	25	10.76%	33	18.73%	25	16.74%	43	11.46%
Russell 1000 Growth			3.19%	57	24.55%	27	42.19%	32	12.02%	12	19.74%	10	18.20%	11	12.99%
Mid Cap Core															
Vanguard Midcap Index Fund	05/31/2004	\$74,694,123	9.36%	15	14.72%	31	28.81%	23	5.31%	63	11.23%	40	10.43%	20	10.39%
Russell Midcap			9.21%	19	14.63%	33	29.33%	17	5.75%	56	11.30%	36	10.48%	17	10.19%
Small Cap Value															
Vaughan Nelson	04/30/2009	\$38,217,299	4.78%	99	7.85%	79	23.68%	70	10.92%	9	13.19%	21	10.30%	11	13.13%
Russell 2000 Value			10.15%	24	9.22%	66	25.88%	40	3.77%	90	9.29%	85	6.60%	92	11.12%
Small Cap Growth															
Fuller & Thaler Small Cap Growth	05/16/2023	\$34,228,934	3.88%	98	21.25%	12	37.37%	5							31.68%
Russell 2000 Growth			8.41%	31	13.22%	53	27.66%	44							20.43%

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Performance Summary - Net of Fees
Cobb County Employees Retirement System
As of September 30, 2024

Account	Inception Date	09/30/2024 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	\$55,134,971	8.03%	24	13.83%	33	25.17%	35	4.10%	50	7.82%	48	5.54%	45	4.08%
<i>International Index</i>			8.06%	23	14.21%	26	25.35%	31	4.14%	49	7.59%	58	5.44%	51	3.66%
Vanguard International Growth	02/06/2019	\$60,171,477	7.43%	31	15.77%	15	28.94%	28	-3.65%	88	10.76%	3			9.92%
<i>MSCI AC Wld x US Grw</i>			6.98%	33	14.35%	31	27.12%	40	1.12%	41	7.41%	52			7.64%
Tweedy Browne Global Value	04/10/2019	\$47,837,767	2.42%	99	8.30%	95	14.48%	99	5.80%	75	5.85%	97			5.20%
<i>MSCI AC Wld x US Val</i>			9.41%	14	15.10%	17	24.90%	15	8.25%	29	8.49%	39			7.21%
Global Allocation															
Natixis Loomis Sayles Global Equity	11/30/2015	\$34,756,743	6.35%	45	14.96%	5	29.01%	1	4.69%	34	8.86%	3	8.85%	1	9.12%
<i>HFRX Global Hedge</i>			2.12%	99	5.08%	99	6.86%	99	1.20%	92	3.30%	99	2.38%	99	2.52%
First Eagle Global Fund	03/31/2010	\$37,188,257	9.97%	1	18.55%	1	27.39%	1	9.35%	1	10.02%	1	8.42%	1	8.44%
<i>HFRX Global Hedge</i>			2.12%	99	5.08%	99	6.86%	99	1.20%	92	3.30%	99	2.38%	99	1.61%
Blackrock Global Allocation Fund	03/31/2010	\$27,640,072	5.01%	77	11.56%	45	22.66%	34	2.77%	73	7.77%	16	6.29%	19	6.14%
<i>HFRX Global Hedge</i>			2.12%	99	5.08%	99	6.86%	99	1.20%	92	3.30%	99	2.38%	99	1.61%
Composite Global Allocation	03/31/2010	\$99,585,071	7.29%	22	15.29%	4	26.59%	2	5.75%	24	8.97%	3	7.93%	2	7.61%
<i>HFRX Global Hedge</i>			2.12%	99	5.08%	99	6.86%	99	1.20%	92	3.30%	99	2.38%	99	1.61%

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Cobb County Employees Retirement System

Period Ending September 30, 2024

Account Values

	Latest Quarter	Fiscal YTD	Year to Date	One Year	Three Years	Five Years	Since Inception
Beginning Mkt Value	\$1,024,733,325.13	\$937,761,618.68	\$937,761,618.68	\$850,521,960.13	\$943,270,225.17	\$683,015,909.49	\$76,718,742.24
Net Contributions	(\$1,486,530.39)	(\$4,136,624.34)	(\$4,136,624.34)	(\$5,553,576.72)	(\$18,488,045.13)	(\$29,803,946.54)	\$112,325,207.04
Investment Earnings	\$53,400,140.46	\$143,021,940.86	\$143,021,940.86	\$231,678,551.79	\$152,188,905.28	\$424,045,588.93	\$888,283,933.18
Ending Mkt Value	\$1,076,646,935.20	\$1,076,646,935.20	\$1,076,646,935.20	\$1,076,646,935.20	\$1,076,646,935.20	\$1,076,646,935.20	\$1,076,646,935.20

Returns

	Latest Quarter	Fiscal YTD	Calendar YTD	One Year	Three Years	Five Years	Ten Years	Fifteen Years	Since Inception
Account	5.36%	15.48%	15.48%	27.57%	5.35%	10.38%	8.60%	9.21%	8.32%
Policy Index	5.92%	13.61%	13.61%	24.13%	5.38%	8.96%	7.62%	8.37%	7.89%
Difference	-0.56%	1.86%	1.86%	3.43%	-0.03%	1.43%	0.98%	0.84%	0.42%

Calendar Year Returns

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Account	15.48%	21.39%	-20.01%	14.85%	19.29%	22.88%	-5.90%	17.87%	6.21%	-0.10%	6.60%	20.18%
Policy Index	13.61%	16.31%	-15.28%	12.67%	14.69%	21.18%	-5.73%	16.12%	7.64%	-0.96%	6.22%	18.13%
Difference	1.86%	5.07%	-4.73%	2.19%	4.59%	1.70%	-0.18%	1.75%	-1.43%	0.86%	0.38%	2.05%

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

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**Cobb County Employees Retirement System
Fees And Returns Summary**
Period Ending September 30, 2024

	<u>Quarter To Date</u>	<u>Year To Date</u>
Net ROR:		
Inclusive of UBS Investment Advisory Fees and Other Fees Paid	5.24%	15.34%
Net ROR:		
Inclusive of Other Fees Paid Only	5.36%	15.48%
Gross ROR:		
Excluding all Fees Paid	5.43%	15.62%

The calculations above are effective as of 1/1/2021. This Fees and Returns Summary is included in UBS Institutional Consulting ("IC") quarterly performance reports starting with first quarter reporting in 2021 and it provides detailed fee information for your review. Data from prior to that time is not included in this new exhibit but is available upon request. If you hold your assets away from UBS, "Other Fees" include all fees your custodian provides to us, except your UBS Investment Advisory Fee, and will typically include investment manager fee and may include, custodian, administrative, trading and execution fees. We can only include fees in this analysis when provided by your custodian, which we have not verified, and are not responsible for the accuracy or completeness of this information. For additional information about what fees are included within "Other Fees" please contact your custodian. If you hold your assets at UBS, "Other Fees" include investment manager fees only, as custody, administrative, trading and execution fees are included in your UBS Investment Advisory Fee. If you have any questions about how fees are depicted throughout the remainder of this report, please discuss with your UBS Consultant.

Total Portfolio - Pension

Performance Summary Through September 30, 2024

	Quarter	YTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr	Inception	Incept Date	Current Assets
Gross Time Weighted Return	5.43	15.62	27.78	5.54	10.61	9.40	8.83	8.58	06/30/1994	\$1,076,646,935
Universe Median										
Policy Index	5.92	13.61	24.13	5.38	8.96	8.06	7.62	7.89		
%-tile										
(45% Russell 3000, 25% Bloomberg US 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	5.22	5.01	12.61	-0.68	1.07	2.16	2.49	3.82	07/31/2007	\$100,130,397
Universe Median	5.12	4.65	11.73	-1.48	0.43	1.45	1.78	3.18		
BB Gov/Cr Bond	5.10	4.39	11.31	-1.50	0.41	1.64	2.00	3.31		
%-tile	28	20	6	8	8	1	1	2		
(100.00% BB Gov/Cr Bond; established 7/31/2007)										

Blackrock Strategic Income Opps Fund - (Total Portfolio)

Gross Time Weighted Return	4.37	5.92	11.77	2.31	3.40	3.35	3.13	3.34	05/31/2011	\$72,709,133
Universe Median	3.71	6.00	10.61	1.94	2.53	2.58	2.56	2.64		
Bloomberg US Agg	5.20	4.45	11.57	-1.39	0.33	1.47	1.84	2.19		
%-tile	25	53	29	39	24	19	25	15		
(100.00% Bloomberg US Agg; established 5/31/2011)										

Delaware Diversified Income Fund - (Total Portfolio)

Gross Time Weighted Return	5.10	5.15	13.07	-1.00	1.44	2.22	2.39	2.73	05/31/2011	\$51,953,430
Universe Median	5.20	5.18	12.54	-1.42	0.76	1.67	2.00	2.55		
Bloomberg US Agg	5.20	4.45	11.57	-1.39	0.33	1.47	1.84	2.19		
%-tile	67	52	25	30	14	14	22	37		
(100.00% Bloomberg US Agg; established 5/31/2011)										

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Total Portfolio - Pension

Performance Summary Through September 30, 2024

	Quarter	YTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr	Inception	Incept Date	Current Assets
Eagle Capital Large Value - (Total Portfolio)										
Gross Time Weighted Return	4.95	24.99	38.09	10.60	16.78	15.01	14.02	13.89	12/31/2002	\$83,122,775
Universe Median	8.27	16.60	28.12	10.32	12.22	10.69	10.15	10.27		
Russell 1000 Value	9.43	16.68	27.76	9.03	10.69	9.53	9.23	9.40		
%-tile	99	1	1	46	1	1	1	1		

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

Vanguard 500 Index - (Total Portfolio)

Gross Time Weighted Return	5.88	22.06	36.33	11.89	15.96	14.45	13.34	8.11	05/31/1999	\$138,624,971
Universe Median	5.77	20.48	34.62	10.57	14.85	13.11	12.01	7.74		
S&P 500 Index	5.89	22.08	36.35	11.91	15.98	14.50	13.38	8.04		
%-tile	39	21	22	17	15	7	3	30		

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

TCW Large Cap Growth - (Total Portfolio)

Gross Time Weighted Return	1.54	24.72	45.77	7.90	17.75	17.24	15.50	15.57	04/30/2013	\$73,257,963
Universe Median	3.55	21.91	39.28	9.67	17.14	16.20	14.97	15.74		
Russell 1000 Growth	3.19	24.55	42.19	12.02	19.74	18.20	16.52	16.89		
%-tile	87	25	7	66	37	33	37	52		

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

Westfield Capital Large Growth - (Total Portfolio)

Gross Time Weighted Return	3.12	24.16	43.90	11.37	19.38	17.38	15.72	12.10	07/31/2007	\$73,548,261
Universe Median	3.55	21.91	39.28	9.67	17.14	16.20	14.97	12.21		
Russell 1000 Growth	3.19	24.55	42.19	12.02	19.74	18.20	16.52	12.99		
%-tile	59	33	19	24	16	27	31	58		

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

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Total Portfolio - Pension

Performance Summary Through September 30, 2024

	Quarter	YTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr	Inception	Incept Date	Current Assets
Vanguard Midcap Index Fund - (Total Portfolio)										
Gross Time Weighted Return	9.36	14.72	28.81	5.31	11.23	10.43	10.22	10.39	05/31/2004	\$74,694,123
Universe Median	8.12	13.35	26.89	6.38	10.92	9.38	9.18	9.11		
Russell Midcap	9.21	14.63	29.33	5.75	11.30	10.48	10.19	10.19		
%-tile	15	31	23	63	40	20	13	1		
(100.00% Russell Midcap; established 5/31/2004)										
Vaughan Nelson - (Total Portfolio)										
Gross Time Weighted Return	5.00	8.57	24.75	11.88	14.20	11.31	11.22	14.22	04/30/2009	\$38,217,299
Universe Median	8.36	10.97	25.43	7.10	11.18	8.62	9.54	12.97		
Russell 2000 Value	10.15	9.22	25.88	3.77	9.29	6.60	8.22	11.12		
%-tile	98	74	57	2	10	6	7	12		
(100.00% Russell 2000 Value; established 4/30/2009)										
Vanguard Total International Stock Fund - (Total Portfolio)										
Gross Time Weighted Return	8.03	13.83	25.17	4.10	7.82	5.54	5.47	4.08	11/30/2006	\$55,134,971
Universe Median	7.09	13.04	24.50	4.12	7.79	5.45	5.44	4.01		
International Index	8.06	14.21	25.35	4.14	7.59	5.44	5.22	3.66		
%-tile	24	33	35	50	48	45	46	44		
(100% MSCI AC World X US Net, established 7/01/2013)										
Natixis Loomis Sayles Global Equity - (Total Portfolio)										
Gross Time Weighted Return	6.35	14.96	29.01	4.69	8.86	8.85		9.12	11/30/2015	\$34,756,743
Universe Median	6.09	11.35	21.31	3.92	6.44	5.45		6.05		
HFRX Global Hedge	2.12	5.08	6.86	1.20	3.30	2.38		2.52		
%-tile	45	5	1	34	3	1		1		
(100.00% HFRX Global Hedge; established 11/30/2015)										

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Total Portfolio - Pension

Performance Summary Through September 30, 2024

	Quarter	YTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr	Inception	Incept Date	Current Assets
First Eagle Global Fund - (Total Portfolio)										
Gross Time Weighted Return	9.97	18.55	27.39	9.35	10.02	8.42	7.91	8.44	03/31/2010	\$37,188,257
Universe Median	6.09	11.35	21.31	3.92	6.44	5.45	5.14	6.13		
HFRX Global Hedge	2.12	5.08	6.86	1.20	3.30	2.38	1.80	1.61		
%-tile	1	1	1	1	1	1	1	1		
(100.00% HFRX Global Hedge; established 3/31/2010)										
Blackrock Global Allocation Fund - (Total Portfolio)										
Gross Time Weighted Return	5.01	11.56	22.66	2.77	7.77	6.29	5.73	6.14	03/31/2010	\$27,640,072
Universe Median	6.09	11.35	21.31	3.92	6.44	5.45	5.14	6.13		
HFRX Global Hedge	2.12	5.08	6.86	1.20	3.30	2.38	1.80	1.61		
%-tile	77	45	34	73	16	19	24	49		
(100.00% HFRX Global Hedge; established 3/31/2010)										
Vanguard International Growth - (Total Portfolio)										
Gross Time Weighted Return	7.43	15.77	28.94	-3.65	10.76			9.92	02/06/2019	\$60,171,477
Universe Median	6.20	12.65	26.14	-0.06	7.47			7.68		
MSCI AC Wld x US Grw	6.98	14.35	27.12	1.12	7.41			7.64		
%-tile	31	15	28	88	3			9		
(100.00% MSCI AC Wld x US Grw; established 2/06/2019)										
Tweedy Browne Global Value - (Total Portfolio)										
Gross Time Weighted Return	2.42	8.30	14.48	5.80	5.85			5.20	04/10/2019	\$47,837,767
Universe Median	7.76	12.63	22.17	7.10	8.14			7.10		
MSCI AC Wld x US Val	9.41	15.10	24.90	8.25	8.49			7.21		
%-tile	99	95	99	75	97			90		
(100.00% MSCI AC Wld x US Val; established 4/10/2019)										

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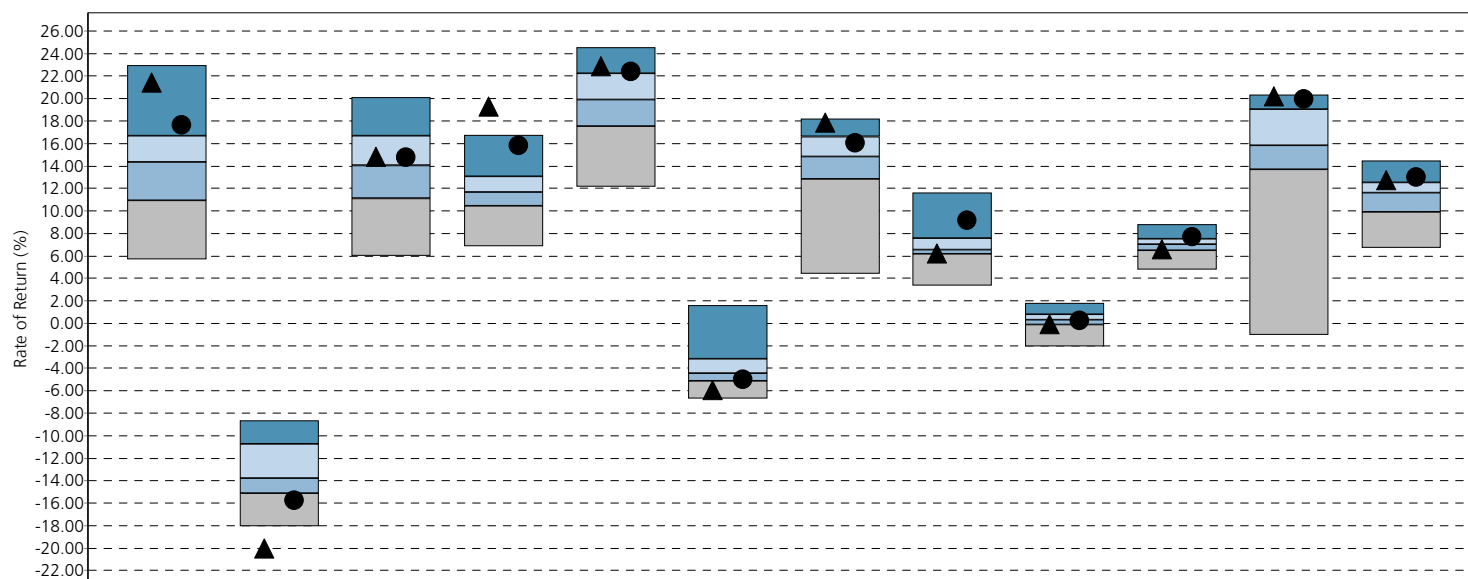
Total Portfolio - Pension

Performance Summary Through September 30, 2024

	Quarter	YTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr	Inception	Incept Date	Current Assets
Fuller & Thaler Small Cap Growth - (Total Portfolio)										
Gross Time Weighted Return	3.88	21.25	37.37					31.68	05/16/2023	\$34,228,934
Universe Median	7.45	13.38	25.89					20.52		
Russell 2000 Growth	8.41	13.22	27.66					20.43		
%-tile	98	12	5					1		
(100.00% Russell 2000 Growth; established 5/16/2023)										
Delaware Diversified Income I - (Total Portfolio)										
Gross Time Weighted Return	5.75	5.13	13.02					7.15	05/08/2023	\$16,444,680
Universe Median	5.20	5.18	12.54					6.60		
BB Universal	5.20	4.91	12.08					6.44		
%-tile	5	54	25					26		
(100.00% BB Universal; established 5/08/2023)										
Hamlin Equity Income - (Total Portfolio)										
Gross Time Weighted Return								5.67	07/29/2024	\$56,985,684
Universe Median								3.55		
Russell 1000 Value								4.11		
%-tile								1		
(100.00% Russell 1000 Value; established 7/29/2024)										

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Consolidated Portfolio vs Master Trusts - Public : Plans < \$1 Billion Managers
December 31, 2003 Through December 31, 2023

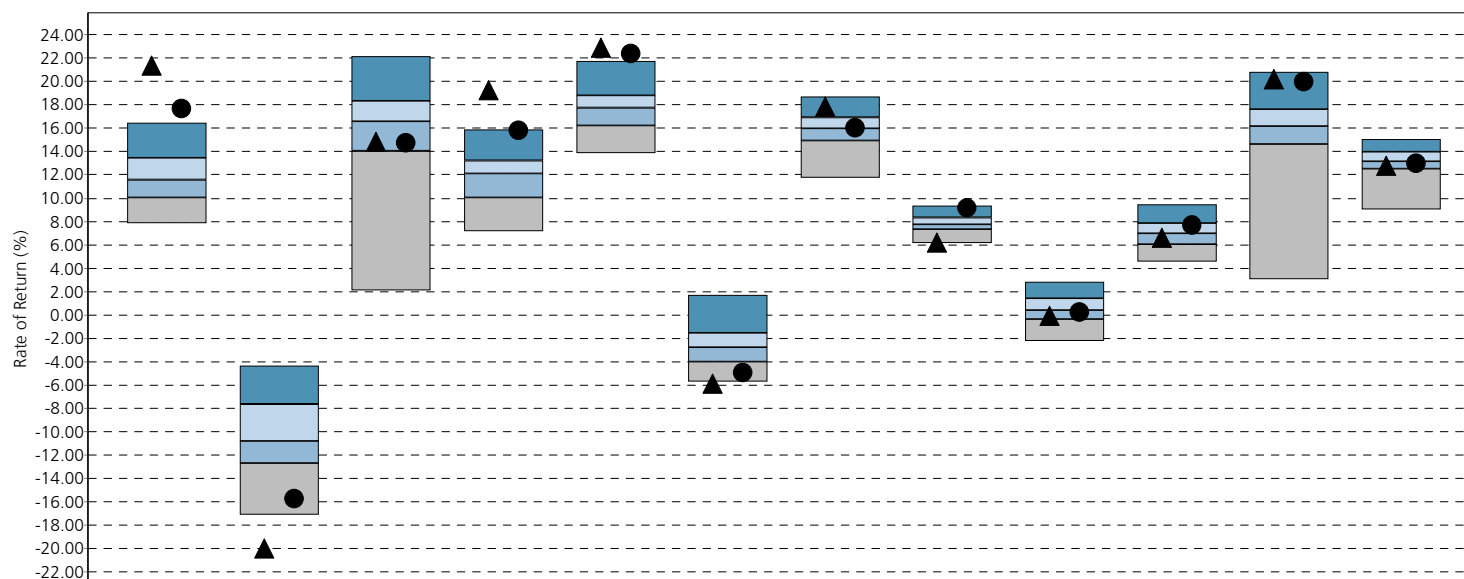


	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Highest Value	22.96	-8.70	20.10	16.74	24.50	1.58	18.17	11.59	1.79	8.81	20.31	14.47
First Quartile	16.63	-10.77	16.67	13.06	22.21	-3.21	16.61	7.54	0.82	7.47	19.02	12.51
Median Value	14.32	-13.78	14.05	11.64	19.87	-4.47	14.79	6.54	0.29	6.99	15.79	11.58
Third Quartile	10.91	-15.14	11.09	10.44	17.52	-5.11	12.80	6.19	-0.14	6.44	13.65	9.86
Lowest Value	5.67	-18.04	6.00	6.82	12.15	-6.71	4.39	3.35	-2.08	4.73	-1.05	6.73
Mean	13.96	-13.49	13.75	11.74	19.51	-3.87	14.17	6.88	0.19	7.01	15.16	11.24
Members	32	29	32	32	23	23	22	22	22	21	21	57

	Returi Rank	Returi Rank	Returi Rank	Returi Rank	Returi Rank	Returi Rank	Returi Rank	Returi Rank	Returi Rank	Returi Rank	Returi Rank	Returi Rank
▲ Total Portfolio	21.39	3 -20.0	99 14.85	43 19.25	1 22.88	14 -5.9C	90 17.87	6 6.21	73 -0.1C	74 6.6C	70 20.18	12 12.77
● Policy Benchmark	17.65	15 -15.7	82 14.76	45 15.81	4 22.35	22 -4.95	73 16.04	36 9.12	7 0.21	60 7.7C	18 19.95	22 12.97

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Consolidated Portfolio vs Master Trusts - Public : Plans > \$1 Billion Managers
December 31, 2003 Through December 31, 2023



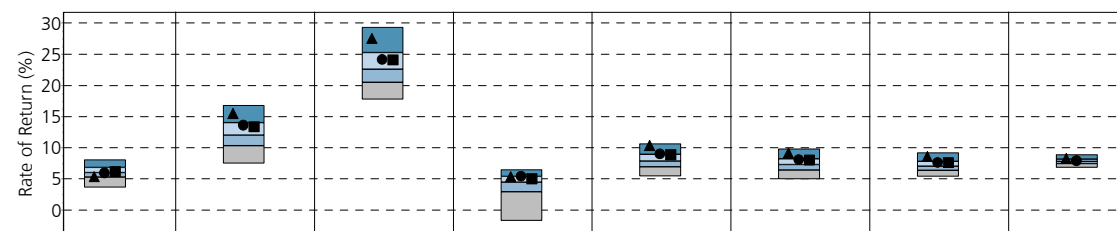
	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Highest Value	16.43	-4.37	22.14	15.86	21.73	1.66	18.67	9.33	2.78	9.47	20.81	15.03
First Quartile	13.44	-7.69	18.32	13.22	18.81	-1.54	16.89	8.33	1.36	7.83	17.64	13.95
Median Value	11.53	-10.86	16.56	12.11	17.72	-2.81	16.00	7.73	0.40	6.96	16.17	13.13
Third Quartile	10.01	-12.74	14.03	10.00	16.20	-4.04	14.90	7.34	-0.37	6.01	14.63	12.51
Lowest Value	7.87	-17.14	2.11	7.17	13.86	-5.74	11.74	6.14	-2.23	4.59	3.02	9.02
Mean	11.72	-10.54	15.92	11.88	17.56	-2.73	15.83	7.76	0.41	7.03	15.89	12.99
Members	53	54	54	54	47	48	48	48	48	48	38	65

	Returi Rank	Returi Rank	Returi Rank	Returi Rank	Returi Rank	Returi Rank	Returi Rank	Returi Rank	Returi Rank	Returi Rank	Returi Rank	Returi Rank
▲ Total Portfolio	21.39	1-20.0	99 14.85	68 19.25	1 22.88	1 -5.9C	99 17.87	7 6.21	97 -0.1C	70 6.6C	71 20.18	3 12.77
● Policy Benchmark	17.65	1-15.7	92 14.76	68 15.81	1 22.35	1 -4.95	90 16.04	48 9.12	4 0.21	58 7.7C	27 19.95	5 12.97

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

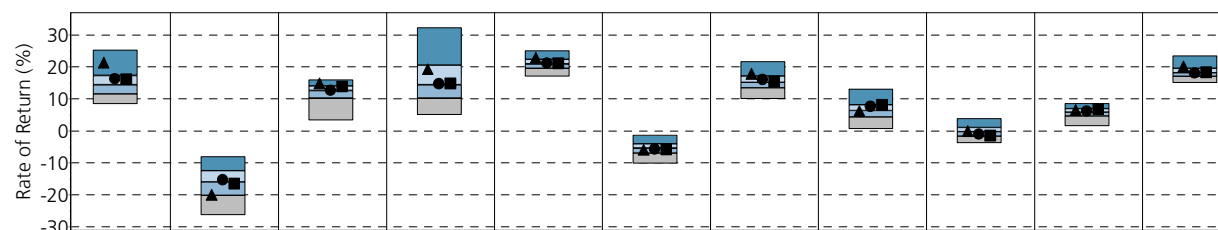
Trailing Periods



	Quarter	Calendar YTD	One Year	Three Years	Five Years	Seven Years	Ten Years	6/1994-9/2024
Highest Value	8.11	16.84	29.39	6.52	10.63	9.83	9.23	8.93
First Quartile	6.85	14.03	25.30	5.40	8.99	8.25	7.82	8.20
Median Value	6.02	12.07	22.64	4.49	7.91	7.33	7.07	7.84
Third Quartile	5.32	10.39	20.53	2.92	6.97	6.44	6.40	7.48
Lowest Value	3.68	7.53	17.82	-1.66	5.48	4.99	5.40	6.85
Mean	6.05	12.13	22.95	3.98	7.96	7.36	7.13	7.85

	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Total Portfolio	5.36	73	15.48	6	27.57	6	5.35	25	10.38	2	9.16	7	8.60	6	8.32	18
● Policy Index	5.92	53	13.61	30	24.13	36	5.38	25	8.96	25	8.06	29	7.62	31	7.89	46
■ Dynamic Index	6.24	42	13.44	32	24.16	36	5.08	33	8.94	26	8.07	29	7.67	29	N/A	N/A

Annual Periods



	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Highest Value	25.31	-7.97	16.04	32.37	25.25	-1.19	21.69	13.23	3.97	8.57	23.53
First Quartile	17.41	-12.43	14.11	20.58	22.38	-3.95	17.23	8.24	1.15	7.00	19.72
Median Value	14.50	-15.87	12.73	14.49	21.01	-5.33	15.25	6.44	-0.17	6.01	18.28
Third Quartile	11.63	-20.16	10.25	10.33	19.62	-6.95	13.50	4.36	-1.60	4.75	17.12
Lowest Value	8.44	-26.30	3.49	5.13	17.16	-10.13	10.19	0.64	-3.65	1.63	15.05
Mean	14.97	-16.26	11.92	15.55	21.05	-5.47	15.47	6.37	-0.15	5.78	18.49

	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Total Portfolio	21.39	9	-20.01	74	14.85	12	19.29	28	22.88	18	-5.90	60	17.87	20	6.21	53
● Policy Index	16.31	36	-15.28	44	12.67	51	14.69	48	21.18	46	-5.73	57	16.12	35	7.64	32
■ Dynamic Index	16.31	36	-16.34	55	14.02	26	14.97	46	21.21	45	-5.71	57	15.61	42	8.21	25

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Performance Profile

June 30, 1994 Through September 30, 2024

	Ended	Return
Best Quarter	6/2020	17.41
Worst Quarter	3/2020	-15.15
Best 4 Quarters	9/1997	30.39
Worst 4 Quarters	9/2022	-21.79

Total # of Periods: 363
 # of Positive Periods: 235
 # of Negative Periods: 128

	Latest Month	Latest Quarter	Year To Date	One Year	Two Years	Three Years	Five Years	Ten Years	Since Inception
Consolidated Portfolio	1.86	5.36	15.48	27.57	22.28	5.35	10.38	8.60	8.32
Policy Index	1.90	5.92	13.61	24.13	18.72	5.38	8.96	7.62	7.89
Excess	-0.04	-0.56	1.86	3.43	3.56	-0.03	1.43	0.98	0.42
Riskless Index	0.44	1.38	4.06	5.51	5.08	3.57	2.37	1.68	2.54
Real ROR	1.66	4.95	12.44	24.56	18.71	0.53	5.99	5.62	5.65
CPI	0.20	0.40	2.73	2.42	3.04	4.72	4.11	2.80	2.51

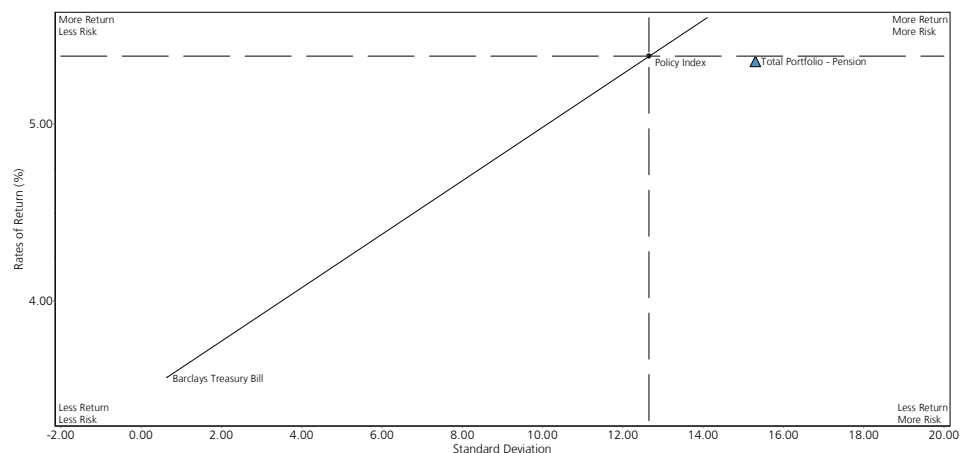
Period	Return	Std Dev	Sharpe Ratio	Alpha	Beta	R-Squared	Relative Risk	Track Error	Treynor Ratio	Info Ratio
One Year	27.57	11.89	1.86	-1.65	1.28	97.08	1.30	3.26	17.25	0.93
Two Years	22.28	12.58	1.37	0.53	1.21	97.67	1.23	2.91	14.19	1.12
Three Years	5.35	15.09	0.12	-0.18	1.20	98.42	1.21	3.11	1.49	0.09
Five Years	10.38	15.01	0.53	0.43	1.17	98.63	1.18	2.78	6.86	0.57
Ten Years	8.60	12.29	0.56	0.16	1.15	98.57	1.16	2.17	6.01	0.50
Since Inception	8.32	10.64	0.54	-0.06	1.10	95.60	1.13	2.44	5.23	0.20

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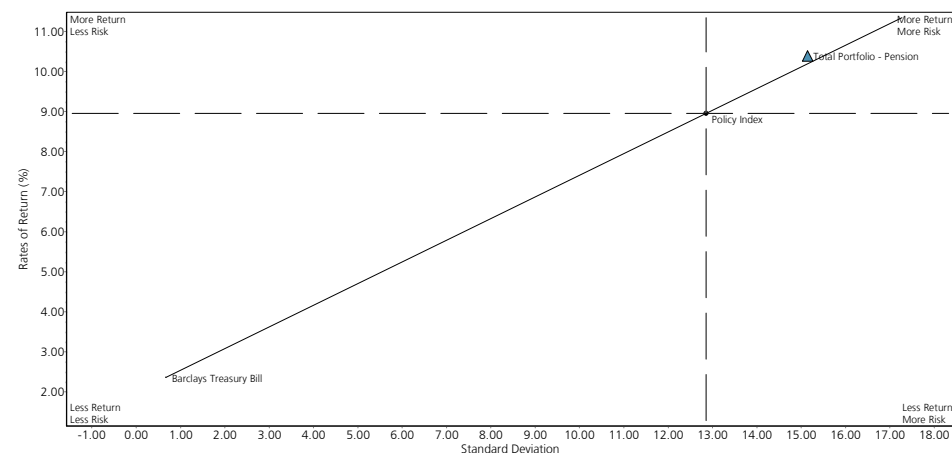
Risk vs Reward Analysis

June 30, 1994 Through September 30, 2024

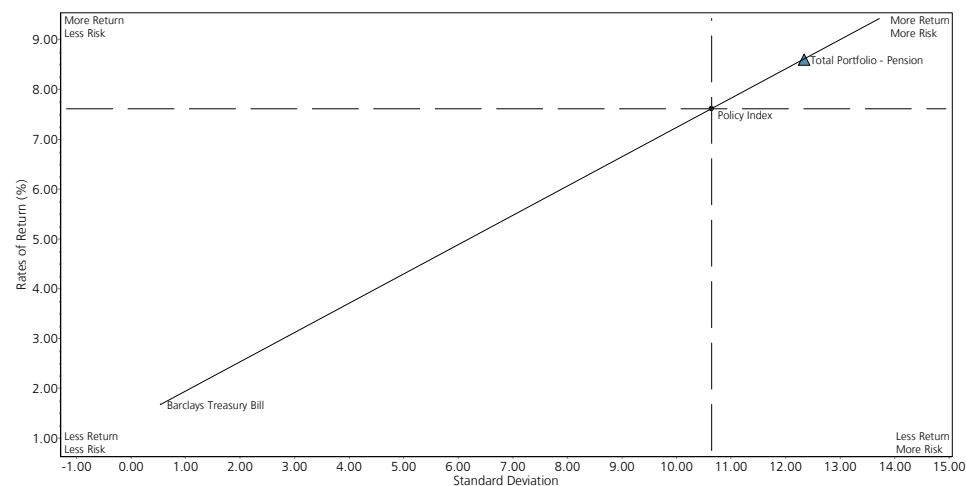
3 Years



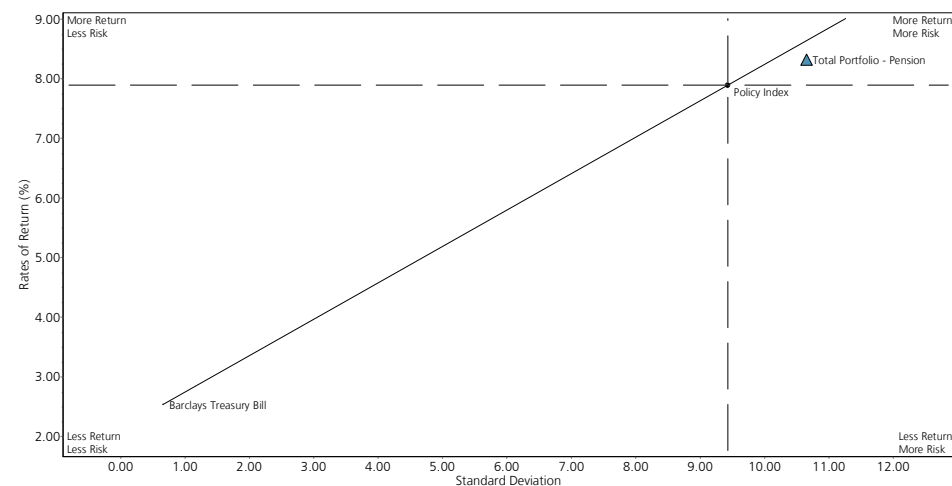
5 Years



10 Years



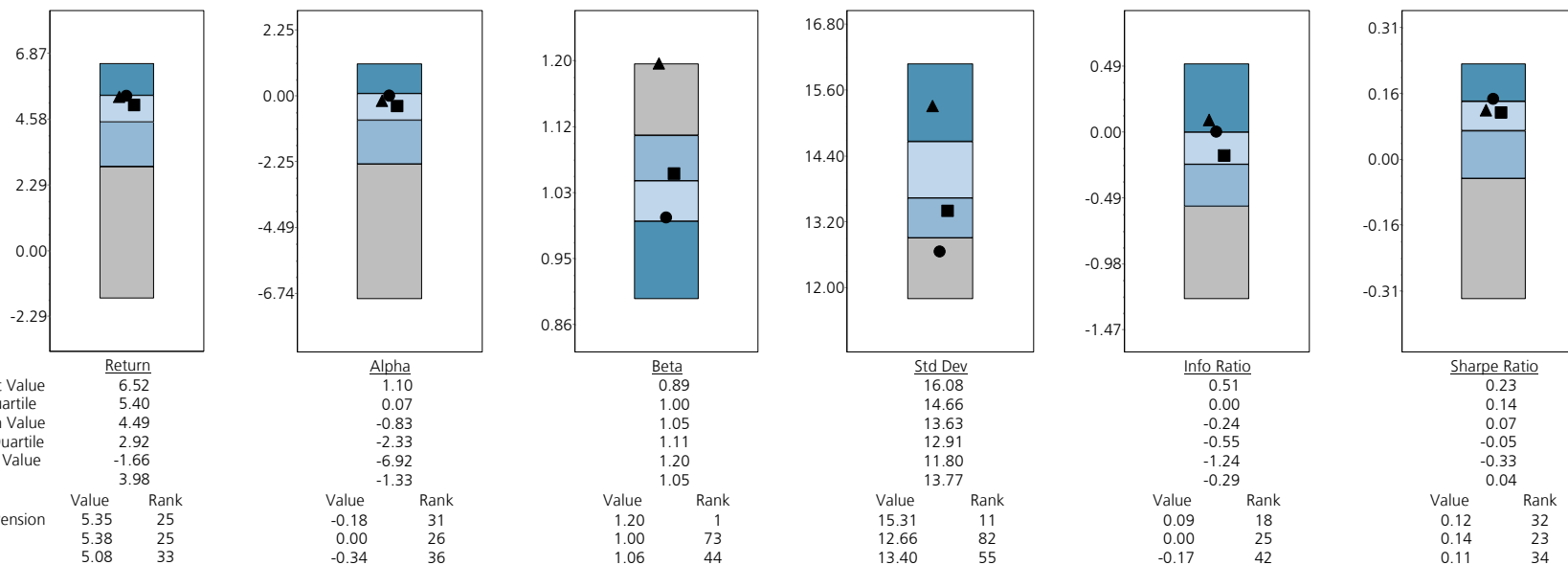
Inception



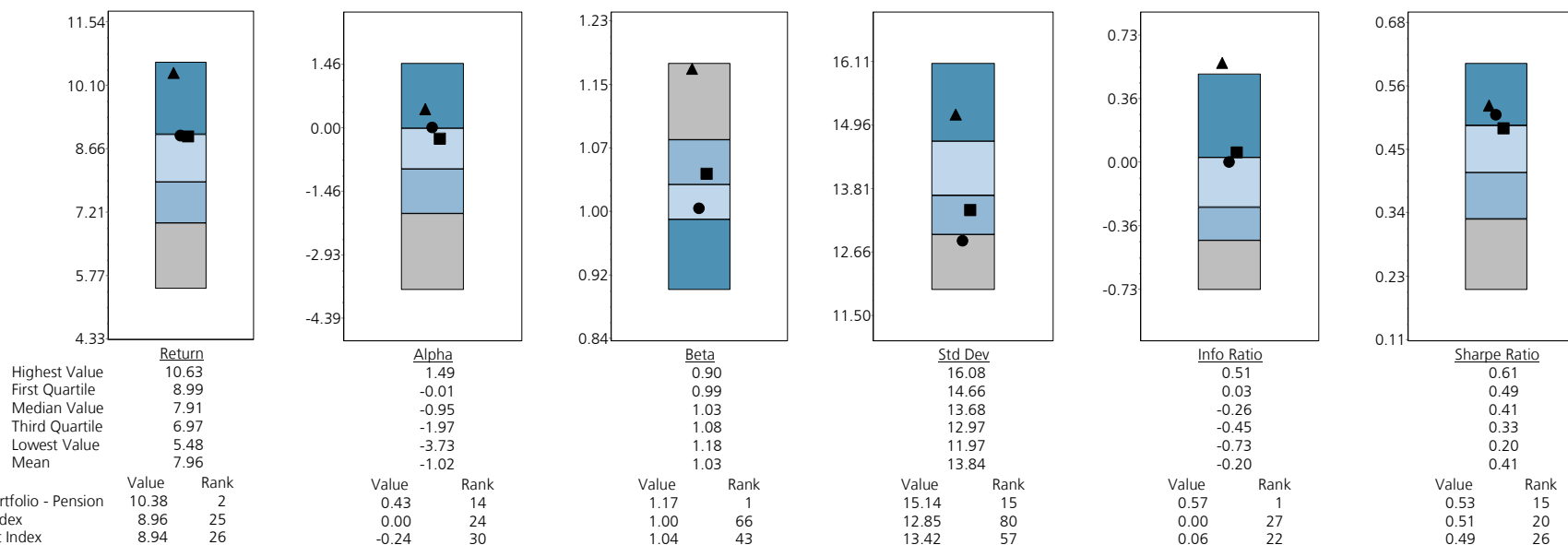
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Consolidated Portfolio vs 50% Equity, 35% Fixed, 15% International Managers September 30, 2021 Through September 30, 2024

3 Year



5 Year

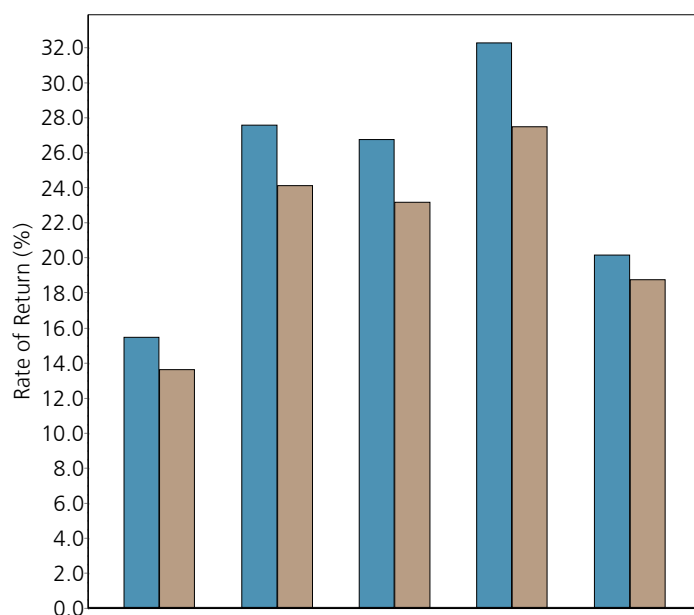


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Performance in Rising and Declining Markets

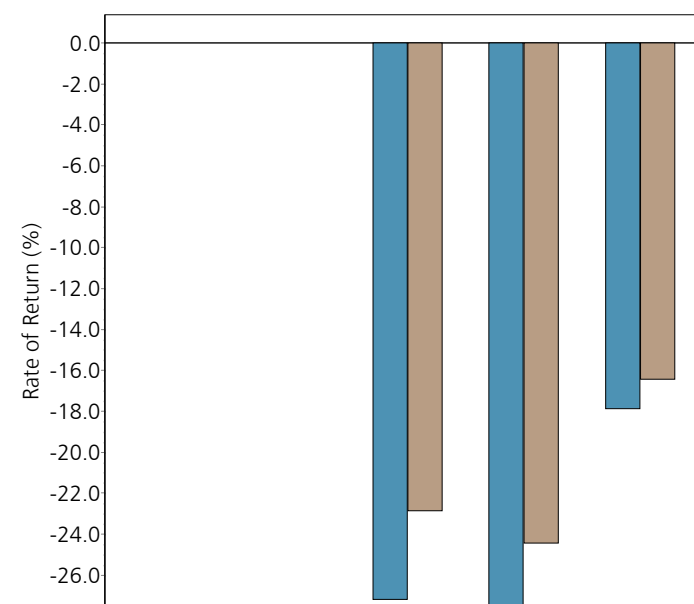
June 30, 1994 Through September 30, 2024

Up Market Performance



	Year to Date	One Year	Three Years	Five Years	Since Inception
Consolidated Portfolio	15.48	27.57	26.75	32.27	20.18
Policy Index	13.61	24.13	23.19	27.48	18.76
Difference	1.86	3.43	3.55	4.79	1.42
Ratio	1.14	1.14	1.15	1.17	1.08
Up Periods	3	4	8	14	88

Down Market Performance



	Year to Date	One Year	Three Years	Five Years	Since Inception
Consolidated Portfolio	N/A	-27.21	-27.62	-17.90	-1.44
Policy Index	N/A	-22.88	-24.47	-16.46	-1.44
Difference	N/A	-4.33	-3.15	-1.44	-1.44
Ratio	N/A	1.19	1.13	1.09	1.09
Down Periods	0	0	4	6	33

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb County Employees Retirement System
 October 22, 2024

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

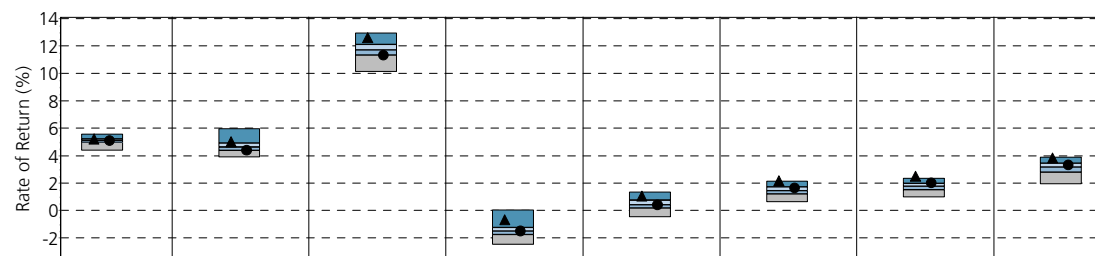
7/31/2007 - Present

100% Bloomberg Barclays Government/Credit Bond

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TOTAL FUND Peer Universe Comparison versus Intermediate Core Bond Managers

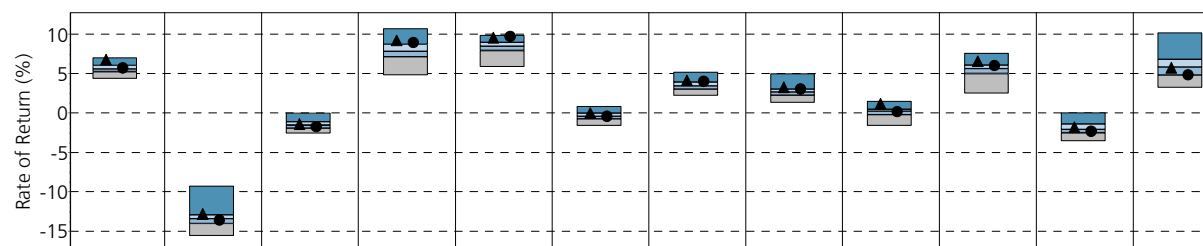
Trailing Periods



	Quarter	Calendar YTD	One Year	Three Years	Five Years	Seven Years	Ten Years	7/2007-9/2024
Highest Value	5.59	5.99	12.96	0.05	1.37	2.16	2.36	3.90
First Quartile	5.24	4.93	12.13	-1.23	0.76	1.73	2.01	3.46
Median Value	5.12	4.65	11.73	-1.48	0.43	1.45	1.78	3.18
Third Quartile	4.99	4.40	11.34	-1.74	0.18	1.20	1.53	2.81
Lowest Value	4.40	3.91	10.13	-2.48	-0.45	0.63	0.97	1.95
Mean	5.09	4.69	11.72	-1.44	0.45	1.45	1.76	3.12

	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Richmond Capital	5.22	28	5.01	20	12.61	6	-0.68	8	1.07	8	2.16	1	2.49	1	3.82	2
● Barclays Govt/Credit	5.10	54	4.39	76	11.31	76	-1.50	51	0.41	51	1.64	31	2.00	26	3.31	39

Annual Periods



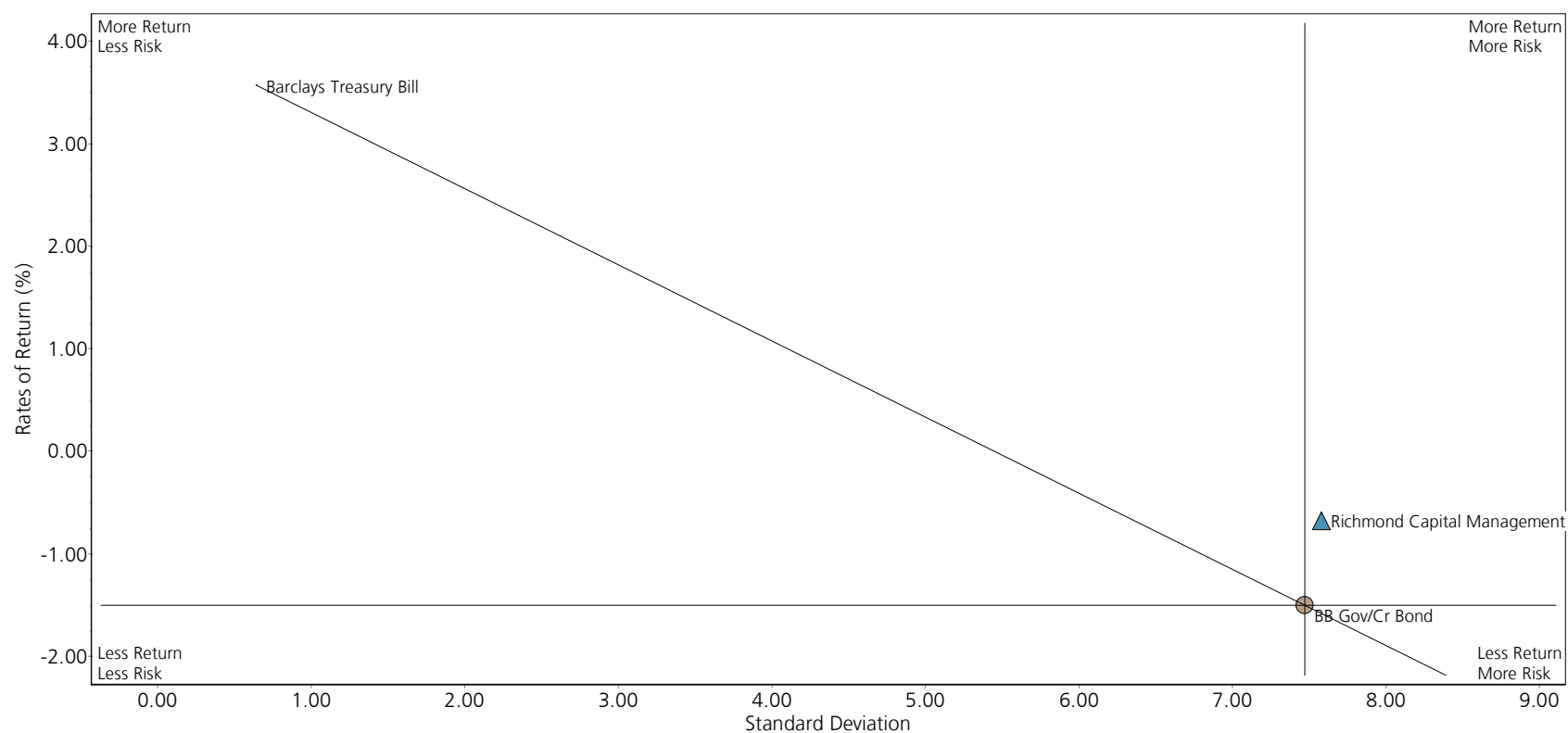
	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Highest Value	7.05	-9.26	0.02	10.73	9.88	0.90	5.23	5.00	1.50	7.63	0.06	10.19
First Quartile	6.04	-12.93	-1.09	8.73	8.97	0.00	3.94	3.10	0.51	6.12	-1.38	6.84
Median Value	5.62	-13.39	-1.53	7.84	8.49	-0.39	3.47	2.69	0.23	5.66	-2.05	5.86
Third Quartile	5.28	-13.99	-1.89	7.17	7.95	-0.75	3.09	2.28	-0.20	5.00	-2.47	4.82
Lowest Value	4.37	-15.53	-2.52	4.83	5.91	-1.53	2.24	1.39	-1.54	2.53	-3.51	3.26
Mean	5.66	-13.30	-1.47	7.91	8.40	-0.38	3.53	2.77	0.14	5.54	-1.93	5.92

	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Richmond Capital	6.80	3	-12.81	21	-1.40	43	9.20	16	9.58	8	-0.01	25	4.15	16	3.26	18
● Barclays Govt/Credit	5.72	44	-13.51	59	-1.75	63	8.93	21	9.71	4	-0.42	53	4.00	23	3.05	24

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Risk vs Reward Analysis

September 30, 2021 Through September 30, 2024

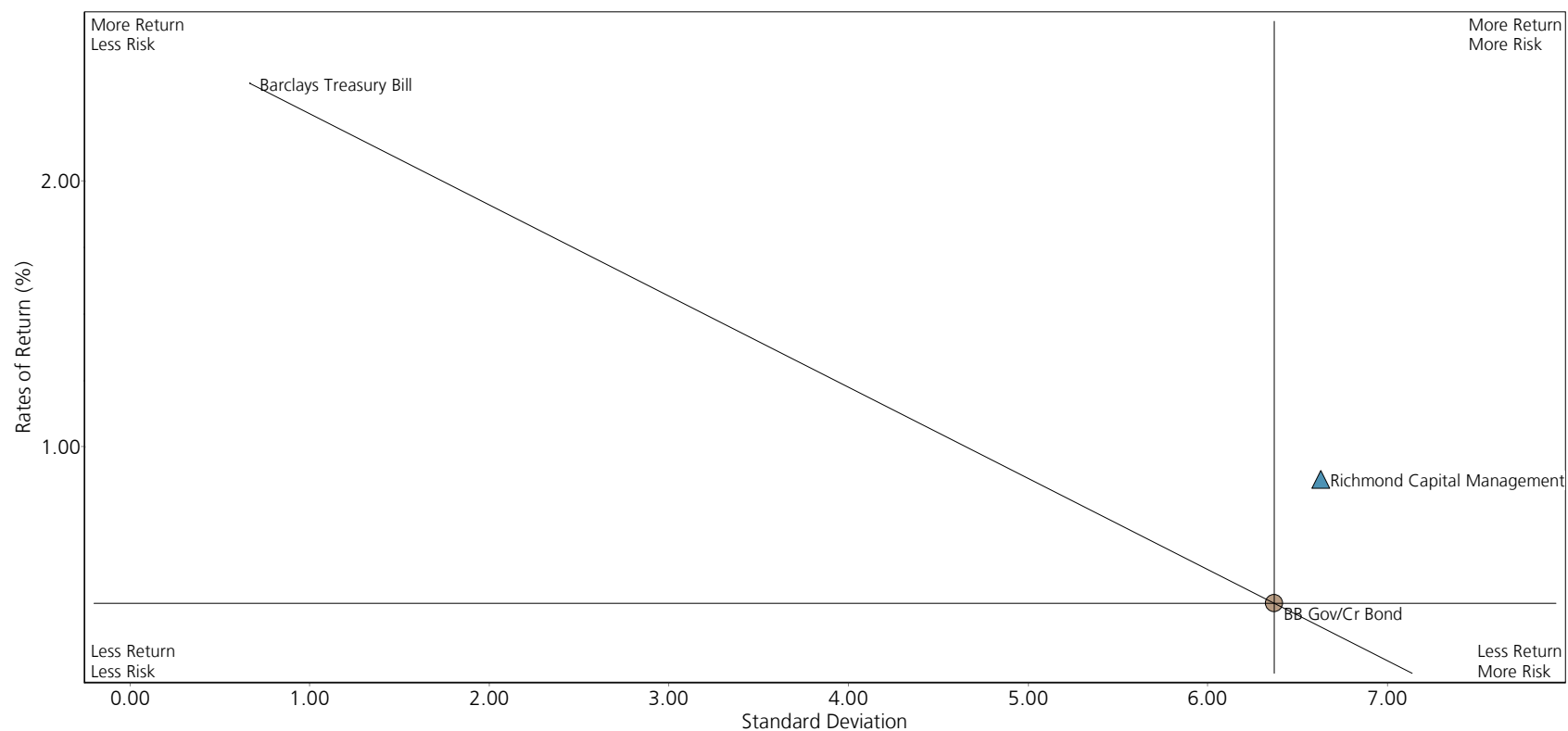


	Return	Std Dev	Alpha	Beta	R-Squared
▲ Richmond Capital Management	-0.68	7.58	0.90	1.01	99.41
● BB Gov/Cr Bond	-1.50	7.47	0.00	1.00	100.00

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Risk vs Reward Analysis

September 30, 2019 Through September 30, 2024

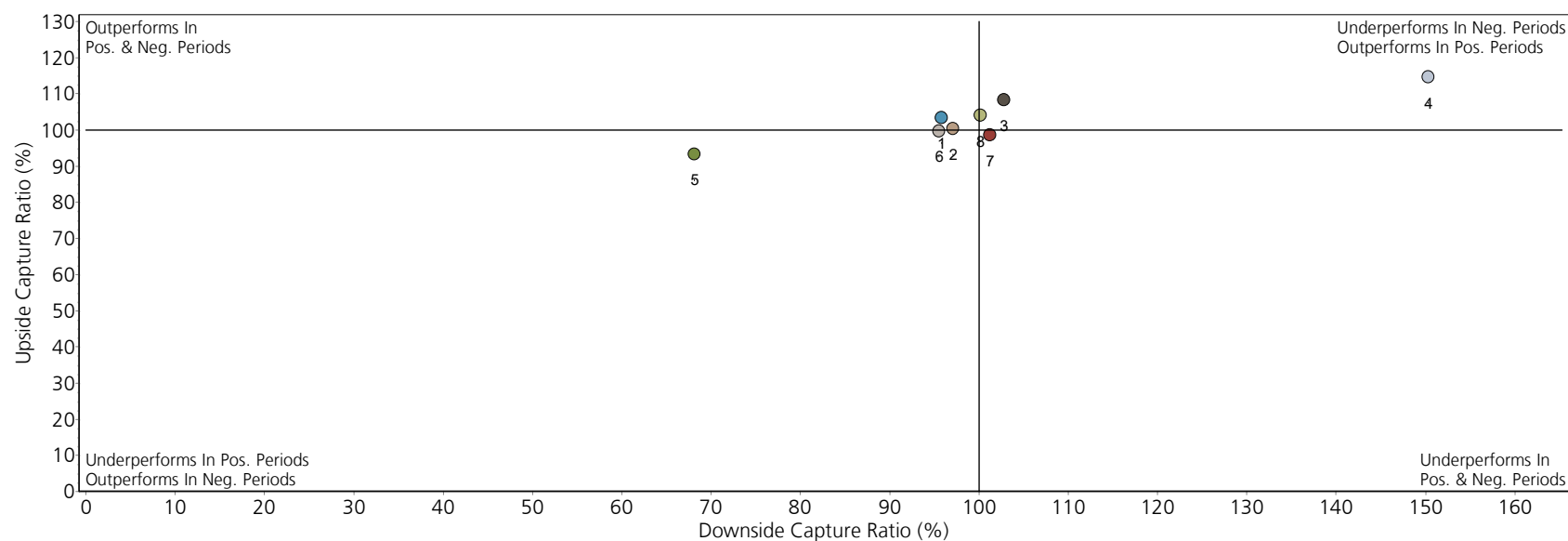


	Return	Std Dev	Alpha	Beta	R-Squared
▲ Richmond Capital Management	0.88	6.63	0.54	1.03	98.17
● BB Gov/Cr Bond	0.41	6.37	0.00	1.00	100.00

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Capture Ratio

July 31, 2007 Through September 30, 2024

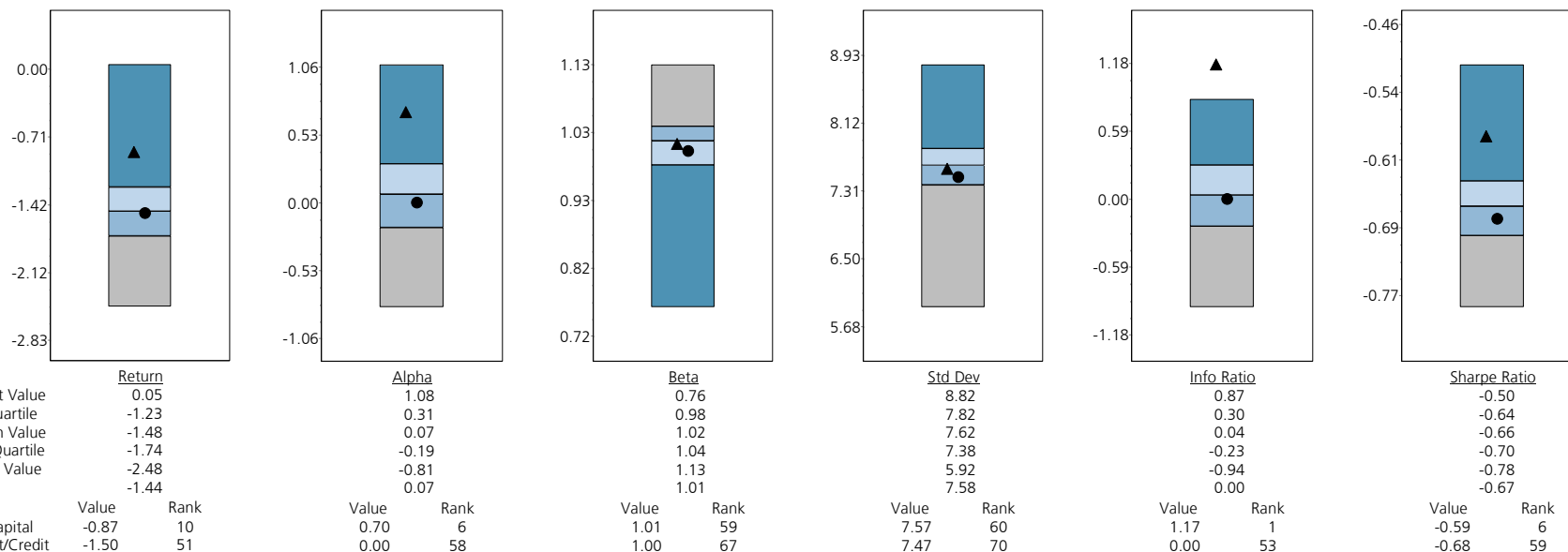


	1	2	3	4	5	6	7	8
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	12/2016-12/2017	7/2007-9/2024
Up Periods	5.00	3.00	6.00	8.00	8.00	6.00	9.00	123.00
Upside Capture ROR	15.81	6.33	4.66	13.94	10.21	4.50	4.74	14.76
BB Gov/Cr Bond	15.29	6.31	4.30	12.16	10.94	4.51	4.81	14.19
% Of Capture	103.41	100.33	108.24	114.60	93.33	99.71	98.61	103.99
Down Periods	7.00	9.00	6.00	4.00	4.00	6.00	3.00	83.00
Downside Capture ROR	-7.96	-18.17	-5.96	-4.34	-0.75	-4.51	-0.78	-10.96
BB Gov/Cr Bond	-8.30	-18.71	-5.80	-2.89	-1.10	-4.72	-0.77	-10.94
% Of Capture	95.83	97.12	102.78	150.30	68.11	95.53	101.24	100.17

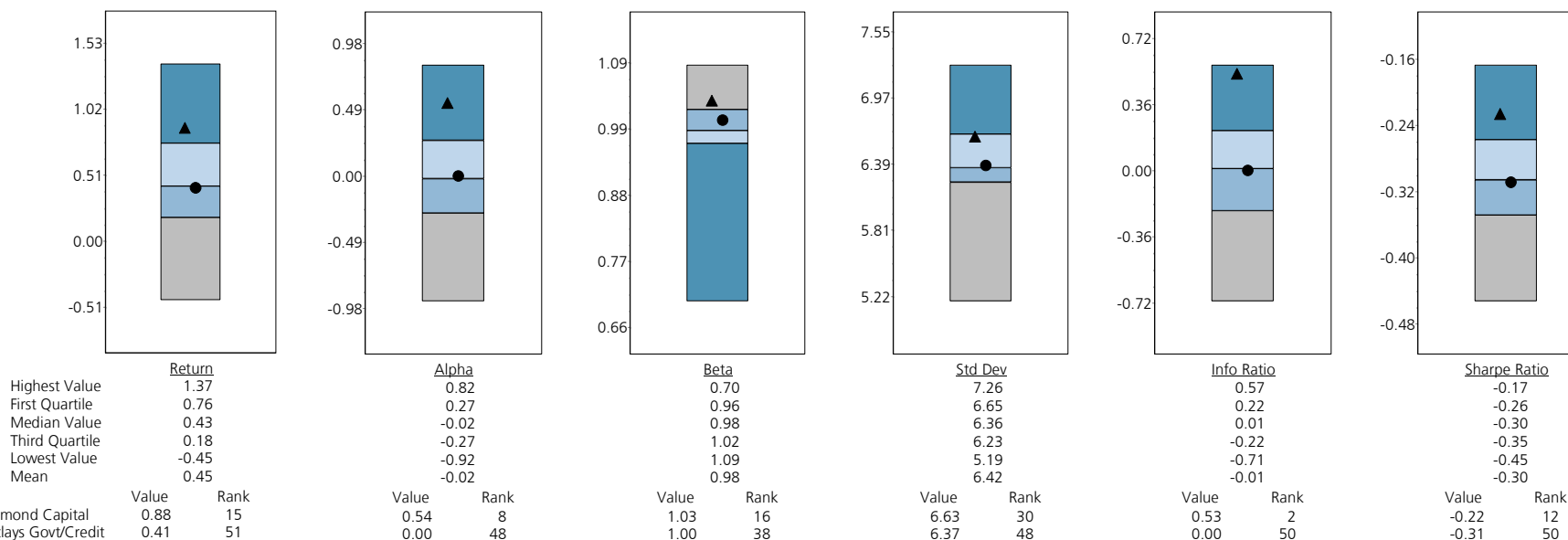
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TOTAL FUND vs Intermediate Core Bond Managers September 30, 2021 Through September 30, 2024

3 Year



5 Year



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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb County Employees Retirement System
 October 22, 2024

Prepared by:
 Earle Dodd, Van Price, Allen Wright

Blackrock Strategic Income Opps 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

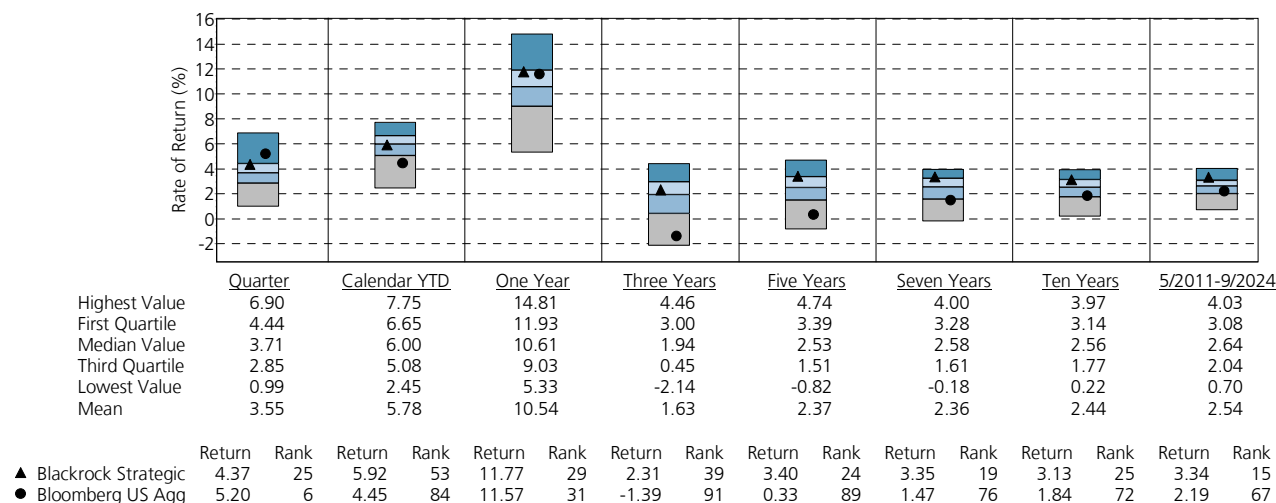
5/31/2011 - Present

100% Bloomberg US Aggregate Bond

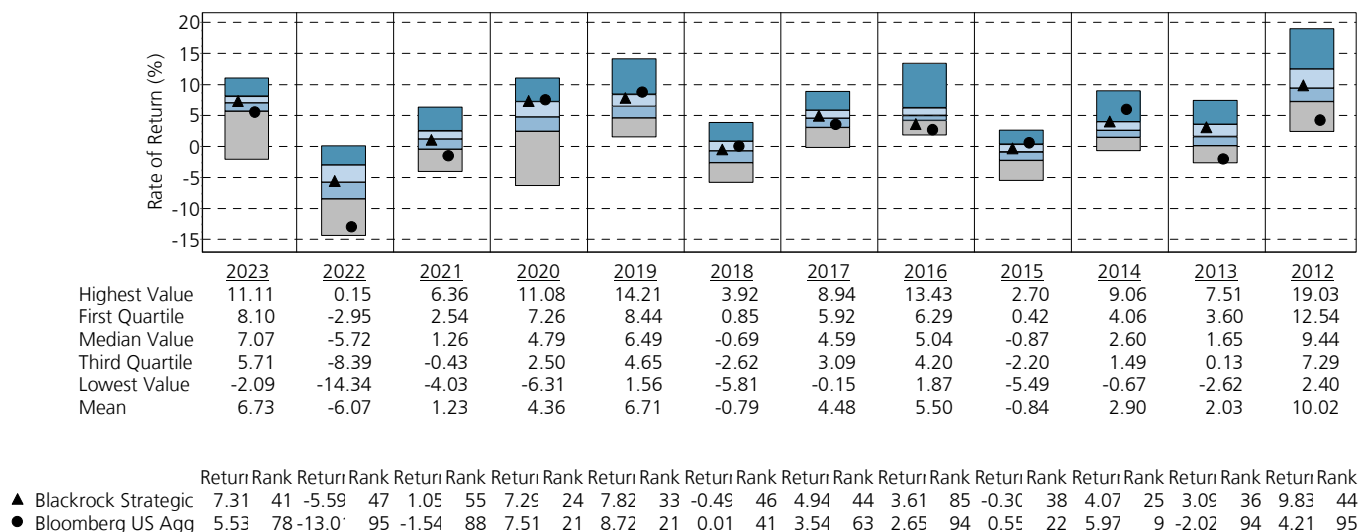
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TOTAL FUND Peer Universe Comparison versus Nontraditional Bond Managers

Trailing Periods



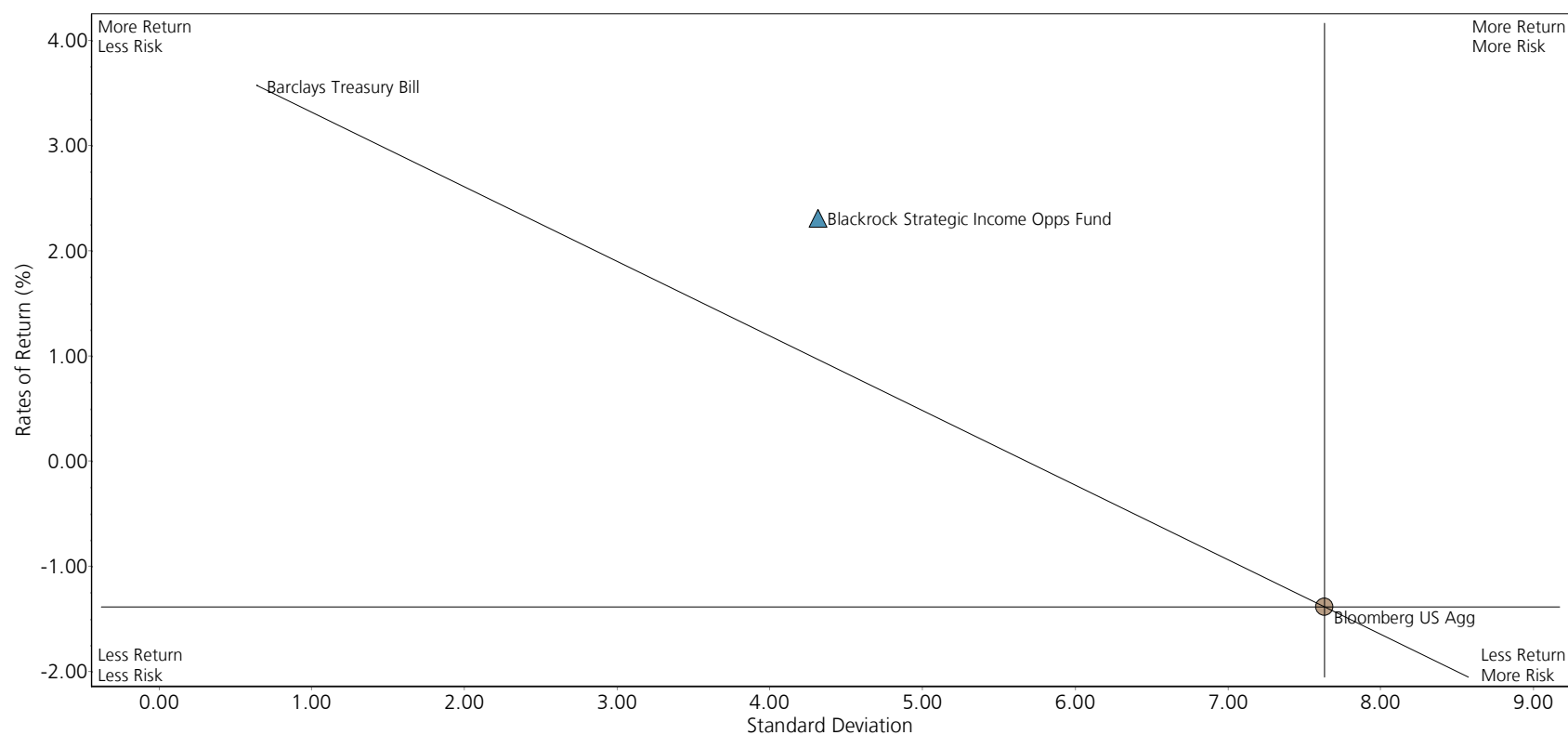
Annual Periods



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Risk vs Reward Analysis

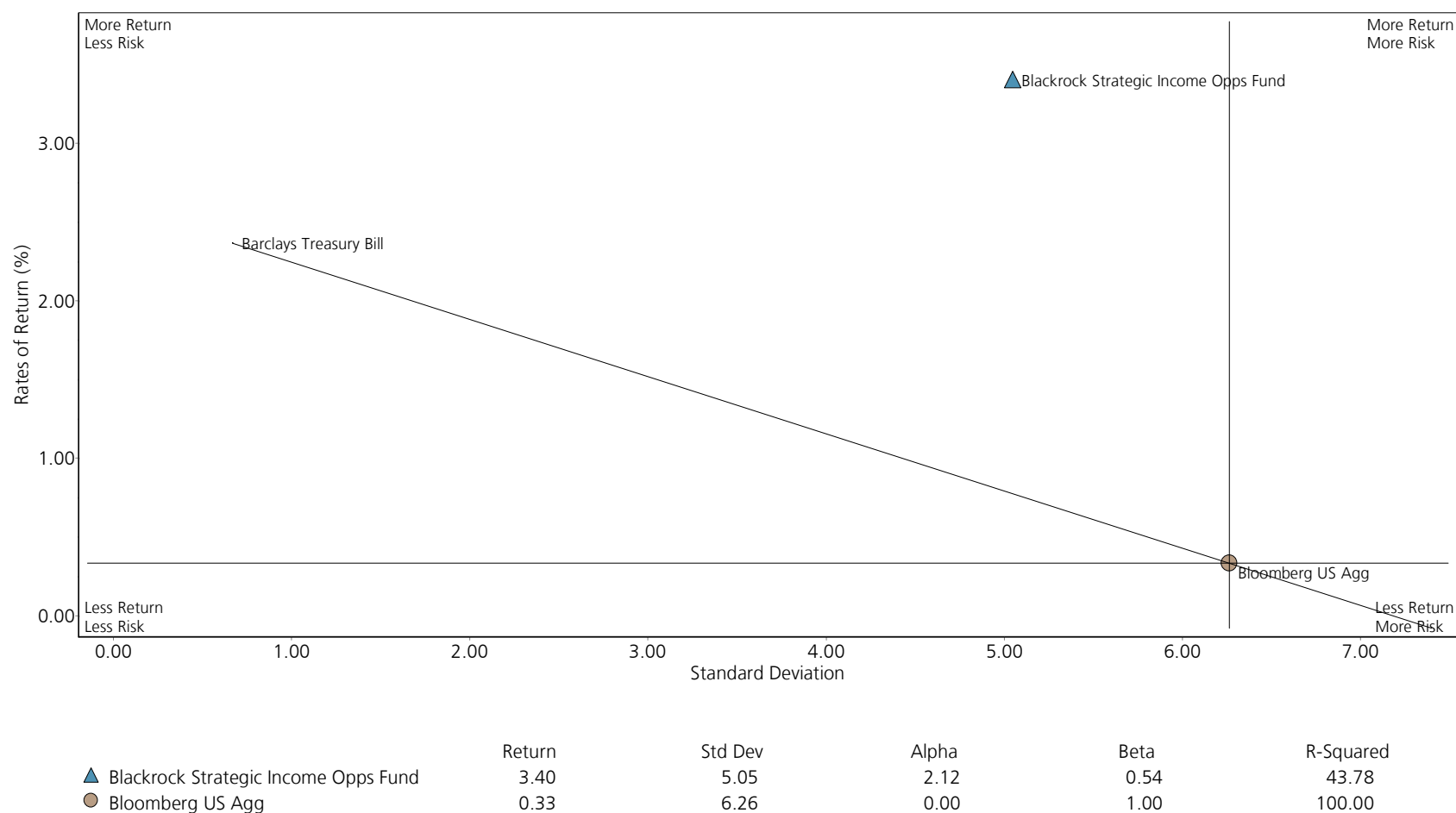
September 30, 2021 Through September 30, 2024



	Return	Std Dev	Alpha	Beta	R-Squared
▲ Blackrock Strategic Income Opps Fund	2.31	4.31	1.16	0.50	82.12
● Bloomberg US Agg	-1.39	7.63	0.00	1.00	100.00

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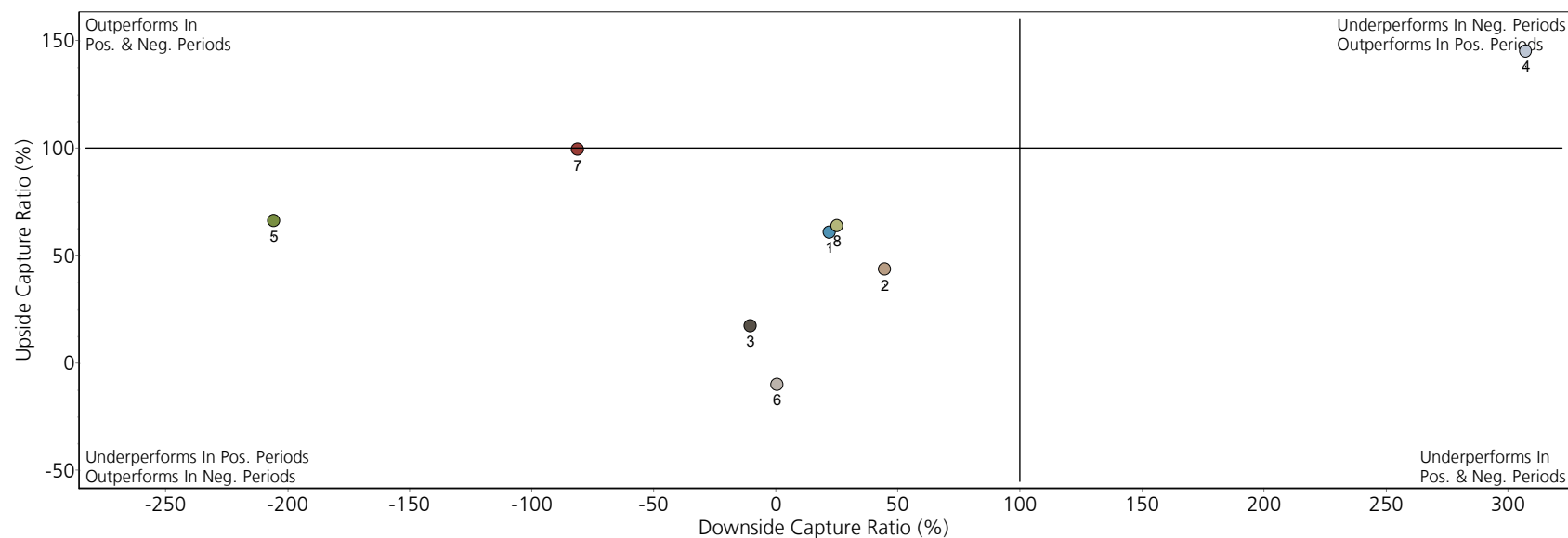
Risk vs Reward Analysis **September 30, 2019 Through September 30, 2024**



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Capture Ratio

May 31, 2011 Through September 30, 2024

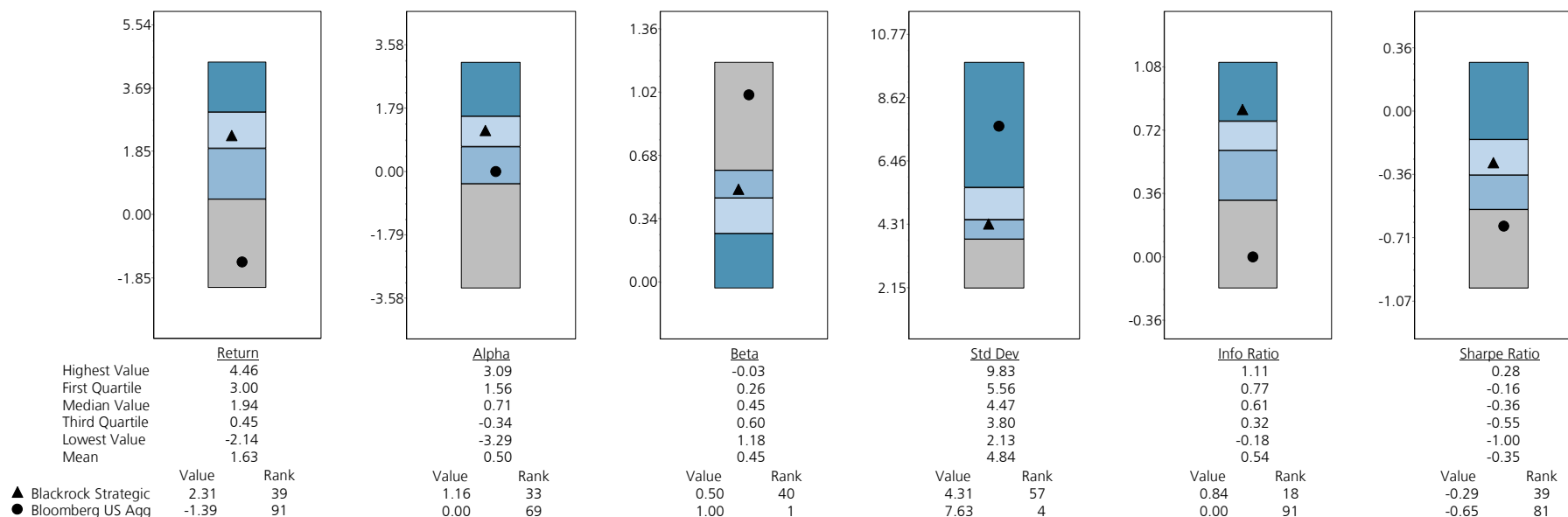


	1	2	3	4	5	6	7	8
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	12/2016-12/2017	5/2011-9/2024
Up Periods	5.00	3.00	5.00	8.00	8.00	6.00	8.00	91.00
Upside Capture ROR	9.37	3.00	0.56	13.89	6.26	-0.46	4.30	8.00
Bloomberg US Agg	15.41	6.90	3.27	9.57	9.49	4.53	4.33	12.56
% Of Capture	60.85	43.53	17.16	145.07	65.98	-10.10	99.27	63.72
Down Periods	7.00	9.00	7.00	4.00	4.00	6.00	4.00	69.00
Downside Capture ROR	-1.89	-8.34	0.48	-5.79	1.46	-0.03	0.61	-2.51
Bloomberg US Agg	-8.56	-18.62	-4.66	-1.89	-0.71	-4.32	-0.76	-10.03
% Of Capture	22.04	44.79	-10.35	307.11	-205.70	0.64	-81.16	25.00

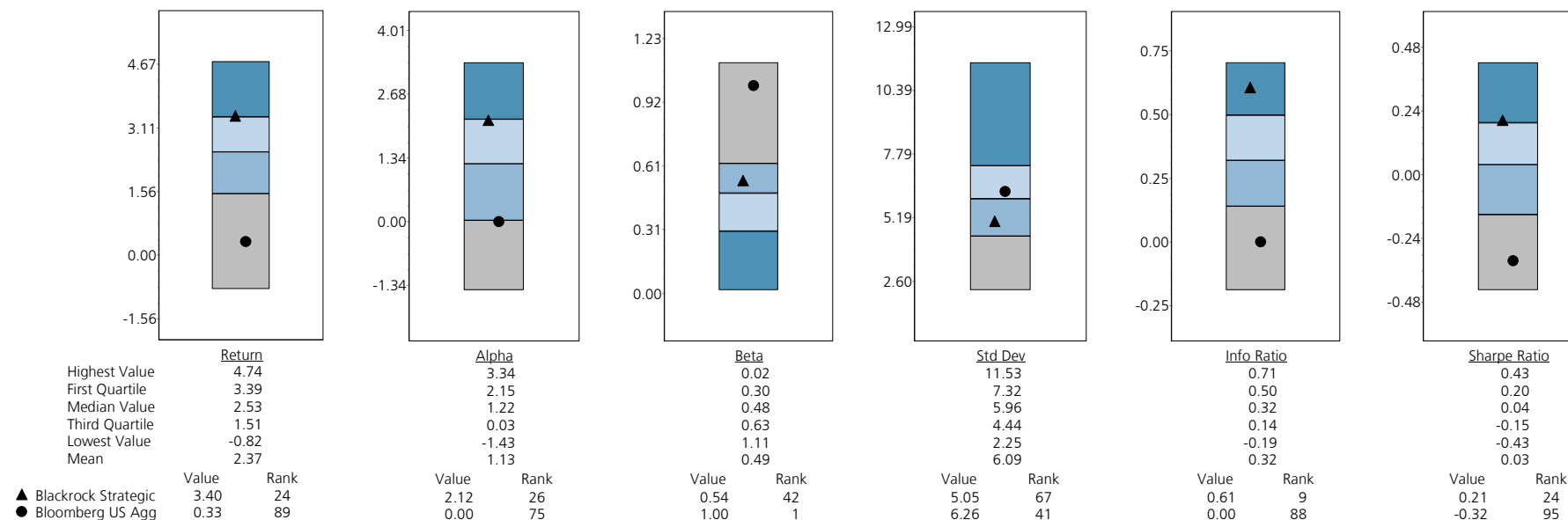
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TOTAL FUND vs Nontraditional Bond Managers September 30, 2021 Through September 30, 2024

3 Year



5 Year



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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb County Employees Retirement System
October 22, 2024

Prepared by:
Earle Dodd, Van Price, Allen Wright

Delaware Diversified 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

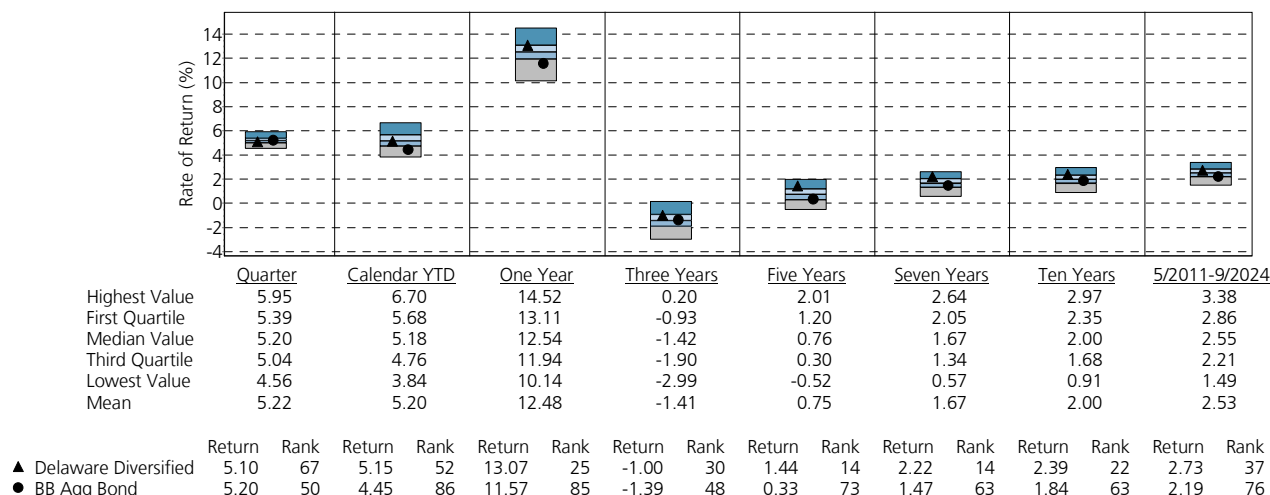
5/31/2011 - Present

100% Bloomberg US Aggregate Bond

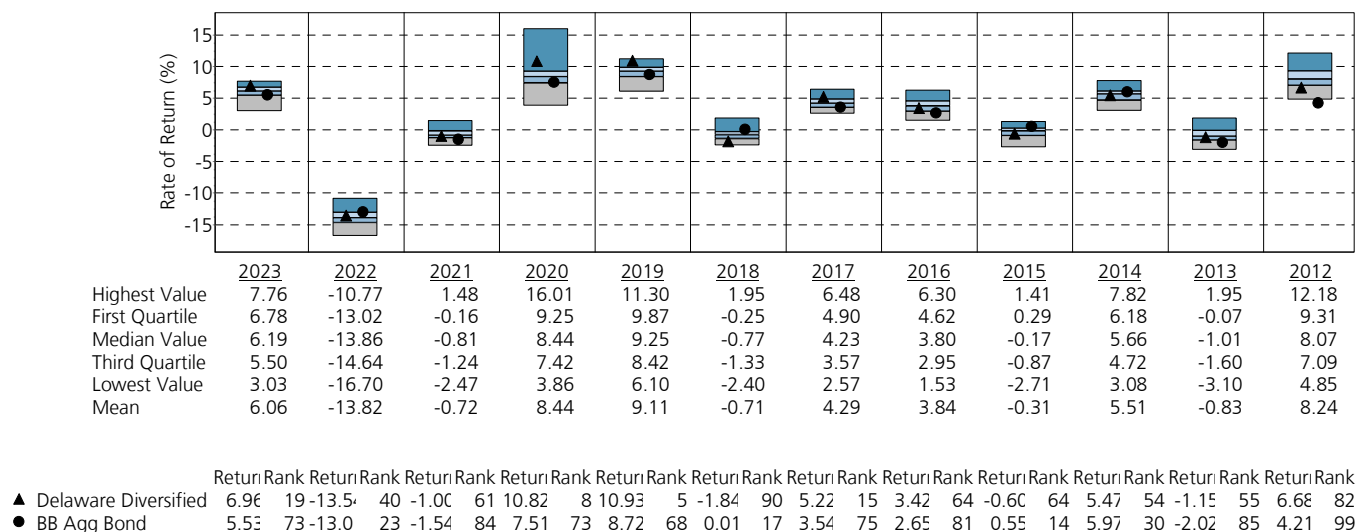
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TOTAL FUND Peer Universe Comparison versus Intermediate Core Plus Bond Managers

Trailing Periods

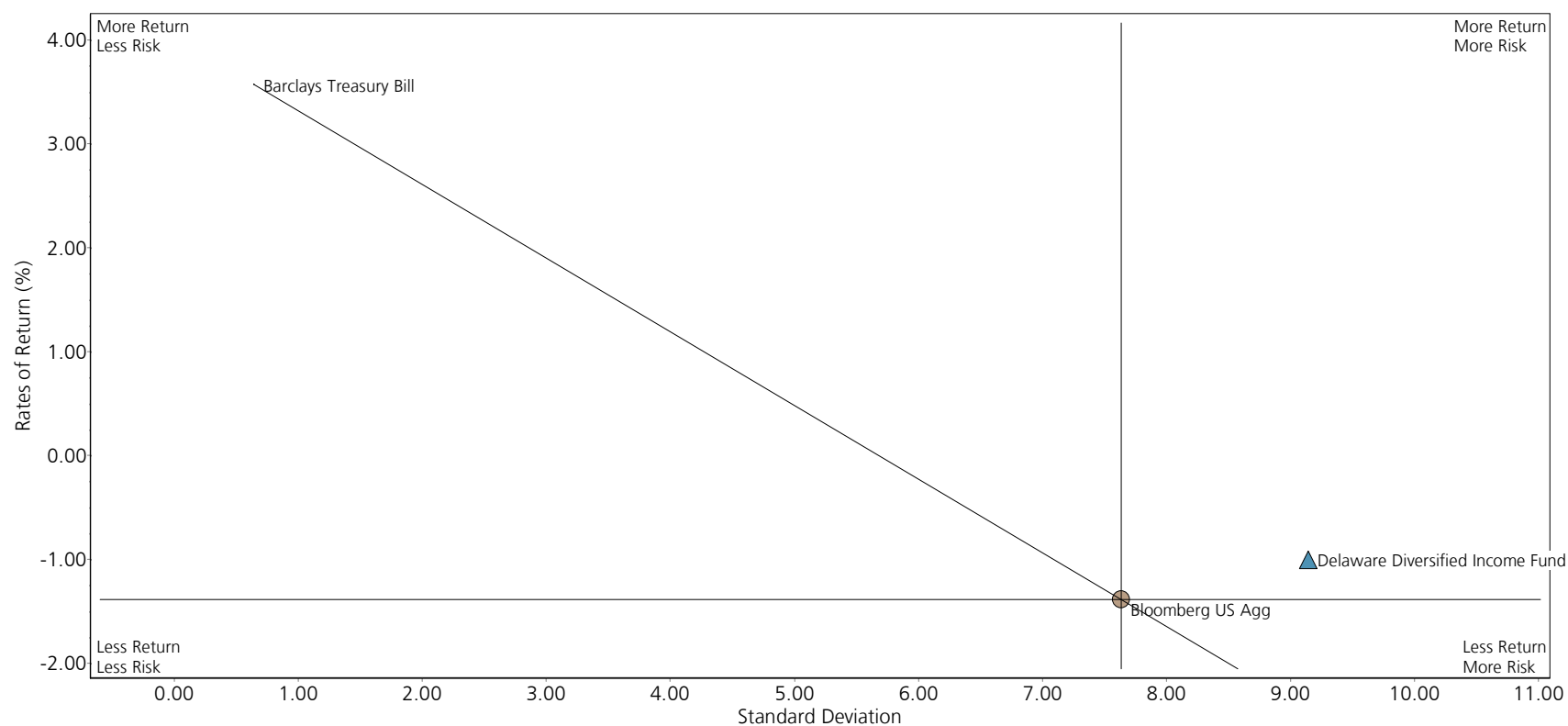


Annual Periods



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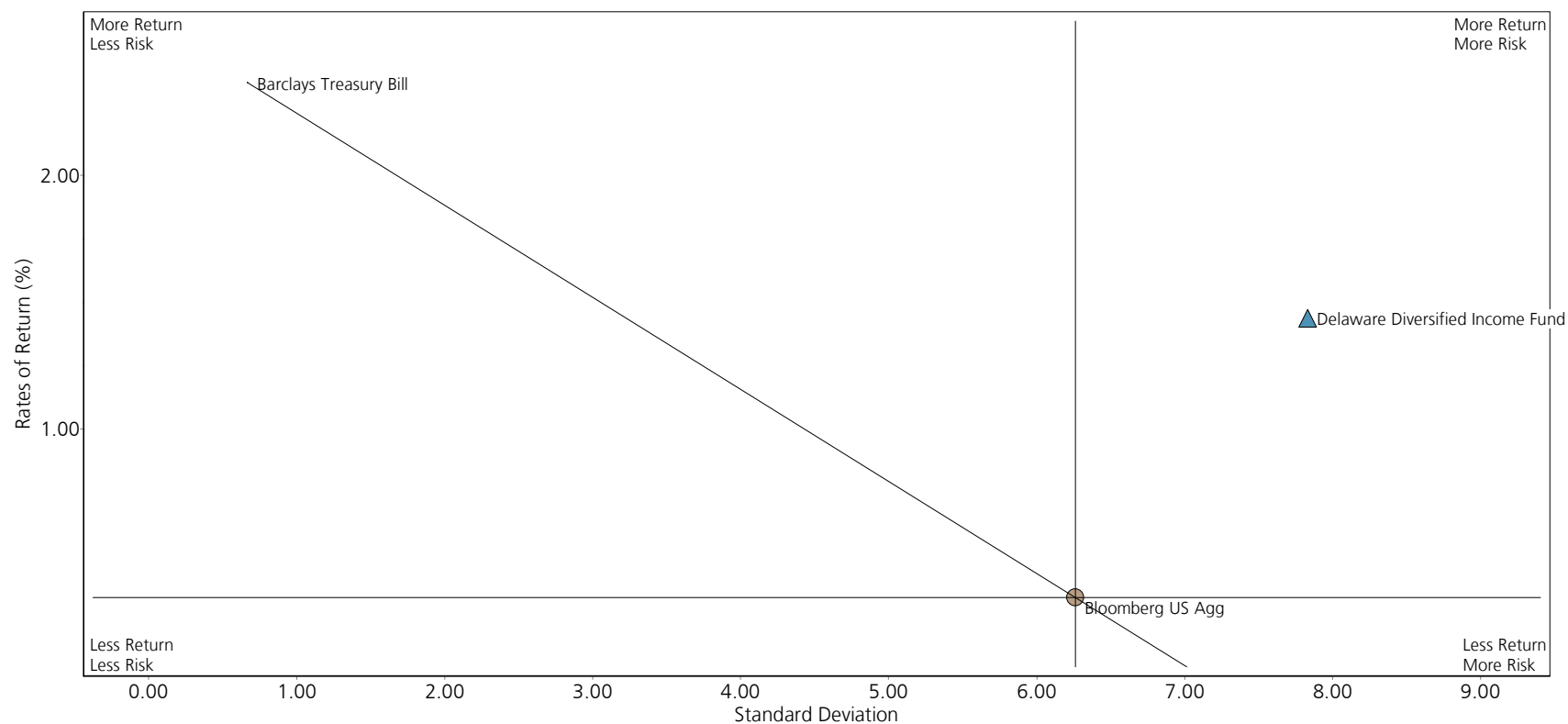
Risk vs Reward Analysis **September 30, 2021 Through September 30, 2024**



	Return	Std Dev	Alpha	Beta	R-Squared
▲ Delaware Diversified Income Fund	-1.00	9.14	1.06	1.12	86.42
● Bloomberg US Agg	-1.39	7.63	0.00	1.00	100.00

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Risk vs Reward Analysis **September 30, 2019 Through September 30, 2024**

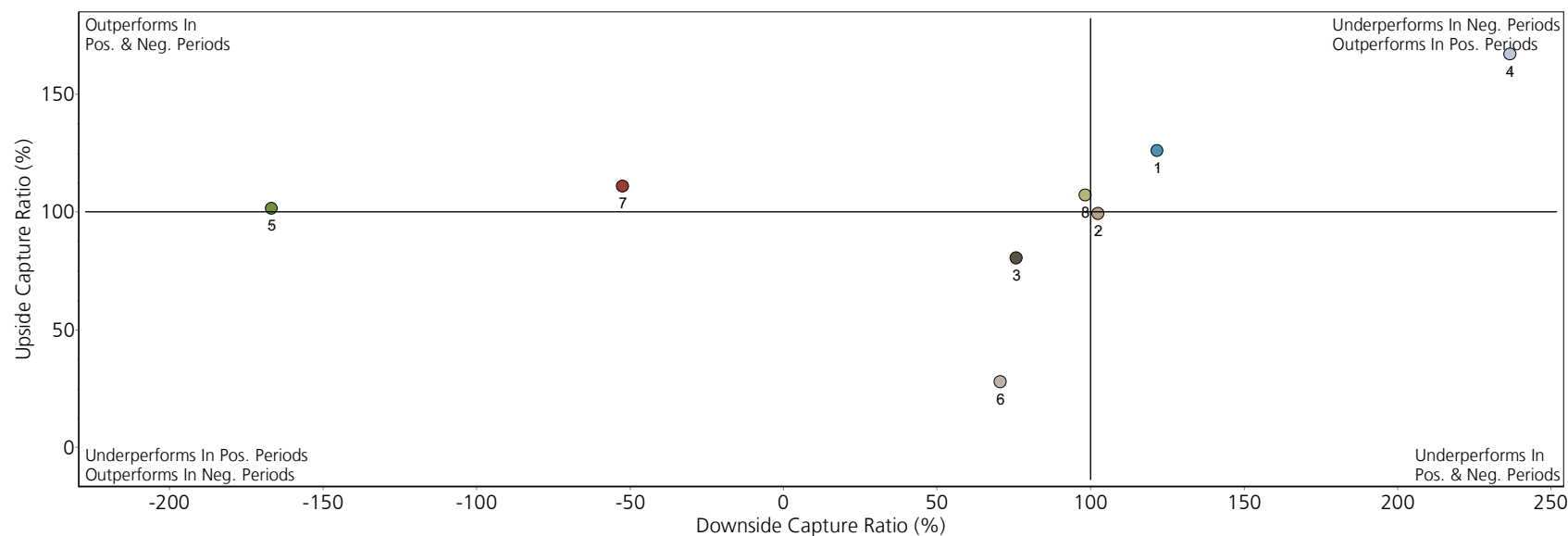


	Return	Std Dev	Alpha	Beta	R-Squared
▲ Delaware Diversified Income Fund	1.44	7.83	1.46	1.14	81.93
● Bloomberg US Agg	0.33	6.26	0.00	1.00	100.00

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Capture Ratio

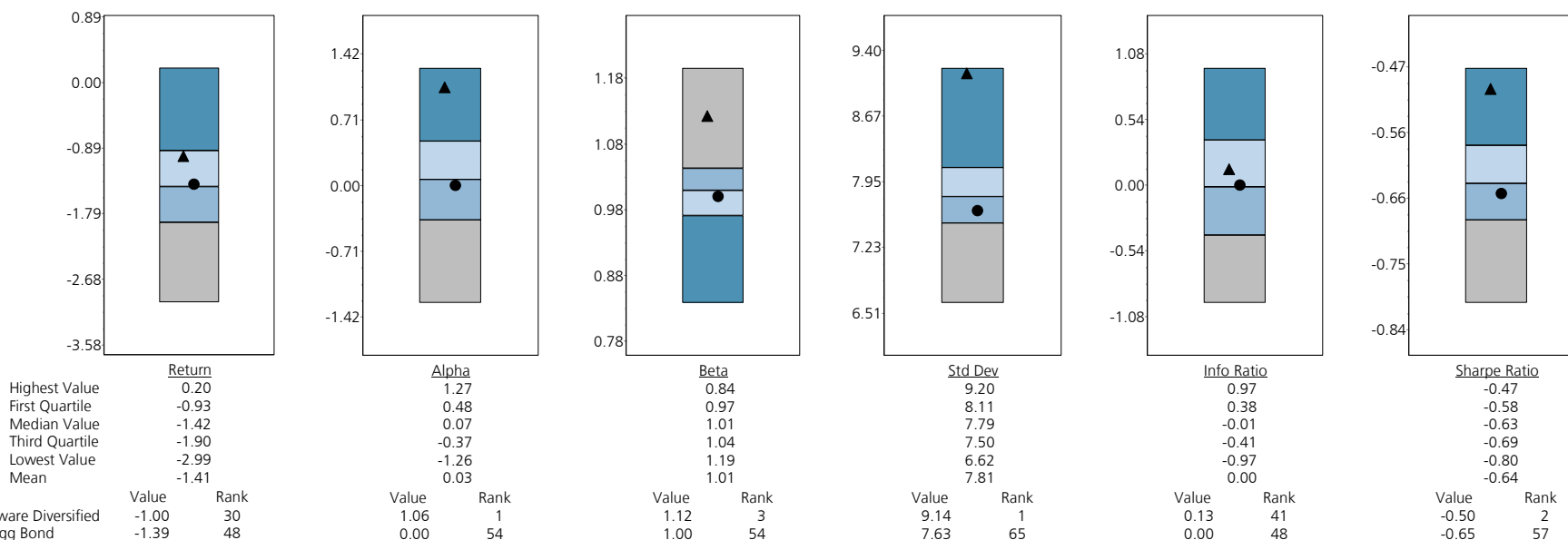
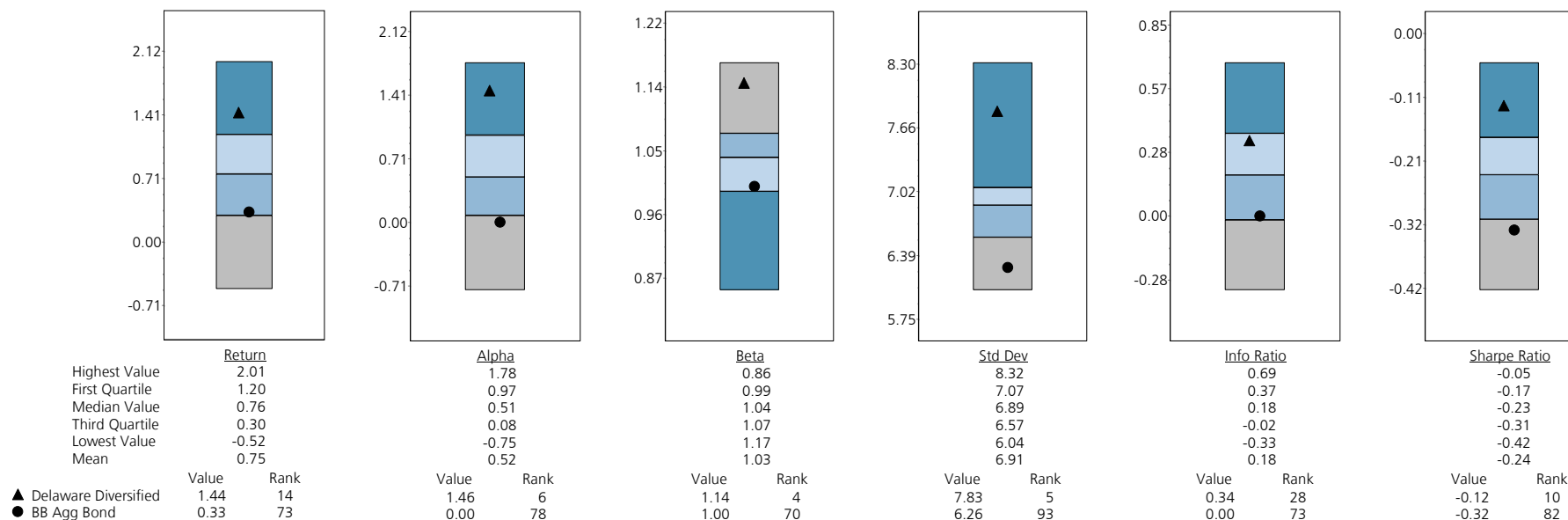
May 31, 2011 Through September 30, 2024



	1	2	3	4	5	6	7	8
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	12/2016-12/2017	5/2011-9/2024
Up Periods	5.00	3.00	5.00	8.00	8.00	6.00	8.00	91.00
Upside Capture ROR	19.41	6.85	2.63	16.00	9.63	1.25	4.80	13.45
Bloomberg US Agg	15.41	6.90	3.27	9.57	9.49	4.53	4.33	12.56
% Of Capture	125.96	99.33	80.26	167.15	101.45	27.64	110.95	107.05
Down Periods	7.00	9.00	7.00	4.00	4.00	6.00	4.00	69.00
Downside Capture ROR	-10.42	-19.08	-3.54	-4.46	1.18	-3.06	0.40	-9.87
Bloomberg US Agg	-8.56	-18.62	-4.66	-1.89	-0.71	-4.32	-0.76	-10.03
% Of Capture	121.78	102.47	75.87	236.76	-166.81	70.71	-52.43	98.40

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TOTAL FUND vs Intermediate Core Plus Bond Managers September 30, 2021 Through September 30, 2024

3 Year

5 Year


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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb County Employees Retirement System
October 22, 2024

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

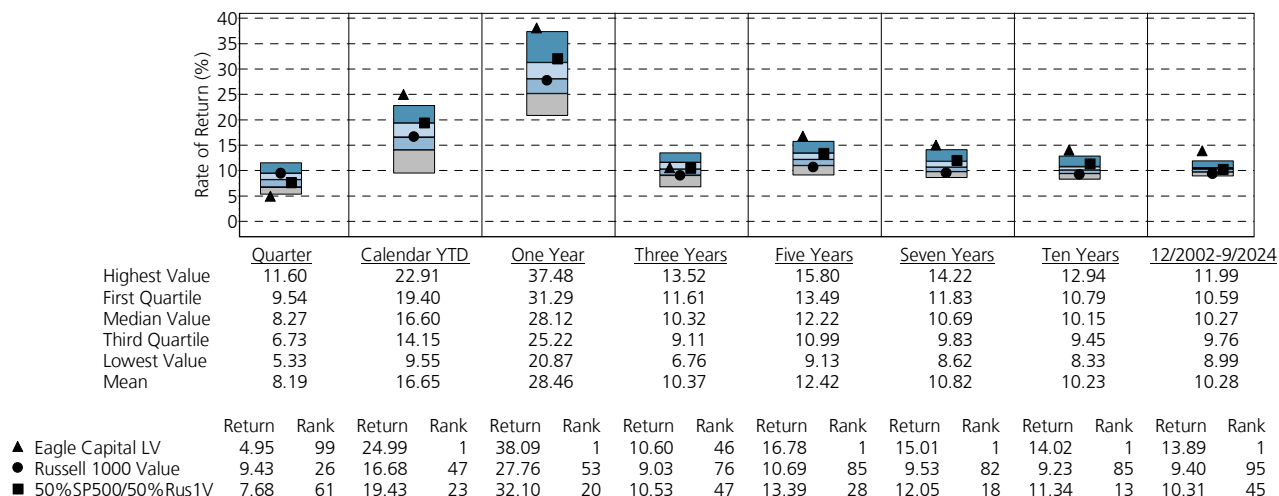
12/31/2002 - Present

100% Russell 1000 Value

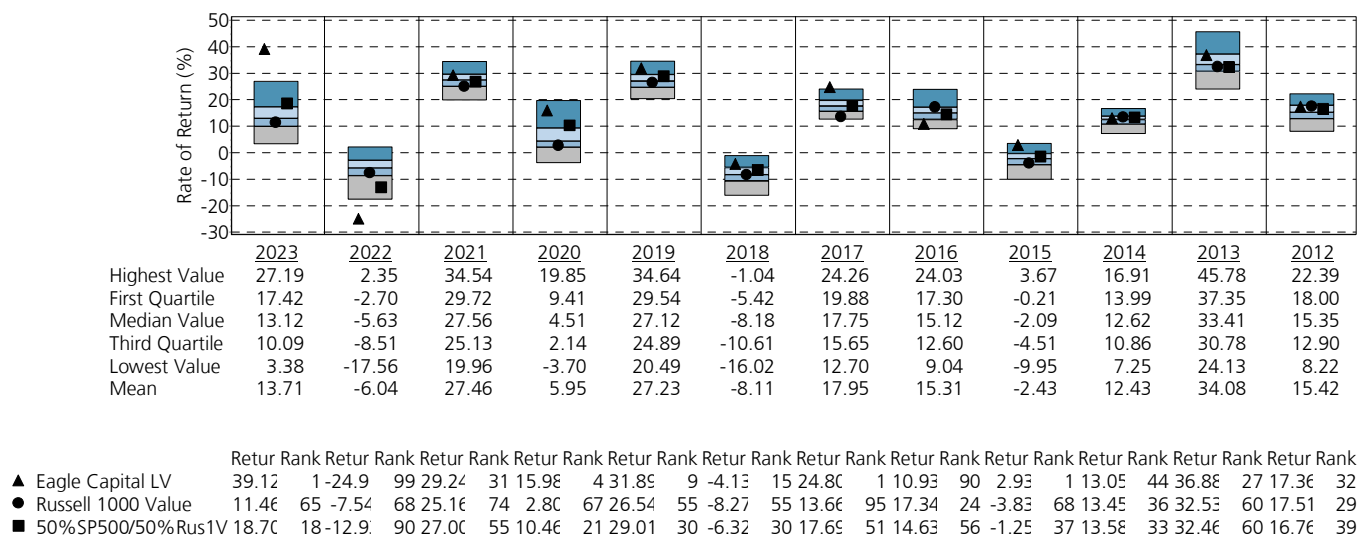
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TOTAL FUND Peer Universe Comparison versus Large Cap Value Managers

Trailing Periods



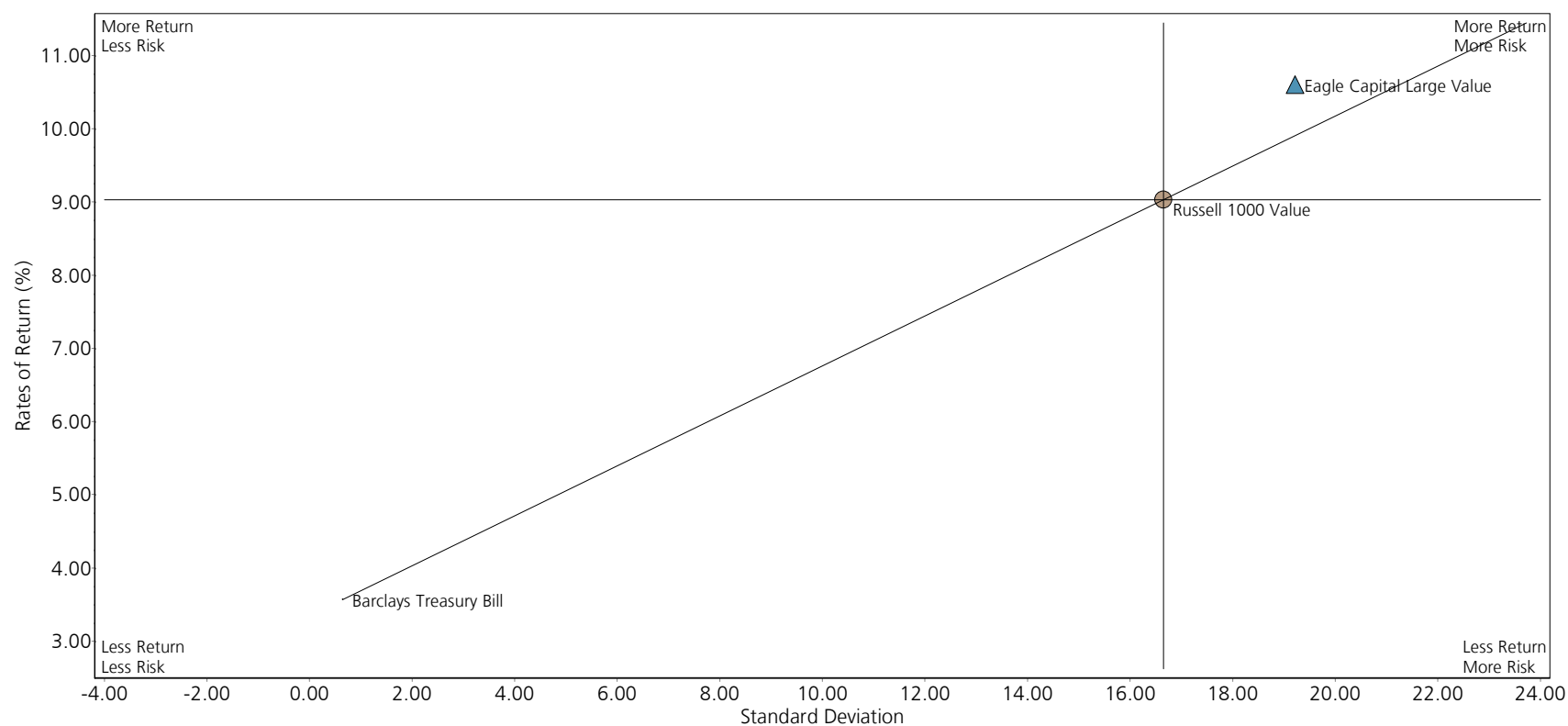
Annual Periods



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Risk vs Reward Analysis

September 30, 2021 Through September 30, 2024

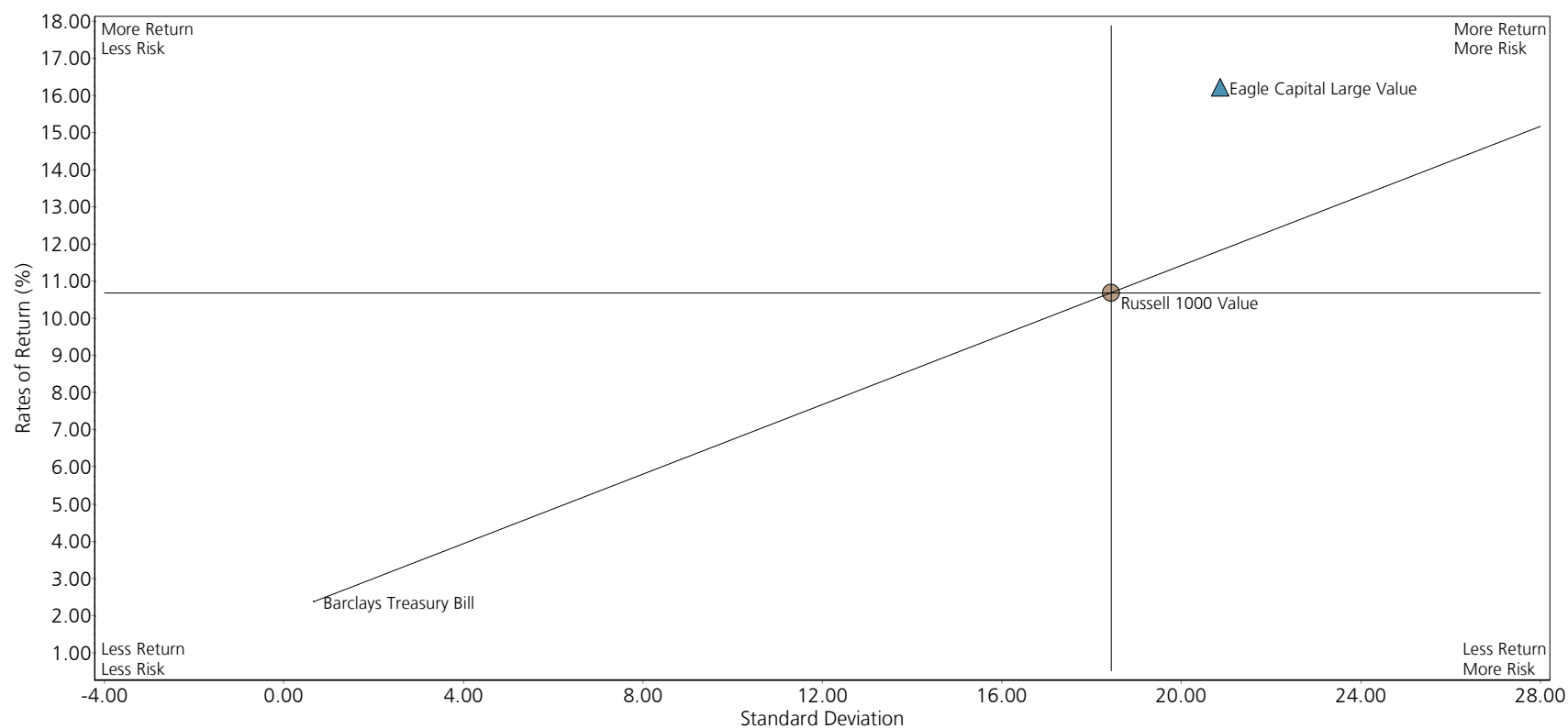


	Return	Std Dev	Alpha	Beta	R-Squared
▲ Eagle Capital Large Value	10.60	19.21	1.98	0.99	74.54
● Russell 1000 Value	9.03	16.65	0.00	1.00	100.00

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Risk vs Reward Analysis

September 30, 2019 Through September 30, 2024

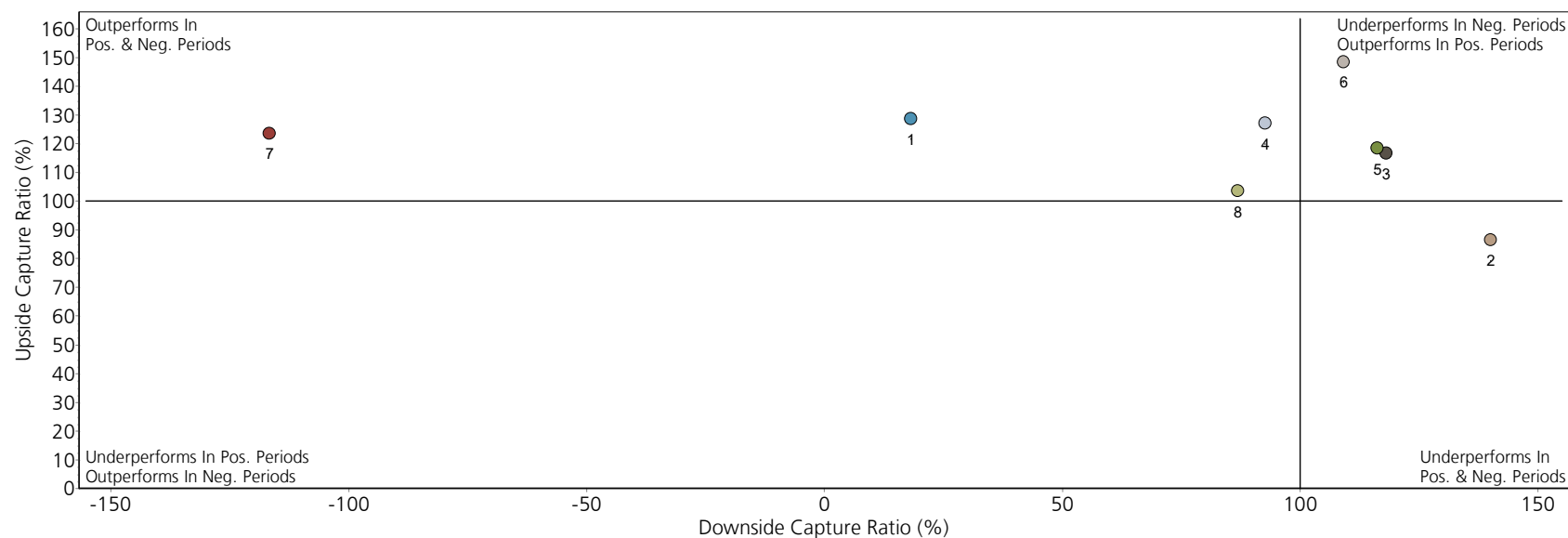


	Return	Std Dev	Alpha	Beta	R-Squared
▲ Eagle Capital Large Value	16.22	20.86	5.06	1.04	84.29
● Russell 1000 Value	10.69	18.43	0.00	1.00	100.00

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Capture Ratio

December 31, 2002 Through September 30, 2024

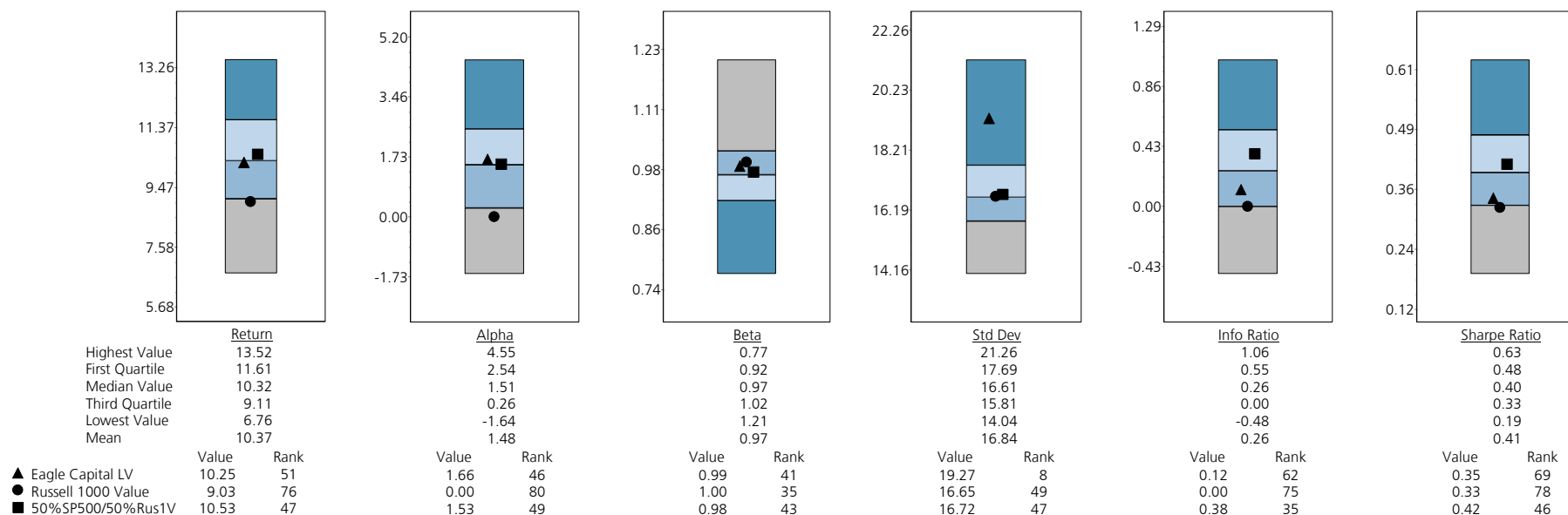


	1	2	3	4	5	6	7	8
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	12/2016-12/2017	12/2002-9/2024
Up Periods	6.00	5.00	8.00	6.00	10.00	8.00	8.00	166.00
Upside Capture ROR	43.46	26.73	43.43	59.34	46.56	21.37	20.42	49.70
Russell 1000 Value	33.78	30.93	37.22	46.72	39.33	14.40	16.52	47.99
% Of Capture	128.66	86.42	116.66	127.01	118.38	148.46	123.61	103.57
Down Periods	6.00	7.00	4.00	6.00	2.00	4.00	4.00	95.00
Downside Capture ROR	-3.02	-41.15	-10.37	-27.74	-10.67	-21.61	2.86	-30.80
Russell 1000 Value	-16.68	-29.38	-8.79	-29.94	-9.18	-19.81	-2.45	-35.47
% Of Capture	18.12	140.04	118.01	92.66	116.22	109.05	-116.75	86.83

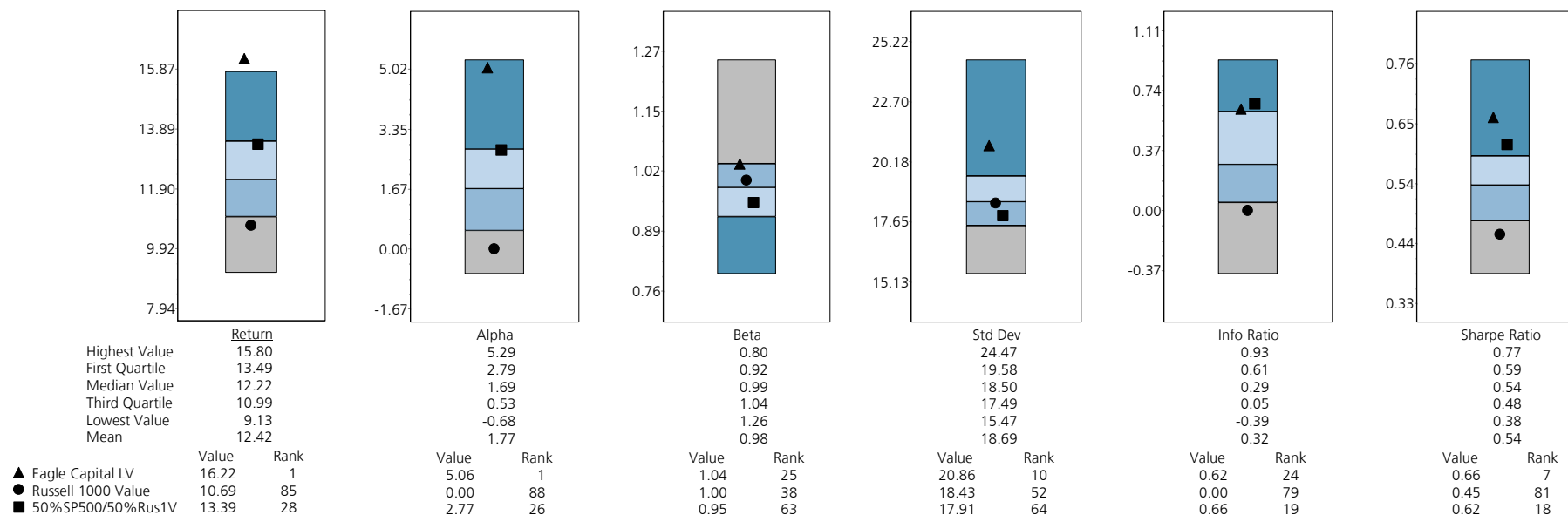
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TOTAL FUND vs Large Cap Value Managers September 30, 2021 Through September 30, 2024

3 Year



5 Year



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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb County Employees Retirement System
October 22, 2024

Prepared by:
Earle Dodd, Van Price, Allen Wright

Vanguard 500 Index

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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

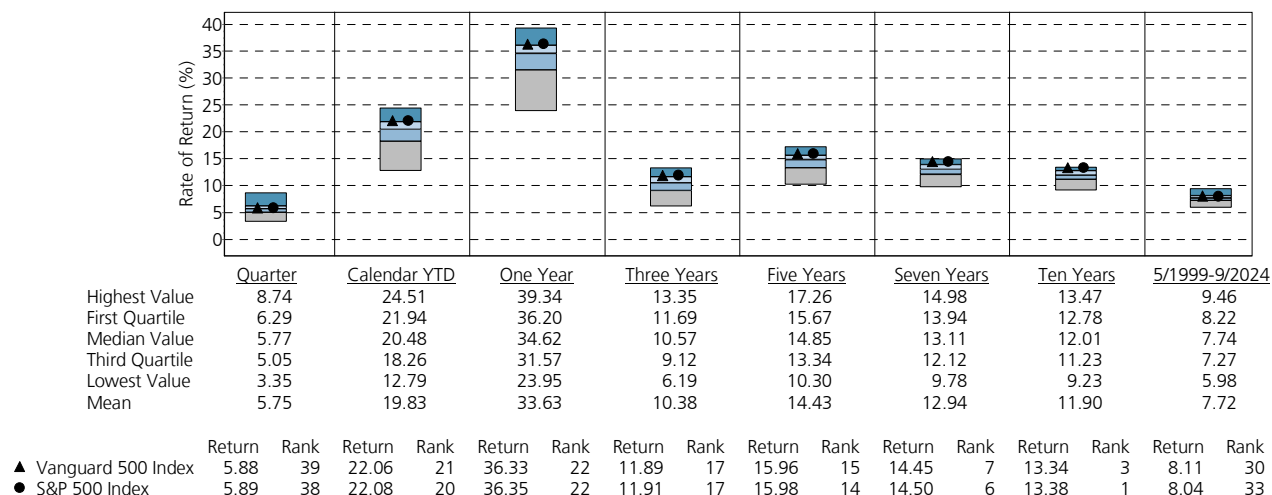
5/31/1999 - Present

100% S&P 500 Index

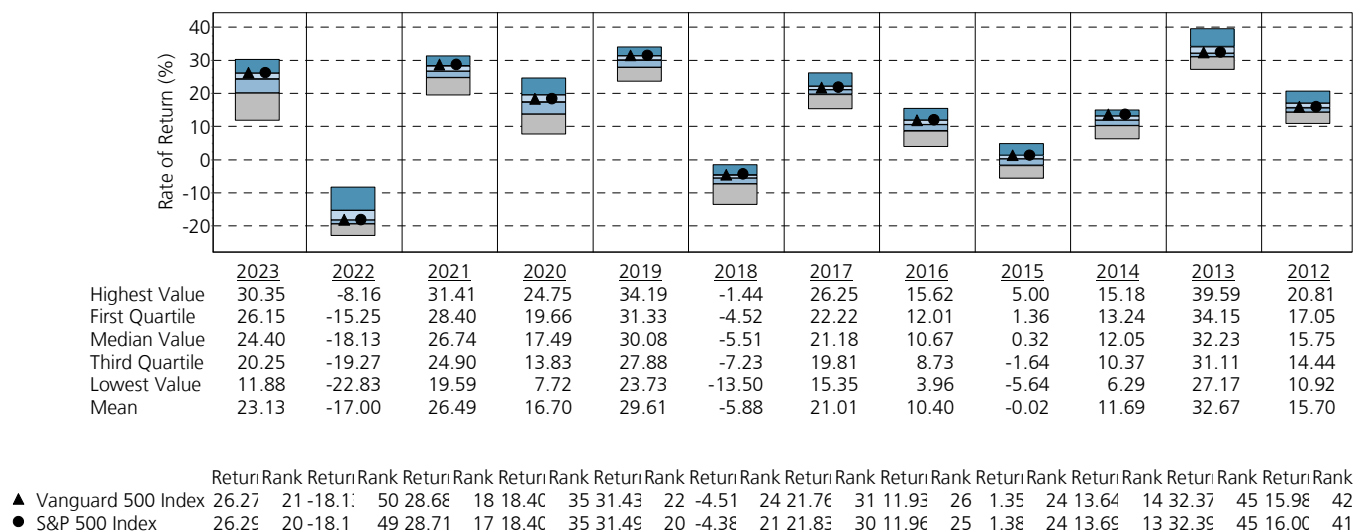
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TOTAL FUND Peer Universe Comparison versus Large Blend Managers

Trailing Periods



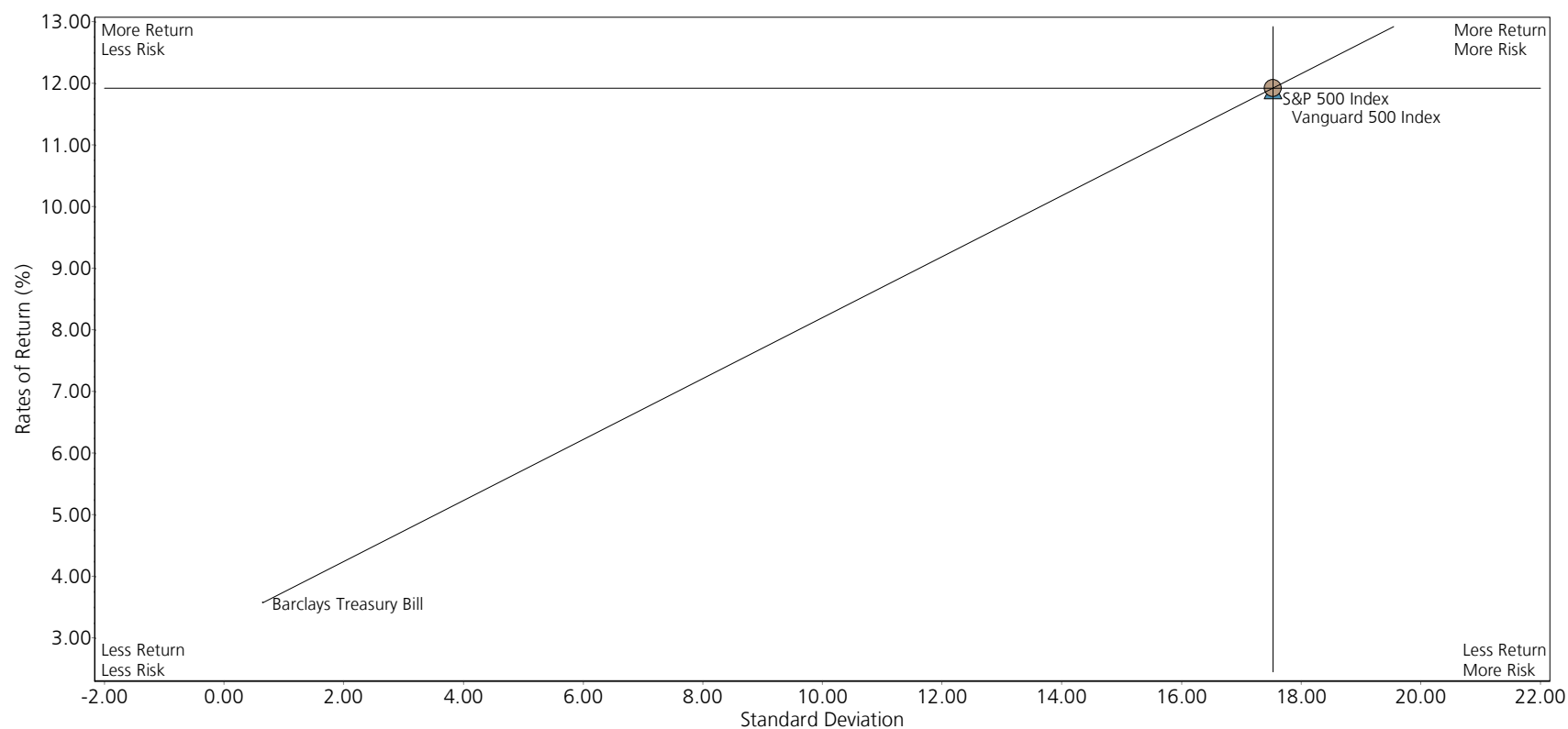
Annual Periods



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Risk vs Reward Analysis

September 30, 2021 Through September 30, 2024

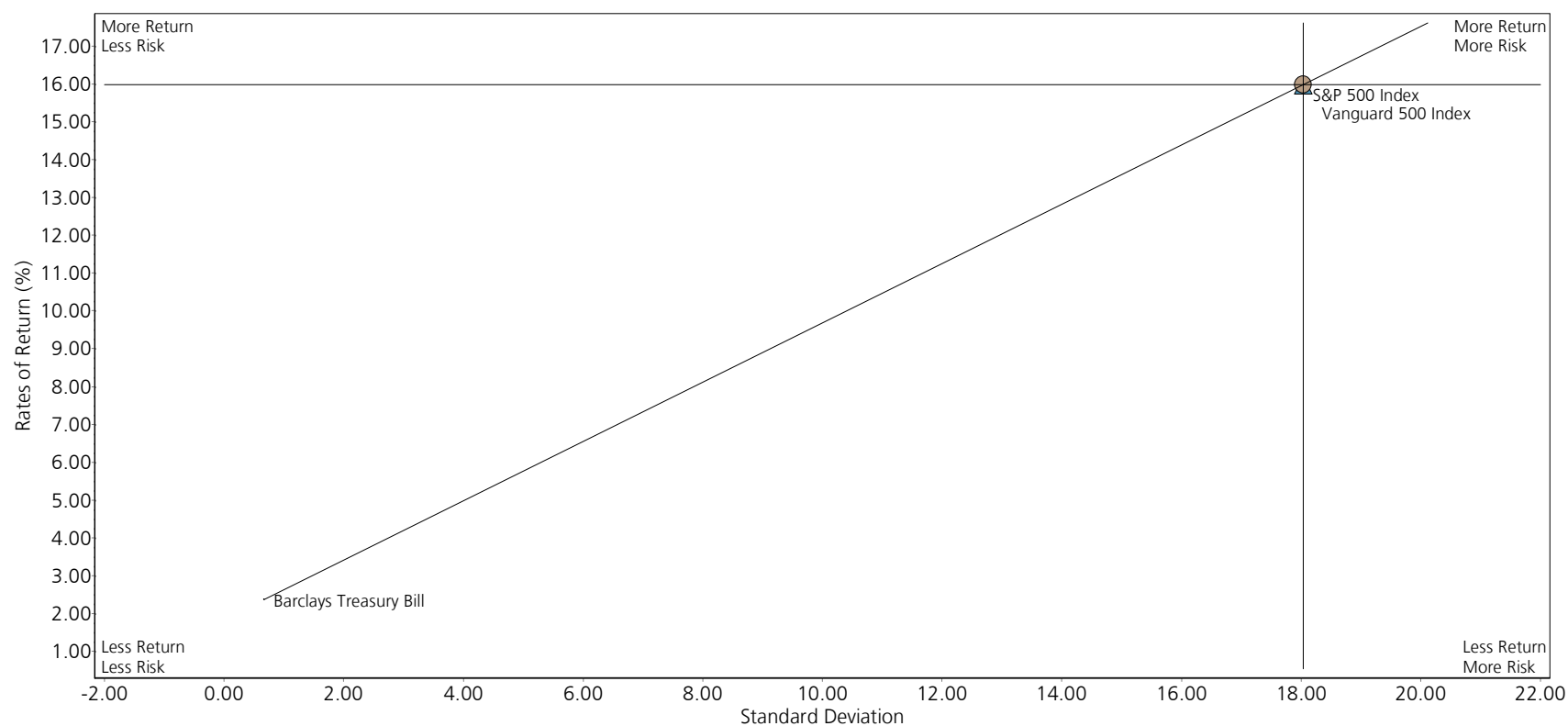


	Return	Std Dev	Alpha	Beta	R-Squared
▲ Vanguard 500 Index	11.89	17.53	-0.02	1.00	100.00
● S&P 500 Index	11.91	17.53	0.00	1.00	100.00

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Risk vs Reward Analysis

September 30, 2019 Through September 30, 2024

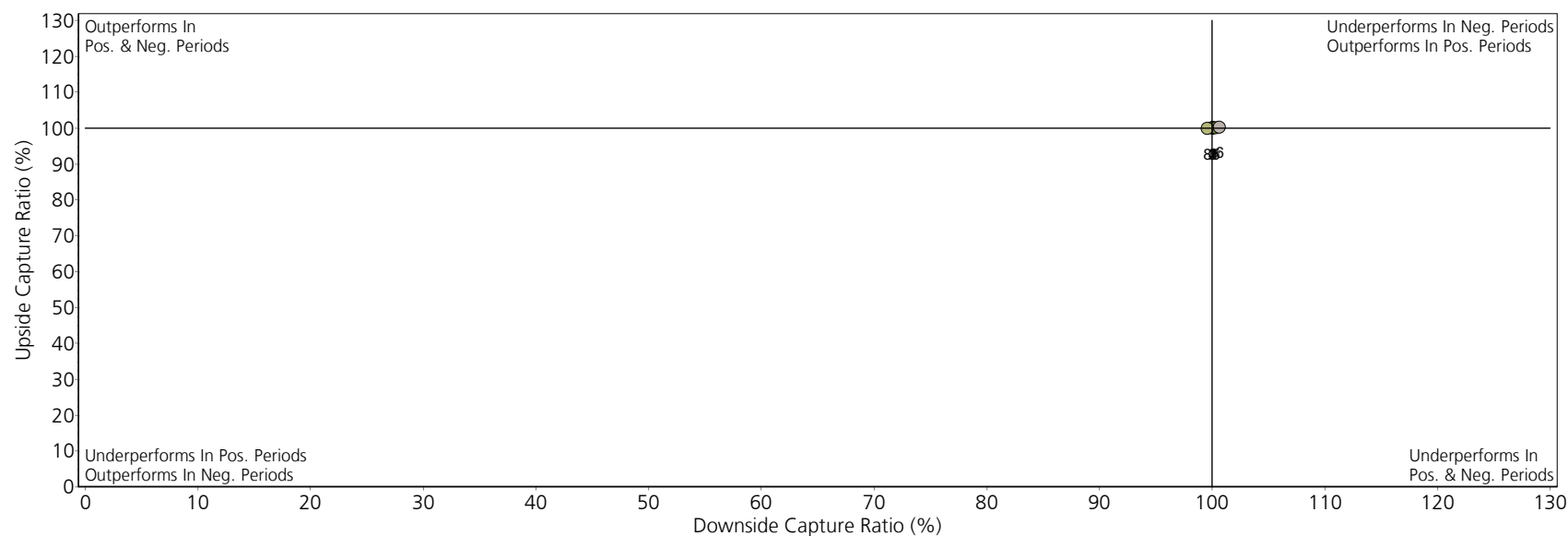


	Return	Std Dev	Alpha	Beta	R-Squared
▲ Vanguard 500 Index	15.96	18.04	-0.02	1.00	100.00
● S&P 500 Index	15.98	18.04	0.00	1.00	100.00

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Capture Ratio

May 31, 1999 Through September 30, 2024

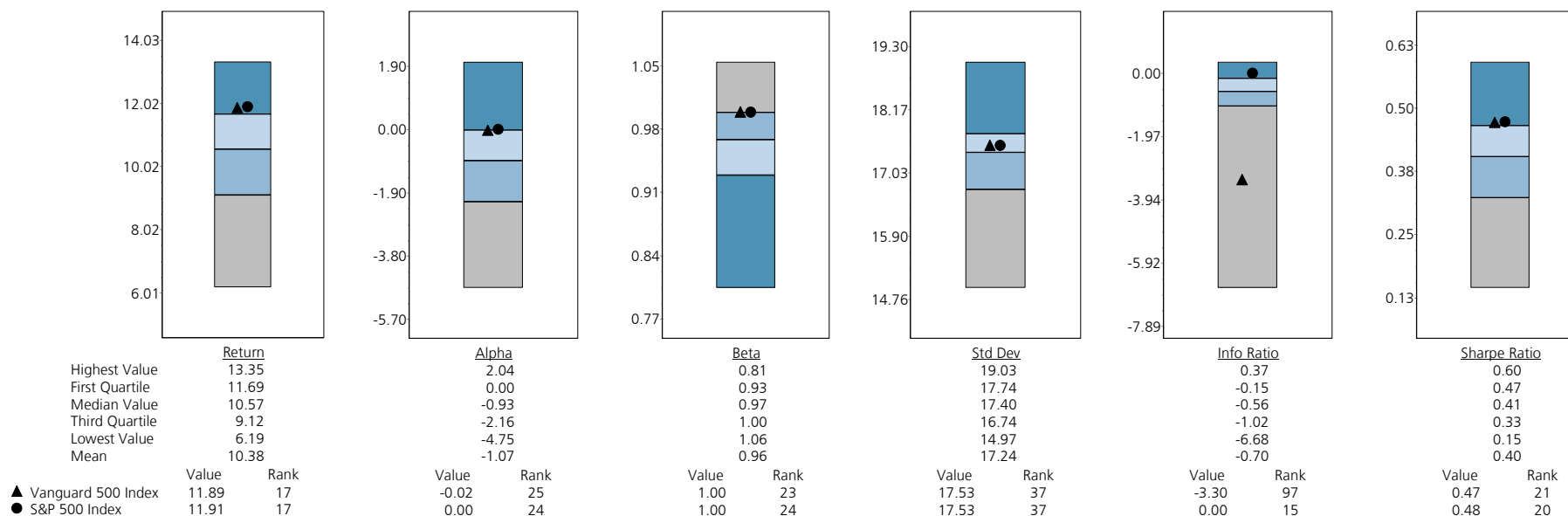


	1	2	3	4	5	6	7	8
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	12/2016-12/2017	5/1999-9/2024
Up Periods	8.00	5.00	9.00	7.00	10.00	8.00	12.00	197.00
Upside Capture ROR	41.07	29.53	37.29	57.26	42.65	20.24	21.76	46.77
S&P 500 Index	41.09	29.53	37.31	57.26	42.67	20.19	21.83	46.81
% Of Capture	99.95	100.00	99.95	100.01	99.95	100.24	99.69	99.90
Down Periods	4.00	7.00	3.00	5.00	2.00	4.00	0.00	107.00
Downside Capture ROR	-10.50	-36.79	-6.27	-24.71	-7.86	-20.58	N/A	-38.42
S&P 500 Index	-10.49	-36.78	-6.27	-24.71	-7.84	-20.45	N/A	-38.57
% Of Capture	100.02	100.04	100.09	100.02	100.34	100.65	N/A	99.61

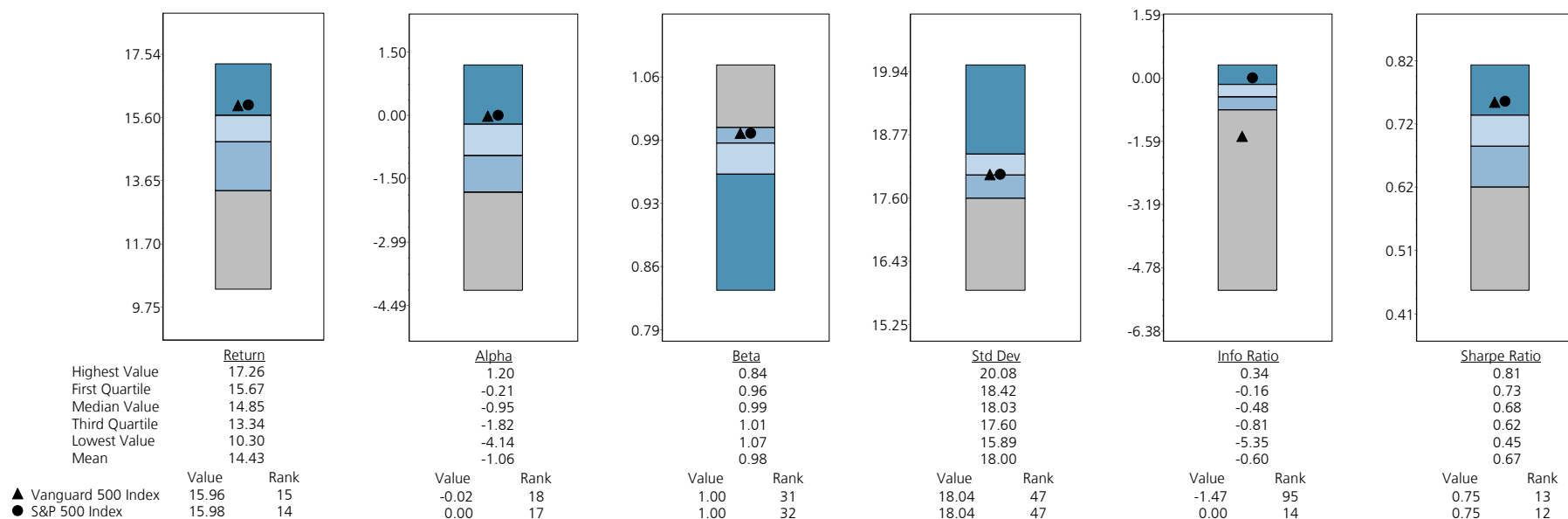
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TOTAL FUND vs Large Blend Managers September 30, 2021 Through September 30, 2024

3 Year



5 Year



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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb County Employees Retirement System
October 22, 2024

Prepared by:
Earle Dodd, Van Price, Allen Wright

TCW Large Cap Growth

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Performance Analysis

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TOTAL FUND BENCHMARK

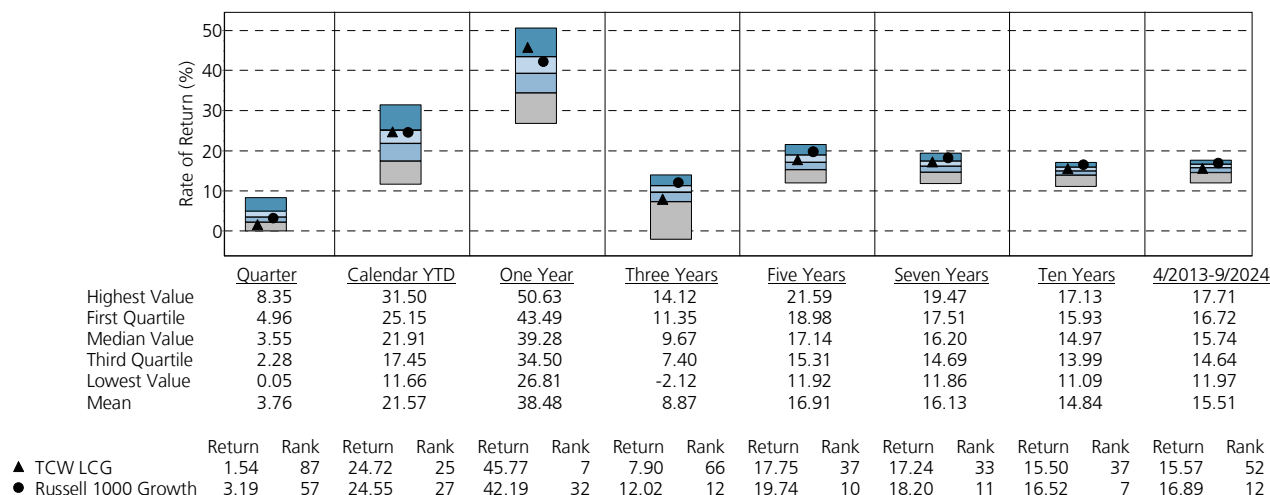
4/30/2013 - Present

100% Russell 1000 Growth

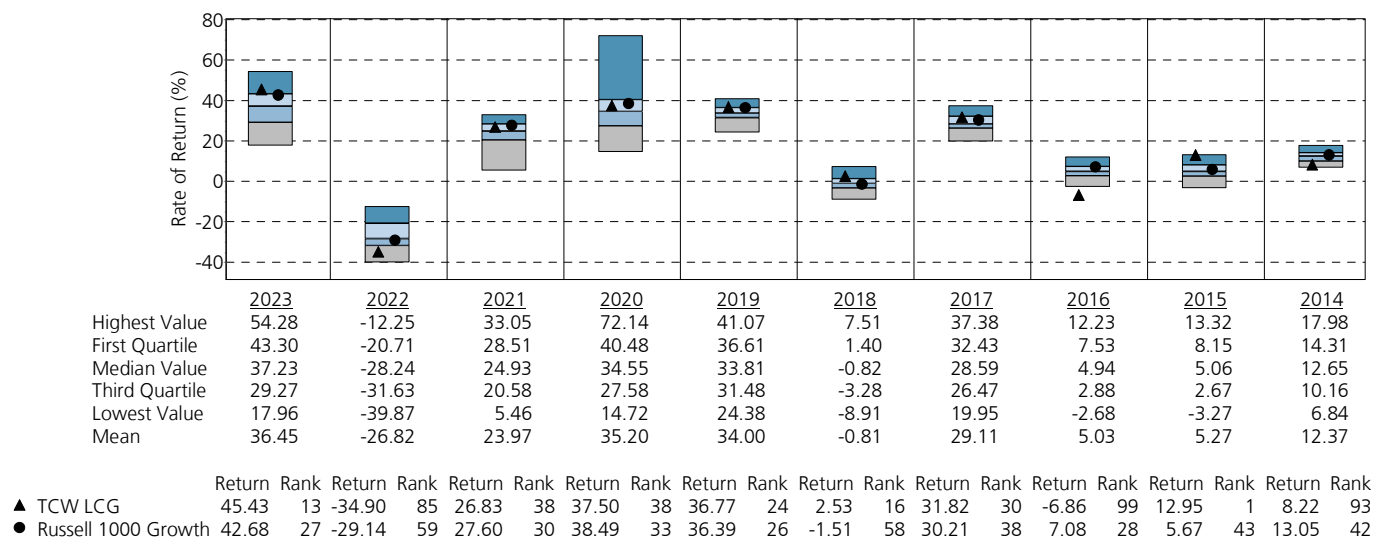
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TOTAL FUND Peer Universe Comparison versus Large Cap Growth Managers

Trailing Periods



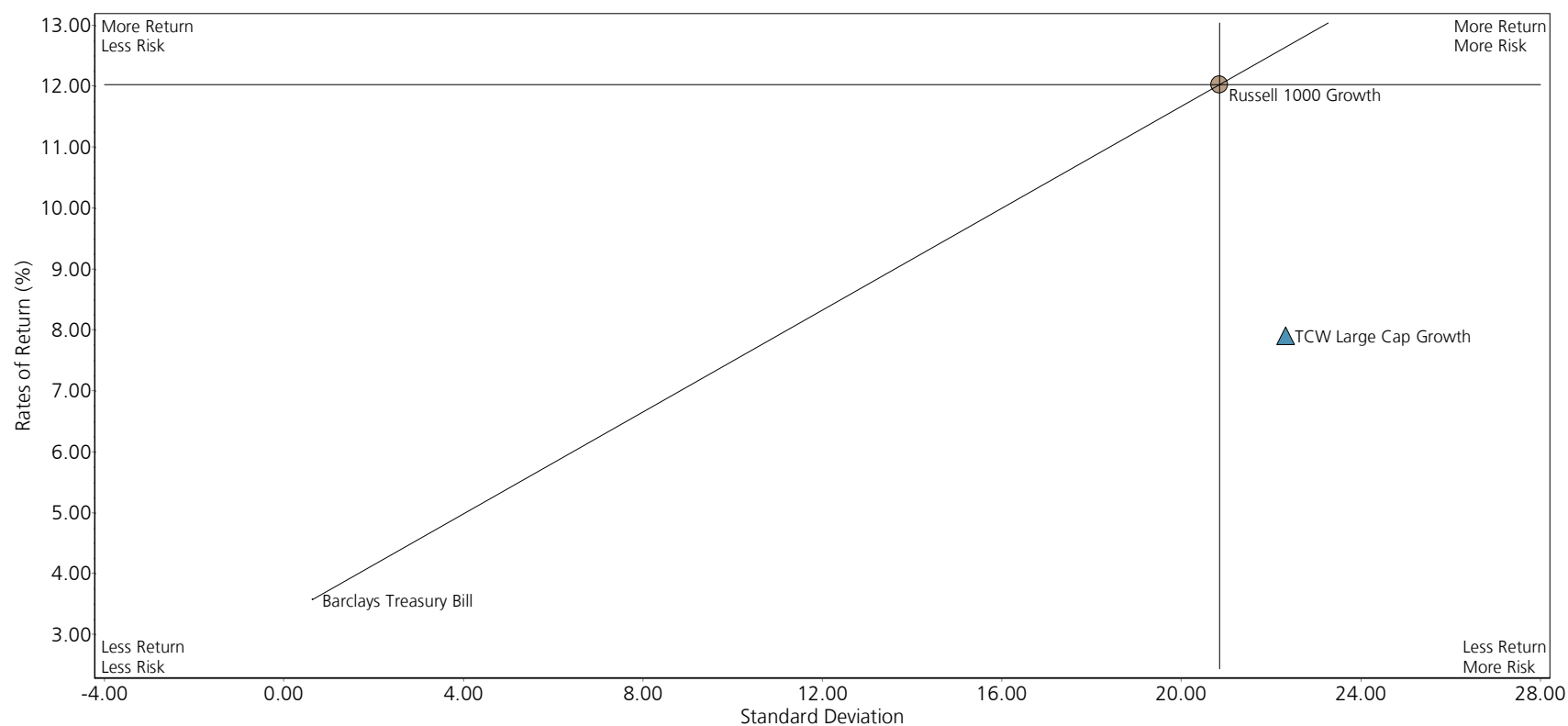
Annual Periods



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Risk vs Reward Analysis

September 30, 2021 Through September 30, 2024

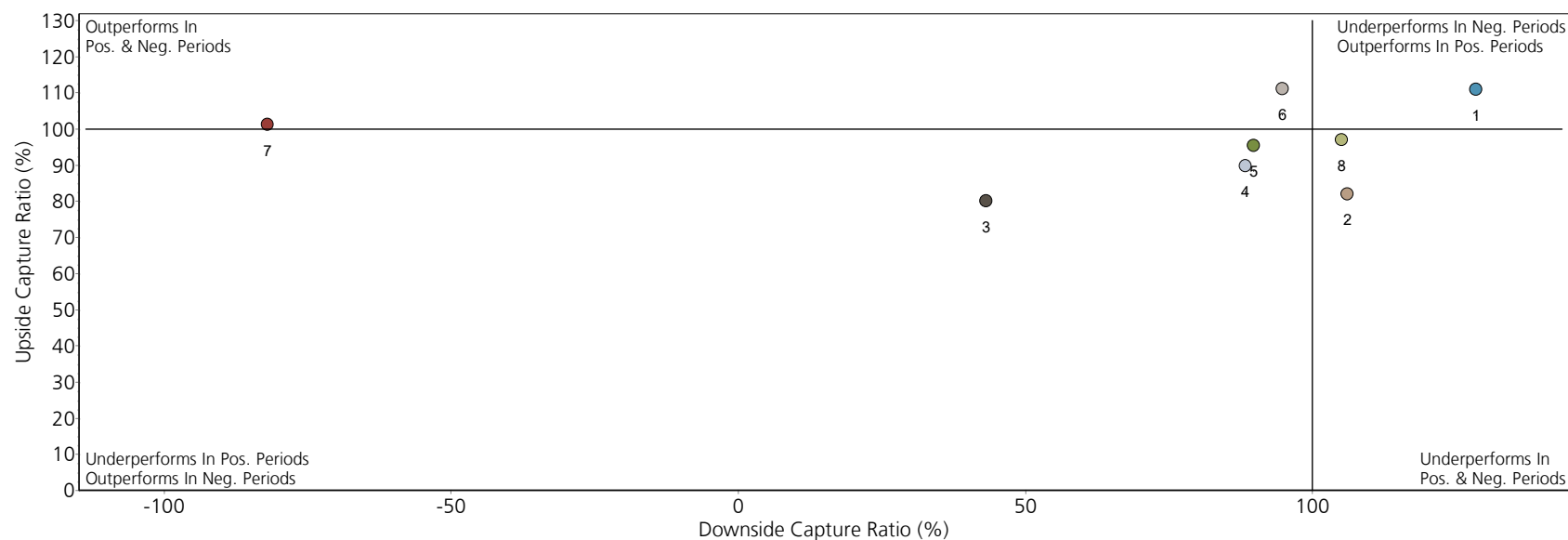


	Return	Std Dev	Alpha	Beta	R-Squared
▲ TCW Large Cap Growth	7.90	22.32	-3.92	1.05	95.81
● Russell 1000 Growth	12.02	20.85	0.00	1.00	100.00

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Capture Ratio

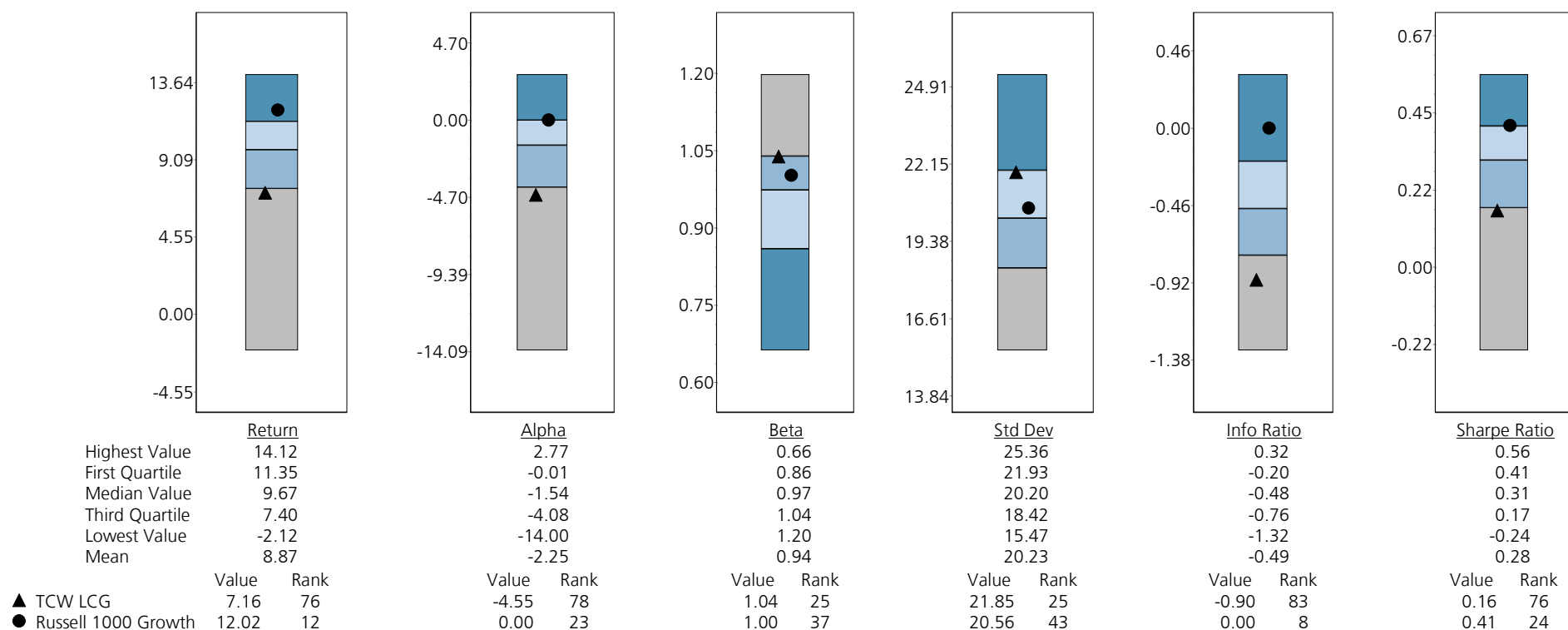
April 30, 2013 Through September 30, 2024



	1	2	3	4	5	6	7	8
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	12/2016-12/2017	4/2013-9/2024
Up Periods	8.00	4.00	8.00	8.00	10.00	8.00	11.00	89.00
Upside Capture ROR	62.42	23.62	30.52	70.98	44.60	27.71	30.94	59.37
Russell 1000 Growth	56.31	28.80	38.12	79.05	46.71	24.95	30.56	61.24
% Of Capture	110.86	82.01	80.08	89.80	95.49	111.07	101.25	96.94
Down Periods	4.00	8.00	4.00	4.00	2.00	4.00	1.00	48.00
Downside Capture ROR	-11.20	-47.69	-3.29	-20.00	-6.31	-20.07	0.22	-37.41
Russell 1000 Growth	-8.72	-44.98	-7.62	-22.65	-7.03	-21.18	-0.26	-35.62
% Of Capture	128.45	106.03	43.14	88.29	89.73	94.76	-82.04	105.03

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TOTAL FUND vs Large Cap Growth Managers
September 30, 2021 Through September 30, 2024



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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb County Employees Retirement System
October 22, 2024

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

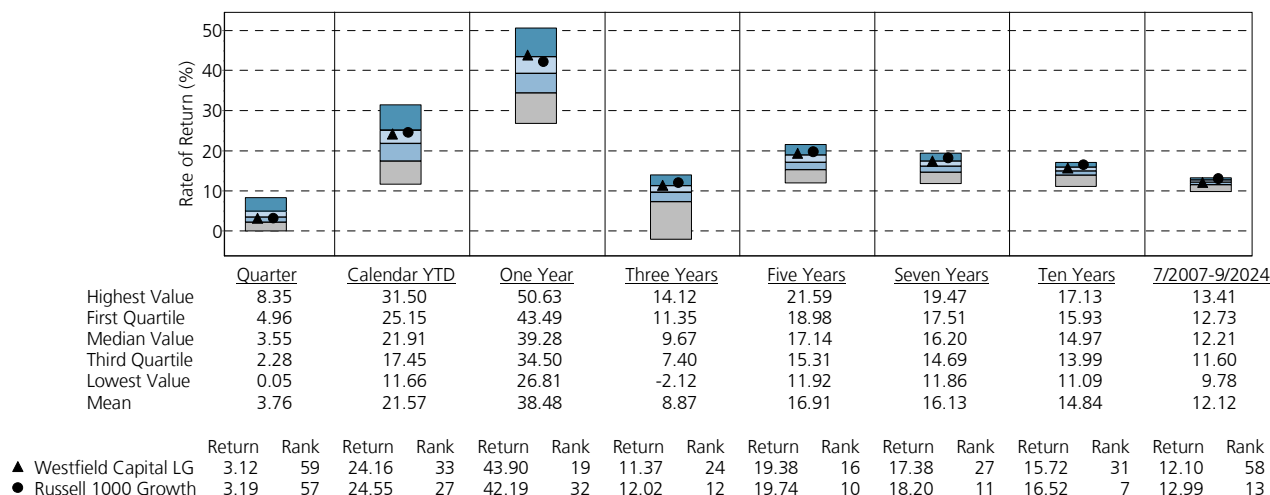
7/31/2007 - Present

100% Russell 1000 Growth

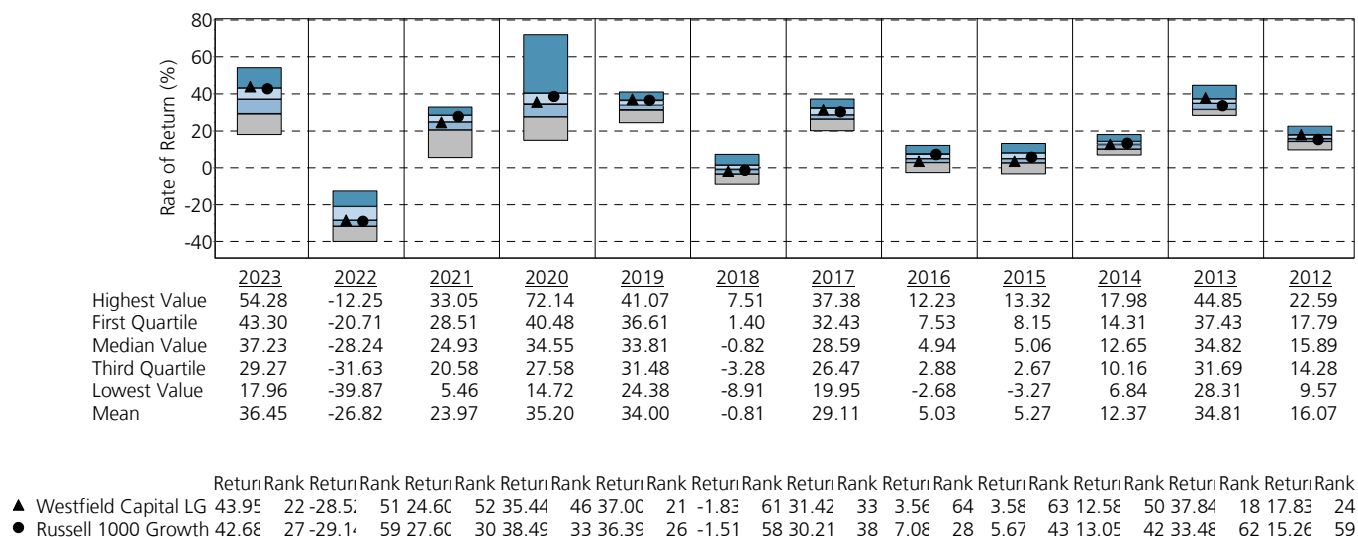
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TOTAL FUND Peer Universe Comparison versus Large Cap Growth Managers

Trailing Periods



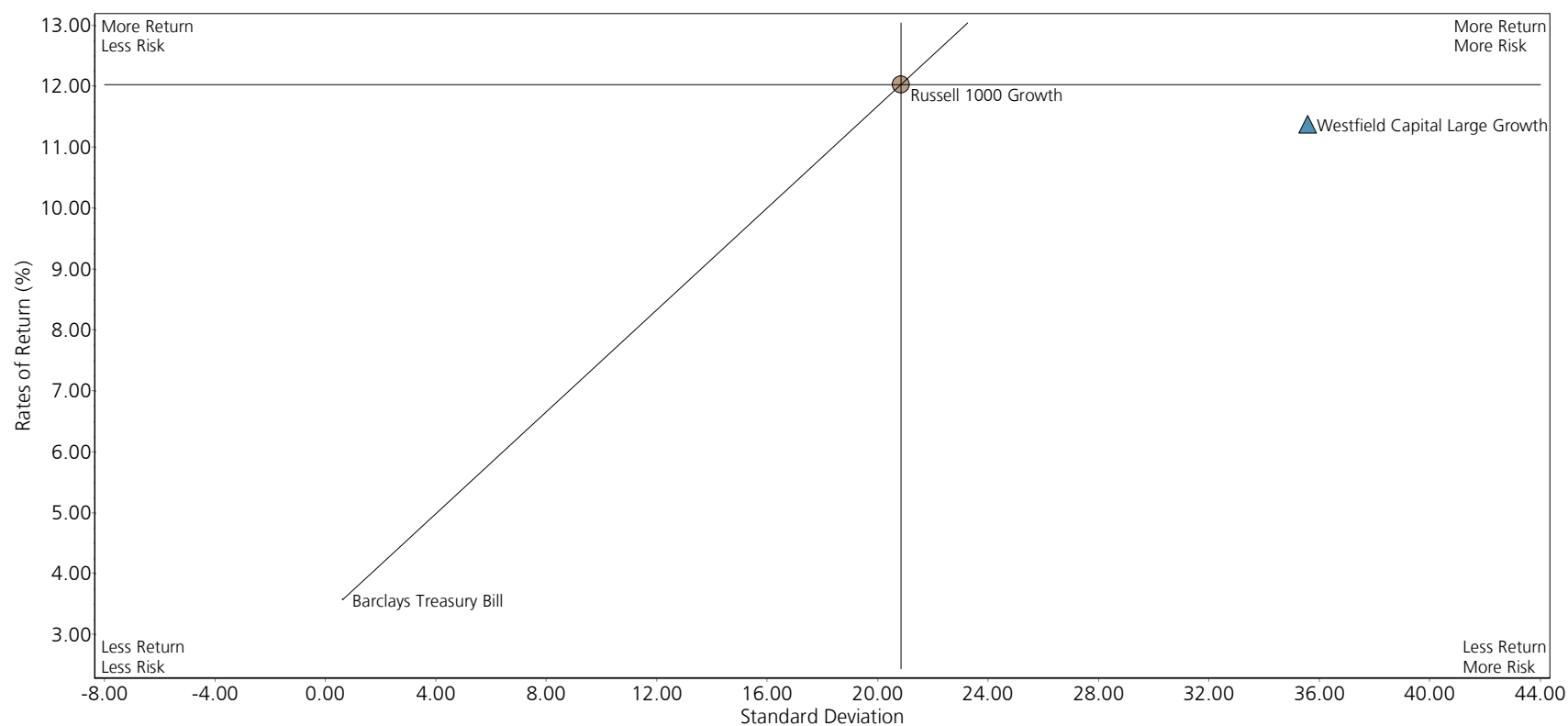
Annual Periods



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Risk vs Reward Analysis

September 30, 2021 Through September 30, 2024

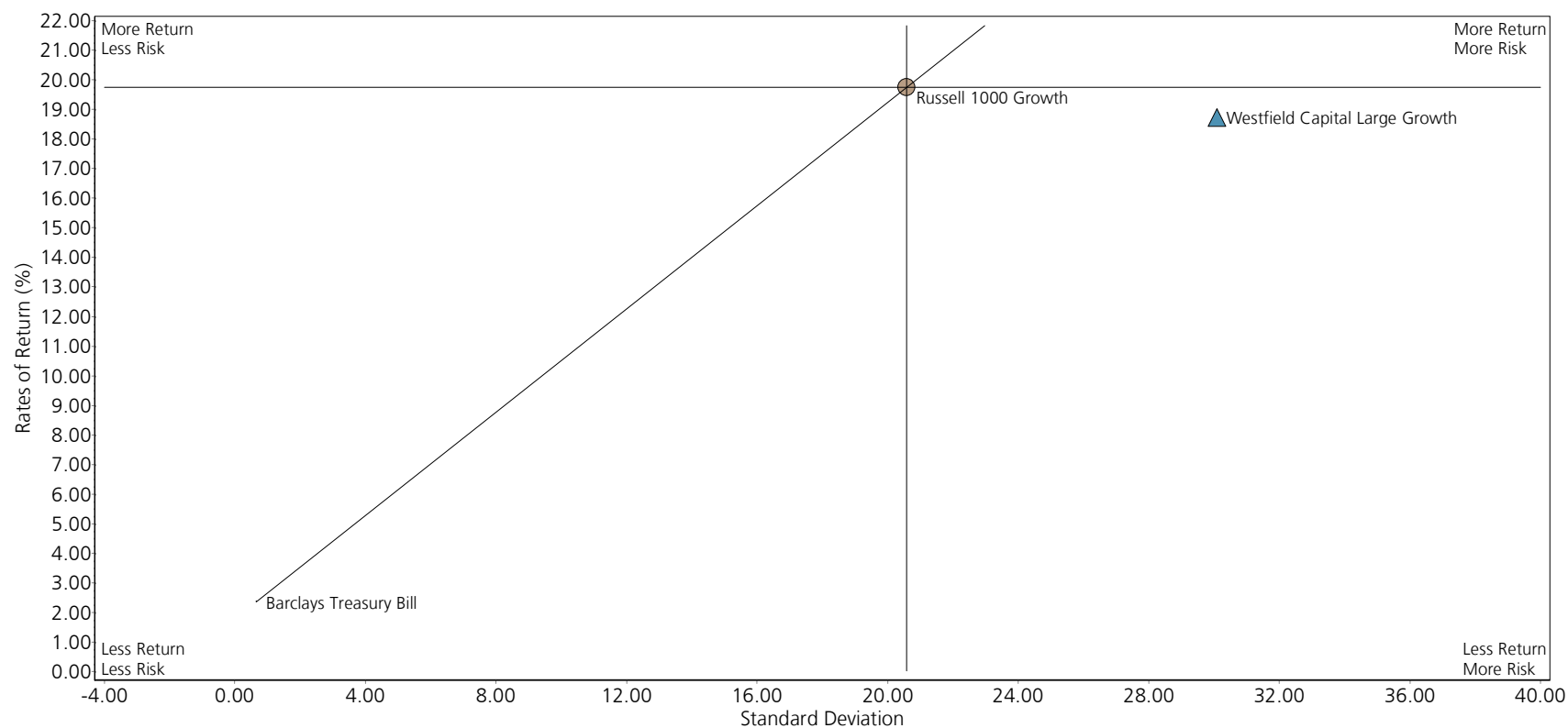


	Return	Std Dev	Alpha	Beta	R-Squared
▲ Westfield Capital Large Growth	11.37	35.56	0.26	1.26	54.29
● Russell 1000 Growth	12.02	20.85	0.00	1.00	100.00

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Risk vs Reward Analysis

September 30, 2019 Through September 30, 2024

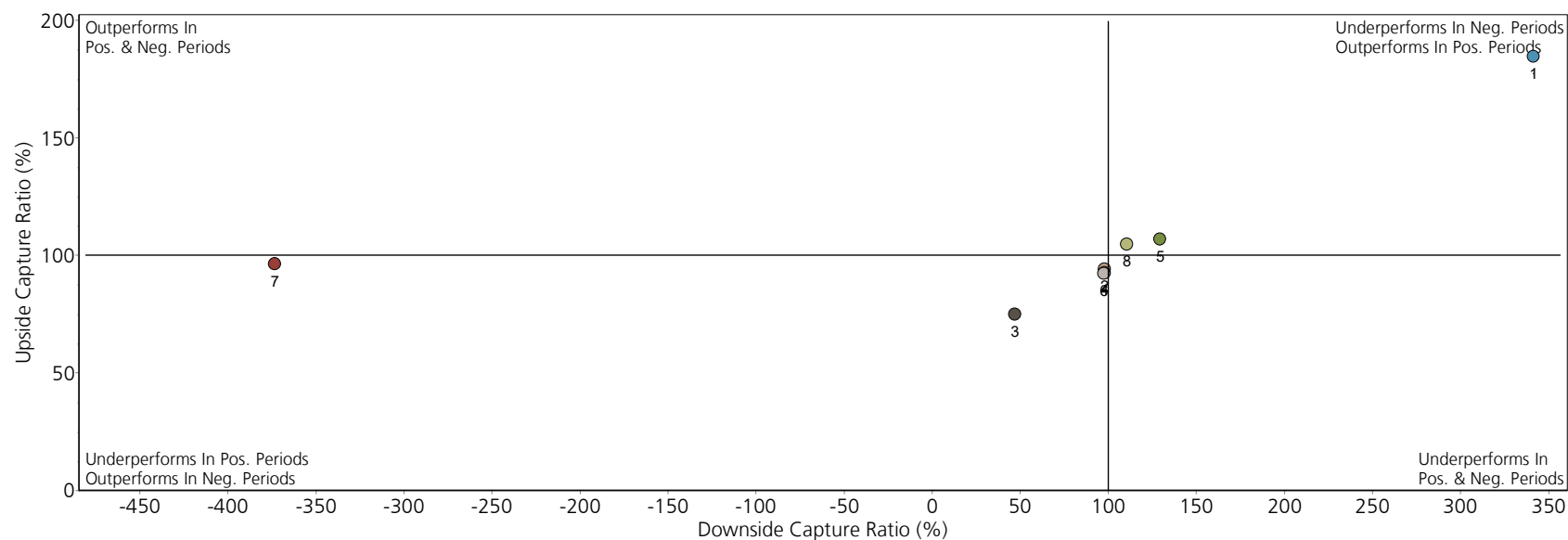


	Return	Std Dev	Alpha	Beta	R-Squared
▲ Westfield Capital Large Growth	18.73	30.10	-1.21	1.13	60.25
● Russell 1000 Growth	19.74	20.58	0.00	1.00	100.00

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Capture Ratio

July 31, 2007 Through September 30, 2024

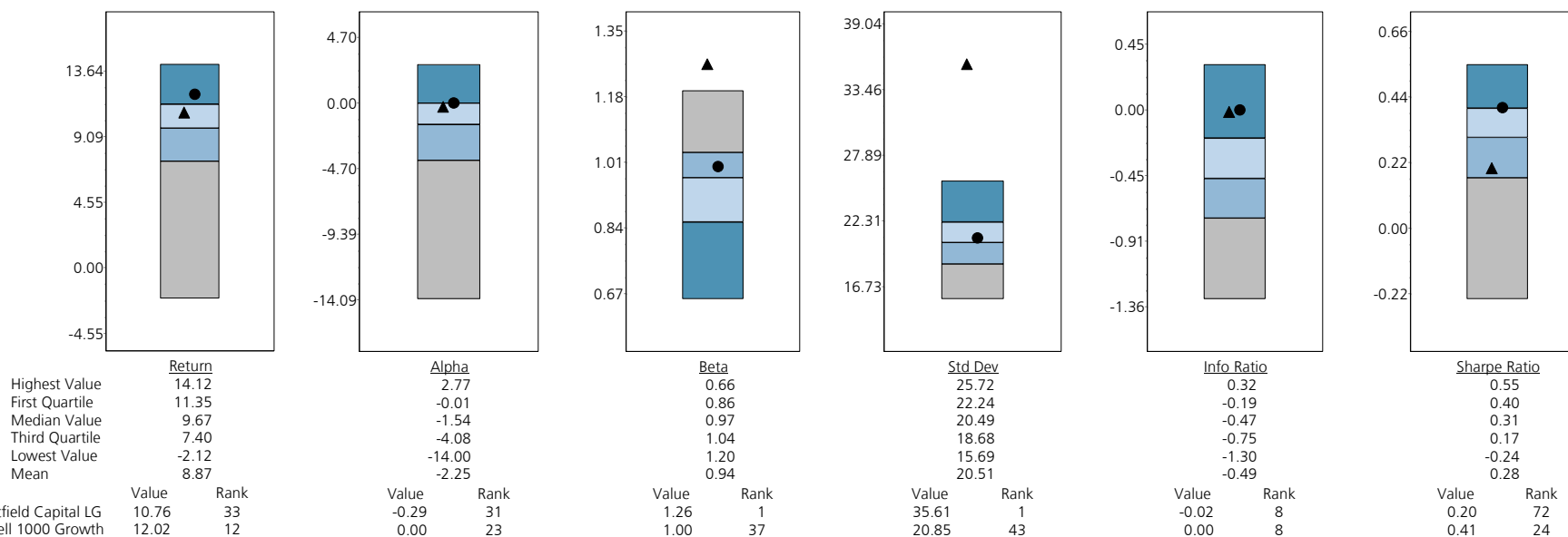


	1	2	3	4	5	6	7	8
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	12/2016-12/2017	7/2007-9/2024
Up Periods	8.00	4.00	8.00	8.00	10.00	8.00	11.00	130.00
Upside Capture ROR	103.84	27.12	28.52	73.10	49.91	23.04	29.40	63.51
Russell 1000 Growth	56.31	28.80	38.12	79.05	46.71	24.95	30.56	60.68
% Of Capture	184.42	94.16	74.82	92.48	106.85	92.34	96.22	104.68
Down Periods	4.00	8.00	4.00	4.00	2.00	4.00	1.00	76.00
Downside Capture ROR	-29.79	-44.08	-3.56	-22.16	-9.10	-20.66	0.98	-42.13
Russell 1000 Growth	-8.72	-44.98	-7.62	-22.65	-7.03	-21.18	-0.26	-38.13
% Of Capture	341.67	97.99	46.79	97.85	129.37	97.55	-373.46	110.50

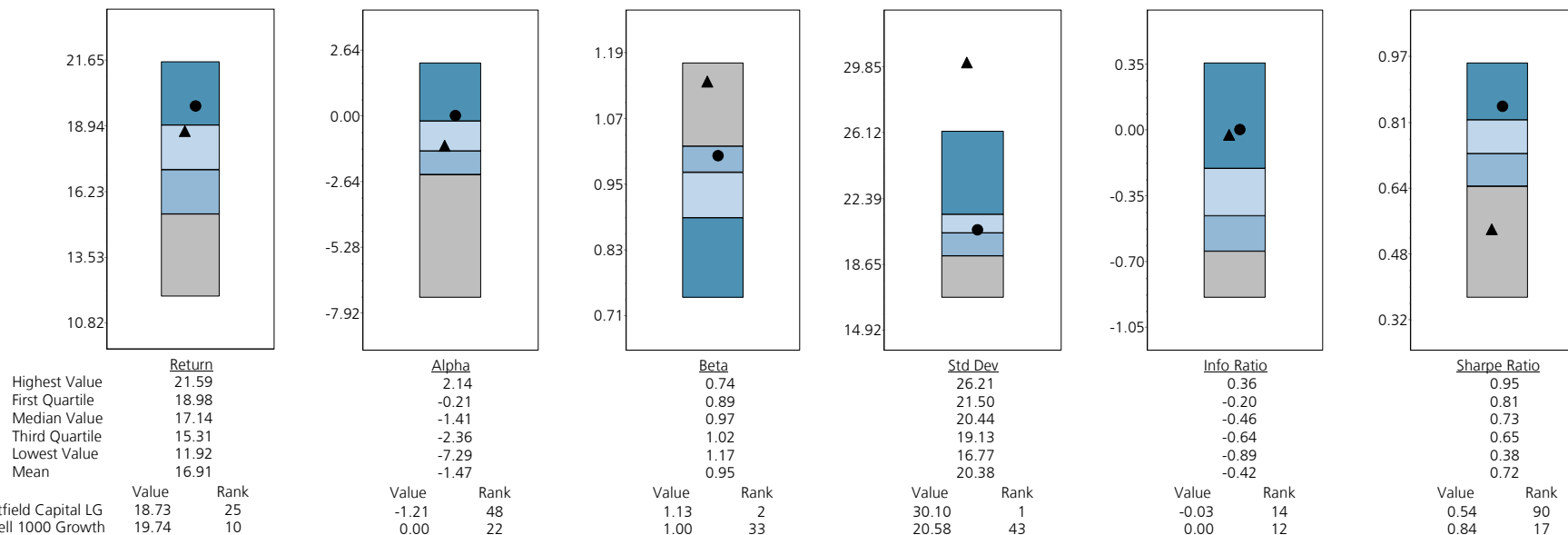
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TOTAL FUND vs Large Cap Growth Managers September 30, 2021 Through September 30, 2024

3 Year



5 Year



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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb County Employees Retirement System
October 22, 2024

Prepared by:
Earle Dodd, Van Price, Allen Wright

Vanguard Midcap Index 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

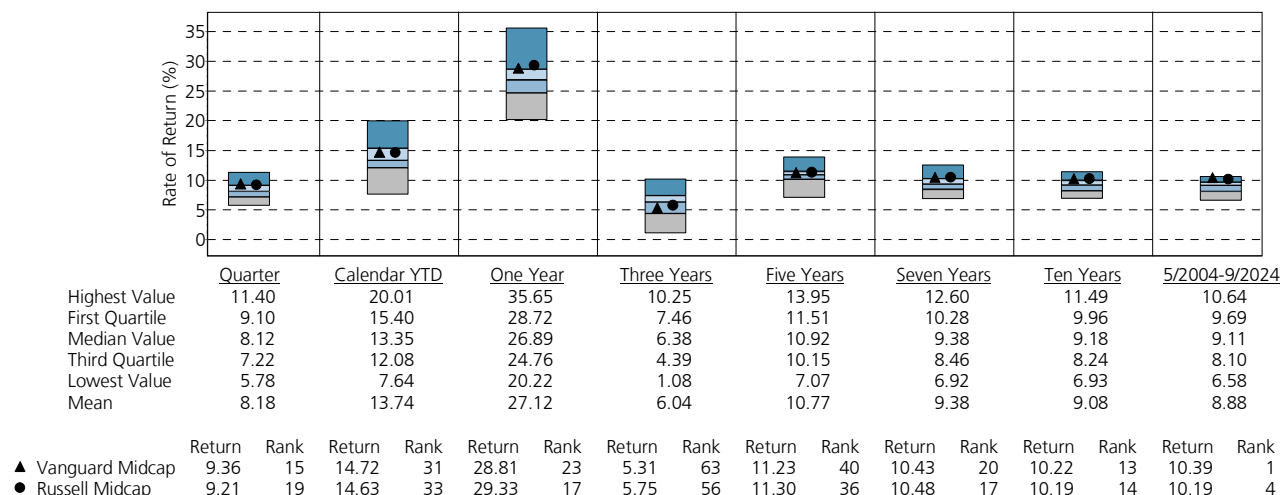
5/31/2004 - Present

100% Russell Midcap

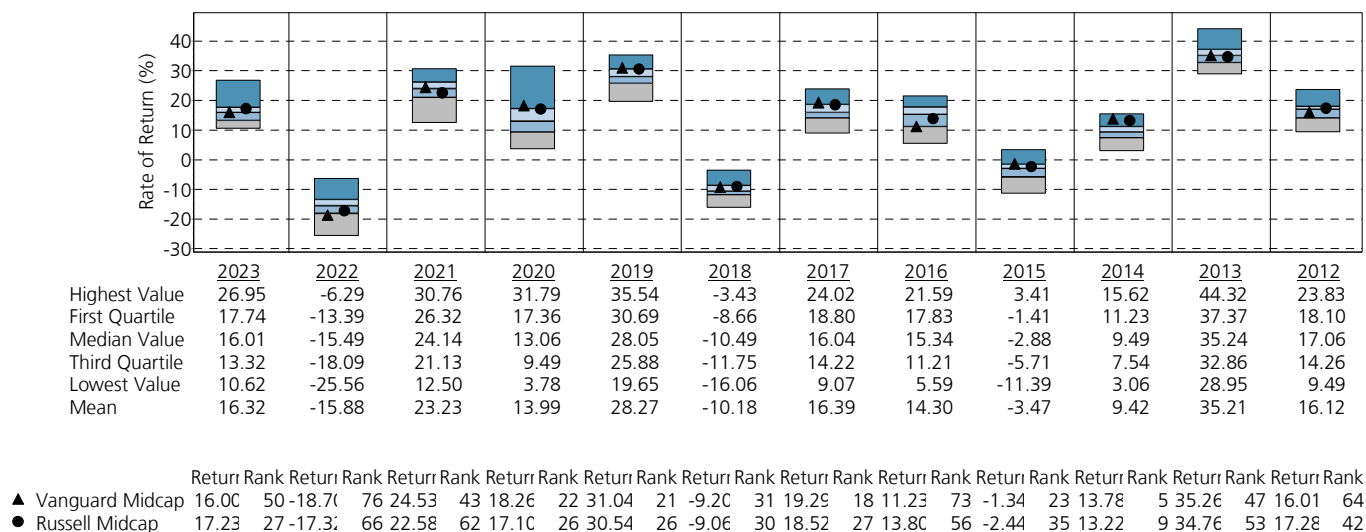
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TOTAL FUND Peer Universe Comparison versus Mid Cap Blend Managers

Trailing Periods



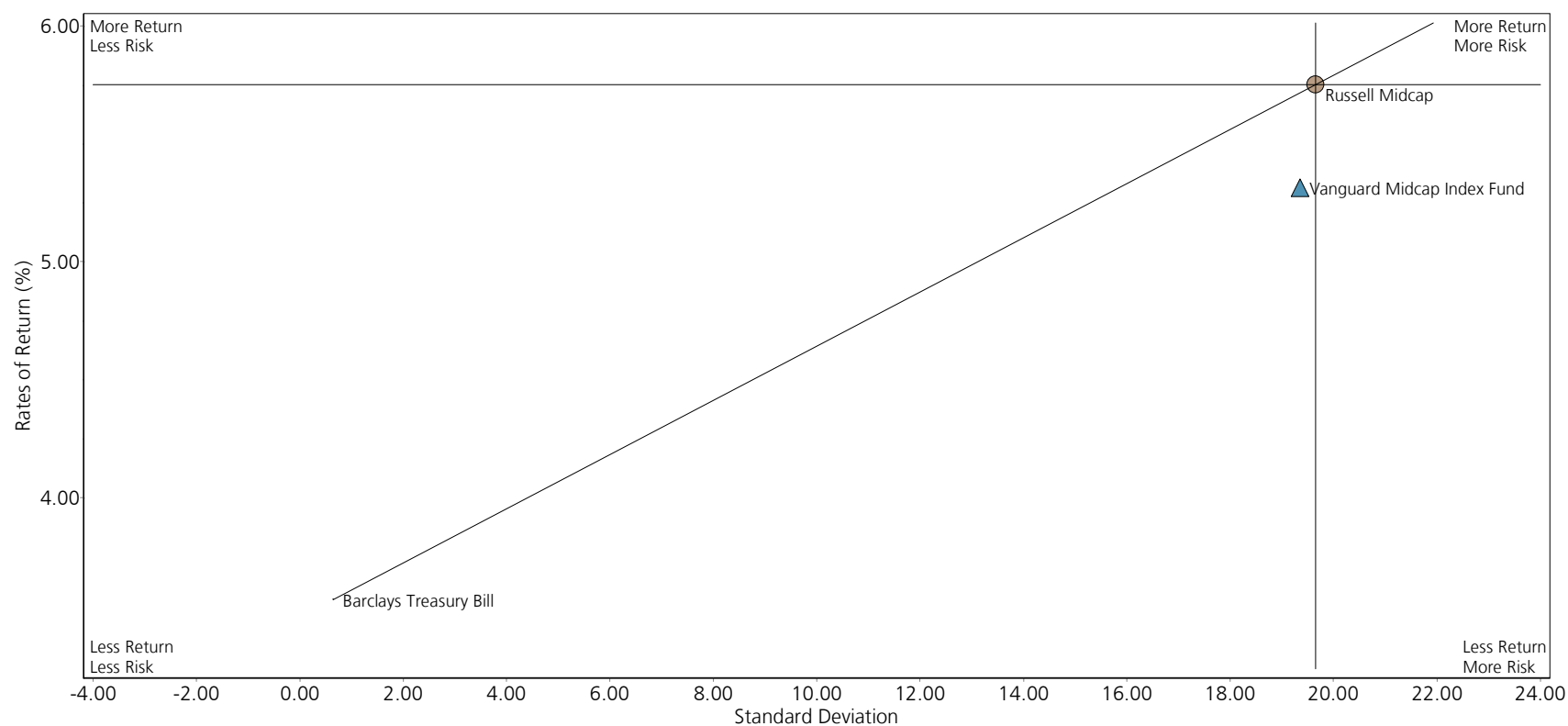
Annual Periods



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Risk vs Reward Analysis

September 30, 2021 Through September 30, 2024

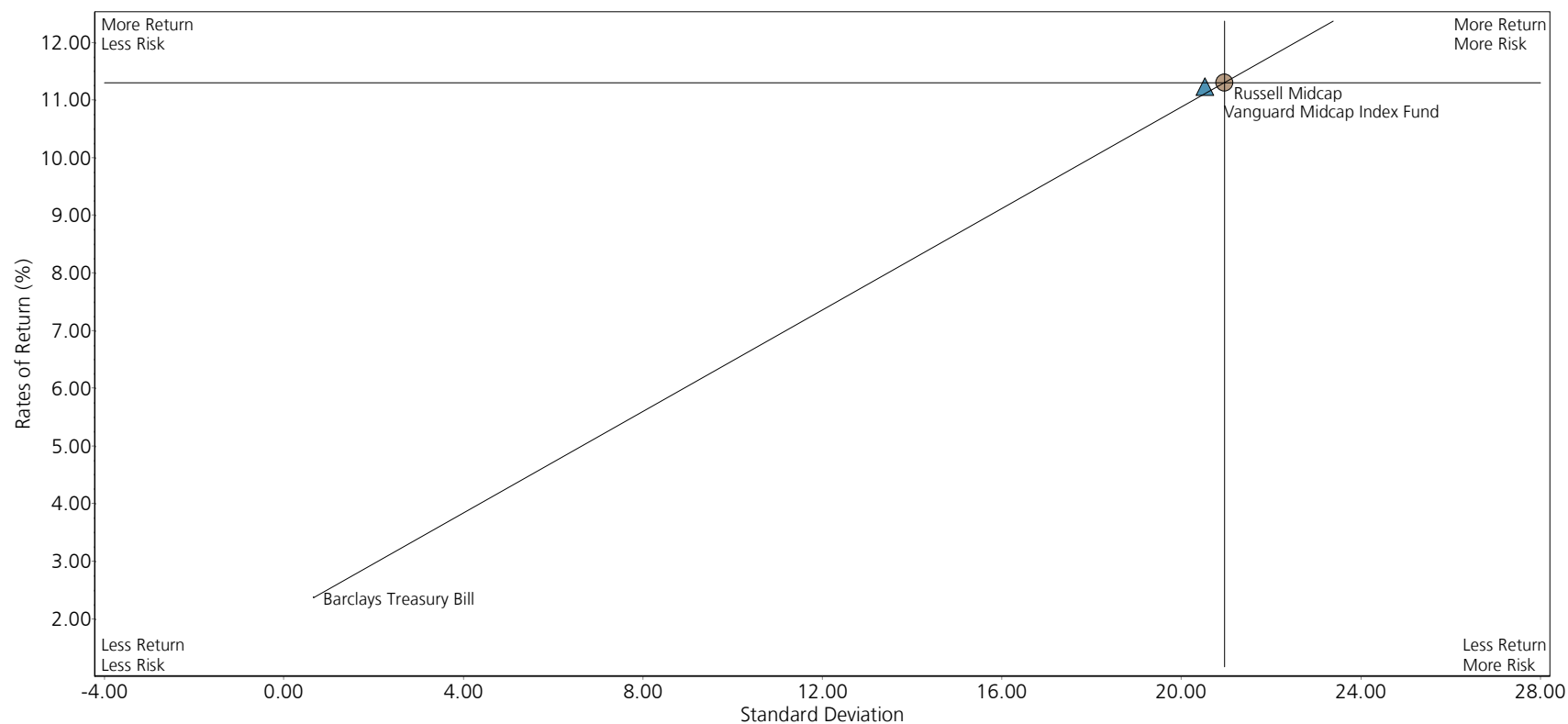


	Return	Std Dev	Alpha	Beta	R-Squared
▲ Vanguard Midcap Index Fund	5.31	19.35	-0.40	0.98	99.51
● Russell Midcap	5.75	19.65	0.00	1.00	100.00

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Risk vs Reward Analysis

September 30, 2019 Through September 30, 2024

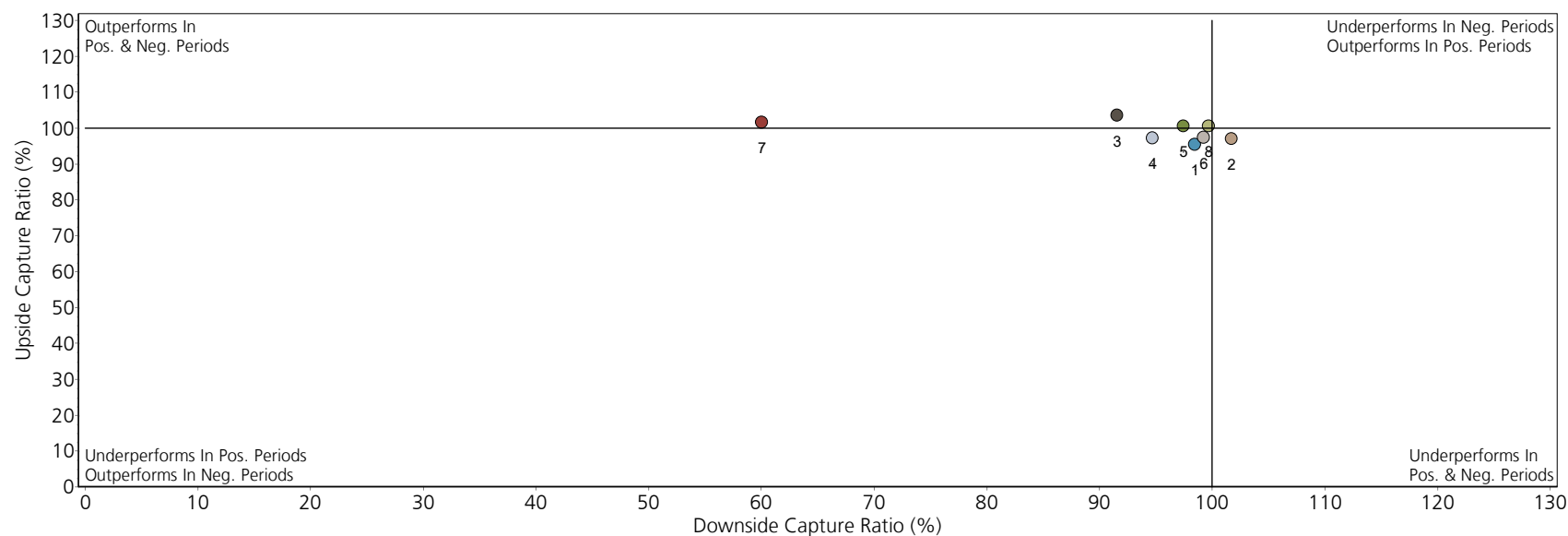


	Return	Std Dev	Alpha	Beta	R-Squared
▲ Vanguard Midcap Index Fund	11.23	20.53	0.08	0.98	99.58
● Russell Midcap	11.30	20.96	0.00	1.00	100.00

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Capture Ratio

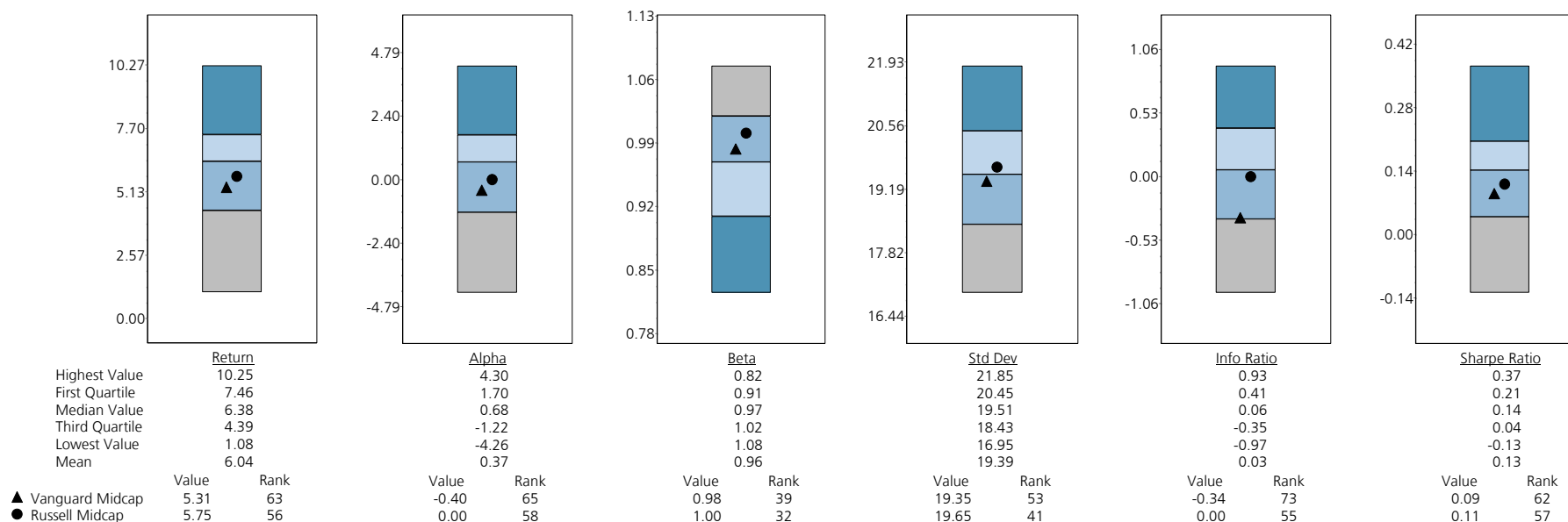
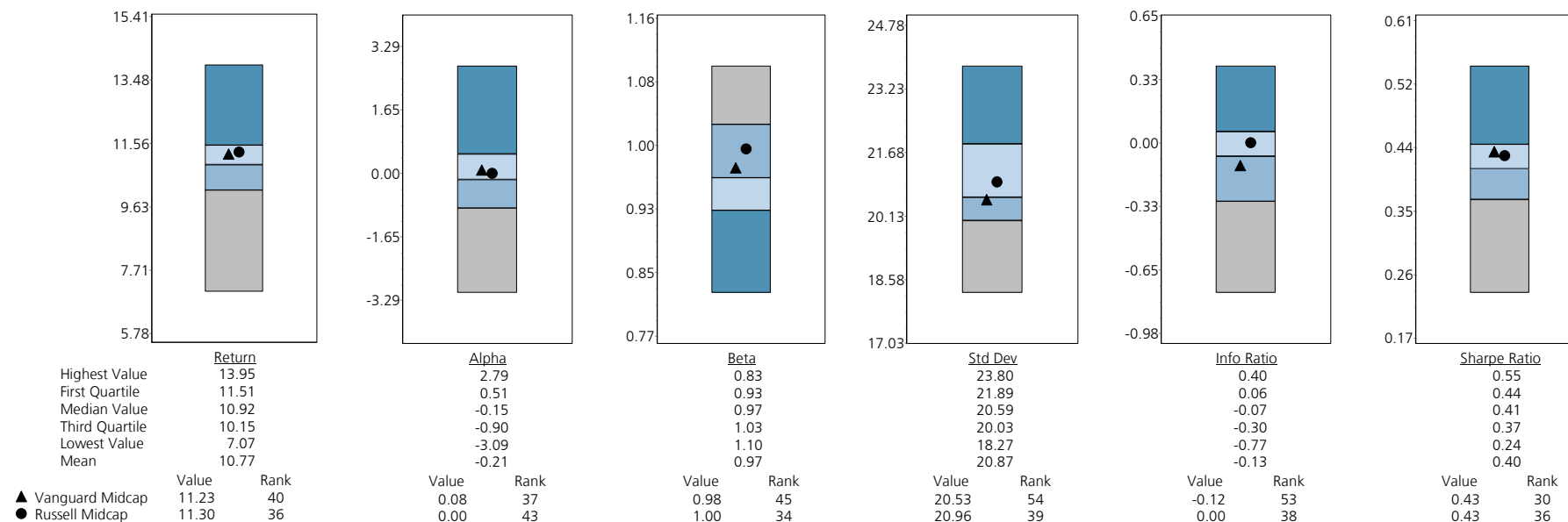
May 31, 2004 Through September 30, 2024



	1	2	3	4	5	6	7	8
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	12/2016-12/2017	5/2004-9/2024
Up Periods	5.00	5.00	9.00	8.00	10.00	7.00	10.00	156.00
Upside Capture ROR	42.84	29.25	33.98	61.95	43.35	15.34	19.96	54.86
Russell Midcap	44.87	30.16	32.82	63.76	43.15	15.76	19.63	54.61
% Of Capture	95.47	96.98	103.54	97.17	100.46	97.34	101.69	100.46
Down Periods	7.00	7.00	3.00	4.00	2.00	5.00	2.00	88.00
Downside Capture ROR	-18.79	-37.10	-7.05	-26.98	-8.59	-21.28	-0.56	-39.43
Russell Midcap	-19.08	-36.48	-7.70	-28.49	-8.81	-21.44	-0.93	-39.55
% Of Capture	98.47	101.72	91.55	94.68	97.45	99.25	60.01	99.68

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TOTAL FUND vs Mid Cap Blend Managers September 30, 2021 Through September 30, 2024

3 Year

5 Year


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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb County Employees Retirement System
October 22, 2024

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

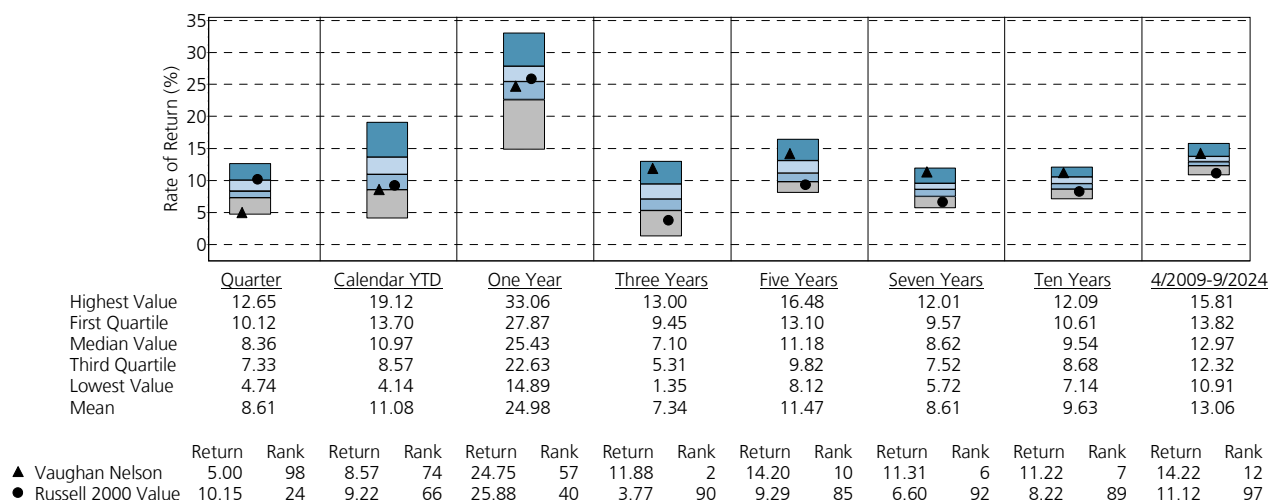
4/30/2009 - Present

100% Russell 2000 Value

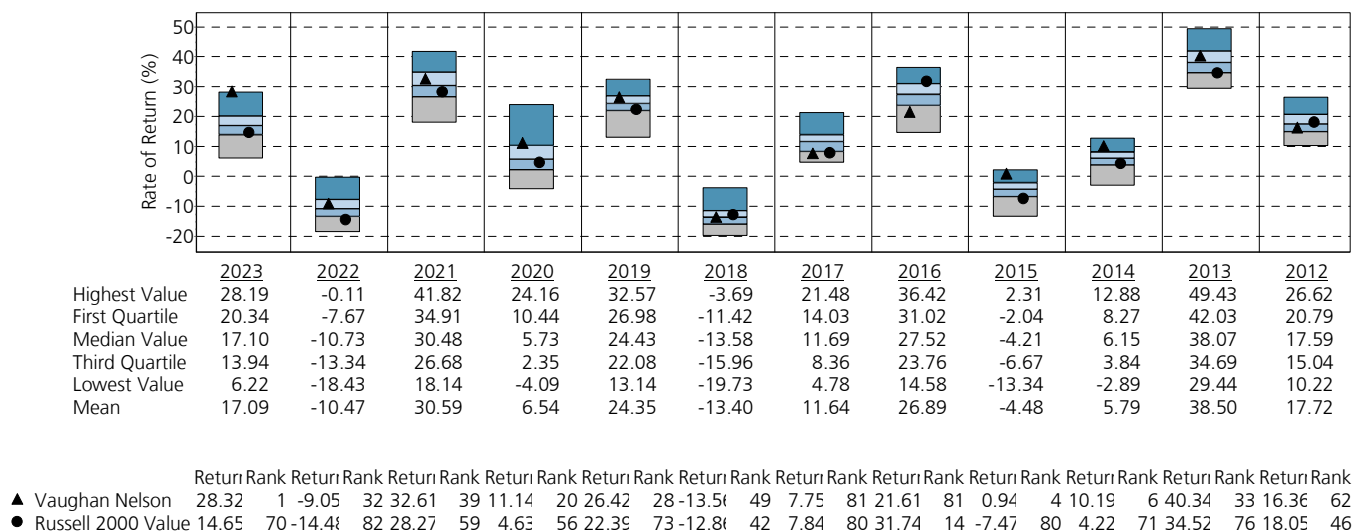
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TOTAL FUND Peer Universe Comparison versus Small Cap Value Managers

Trailing Periods



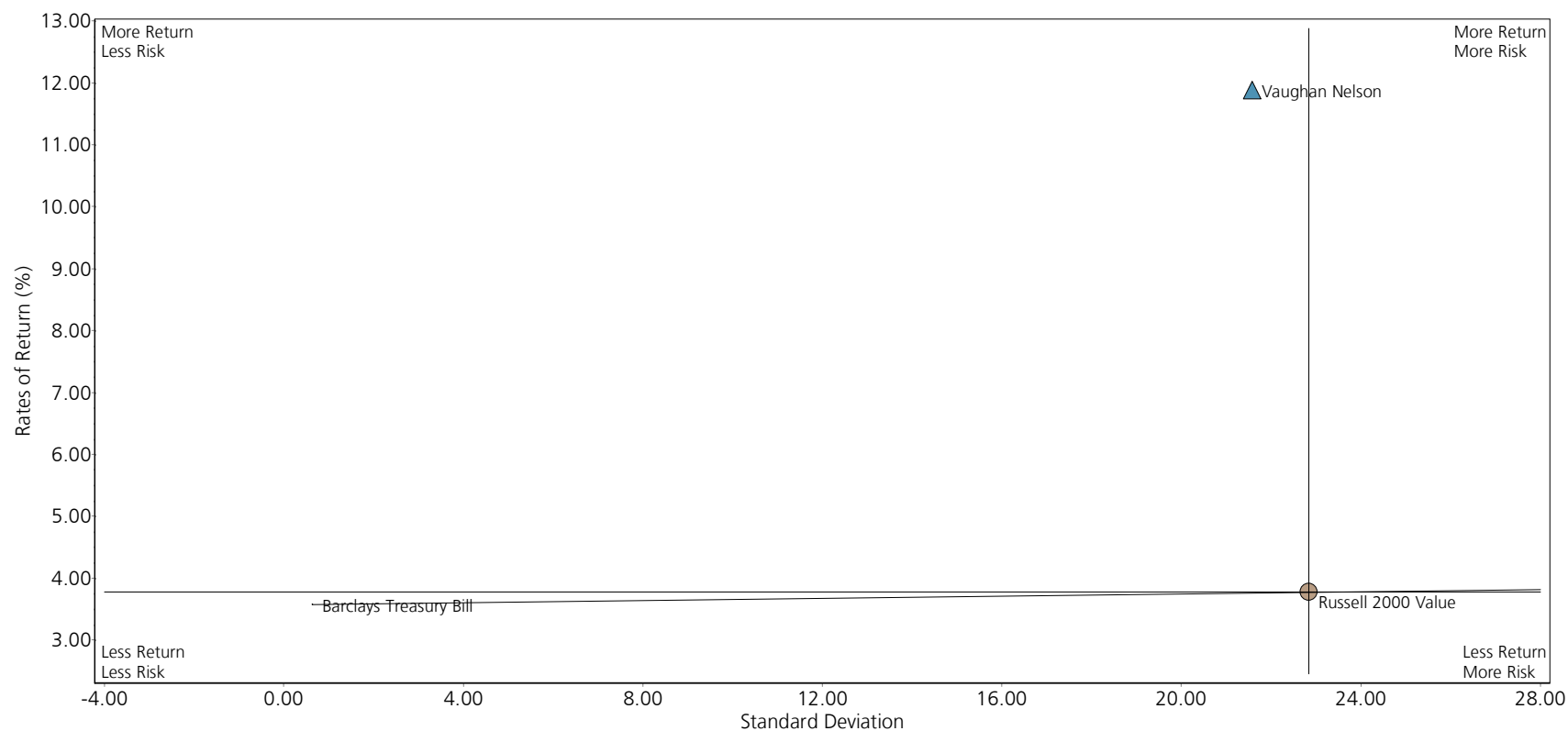
Annual Periods



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Risk vs Reward Analysis

September 30, 2021 Through September 30, 2024

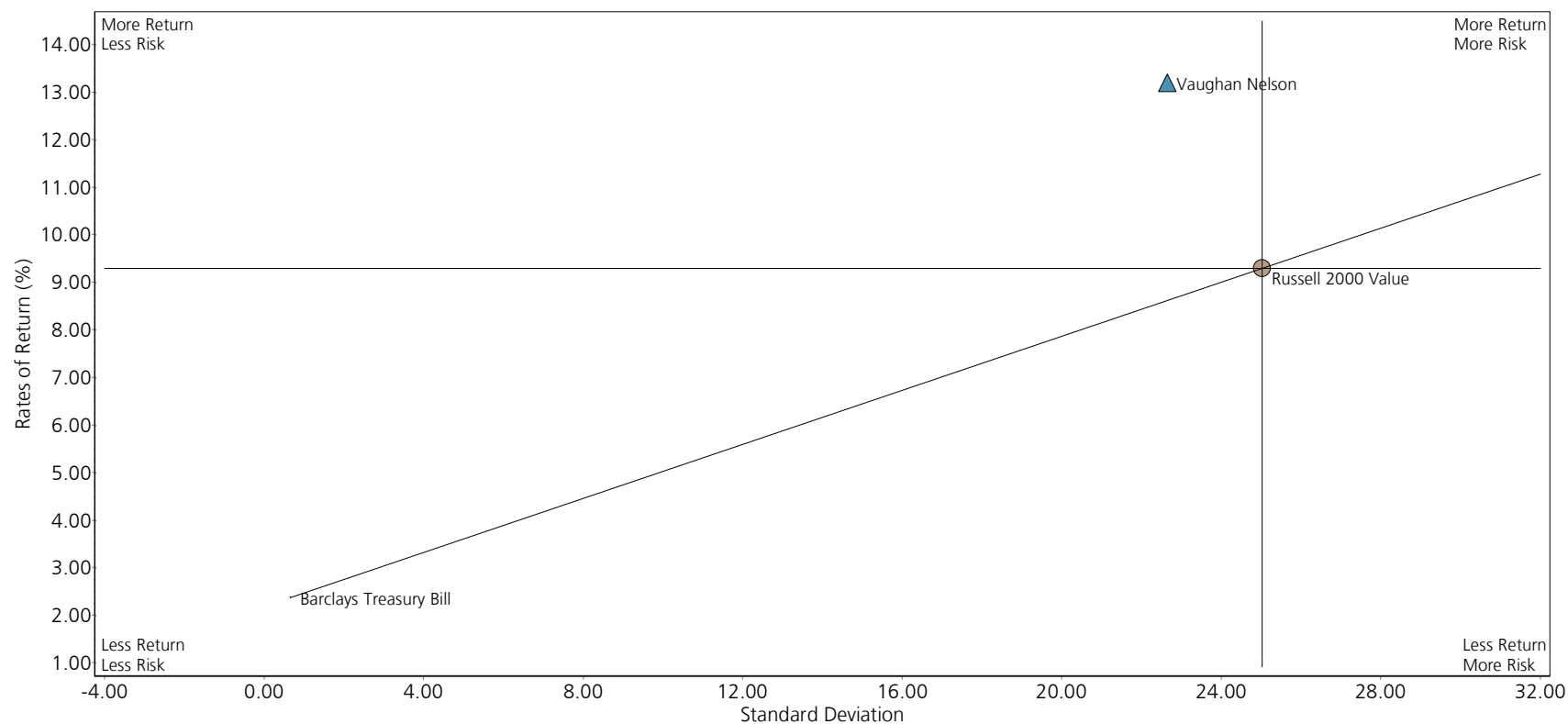


	Return	Std Dev	Alpha	Beta	R-Squared
▲ Vaughan Nelson	11.88	21.58	7.60	0.89	88.49
● Russell 2000 Value	3.77	22.84	0.00	1.00	100.00

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Risk vs Reward Analysis

September 30, 2019 Through September 30, 2024

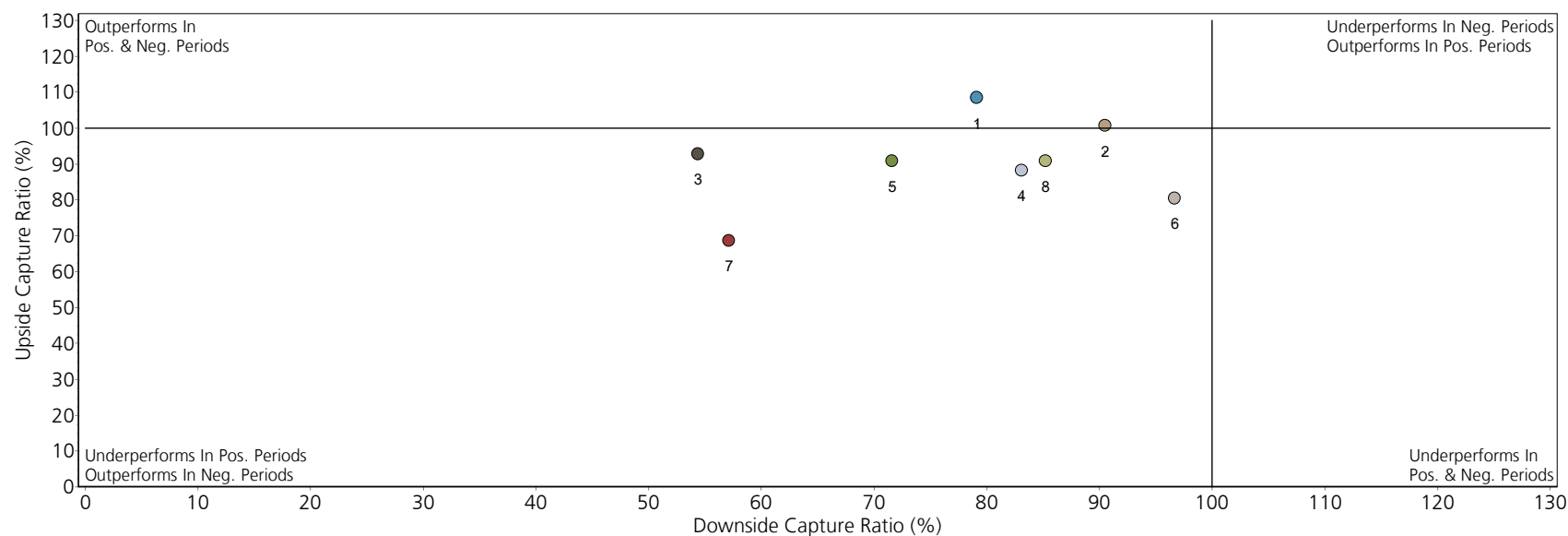


	Return	Std Dev	Alpha	Beta	R-Squared
▲ Vaughan Nelson	13.19	22.65	4.29	0.86	90.36
● Russell 2000 Value	9.29	25.03	0.00	1.00	100.00

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Capture Ratio

April 30, 2009 Through September 30, 2024



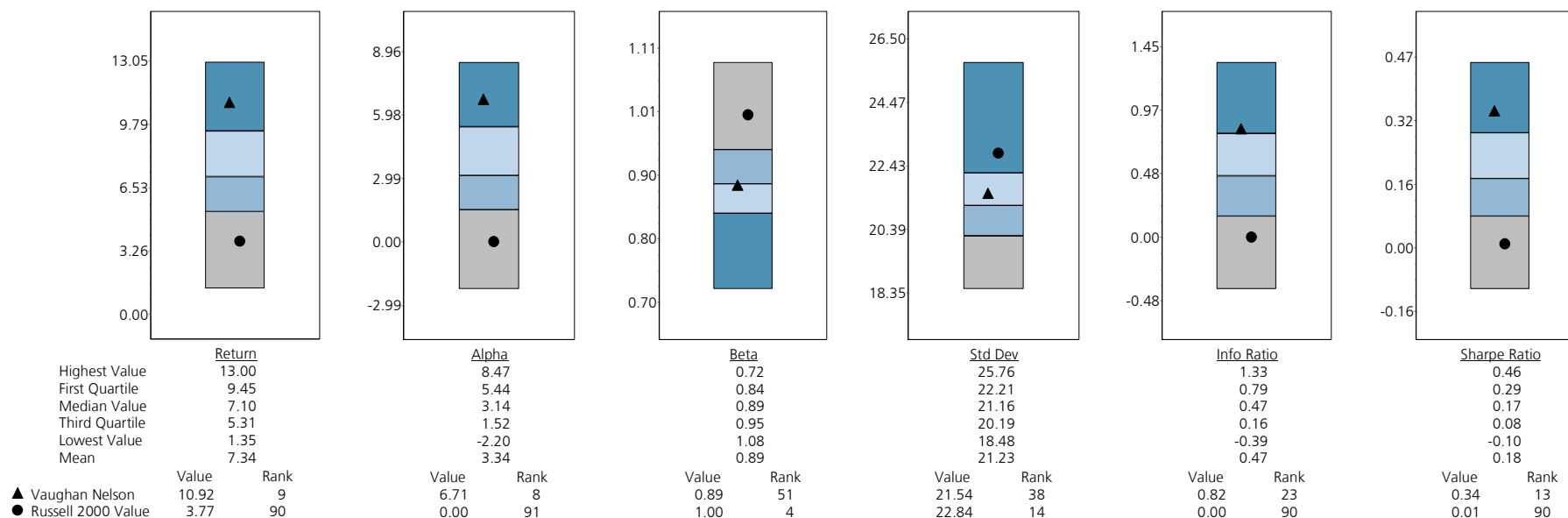
	1	2	3	4	5	6	7	8
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	12/2016-12/2017	4/2009-9/2024
Up Periods	5.00	6.00	8.00	8.00	9.00	8.00	7.00	116.00
Upside Capture ROR	60.60	34.69	38.45	62.22	41.17	14.09	11.68	61.63
Russell 2000 Value	55.87	34.43	41.41	70.57	45.35	17.51	17.03	67.85
% Of Capture	108.47	100.74	92.85	88.18	90.78	80.47	68.62	90.83
Down Periods	7.00	6.00	4.00	4.00	3.00	4.00	5.00	69.00
Downside Capture ROR	-20.93	-32.94	-5.05	-32.13	-11.31	-24.99	-4.48	-37.89
Russell 2000 Value	-26.45	-36.39	-9.29	-38.65	-15.79	-25.85	-7.85	-44.45
% Of Capture	79.13	90.53	54.35	83.11	71.62	96.69	57.11	85.24

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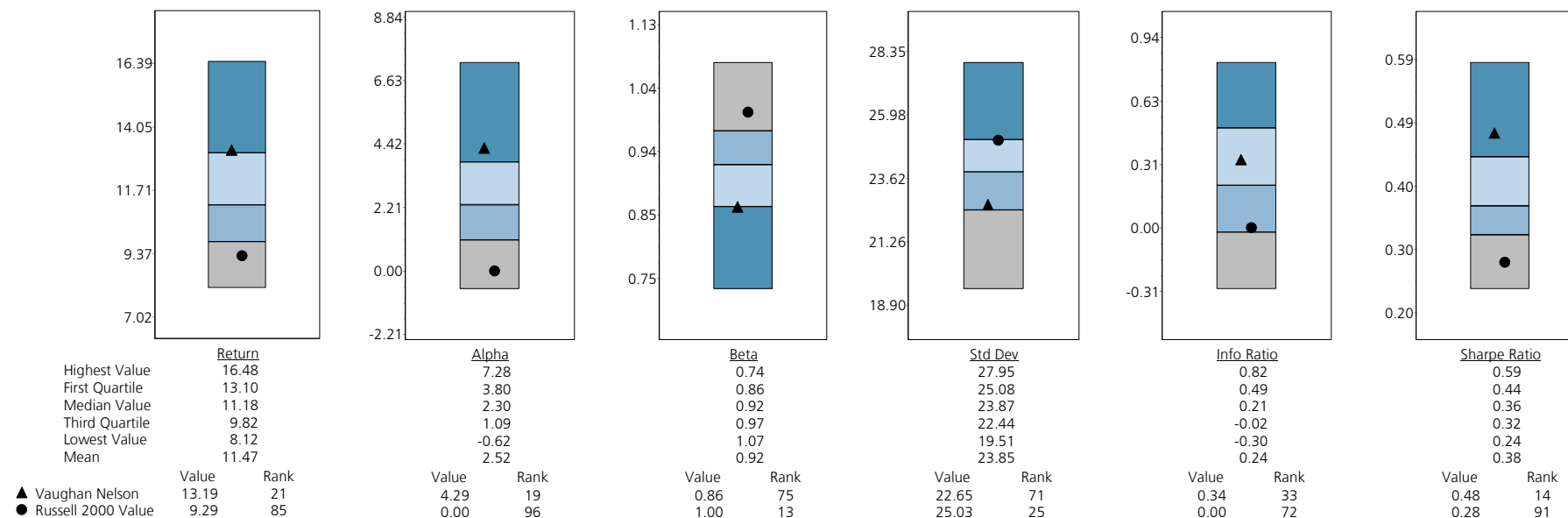
TOTAL FUND vs Small Cap Value Managers

September 30, 2021 Through September 30, 2024

3 Year



5 Year



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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb County Employees Retirement System
October 22, 2024

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

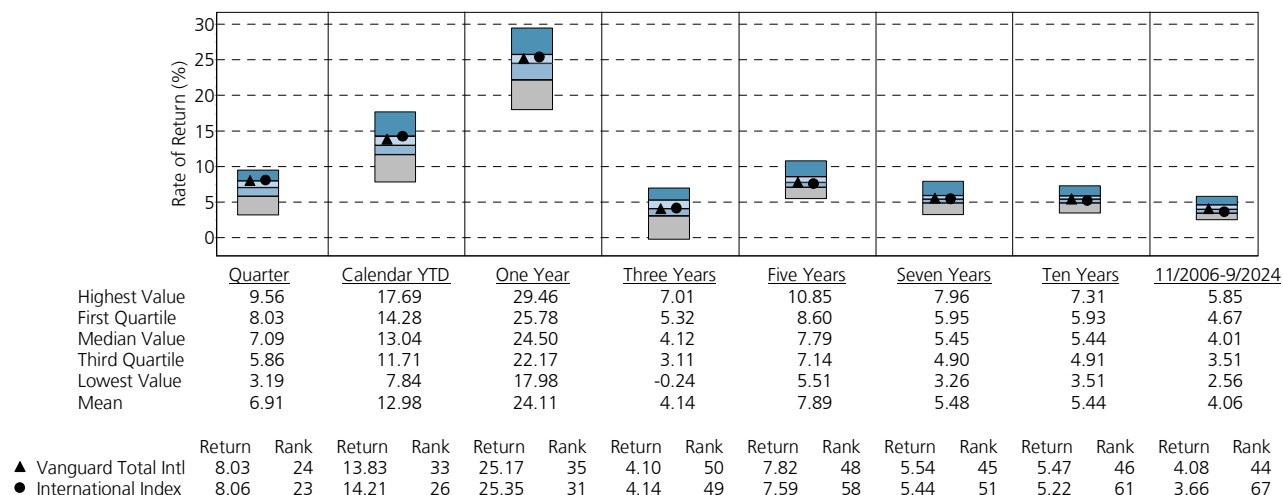
12/31/1998 - 06/30/2013

100% MSCI Net EAFE

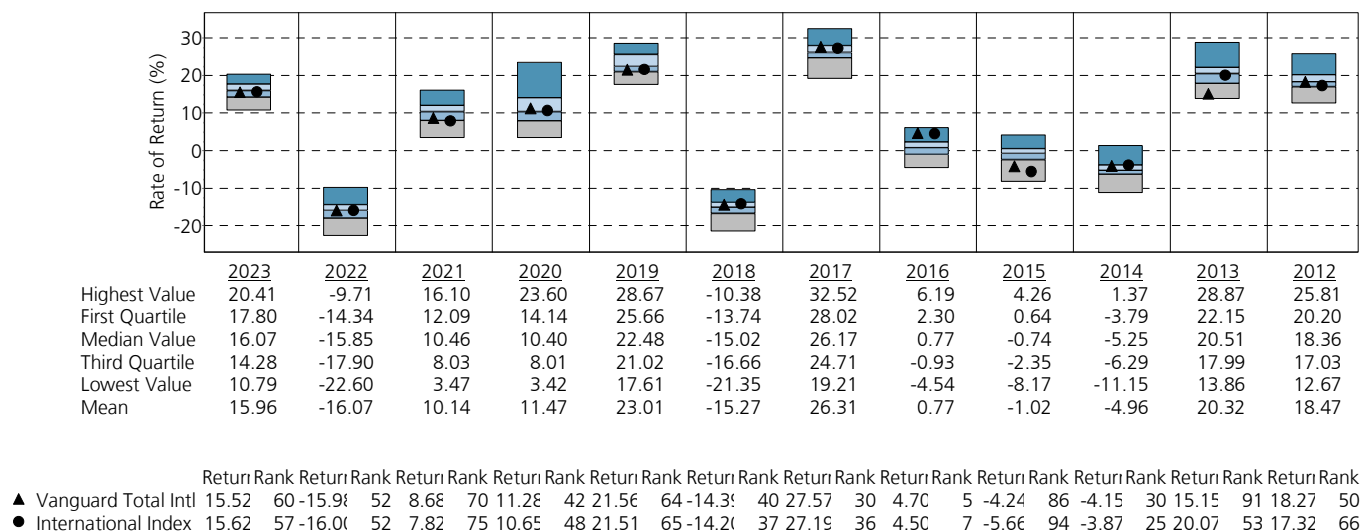
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TOTAL FUND Peer Universe Comparison versus Foreign Large Blend Managers

Trailing Periods

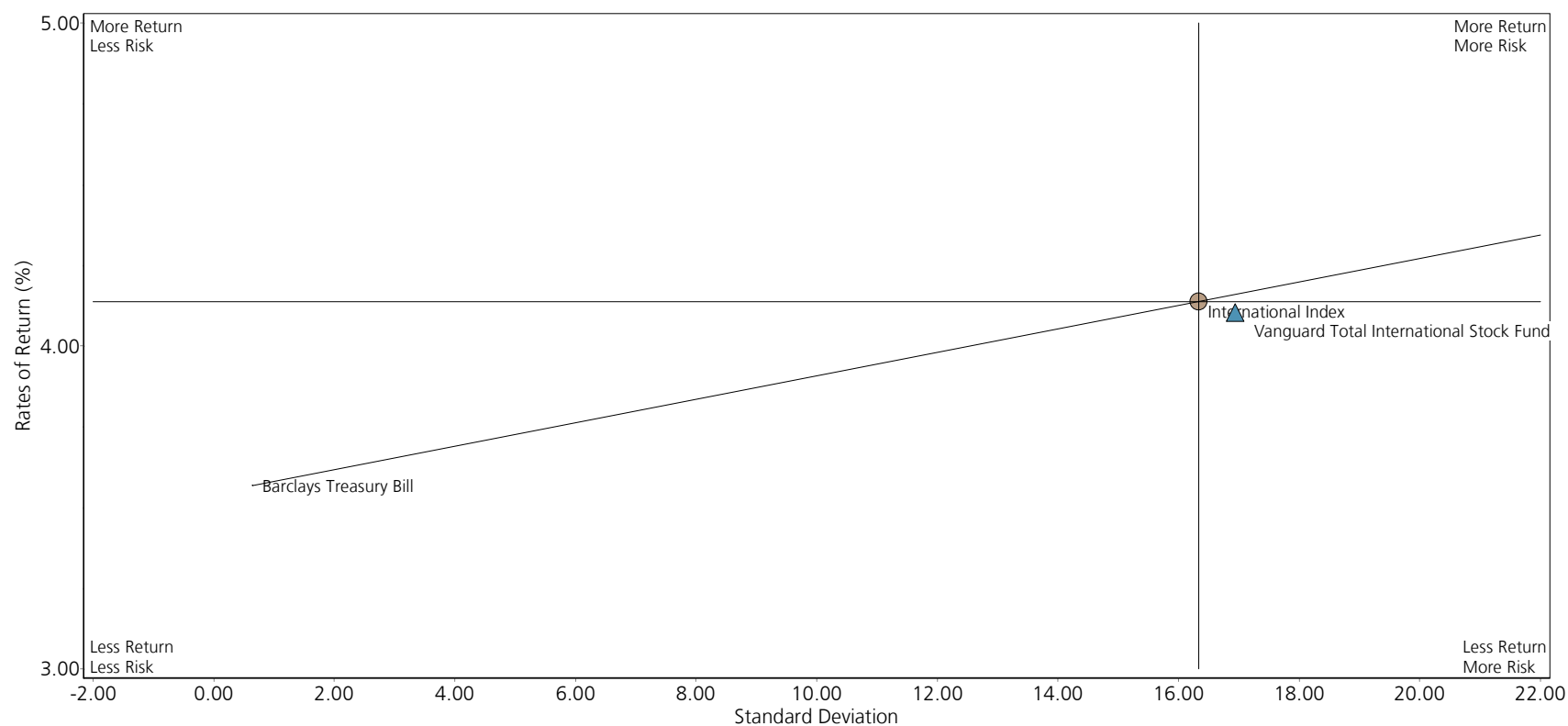


Annual Periods



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Risk vs Reward Analysis **September 30, 2021 Through September 30, 2024**

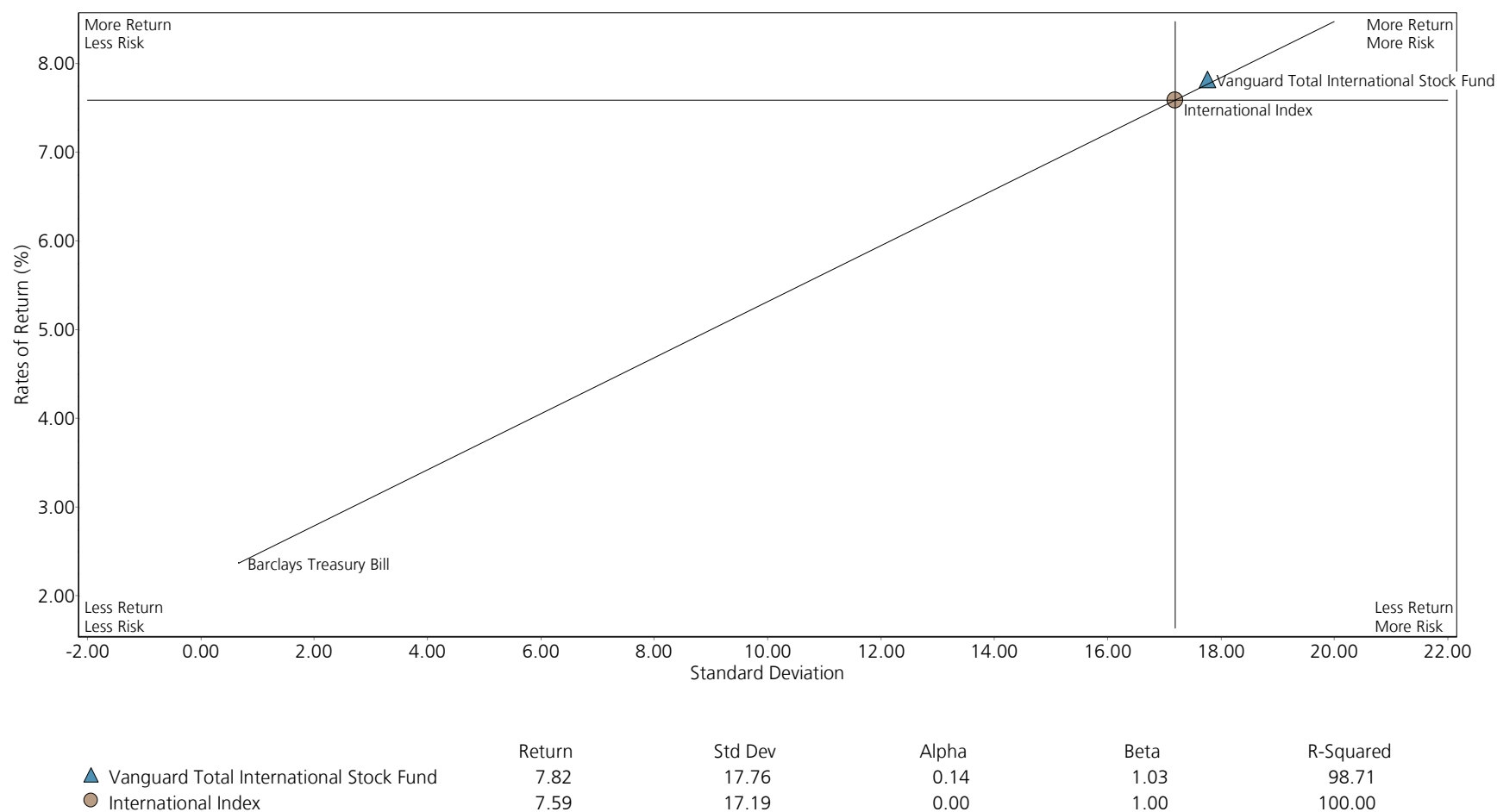


	Return	Std Dev	Alpha	Beta	R-Squared
▲ Vanguard Total International Stock Fund	4.10	16.94	0.00	1.03	98.56
● International Index	4.14	16.34	0.00	1.00	100.00

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Risk vs Reward Analysis

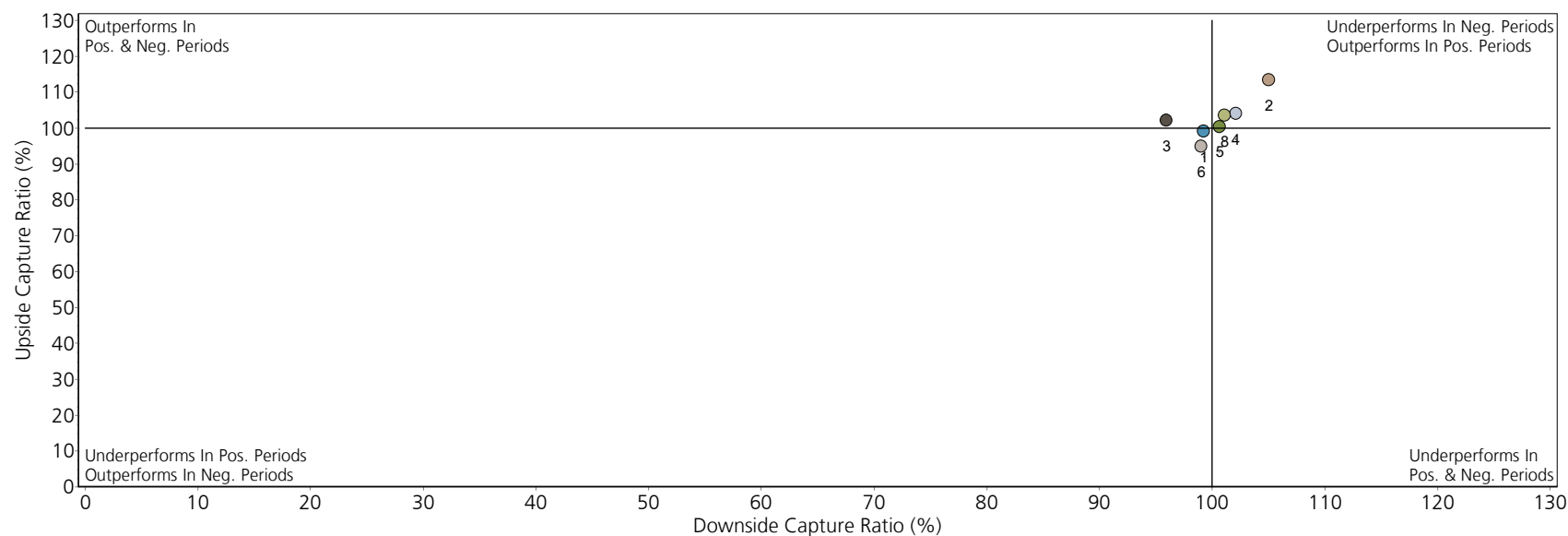
September 30, 2019 Through September 30, 2024



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Capture Ratio

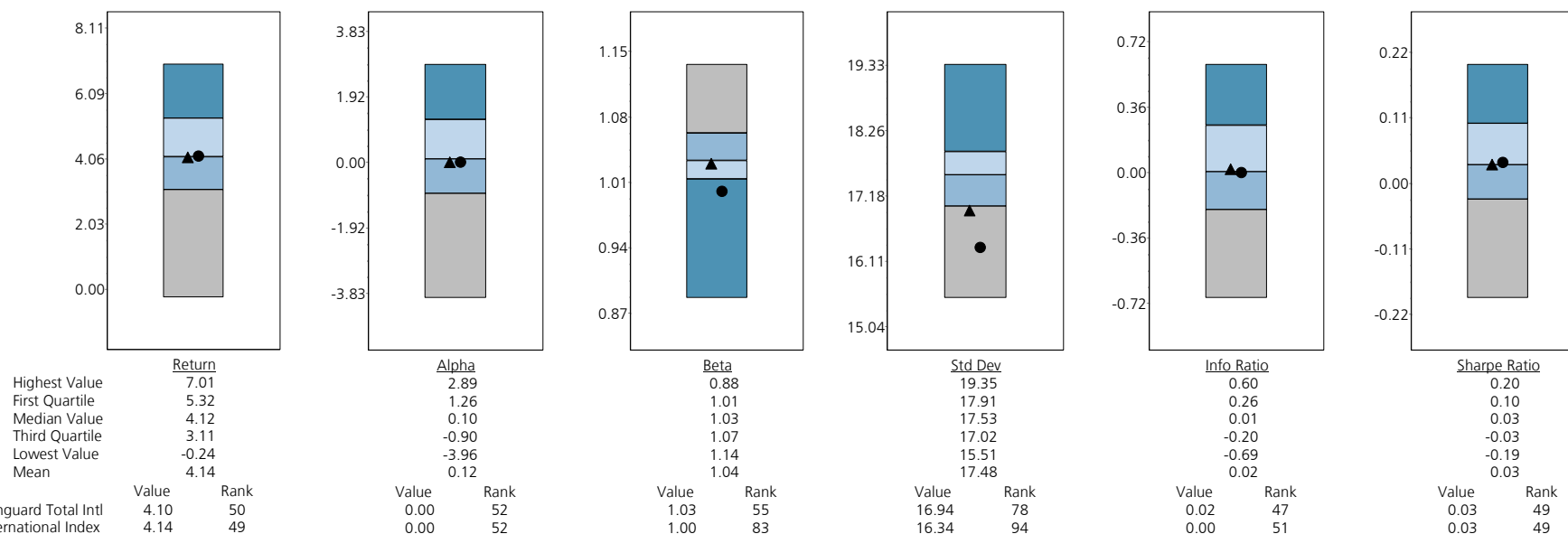
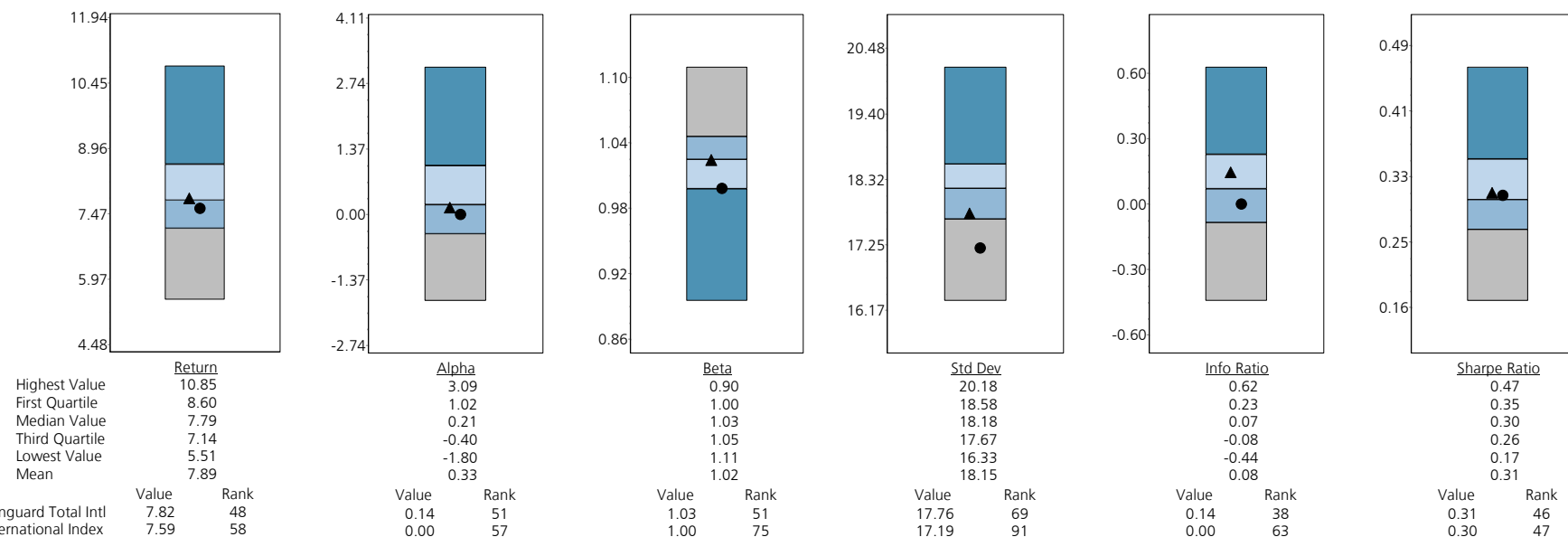
November 30, 2006 Through September 30, 2024



	1	2	3	4	5	6	7	8
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	12/2016-12/2017	11/2006-9/2024
Up Periods	7.00	5.00	8.00	7.00	9.00	5.00	12.00	122.00
Upside Capture ROR	39.91	22.83	19.79	53.31	34.26	10.79	27.57	56.09
International Index	40.26	20.13	19.37	51.26	34.12	11.36	27.19	54.16
% Of Capture	99.13	113.42	102.17	103.99	100.40	94.93	101.40	103.56
Down Periods	5.00	7.00	4.00	5.00	3.00	7.00	0.00	92.00
Downside Capture ROR	-17.44	-31.60	-9.28	-27.41	-9.46	-22.73	N/A	-39.19
International Index	-17.57	-30.08	-9.67	-26.85	-9.40	-22.95	N/A	-38.76
% Of Capture	99.24	105.05	95.93	102.10	100.66	99.01	N/A	101.10

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TOTAL FUND vs Foreign Large Blend Managers September 30, 2021 Through September 30, 2024

3 Year

5 Year


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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb County Employees Retirement System
October 22, 2024

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

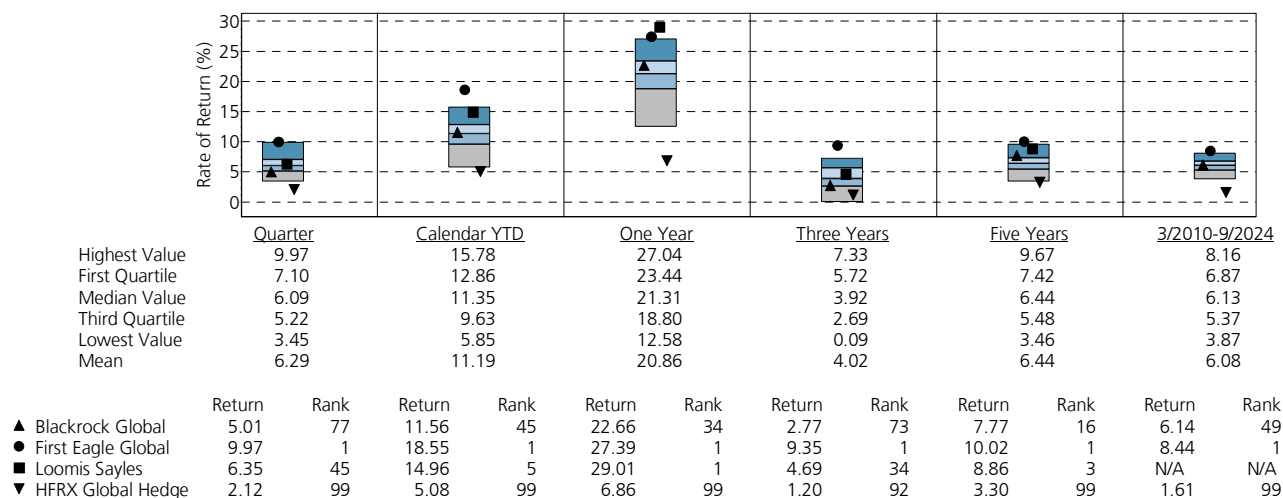
3/31/2010 - Present

100% HFRX Global Hedge Fund Index

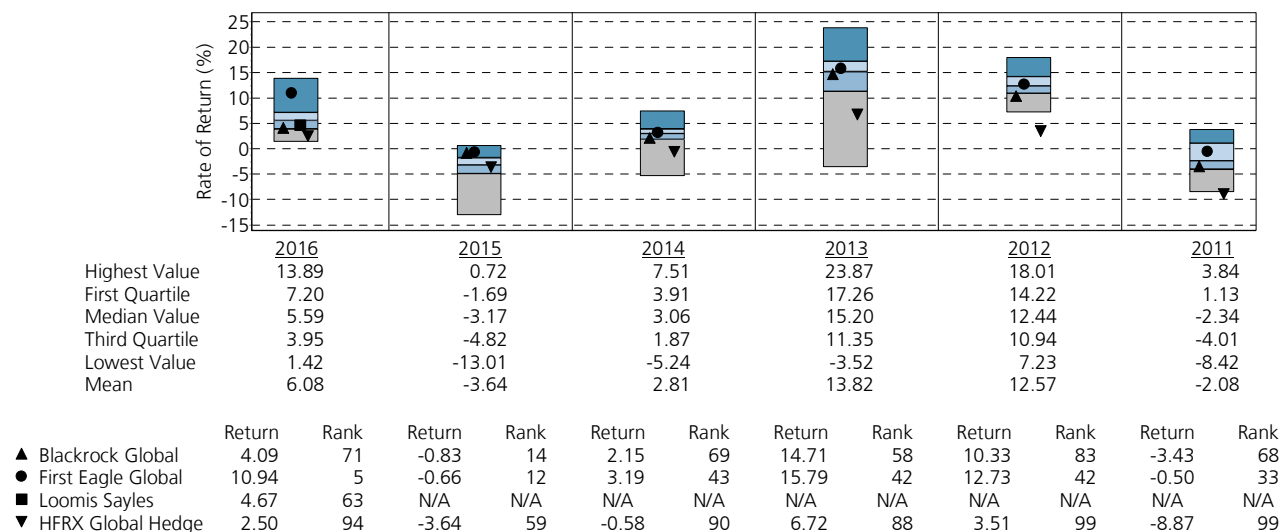
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TOTAL FUND Peer Universe Comparison versus Global Allocation Universe Managers

Trailing Periods



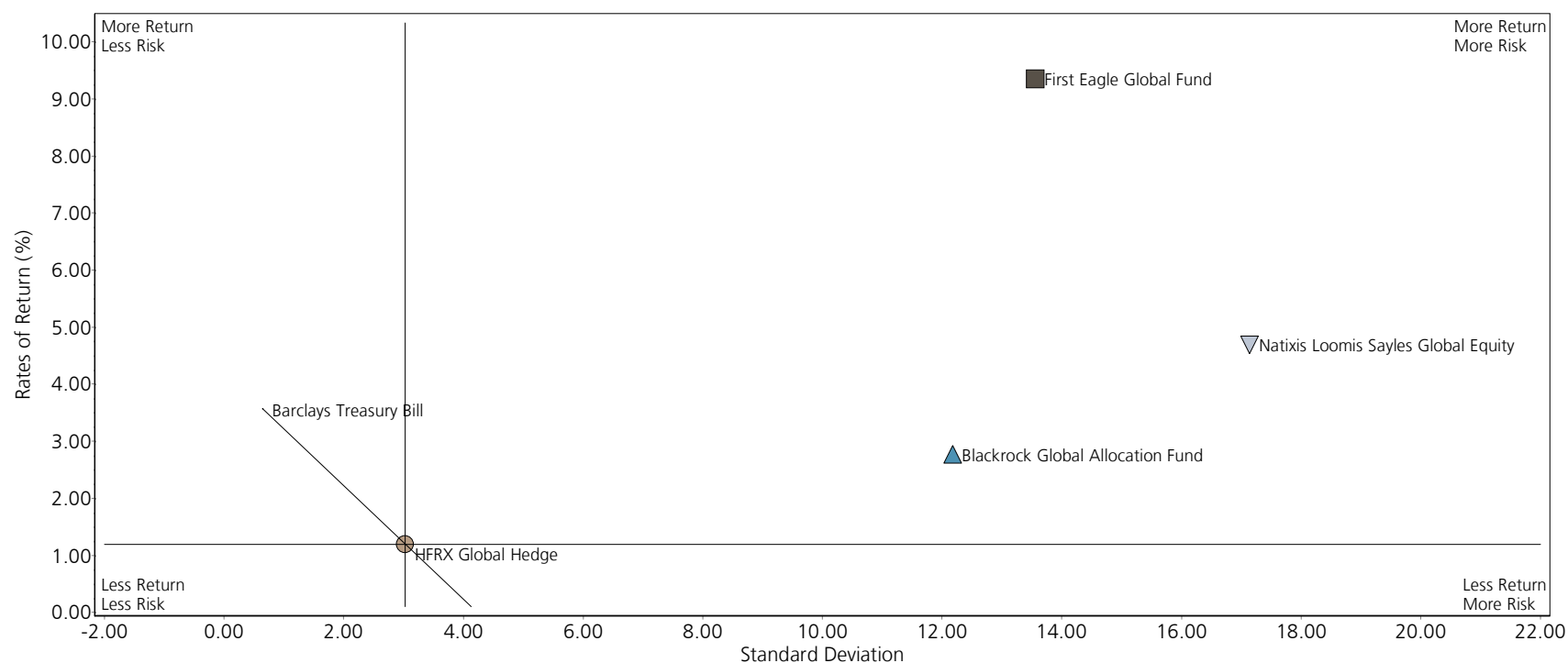
Annual Periods



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Risk vs Reward Analysis

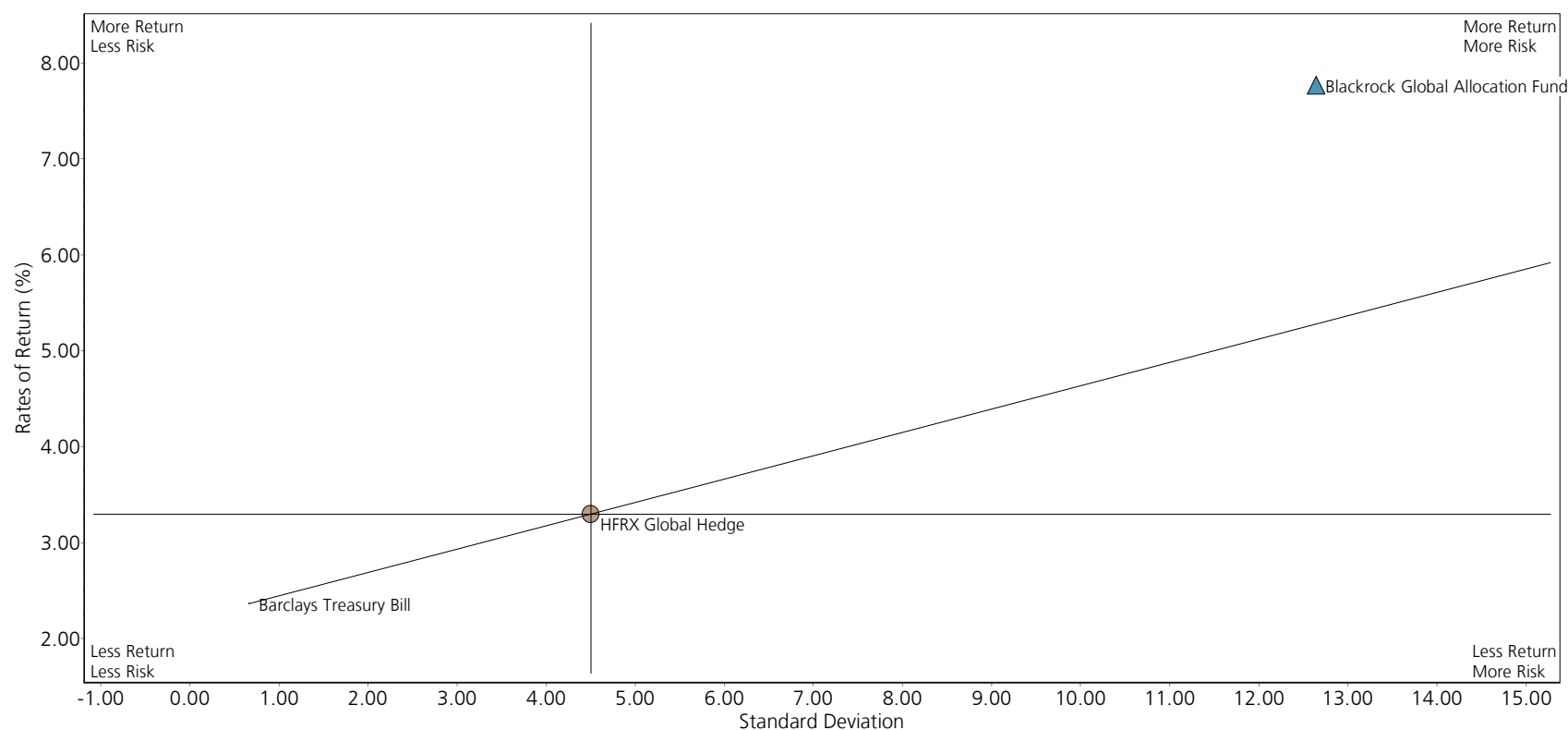
September 30, 2021 Through September 30, 2024



	Return	Std Dev	Alpha	Beta	R-Squared
▲ Blackrock Global Allocation Fund	2.77	12.18	6.44	2.85	45.21
● HFRX Global Hedge	1.20	3.03	0.00	1.00	100.00
■ First Eagle Global Fund	9.35	13.55	13.16	2.99	39.65
▼ Natixis Loomis Sayles Global Equity	4.69	17.14	11.30	3.86	41.46

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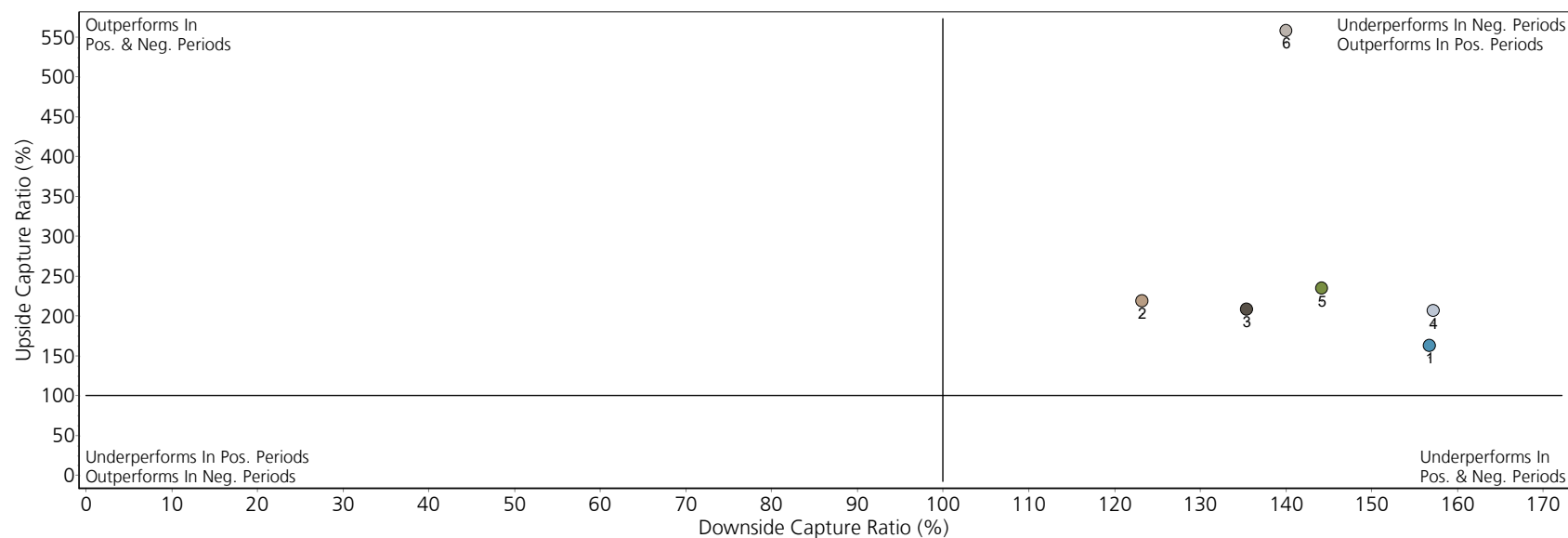
Risk vs Reward Analysis **September 30, 2019 Through September 30, 2024**



	Return	Std Dev	Alpha	Beta	R-Squared
▲ Blackrock Global Allocation Fund	7.77	12.64	3.78	2.15	61.10
● HFRX Global Hedge	3.30	4.50	0.00	1.00	100.00

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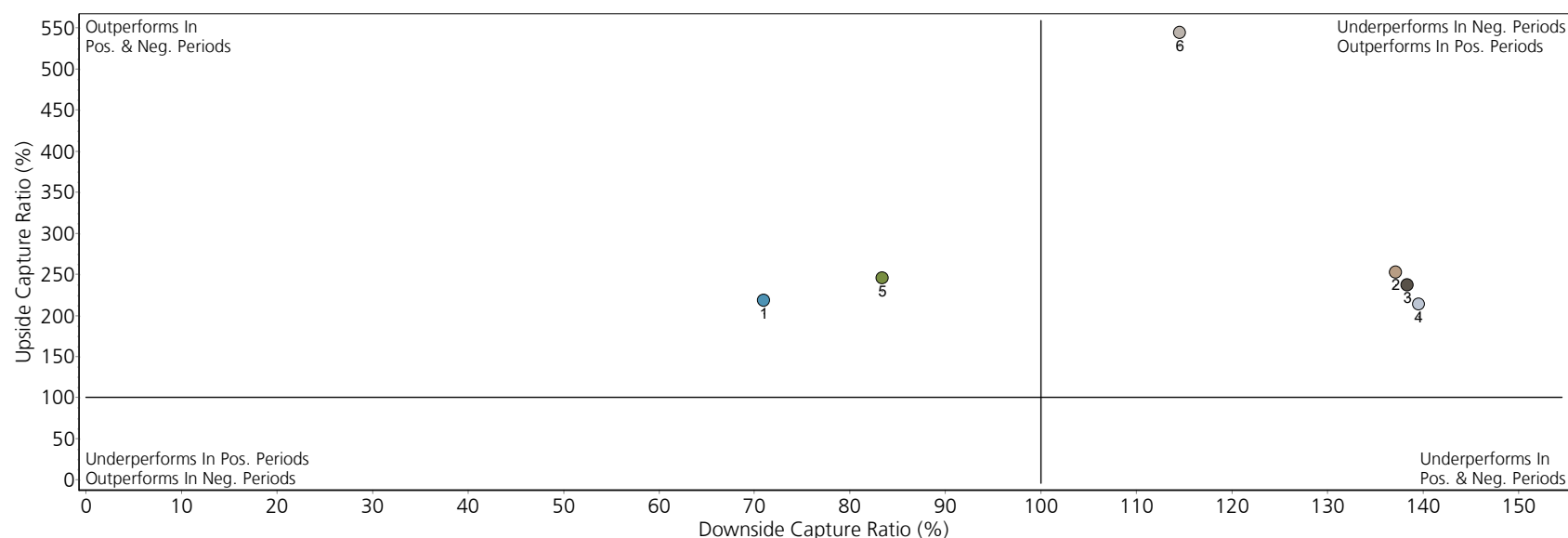
Capture Ratio - Blackrock Global Allocation Fund
December 31, 2010 Through December 31, 2016



	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

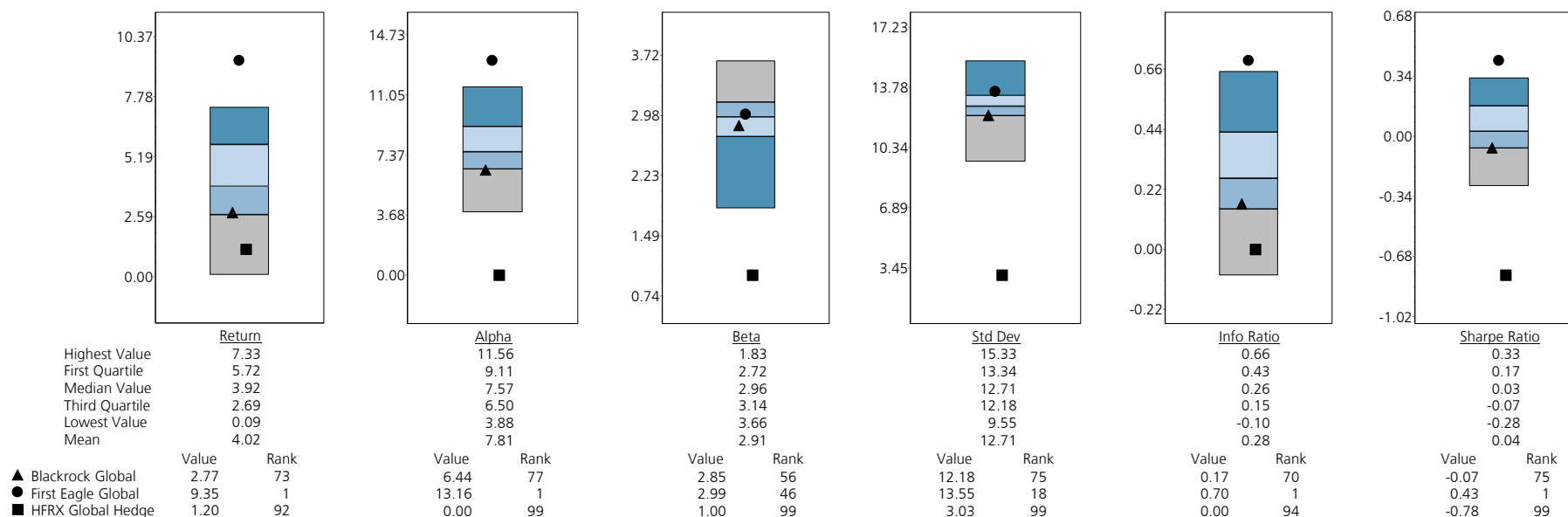


	1	2	3	4	5	6
	12/2015-12/2016	12/2014-12/2015	12/2013-12/2014	12/2012-12/2013	12/2011-12/2012	12/2010-12/2011
Up Periods	9.00	5.00	5.00	10.00	8.00	4.00
Upside Capture ROR	13.88	10.99	10.57	19.42	15.14	14.11
HFRX Global Hedge	6.36	4.35	4.46	9.09	6.18	2.59
% Of Capture	218.05	252.75	236.96	213.54	245.07	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

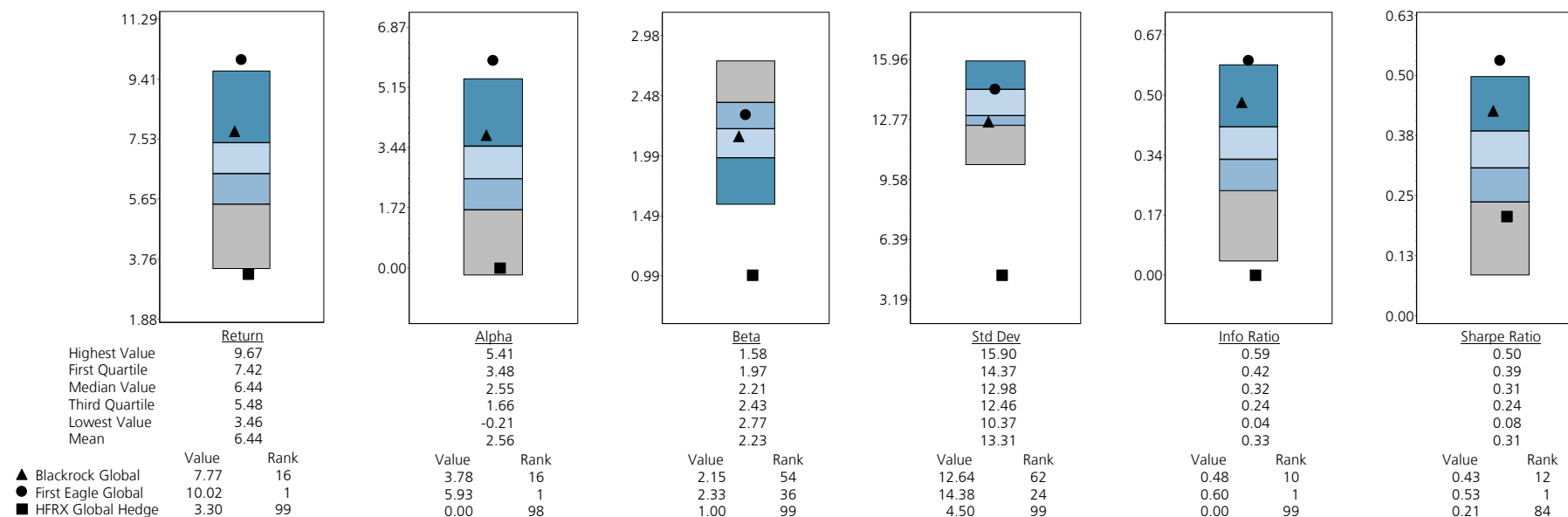
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TOTAL FUND vs Global Allocation Universe Managers September 30, 2021 Through September 30, 2024

3 Year



5 Year



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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb County Employees Retirement System
October 22, 2024

Prepared by:
Earle Dodd, Van Price, Allen Wright

Vanguard 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

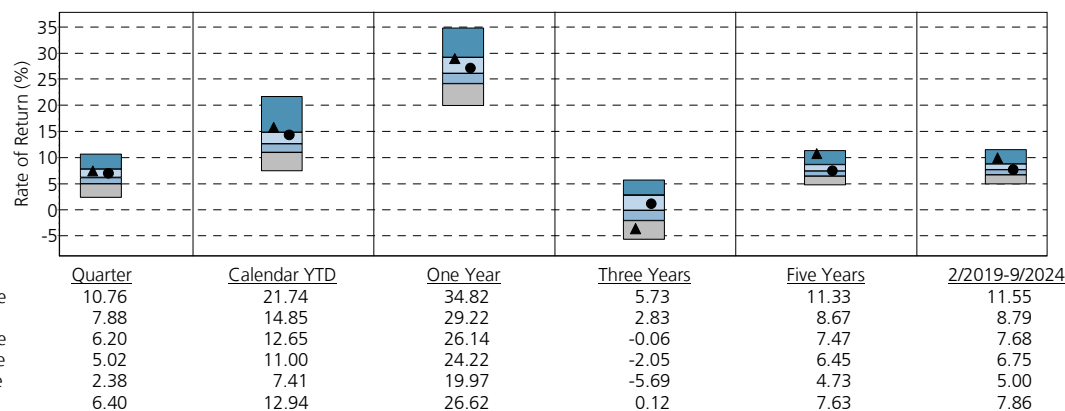
2/6/2019 - Present

100% MSCI AC World Index ex USA Growth

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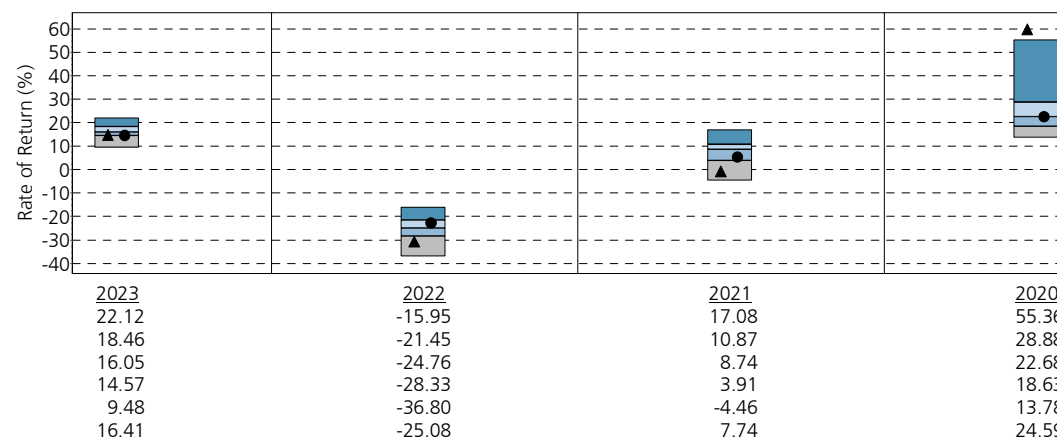
TOTAL FUND Peer Universe Comparison versus Foreign Large Growth Managers

Trailing Periods



	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Vanguard Intl Growth	7.43	31	15.77	15	28.94	28	-3.65	88	10.76	3	9.92	9
● MSCI AC Wld x US Grw	6.98	33	14.35	31	27.12	40	1.12	41	7.41	52	7.64	51

Annual Periods



	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Vanguard Intl Growth	14.81	72	-30.79	83	-0.74	96	59.74	1
● MSCI AC Wld x US Grw	14.40	78	-22.80	29	5.37	70	22.56	50

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb County Employees Retirement System
October 22, 2024

Prepared by:
Earle Dodd, Van Price, Allen Wright

Tweedy Browne Global Value

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Performance Analysis

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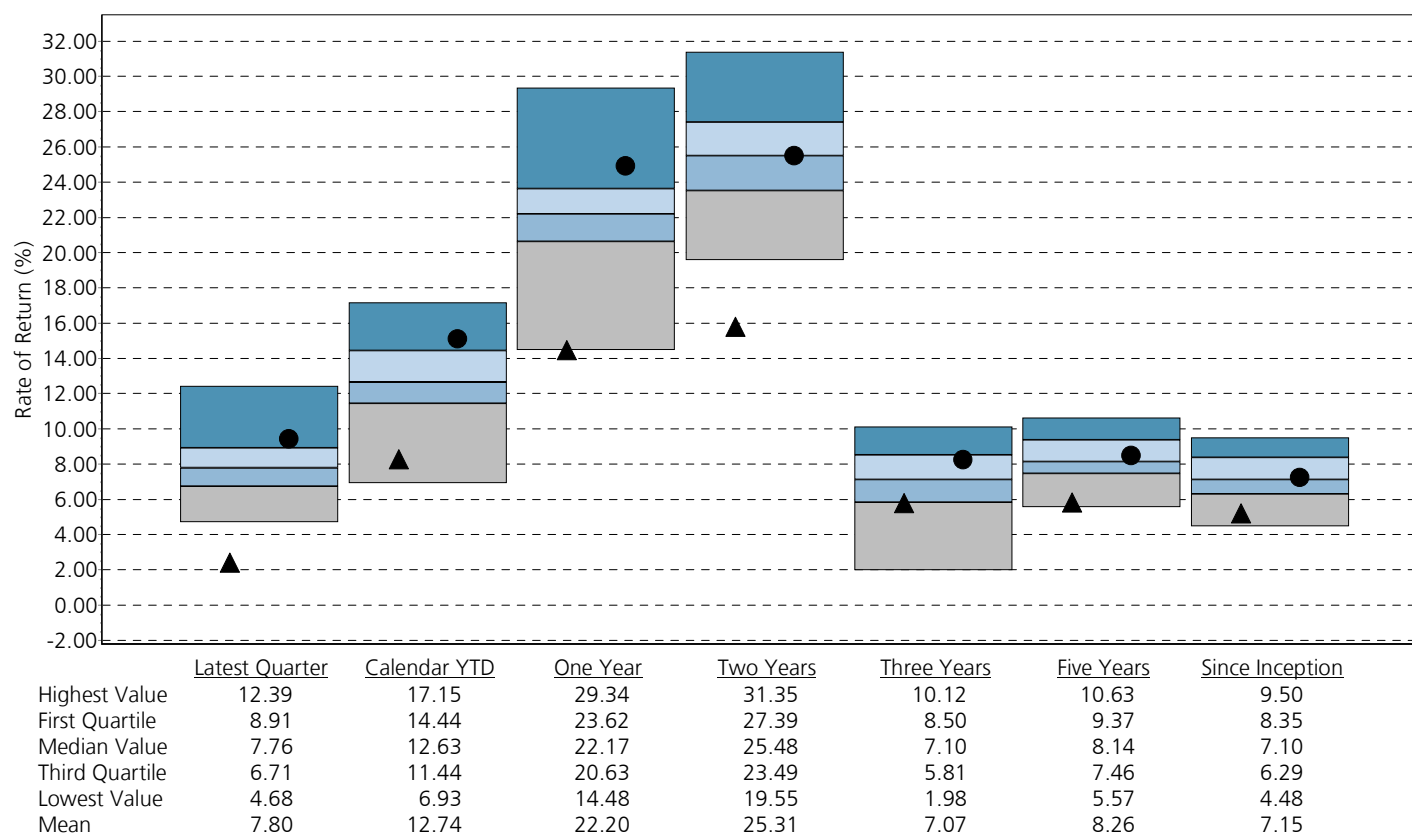
TOTAL FUND BENCHMARK

4/10/2019 - Present

100% MSCI AC World Index ex USA Value

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TOTAL FUND versus Foreign Large Value Managers
April 30, 2019 Through September 30, 2024

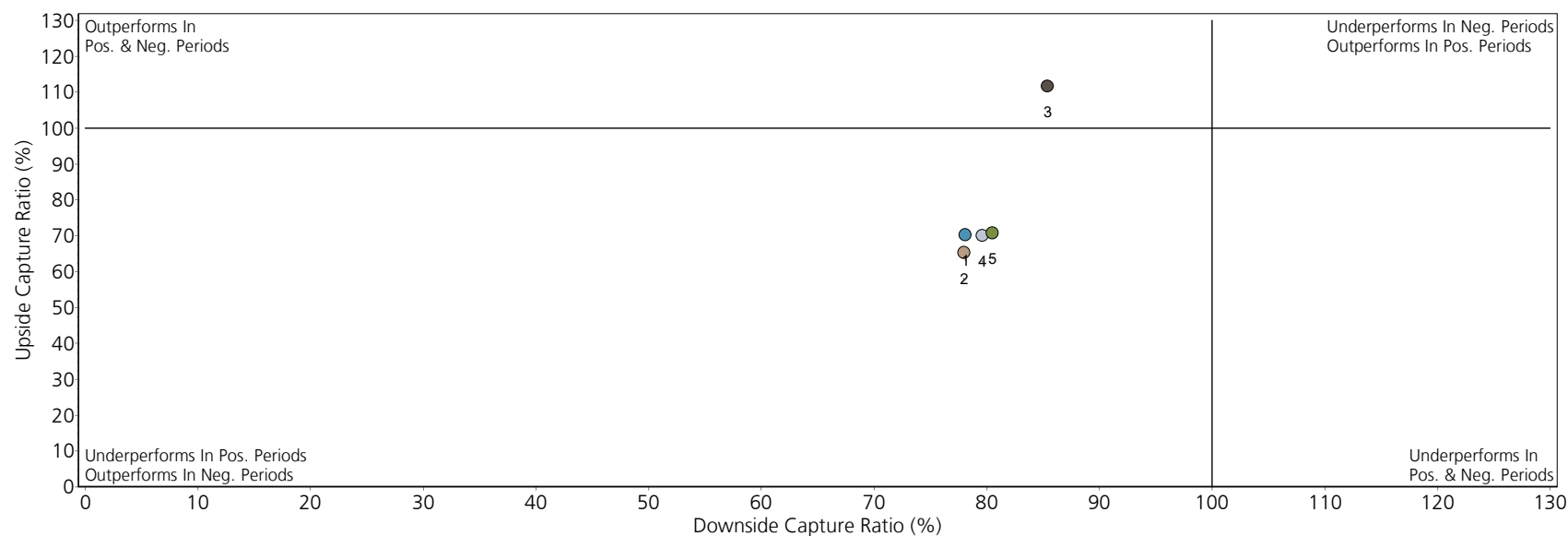


	Latest Quarter		Calendar YTD		One Year		Two Years		Three Years		Five Years		Since Inception	
▲ Tweedy Browne Global Value	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
● MSCI AC Wld x US Val	2.42	99	8.30	95	14.48	99	15.78	99	5.80	75	5.85	97	5.20	90
	9.41	14	15.10	17	24.90	15	25.49	49	8.25	29	8.49	39	7.21	46

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Capture Ratio

April 10, 2019 Through September 30, 2024



	1 12/2022-12/2023	2 12/2021-12/2022	3 12/2020-12/2021	4 12/2019-12/2020	5 4/2019-9/2024
Up Periods	7.00	7.00	7.00	7.00	39.00
Upside Capture ROR	27.69	14.32	26.96	34.49	41.22
MSCI AC Wld x US Val	39.42	21.93	24.16	49.25	58.22
% Of Capture	70.25	65.30	111.61	70.04	70.81
Down Periods	5.00	5.00	5.00	5.00	26.00
Downside Capture ROR	-11.92	-19.11	-8.96	-26.39	-32.37
MSCI AC Wld x US Val	-15.27	-24.51	-10.49	-33.13	-40.20
% Of Capture	78.07	77.98	85.37	79.63	80.53

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb County Employees Retirement System
 October 22, 2024

Prepared by:
 Earle Dodd, Van Price, Allen Wright

Fuller & Thaler Small Cap Growth

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Performance Analysis

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TOTAL FUND BENCHMARK

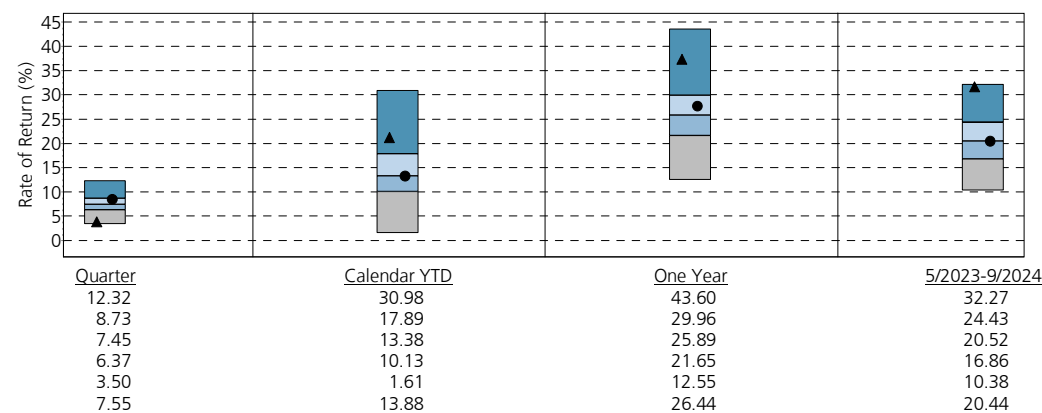
5/16/2023 - Present

100% Russell 2000 Growth

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TOTAL FUND Peer Universe Comparison versus Small Cap Growth Managers

Trailing Periods



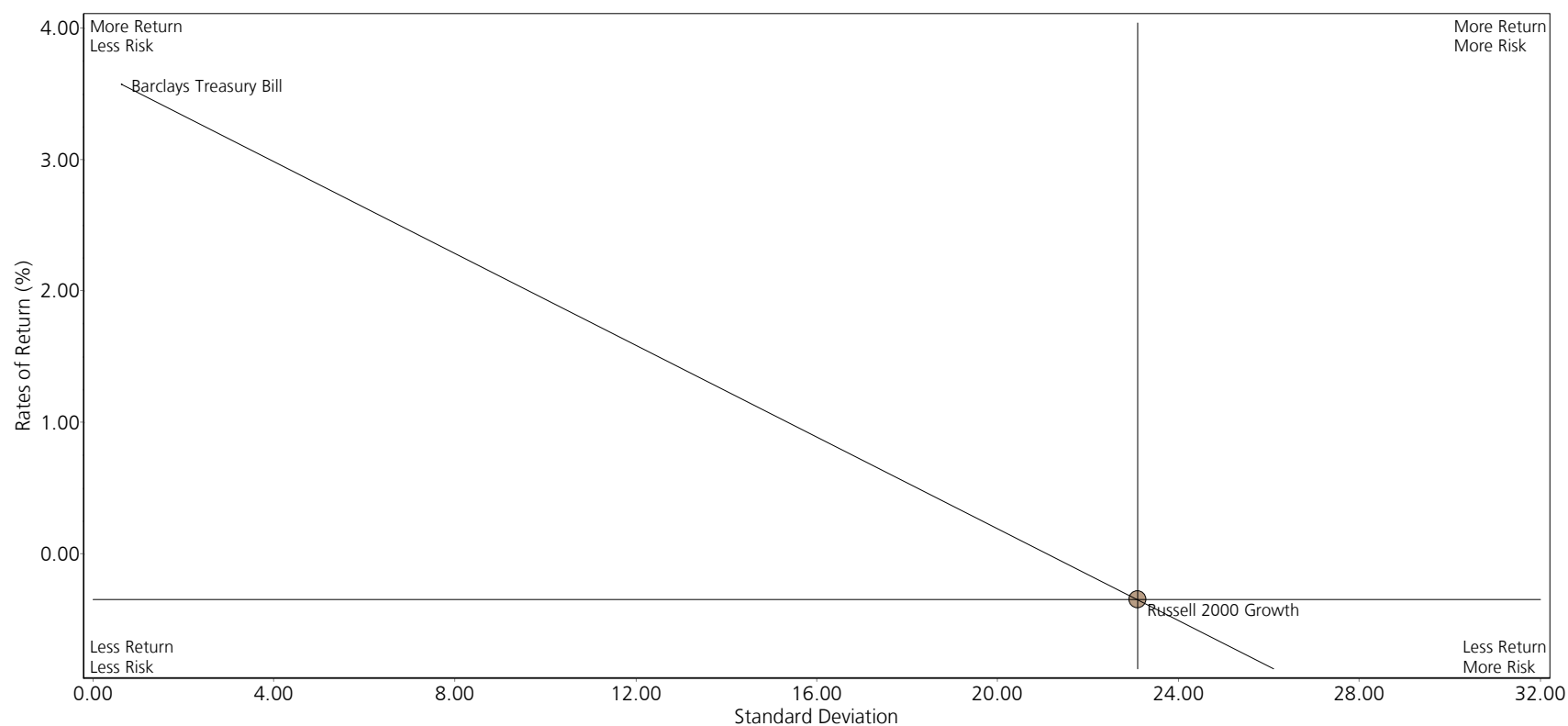
	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Fuller & Thaler SCG	3.88	98	21.25	12	37.37	5	31.68	1
● Russell 2000 Growth	8.41	31	13.22	53	27.66	44	20.43	51

Annual Periods

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Risk vs Reward Analysis

September 30, 2021 Through September 30, 2024

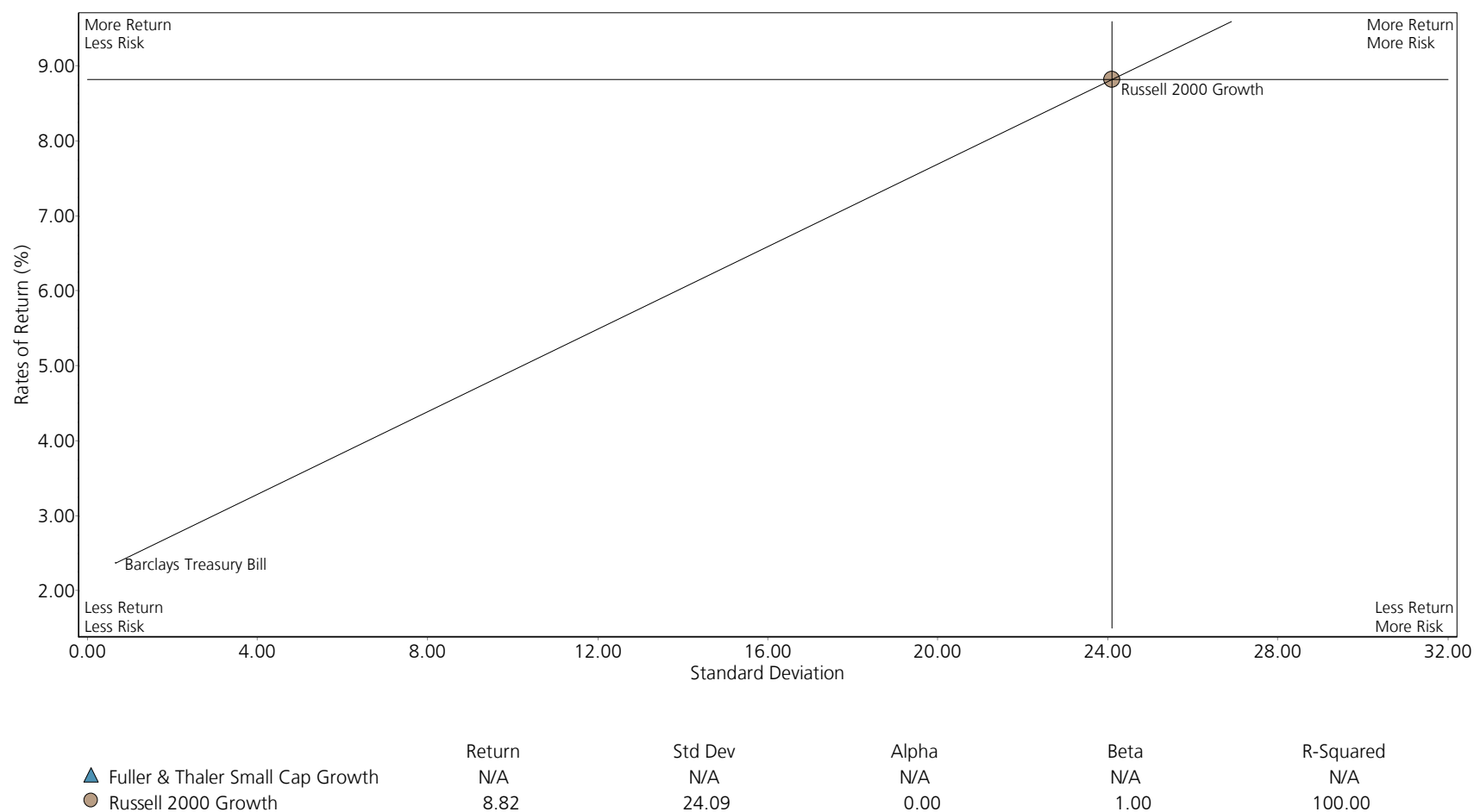


	Return	Std Dev	Alpha	Beta	R-Squared
▲ Fuller & Thaler Small Cap Growth	N/A	N/A	N/A	N/A	N/A
● Russell 2000 Growth	-0.35	23.09	0.00	1.00	100.00

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Risk vs Reward Analysis

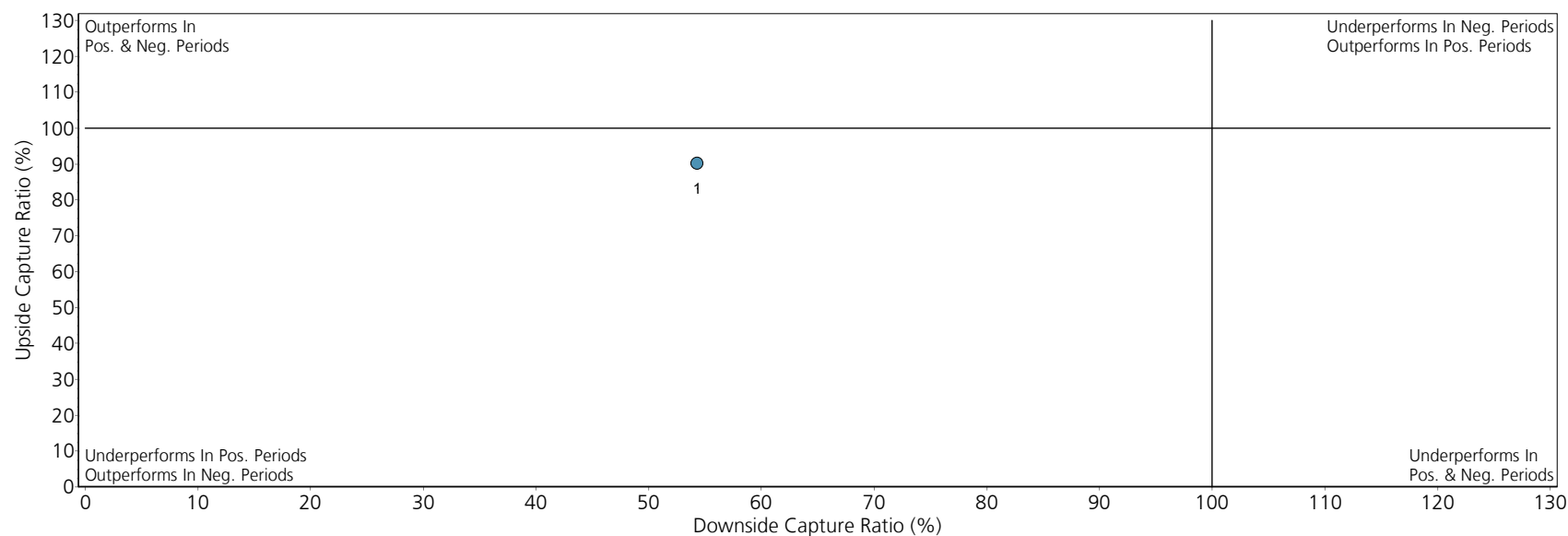
September 30, 2019 Through September 30, 2024



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Capture Ratio

May 16, 2023 Through December 31, 2023



	1
	5/2023-9/2024
Up Periods	9.00
Upside Capture ROR	70.14
Russell 2000 Growth	77.77
% Of Capture	90.19
Down Periods	7.00
Downside Capture ROR	-15.16
Russell 2000 Growth	-27.93
% Of Capture	54.30

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb County Employees Retirement System
October 22, 2024

Prepared by:
Earle Dodd, Van Price, Allen Wright

Delaware Diversified Income I

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

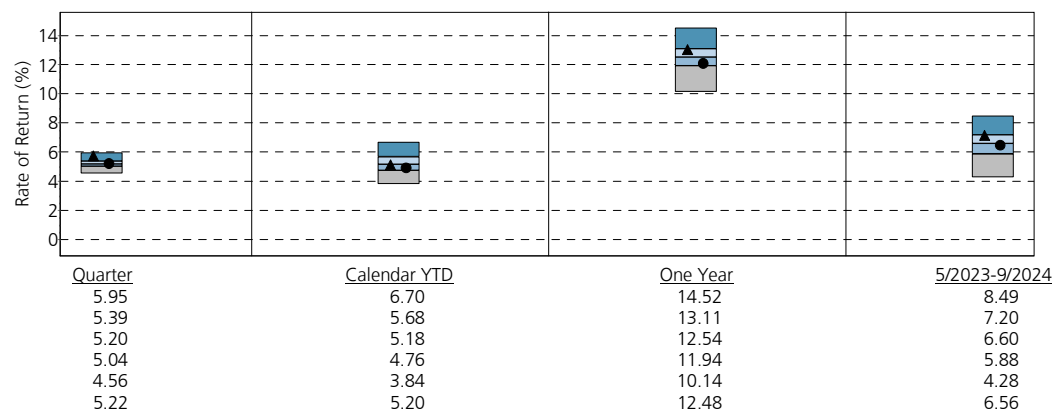
5/8/2023 - Present

100% Bloomberg Barclays US Universal

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TOTAL FUND Peer Universe Comparison versus Intermediate Core Plus Bond Managers

Trailing Periods

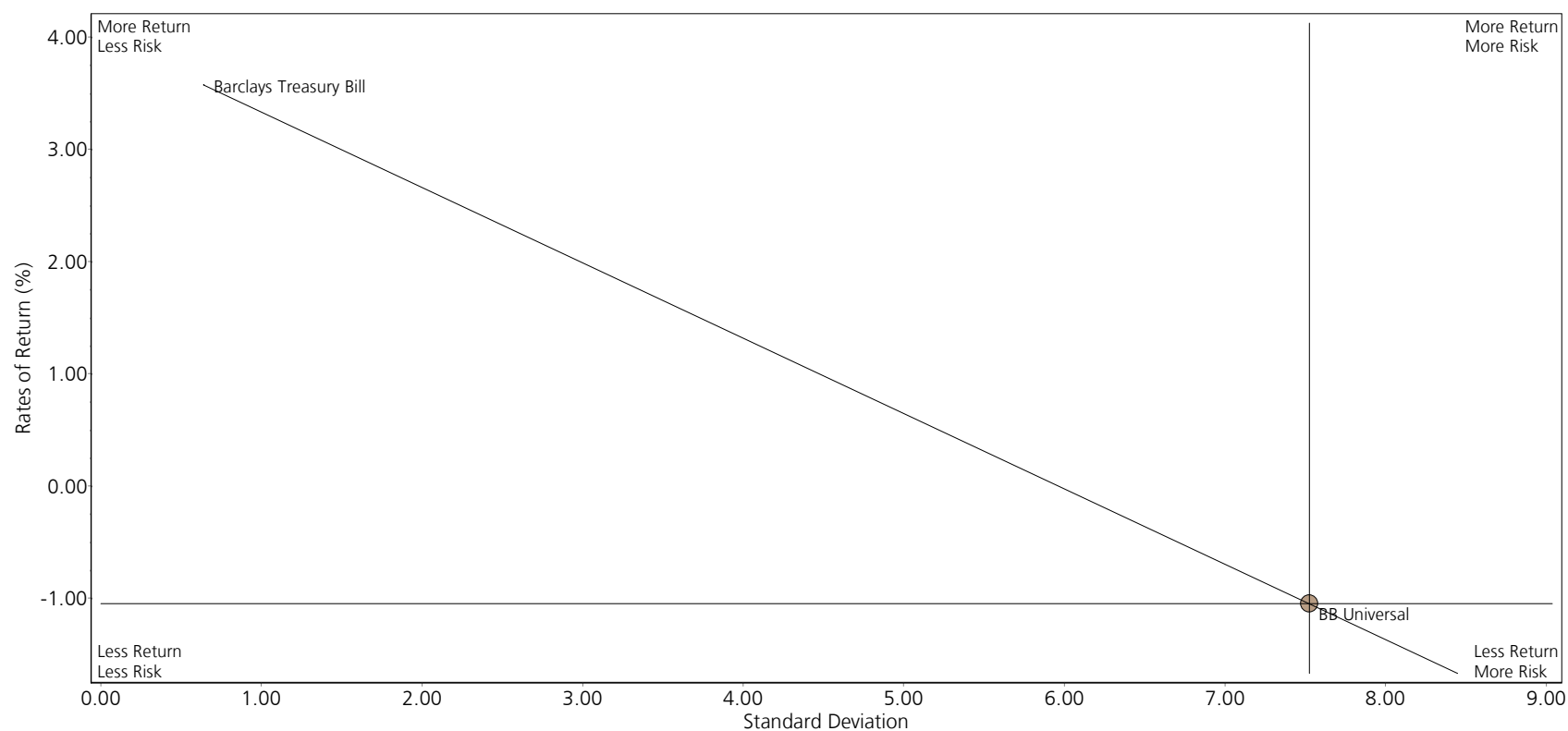


	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Delaware Div MF	5.75	5	5.13	54	13.02	25	7.15	26
● BB Universal	5.20	49	4.91	66	12.08	68	6.44	55

Annual Periods

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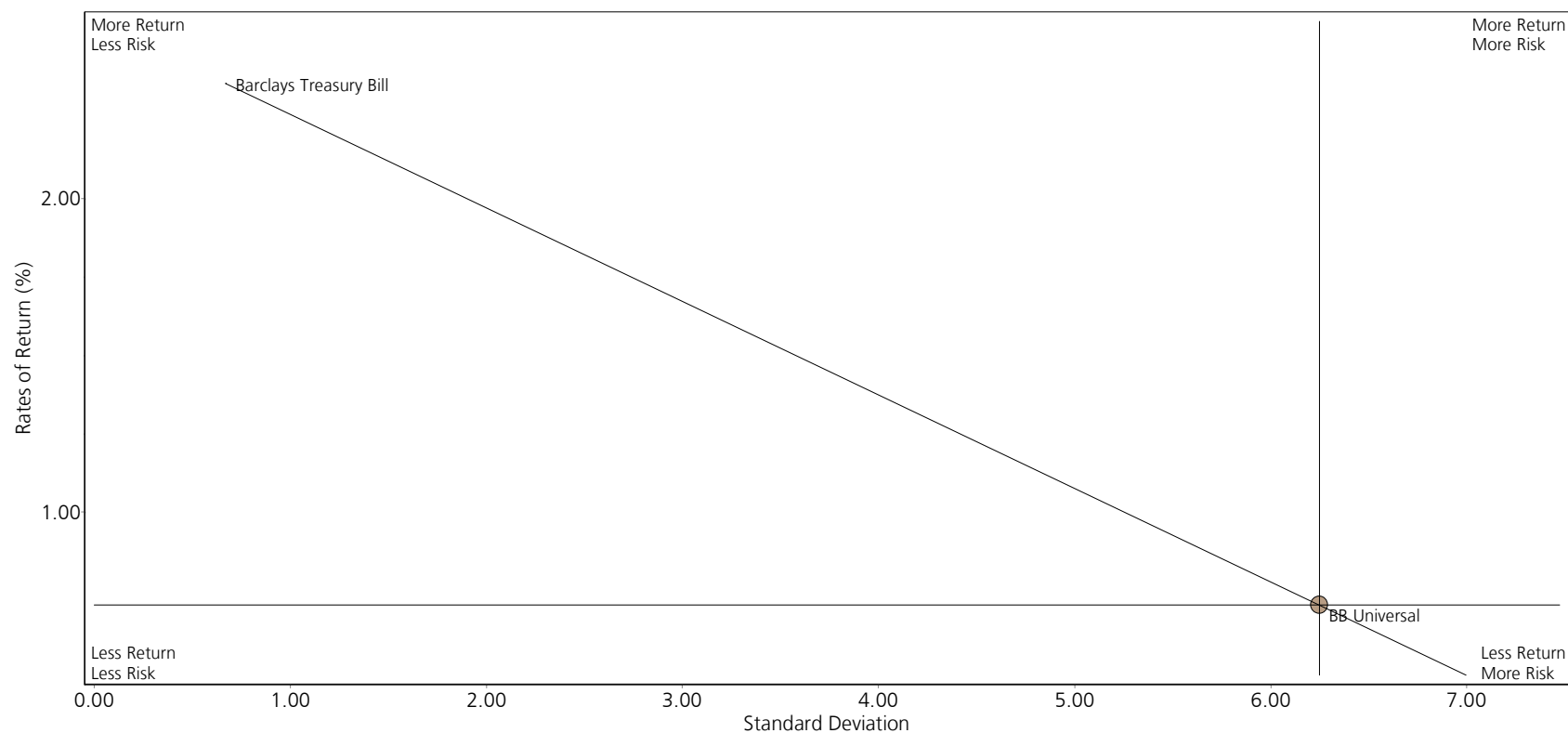
Risk vs Reward Analysis **September 30, 2021 Through September 30, 2024**



	Return	Std Dev	Alpha	Beta	R-Squared
▲ Delaware Diversified Income I	N/A	N/A	N/A	N/A	N/A
● BB Universal	-1.05	7.52	0.00	1.00	100.00

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Risk vs Reward Analysis **September 30, 2019 Through September 30, 2024**

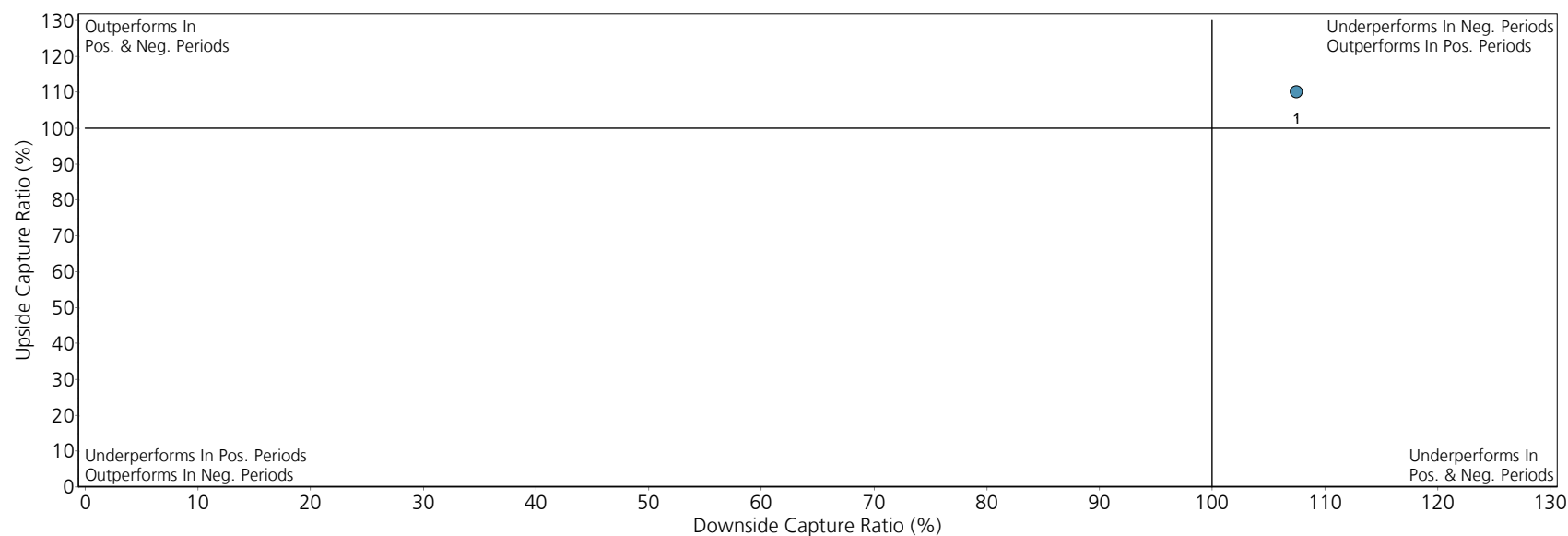


	Return	Std Dev	Alpha	Beta	R-Squared
▲ Delaware Diversified Income I	N/A	N/A	N/A	N/A	N/A
● BB Universal	0.70	6.25	0.00	1.00	100.00

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Capture Ratio

May 8, 2023 Through December 31, 2023



	1
	5/2023-9/2024
Up Periods	9.00
Upside Capture ROR	20.17
BB Universal	18.32
% Of Capture	110.08
Down Periods	7.00
Downside Capture ROR	-8.76
BB Universal	-8.15
% Of Capture	107.48

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb County Employees Retirement System
October 22, 2024

Prepared by:
Earle Dodd, Van Price, Allen Wright

Hamlin Equity Income

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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

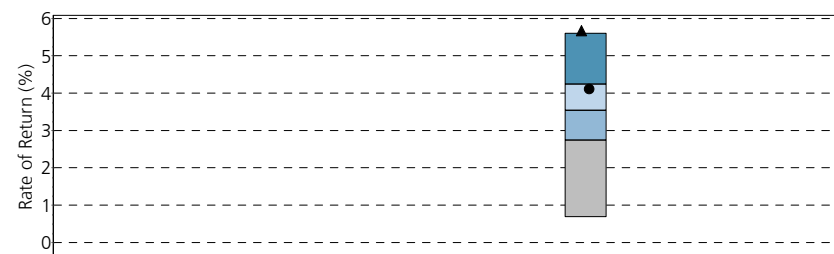
7/29/2024 - Present

100% Russell 1000 Value

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TOTAL FUND Peer Universe Comparison versus Large Value Managers

Trailing Periods



7/2024-9/2024

Highest Value	5.61
First Quartile	4.25
Median Value	3.55
Third Quartile	2.75
Lowest Value	0.69
Mean	3.43

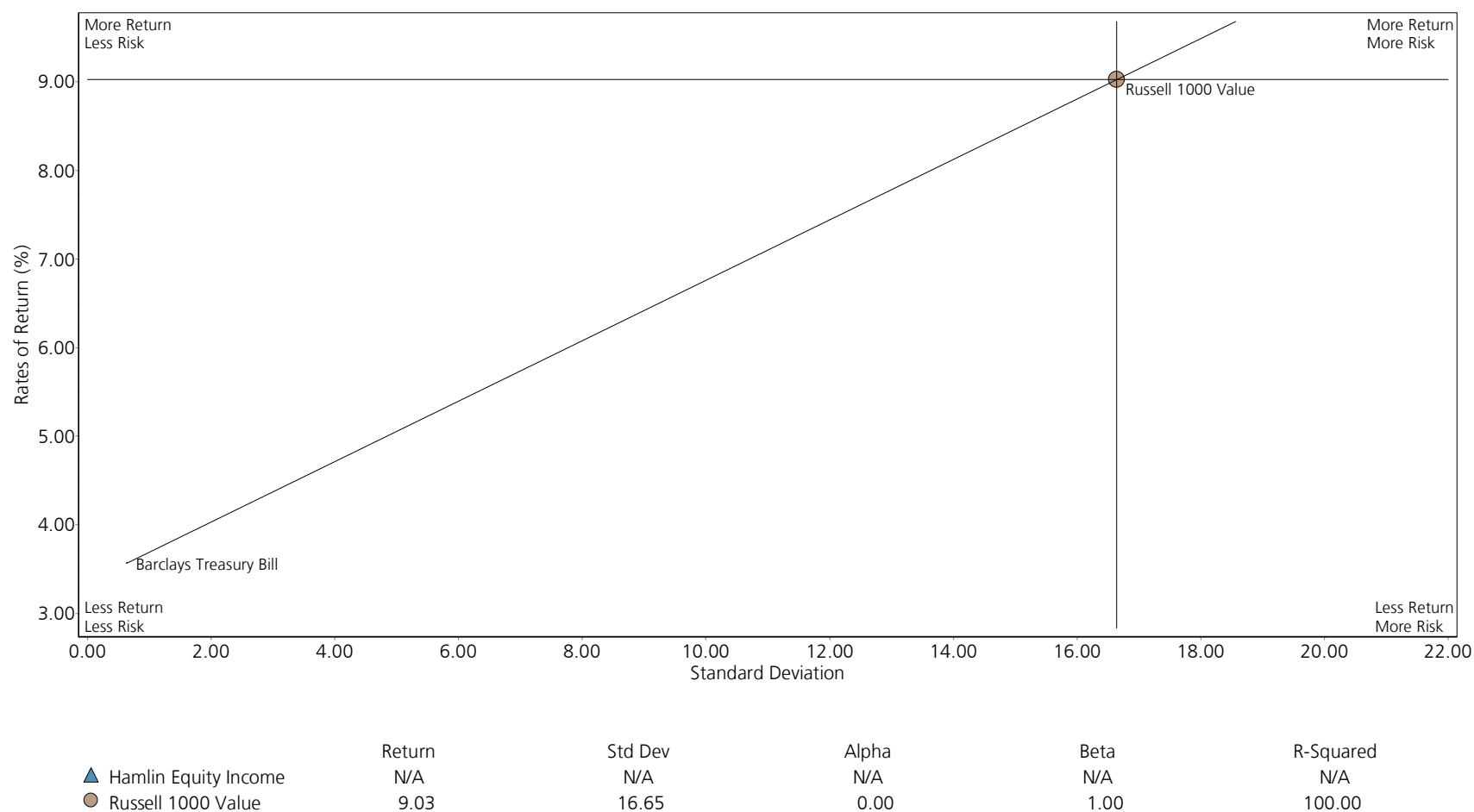
	Return	Rank
▲ Hamlin Equity Income	5.67	1
● Russell 1000 Value	4.11	29

Annual Periods

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Risk vs Reward Analysis

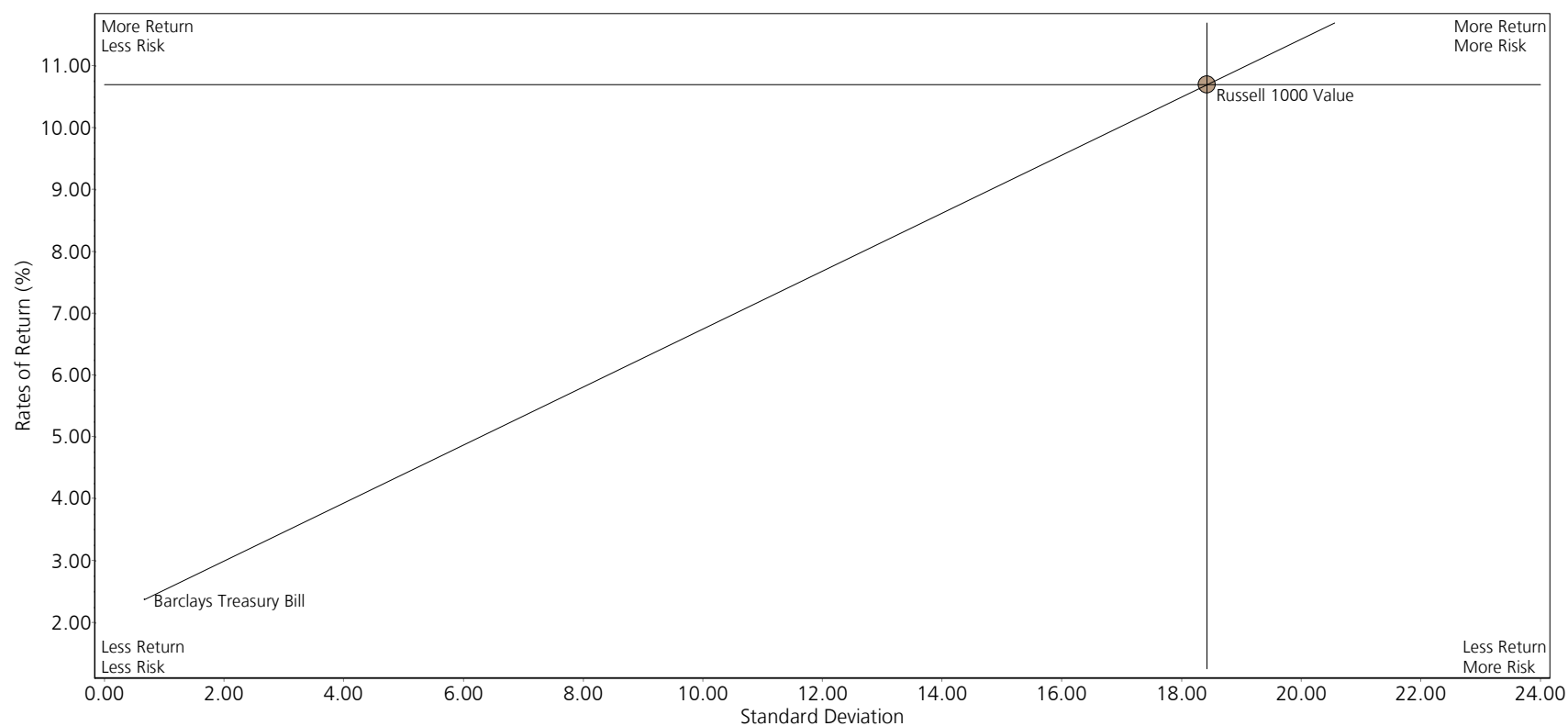
September 30, 2021 Through September 30, 2024



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Risk vs Reward Analysis

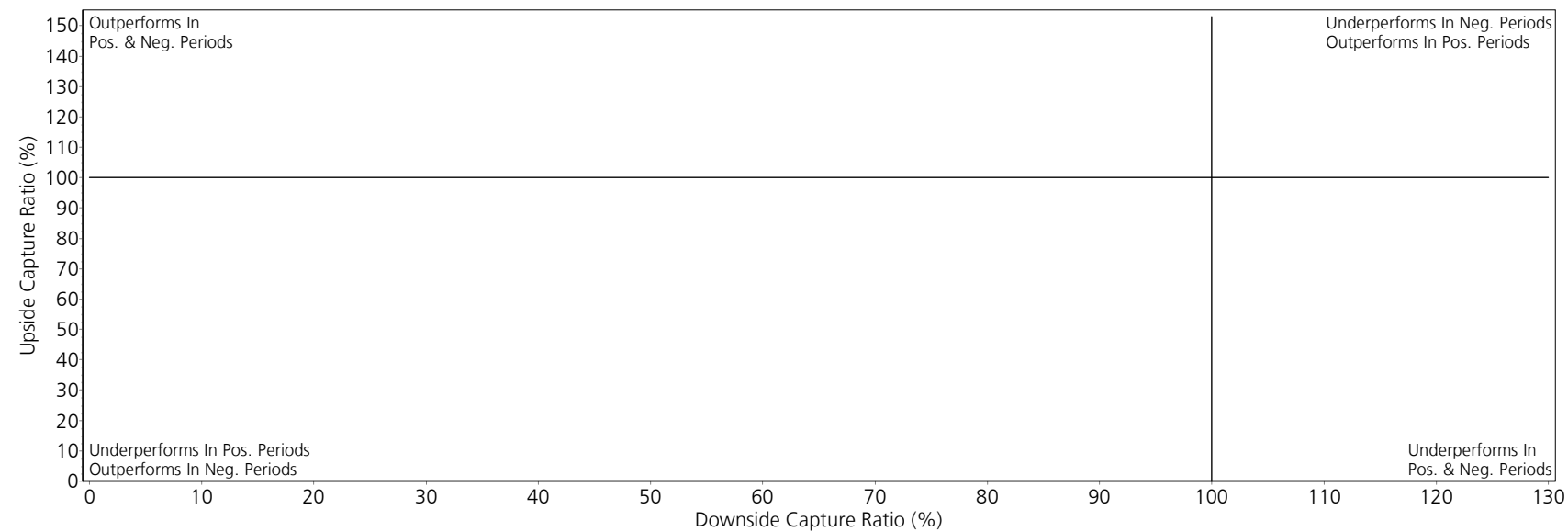
September 30, 2019 Through September 30, 2024



	Return	Std Dev	Alpha	Beta	R-Squared
▲ Hamlin Equity Income	N/A	N/A	N/A	N/A	N/A
● Russell 1000 Value	10.69	18.43	0.00	1.00	100.00

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Capture Ratio
July 29, 2024 Through December 31, 2023



	1
	7/2024-9/2024
Up Periods	2.00
Upside Capture ROR	5.67
Russell 1000 Value	4.11
% Of Capture	137.98
Down Periods	0.00
Downside Capture ROR	N/A
Russell 1000 Value	N/A
% Of Capture	N/A

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Cobb County Employees Retirement System - Investments Not Reviewed by UBS

UBS does not conduct due diligence and has not otherwise reviewed the following investments or strategies, which are included in this report at your request. You have retained this investment or strategy without the assistance of UBS or any of its employees. The inclusion of these investments/strategies in this performance report does not constitute a recommendation by UBS that you continue to invest or add funds to the strategy.

UBS does not make initial or ongoing recommendations on this investment or manager strategy to existing or prospective clients.

The IC program offers a broad spectrum of investments and manager strategies that are researched by UBS and for which clients can receive investment advice and research.

Your IC fee will not be offset or reduced as a result of not accessing our researched options.

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 UBS Institutional Consulting ("IC") or UBS Consolidated Advisory Program ("CAP") 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. 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.

If this output is provided as part of a proposal, it is marketing material. It is provided to you for discussion and consideration and is intended to aid (and be used by) your UBS Consultant or Financial Advisor in providing you with actual individualized investment recommendations. Therefore, they should only be considered in conjunction with the actual recommendations and advice of your UBS Consultant or Financial Advisor, our standard account documents, agreements, disclosures, including the ADV Disclosure for applicable advisory programs, and the additional factors that warrant consideration for your particular financial situation, including costs. The options presented are for discussion purposes only and do not constitute a recommendation to buy, hold, or sell any securities or investment products. This material is not intended and should not be construed to constitute investment advice and does not itself create a fiduciary relationship between you and UBS. You must make independent decisions with respect to any proposals contained within this report. In making those decisions you have reviewed the terms of any Plan with respect to which you are a fiduciary and your obligations to any such Plan under ERISA. If you would like more details about any of the information provided, or personalized recommendations or advice, please contact your UBS Financial Advisor.

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 IC or CAP Services Agreement or you have asked us to include those assets as an accommodation but they are not included as part of your IC or CAP Services Agreement with us. If assets are included solely as an accommodation, those assets are identified as such in this report. In either situation, the inclusion of assets held at another financial institution is based on information, including valuation and transactional information, furnished to UBS by you or your custodian. We have not verified, and are not responsible for, the accuracy or completeness of this information. 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 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 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. We require that you hold and purchase only eligible managed assets in your UBS advisory accounts.

Investment Monitoring: Your IC or CAP Agreement defines the investment monitoring performed as part of your respective investment advisory program. If we have included assets held in UBS brokerage accounts, it is important that you understand that we do not act as an investment adviser or fiduciary on brokerage assets. We do not monitor brokerage account investments through the IC or CAP Programs and we do not monitor investments as a brokerage service unless specifically agreed to in writing. This report is provided solely to help you evaluate your account performance and/or progress toward your financial objectives. By providing this report to you, we are not agreeing to monitor any brokerage account investments contained within the report. If you want ongoing monitoring of your brokerage investments, please speak with your financial advisor about the possibility of including such investments as part of an investment advisory relationship with us. Inclusion of brokerage assets in this report also distorts the actual performance of your advisory assets.

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 or Financial Advisor. Such pricing may impact the performance information provided in these reports. If pricing is indicated as "NA", the required data for that field was not provided by the other financial institution or you; this will impact 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. When you hold your assets at UBS, this report will generally show performance net of manager and UBS Institutional Consulting fees, unless you and your UBS Financial Advisor decided to reflect fee information differently. If you hold your assets away from UBS, this report will generally show performance net of manager and UBS Institutional Consulting fees if your custodian provides that level of fee information, unless you and your UBS Financial Advisor decided to reflect fee information differently. Therefore, this report may reflect performance before the deduction of manager fees and/or UBS Institutional Consulting advisory 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 instruction. For reports that reflect combined account information, the inception 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 inception dates, the consolidated Additions/Withdrawals, Income Earned and Investment Appreciation/ Depreciation will include all activity that occurred during the consolidated reporting time period. The inception date of each account is listed at the beginning of this report. 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.

Using Margin in your IC or CAP Investment Advisory Accounts. Using margin in an advisory account is a more aggressive, higher risk approach to pursuing your investment objectives. Unless you have selected a strategy that requires the use of margin as part of its implementation, we do not recommend the use of margin in advisory accounts, including IC and CAP accounts. The decision to leverage in an advisory account rests solely with you and is made against our recommendation. Your decision should be made only if you understand: (1) the risks of margin in an advisory account; (2) how margin may affect your ability to achieve investment objectives; (3) that you may lose more than your original investment. You will pay interest to UBS on the outstanding margin loan balance. Using margin to purchase securities in an advisory account increases the amount of (but not the percentage of) the advisory fee you pay. Positive or negative performance of a margined advisory account will be magnified by virtue of using margin. You will not benefit from using margin in an advisory account if the performance of your account does not exceed the interest expense being charged on the loan plus the additional advisory account fees incurred by your account as a result of the deposit of the loan proceeds.

Using Advisory Accounts as collateral for a credit line. If you currently have UBS Bank USA Credit Line collateralized by advisory accounts, UBS Bank USA pays UBS Financial Services a servicing fee based on the amount of outstanding loan balances to compensate UBS for referring clients and for administrative and operational support relating to the loan. If you maintain a balance on a non-purpose loan, your Financial Advisor will receive compensation primarily based upon the outstanding balance and the corresponding spread on the loan. This provides an incentive for your Financial Advisor to refer you for a non-purpose loan and to draw down on the loan. As UBS and your Financial Advisor are compensated primarily through advisory fees paid on your account, we (and your Financial Advisor) benefit if you draw down on your loan to meet liquidity needs rather than sell securities or other investments in your UBS account, which would reduce our advisory fee. A draw down would preserve your Financial Advisor's advisory fee revenue and may generate additional loan-related compensation for him. This presents a potential conflict of interest for your Financial Advisor when addressing your needs for liquidity. Please consider your options and these conflicts of interest carefully when deciding whether to liquidate assets or draw down on a non-purpose loan.

UBS Financial Services Inc. is in the business of establishing and maintaining investment accounts and we will receive compensation from you in connection with investments that you make, as well as additional compensation from third parties whose investments we distribute. This presents a conflict of interest when we recommend that you move your assets to UBS from another financial institution, and also when we make investment recommendations for assets you hold at, or purchase through, UBS. For more information on how we are compensated by clients and third parties, conflicts of interest and investments available at UBS please refer to the 'Your relationship with UBS' booklet provided at ubs.com/relationshipwithubs, or ask your UBS Financial Advisor for a copy. Neither UBS, our affiliates nor our Financial Advisors will act as investment adviser to you with respect to the liquidation of securities held in an advisory account to meet a margin call or credit line loan demand

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> <http://advisor.morningstar.com/familyinfo.asp> <http://advisor.morningstar.com/familyinfo.asp> <http://advisor.morningstar.com/familyinfo.asp> <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> <http://advisor.morningstar.com/familyinfo.asp> <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.

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 ©2021 Wilshire Associates Incorporated, all rights reserved.

Ranking Methodology: Universe ranking assigns a whole number rank between 1 and 99 for a set of values. This is the distribution. Ranking is determined by comparing a value to the values in the set, and using the rank assigned to the value that is equal to or 'better' than the value being compared. A 'better' value is based on whether a higher value is better or a lower value is better. A set of values can be ranked either high to low (as in rates of return, where a higher value is better than a lower value) or low to high (such as Beta). **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. **The benchmarks that constitute the policy index change over time as your portfolio changes. For historical policy index information, see the Benchmark Comparisons Used in this Report exhibit.**

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 you or 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, UBS Financial Services Inc. offers investment advisory services in its capacity as an SEC-registered investment adviser and brokerage services in its capacity as an SEC-registered broker-dealer. Investment advisory services and brokerage services are separate and distinct, differ in material ways and are governed by different laws and separate arrangements. It is important that clients understand the ways in which we conduct business and that they carefully read the agreements and disclosures that we provide to them about the products or services we offer. A small number of our financial advisors are not permitted to offer advisory services to you, and can only work with you directly as UBS broker-dealer representatives. Your financial advisor will let you know if this is the case and, if you desire advisory services, will be happy to refer you to another financial advisor who can help you. Our agreements and disclosures will inform you about whether we and our financial advisors are acting in our capacity as an investment adviser or broker-dealer. For more information, please review the PDF document at ubs.com/relationshipsummary. 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, AAP, 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) or by you (in MAC or IC). 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

Accrued Interest: In accounting, accrued interest refers to the amount of interest that has been incurred, as of a specific date, on a loan or other financial obligation but has not yet been paid out. Accrued interest can either be in the form of accrued interest revenue, for the lender, or accrued interest expense, for the borrower. The term accrued interest can also refer to the amount of bond interest that has accumulated since the last time a bond interest payment was made.

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.

Annual Income is money (or some equivalent value) that an individual or business receives, usually in exchange for providing a good or service or through investing capital. Income is used to fund day-to-day expenditures. Investments, pensions, and Social Security are primary sources of income for retirees. For individuals, income is most often received in the form of wages or salary. Business income can refer to a company's remaining revenues after paying all expenses and taxes. In this case, income is referred to as "earnings." Most forms of income are subject to taxation.

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.

Cost: This is the Cost basis information. Cost basis is the original value of an asset for tax purposes, usually the purchase price, adjusted for stock splits, dividends, and return of capital distributions. This value is used to determine the capital gain, which is equal to the difference between the asset's cost basis and the current market value.

Coupon Rate: A coupon rate is the yield paid by a fixed-income security; a fixed-income security's coupon rate is the annual coupon payments paid by the issuer relative to the bond's face or par value. The coupon rate, or coupon payment, is the yield the bond paid on its issue date. This yield changes as the value of the bond changes, thus giving the bond's **Yield to Maturity**. The portfolio's coupon rate is the weighted average of the assets' coupon rates.

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.

Distribution of Assets: Distribution of Assets displays monthly data related to net contributions, market values, rates of return, and Index Values.

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.

Investment Class: Group of financial instruments which have similar financial characteristics and which tend to behave similarly in the marketplace.

Investment Style: Method and philosophy followed by a manager when selecting financial instruments.

Management Firm: Professional organization managing various assets in order to meet specified investment goals for the benefit of its clients.

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.

Maturity Date: The maturity date is the date on which the principal amount of a note, draft, acceptance bond or other debt instrument becomes due. On this date, which is generally printed on the certificate of the instrument in question, the principal investment is repaid to the investor, while the interest payments that were regularly paid out during the life of the bond, cease to roll in. The maturity date also refers to the termination date (due date) on which an installment loan must be paid back in full.

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".

Par value: Par value is the face value of a bond. The market price of a bond may be above or below par, depending on factors such as the level of interest rates and the bond's credit status. Par value for a bond is typically \$1,000 or \$100 because these are the usual denominations in which they are issued.

Performance Attribution: Attribution analysis is a sophisticated method for evaluating the performance of a portfolio or fund manager. Manager Contribution focuses on three factors: the manager's investment style, their specific asset selections, and the market timing of those selections. It attempts to provide a quantitative analysis of the aspects of a fund manager's investment selections and philosophy that lead to that fund's performance. Asset Allocation provides an analysis of the effects on relative performance (i.e., performance vs. an index) that are related to a portfolio's allocation between asset classes. Total Fund Attribution combines the Manager Contribution results with the impacts of Asset Allocation decisions.

Real rate of return is the annual percentage of profit earned on an investment, adjusted for inflation. Therefore, the real rate of return accurately indicates the actual purchasing power of a given amount of money over time. Adjusting the nominal return to compensate for inflation allows the investor to determine how much of a nominal return is real return. In addition to adjusting for inflation, investors also must consider the impact of other factors such as taxes and investing fees in order to calculate real returns on their money or to choose among various investing options.

Tracking error is the divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark. This is often in the context of a hedge fund, mutual fund, or exchange-traded fund (ETF) that did not work as effectively as intended, creating an unexpected profit or loss. Tracking error is reported as a standard deviation percentage difference, which reports the difference between the return an investor receives and that of the benchmark they were attempting to imitate.

Treynor ratio, also known as the reward-to-volatility ratio, is a performance metric for determining how much excess return was generated for each unit of risk taken on by a portfolio. Excess return in this sense refers to the return earned above the return that could have been earned in a risk-free investment. Although there is no true risk-free investment, treasury bills are often used to represent the risk-free return in the Treynor ratio. Risk in the Treynor ratio refers to systematic risk as measured by a portfolio's beta. Beta measures the tendency of a portfolio's return to change in response to changes in return for the overall market.

Upside market Capture ratio: The Upside Capture Ratio is the ratio of the Upside Capture Return -of a portfolio against a benchmark index- divided by the Market Benchmark Index's return (from zero or positive returns).

Upside Capture Return; The Upside Capture Return, which is measured based a related benchmark index's returns, is the portfolio's compound return for returns in periods, in which the respective benchmark index's return is above or equal to zero.

Yield to maturity (YTM) is the total return anticipated on a bond if the bond is held until it matures. Yield to maturity is considered a long-term bond yield but is expressed as an annual rate. In other words, it is the internal rate of return (IRR) of an investment in a bond if the investor holds the bond until maturity, with all payments made as scheduled and reinvested at the same rate.

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.

Unit Values: Unit Value links periodic rates of return, beginning with an initial value of 100. It can be used to calculate rates of return between any two dates in the report.

Index Definitions

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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UBS

Cobb County OPEB

Asset Class Summary

Style Analysis

As of December 2, 2024

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	6.9%	15,575,443.00										\$ 15,575,443
Westfield Capital Management	XXXXX91	7.0%	15,907,600.57										\$ 15,907,601
Vanguard S&P 500 (VINIX)	XXXXX57	13.3%		30,088,459.17									\$ 30,088,459
Eagle Capital	XXXXX00	7.8%			17,703,778.21								\$ 17,703,778
Hamlin Capital Mgmt	XXXXX68	5.2%			11,880,820.23								\$ 11,880,820
Vanguard Mid Cap (VIMAX)	XXXXX57	7.1%				16,158,185.27							\$ 16,158,185
Fuller & Thaler Behavioral SCG (FTXFX)	XXXXX57	3.4%					7,713,953.51						\$ 7,713,954
Vaughan Nelson	XXXXX94	3.3%						7,455,369.41					\$ 7,455,369
BlackRock Global Allocation (MALOX)	XXXXX57	2.9%							6,678,139.44				\$ 6,678,139
First Eagle Global (SGIIX)	XXXXX57	3.4%							7,719,678.72				\$ 7,719,679
Loomis Sayles Global Equity & Income (LSWWX)	XXXXX57	3.6%							8,087,043.35				\$ 8,087,043
Vanguard Total Int'l Stock (VTSNX)	XXXXX57	5.0%								11,428,146.77			\$ 11,428,147
Vanguard International Growth (VWILX)	XXXXX57	5.4%								12,295,207.44			\$ 12,295,207
Tweedy Browne Global Value (TGBVX)	XXXXX57	3.8%								8,702,357.65			\$ 8,702,358
Richmond	XXXXX92	8.6%									19,621,410.92		\$ 19,621,411
BlackRock Strategic Income Opps (BSIIX)	XXXXX57	6.2%									14,120,981.53		\$ 14,120,982
Belle Haven	XXXXX57	7.0%									15,841,431.05		\$ 15,841,431
Total		100%	\$ 31,483,044	\$ 30,088,459	\$ 29,584,598	\$ 16,158,185	\$ 7,713,954	\$ 7,455,369	\$ 22,484,862	\$ 32,425,712	\$ 49,583,824	\$ -	\$ 226,978,006
Current Allocation			13.87%	13.26%	13.03%	7.12%	3.40%	3.28%	9.91%	14.29%	21.85%	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 %			2.87%	2.26%	2.03%	1.12%	0.40%	0.28%	-0.09%	-5.71%	-3.15%		

Earle Dodd & Austin Dodd
 Senior Institutional Consultant
 Senior Vice President - Wealth Management
 (404)760-3000

Dollar values above are rounded to the nearest dollar.

Cobb County OPEB Asset Class Summary

Market Value As of: December 2, 2024

Disclosures:

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The target allocation is based on the client's most recent IPS that UBSFS has on file.

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If you believe any information included in this report is incomplete or inaccurate in any way, please contact your UBSFS representative.

Sources: Custodial Statement; IPS; Client Request or Advisor Recommendation

Review code: IS1602740

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb OPEB
October 22, 2024

Prepared by:
Earle Dodd, Austin Dodd

Total Portfolio - OPEB

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 September 30, 2024

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. account 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 pricing 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 pricing 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
Hamlin Equity Income	AXxxx68	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.

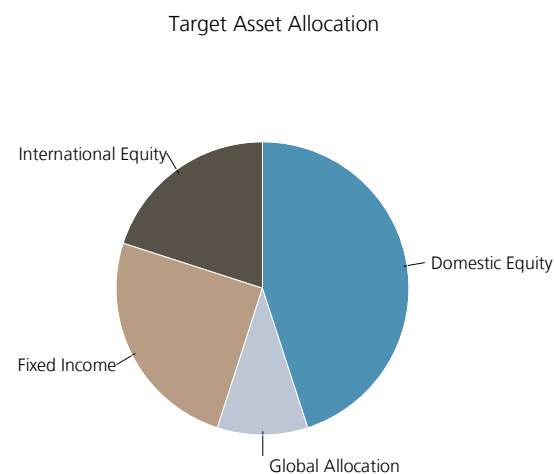
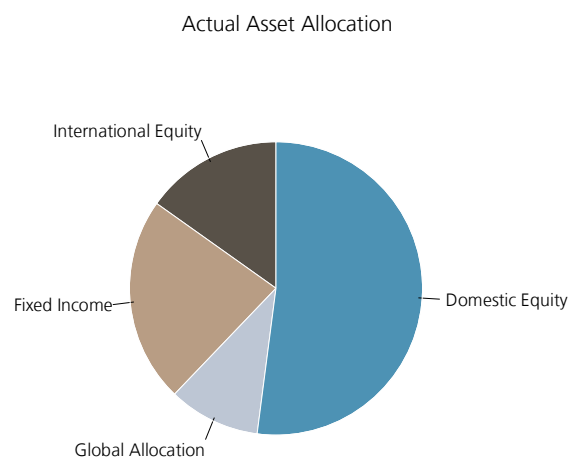
CONSOLIDATED PORTFOLIO BENCHMARK

08/31/2008 - Present

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

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Actual vs Target Asset Allocation As of September 30, 2024



	Market Value Actual	Percent Actual	Market Value Target	Percent Target	Market Value Difference	Percent Difference
Fixed Income	50,286,508.1	22.7%	55,474,326.3	25.0%	(5,187,818.2)	(2.3%)
Domestic Equity	115,499,012.6	52.1%	99,853,787.3	45.0%	15,645,225.3	7.1%
International Equity	33,637,923.7	15.2%	44,379,461.0	20.0%	(10,741,537.3)	(4.8%)
Global Allocation	22,473,860.7	10.1%	22,189,730.5	10.0%	284,130.2	0.1%
Total Fund	\$221,897,305.1	100.0%	\$221,897,305.1	100.0%	\$0.0	0.0%

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Performance Summary - Gross of Fees
Cobb OPEB
As of September 30, 2024

Account	Inception Date	09/30/2024 Market Value	Latest QTR	%tile Ranking	%tile YTD	%tile Ranking	1 Year	%tile Ranking	3 Year	%tile Ranking	5 Year	%tile Ranking	7 Year	%tile Ranking	Inception
Composite	08/31/2008	\$221,897,305	5.35%		15.40%		27.48%		6.00%		10.77%		9.38%		8.38%
Policy Index			6.02%		13.73%		24.27%		5.58%		9.27%		8.29%		7.40%
Dynamic Index			6.18%		13.29%		23.91%		5.02%		8.81%		7.94%		
Fixed Income															
Richmond Capital Management	09/30/2017	\$20,058,128	5.00%	73	4.66%	48	12.07%	28	-1.03%	14	0.78%	22	1.97%	7	1.97%
BB Gov/Cr Bond			5.10%	54	4.39%	76	11.31%	76	-1.50%	51	0.41%	51	1.64%	31	1.64%
Blackrock Strategic Income I	09/30/2017	\$14,157,017	4.37%	25	5.89%	54	11.84%	27	2.26%	41	3.35%	25	3.26%	25	3.26%
BB Agg Bond			5.20%	6	4.45%	84	11.57%	31	-1.39%	91	0.33%	89	1.47%	76	1.47%
Delaware Diversified Income I	09/30/2017	\$16,071,364	5.33%	31	5.04%	60	12.89%	31	-1.28%	43	1.20%	24	2.07%	23	2.07%
BB Agg Bond			5.20%	50	4.45%	86	11.57%	85	-1.39%	48	0.33%	73	1.47%	63	1.47%
Large Cap Value															
Eagle Capital Large Value	09/30/2017	\$16,923,204	3.83%	99	23.66%	1	36.41%	1	10.45%	49	16.52%	1	14.57%	1	14.57%
Russell 1000 Value			9.43%	26	16.68%	47	27.76%	53	9.03%	76	10.69%	85	9.53%	82	9.53%
50%SP500/50%Rus1V			7.68%	61	19.43%	23	32.10%	20	10.53%	47	13.39%	28	12.05%	18	12.05%
Hamlin Equity Income	07/29/2024	\$11,478,238													5.68%
Russell 1000 Value															4.11%
Large Cap Blend															
Vanguard 500 Index	09/30/2017	\$28,682,032	5.87%	40	22.05%	21	36.30%	23	11.88%	18	15.89%	18	14.42%	8	14.42%
S&P 500 Index			5.89%	38	22.08%	20	36.35%	22	11.91%	17	15.98%	14	14.50%	6	14.50%
Large Cap Growth															
TCW Large Cap Growth	09/30/2017	\$14,478,553	1.86%	78	25.23%	24	46.33%	6	7.75%	66	17.98%	33	17.40%	27	17.40%
Russell 1000 Growth			3.19%	57	24.55%	27	42.19%	32	12.02%	12	19.74%	10	18.20%	11	18.20%
Westfield Capital Large Growth	09/30/2017	\$15,137,200	3.32%	53	24.56%	26	44.52%	15	11.83%	16	19.72%	12	17.66%	20	17.66%
Russell 1000 Growth			3.19%	57	24.55%	27	42.19%	32	12.02%	12	19.74%	10	18.20%	11	18.20%
Mid Cap Blend															
Vanguard Mid-Cap Index Fund Admiral	09/30/2017	\$14,987,615	9.36%	16	14.72%	31	29.44%	17	5.48%	59	11.35%	33	10.50%	17	10.50%
Russell Midcap			9.21%	19	14.63%	33	29.33%	17	5.75%	56	11.30%	36	10.48%	17	10.48%
Small Cap Value															
Vaughan Nelson	09/30/2017	\$6,965,243	4.88%	99	8.19%	77	24.08%	65	11.23%	6	13.15%	21	10.39%	11	10.39%
Russell 2000 Value			10.15%	24	9.22%	66	25.88%	40	3.77%	90	9.29%	85	6.60%	92	6.60%
Small Cap Growth															
Fuller & Thaler Small Cap Growth	05/04/2023	\$6,846,928	3.88%	98	21.25%	12	37.37%	5							31.68%
Russell 2000 Growth			8.41%	31	13.22%	53	27.66%	44							20.43%

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Performance Summary - Gross of Fees
Cobb OPEB
As of September 30, 2024

Account	Inception Date	09/30/2024 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	09/30/2017	\$12,022,445	8.03%	24	13.81%	33	24.92%	42	4.03%	52	7.77%	51	5.51%	46	5.51%
MSCI AC Wld X US Net			8.06%	23	14.21%	26	25.35%	31	4.14%	49	7.59%	58	5.44%	51	5.44%
Vanguard International Growth Fund	02/07/2019	\$12,564,905	7.43%	31	15.77%	15	28.94%	28	-3.65%	88	10.76%	3			9.92%
MSCI AC Wld x US Grw			6.98%	33	14.35%	31	27.12%	40	1.12%	41	7.41%	52			7.64%
Tweedy Browne Global Value Fund	04/11/2019	\$9,050,574	2.42%	99	8.30%	95	14.48%	99	5.80%	75	5.85%	97			5.20%
MSCI AC Wld x US Val			9.41%	14	15.10%	17	24.90%	15	8.25%	29	8.49%	39			7.21%
Global Allocation															
Loomis Sayles Global Equity	09/30/2017	\$7,998,012	6.35%	45	14.93%	6	28.93%	1	4.60%	35	8.77%	4	8.76%	1	8.76%
HFRX Global Hedge			2.12%	99	5.08%	99	6.86%	99	1.20%	92	3.30%	99	2.38%	99	2.38%
First Eagle Global Funds Class I	09/30/2017	\$7,831,150	9.96%	1	18.49%	1	27.29%	1	9.27%	1	9.94%	1	8.33%	1	8.33%
HFRX Global Hedge			2.12%	99	5.08%	99	6.86%	99	1.20%	92	3.30%	99	2.38%	99	2.38%
Blackrock Global Allocation Fund	09/30/2017	\$6,644,699	4.97%	77	11.52%	46	22.60%	35	2.69%	75	7.69%	19	6.20%	21	6.20%
HFRX Global Hedge			2.12%	99	5.08%	99	6.86%	99	1.20%	92	3.30%	99	2.38%	99	2.38%
Composite Global Allocation	09/30/2017	\$22,473,861	7.16%	23	15.09%	5	26.43%	2	5.52%	26	8.84%	3	7.83%	2	7.83%
HFRX Global Hedge			2.12%	99	5.08%	99	6.86%	99	1.20%	92	3.30%	99	2.38%	99	2.38%

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Performance Summary - Net of Fees
Cobb OPEB
As of September 30, 2024

Account	Inception Date	09/30/2024 Market Value	Latest QTR	%tile Ranking	%tile YTD	%tile Ranking	1 Year	%tile Ranking	3 Year	%tile Ranking	5 Year	%tile Ranking	7 Year	%tile Ranking	Inception
Composite	08/31/2008	\$221,897,305	5.26%		15.16%		27.17%		5.76%		10.54%		9.15%		8.28%
Policy Index			6.02%		13.73%		24.27%		5.58%		9.27%		8.29%		7.40%
Dynamic Index			6.18%		13.29%		23.91%		5.02%		8.81%		7.94%		
Fixed Income															
Richmond Capital Management	09/30/2017	\$20,058,128	4.95%	79	4.52%	65	11.86%	42	-1.20%	21	0.60%	34	1.79%	20	1.79%
BB Gov/Cr Bond			5.10%	54	4.39%	76	11.31%	76	-1.50%	51	0.41%	51	1.64%	31	1.64%
Blackrock Strategic Income I	09/30/2017	\$14,157,017	4.37%	25	5.89%	54	11.84%	27	2.26%	41	3.35%	25	3.26%	25	3.26%
BB Agg Bond			5.20%	6	4.45%	84	11.57%	31	-1.39%	91	0.33%	89	1.47%	76	1.47%
Delaware Diversified Income I	09/30/2017	\$16,071,364	5.33%	31	5.04%	60	12.89%	31	-1.28%	43	1.20%	24	2.07%	23	2.07%
BB Agg Bond			5.20%	50	4.45%	86	11.57%	85	-1.39%	48	0.33%	73	1.47%	63	1.47%
Large Cap Value															
Eagle Capital Large Value	09/30/2017	\$16,923,204	3.51%	99	22.85%	1	35.51%	5	9.65%	62	15.68%	1	13.72%	1	13.72%
Russell 1000 Value			9.43%	26	16.68%	47	27.76%	53	9.03%	76	10.69%	85	9.53%	82	9.53%
50%SP500/50%Rus1V			7.68%	61	19.43%	23	32.10%	20	10.53%	47	13.39%	28	12.05%	18	12.05%
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S&P 500 Index			5.89%	38	22.08%	20	36.35%	22	11.91%	17	15.98%	14	14.50%	6	14.50%
Large Cap Growth															
TCW Large Cap Growth	09/30/2017	\$14,478,553	1.22%	92	24.11%	33	44.56%	15	6.90%	76	17.24%	49	16.69%	44	16.69%
Russell 1000 Growth			3.19%	57	24.55%	27	42.19%	32	12.02%	12	19.74%	10	18.20%	11	18.20%
Westfield Capital Large Growth	09/30/2017	\$15,137,200	3.14%	59	23.76%	34	43.40%	25	11.13%	28	19.03%	23	17.00%	38	17.00%
Russell 1000 Growth			3.19%	57	24.55%	27	42.19%	32	12.02%	12	19.74%	10	18.20%	11	18.20%
Mid Cap Blend															
Vanguard Mid-Cap Index Fund Admiral	09/30/2017	\$14,987,615	9.36%	16	14.72%	31	29.44%	17	5.48%	59	11.35%	33	10.50%	17	10.50%
Russell Midcap			9.21%	19	14.63%	33	29.33%	17	5.75%	56	11.30%	36	10.48%	17	10.48%
Small Cap Value															
Vaughan Nelson	09/30/2017	\$6,965,243	4.66%	99	7.48%	80	23.02%	71	10.27%	18	12.15%	34	9.38%	26	9.38%
Russell 2000 Value			10.15%	24	9.22%	66	25.88%	40	3.77%	90	9.29%	85	6.60%	92	6.60%
Small Cap Growth															
Fuller & Thaler Small Cap Growth	05/04/2023	\$6,846,928	3.88%	98	21.25%	12	37.37%	5							31.68%
Russell 2000 Growth			8.41%	31	13.22%	53	27.66%	44							20.43%

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Performance Summary - Net of Fees
Cobb OPEB
As of September 30, 2024

Account	Inception Date	09/30/2024 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	09/30/2017	\$12,022,445	8.03%	24	13.81%	33	24.92%	42	4.03%	52	7.77%	51	5.51%	46	5.51%
<i>MSCI AC Wld X US Net</i>			8.06%	23	14.21%	26	25.35%	31	4.14%	49	7.59%	58	5.44%	51	5.44%
Vanguard International Growth Fund	02/07/2019	\$12,564,905	7.43%	31	15.77%	15	28.94%	28	-3.65%	88	10.76%	3			9.92%
<i>MSCI AC Wld x US Grw</i>			6.98%	33	14.35%	31	27.12%	40	1.12%	41	7.41%	52			7.64%
Tweedy Browne Global Value Fund	04/11/2019	\$9,050,574	2.42%	99	8.30%	95	14.48%	99	5.80%	75	5.85%	97			5.20%
<i>MSCI AC Wld x US Val</i>			9.41%	14	15.10%	17	24.90%	15	8.25%	29	8.49%	39			7.21%
Global Allocation															
Loomis Sayles Global Equity	09/30/2017	\$7,998,012	6.35%	45	14.93%	6	28.93%	1	4.60%	35	8.77%	4	8.76%	1	8.76%
<i>HFRX Global Hedge</i>			2.12%	99	5.08%	99	6.86%	99	1.20%	92	3.30%	99	2.38%	99	2.38%
First Eagle Global Funds Class I	09/30/2017	\$7,831,150	9.96%	1	18.49%	1	27.29%	1	9.27%	1	9.94%	1	8.33%	1	8.33%
<i>HFRX Global Hedge</i>			2.12%	99	5.08%	99	6.86%	99	1.20%	92	3.30%	99	2.38%	99	2.38%
Blackrock Global Allocation Fund	09/30/2017	\$6,644,699	4.97%	77	11.52%	46	22.60%	35	2.69%	75	7.69%	19	6.20%	21	6.20%
<i>HFRX Global Hedge</i>			2.12%	99	5.08%	99	6.86%	99	1.20%	92	3.30%	99	2.38%	99	2.38%
Composite Global Allocation	09/30/2017	\$22,473,861	7.16%	23	15.09%	5	26.43%	2	5.52%	26	8.84%	3	7.83%	2	7.83%
<i>HFRX Global Hedge</i>			2.12%	99	5.08%	99	6.86%	99	1.20%	92	3.30%	99	2.38%	99	2.38%

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Cobb OPEB**Period Ending September 30, 2024****Account Values**

	Latest Quarter	Fiscal YTD	Year to Date	One Year	Three Years	Five Years	Since Inception
Beginning Mkt Value	\$210,822,673.34	\$192,957,258.18	\$192,957,258.18	\$174,832,002.04	\$190,650,592.43	\$135,324,785.92	\$12,000,000.00
Net Contributions	\$0.00	(\$63,369.10)	(\$63,369.10)	(\$103,013.10)	\$552,694.78	\$2,260,308.48	\$63,692,590.88
Investment Earnings	\$11,074,631.74	\$29,003,416.00	\$29,003,416.00	\$47,168,316.14	\$30,694,017.87	\$84,312,210.68	\$146,204,714.20
Ending Mkt Value	\$221,897,305.08	\$221,897,305.08	\$221,897,305.08	\$221,897,305.08	\$221,897,305.08	\$221,897,305.08	\$221,897,305.08

Returns

	Latest Quarter	Fiscal YTD	Calendar YTD	One Year	Three Years	Five Years	Ten Years	Fifteen Years	Since Inception
Account	5.26%	15.16%	15.16%	27.17%	5.76%	10.54%	8.72%	9.17%	8.28%
Policy Index	6.02%	13.73%	13.73%	24.27%	5.58%	9.27%	7.82%	8.48%	7.40%
Difference	-0.76%	1.44%	1.44%	2.90%	0.18%	1.27%	0.90%	0.70%	0.89%

Calendar Year Returns

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Account	15.16%	21.11%	-18.60%	14.41%	19.12%	22.58%	-6.37%	18.11%	7.35%	0.18%	5.43%	17.61%
Policy Index	13.73%	16.44%	-14.99%	12.79%	15.57%	21.17%	-5.62%	16.17%	7.80%	-0.83%	6.32%	17.59%
Difference	1.44%	4.67%	-3.61%	1.63%	3.56%	1.41%	-0.75%	1.94%	-0.44%	1.01%	-0.89%	0.01%

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

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**Cobb OPEB
Fees And Returns Summary**
Period Ending September 30, 2024

	<u>Quarter To Date</u>	<u>Year To Date</u>
Net ROR:		
Inclusive of UBS Investment Advisory Fees and Other Fees Paid	5.18%	15.03%
Net ROR:		
Inclusive of Other Fees Paid Only	5.26%	15.16%
Gross ROR:		
Excluding all Fees Paid	5.35%	15.40%

The calculations above are effective as of 1/1/2021. This Fees and Returns Summary is included in UBS Institutional Consulting ("IC") quarterly performance reports starting with first quarter reporting in 2021 and it provides detailed fee information for your review. Data from prior to that time is not included in this new exhibit but is available upon request. If you hold your assets away from UBS, "Other Fees" include all fees your custodian provides to us, except your UBS Investment Advisory Fee, and will typically include investment manager fee and may include, custodian, administrative, trading and execution fees. We can only include fees in this analysis when provided by your custodian, which we have not verified, and are not responsible for the accuracy or completeness of this information. For additional information about what fees are included within "Other Fees" please contact your custodian. If you hold your assets at UBS, "Other Fees" include investment manager fees only, as custody, administrative, trading and execution fees are included in your UBS Investment Advisory Fee. If you have any questions about how fees are depicted throughout the remainder of this report, please discuss with your UBS Consultant.

Total Portfolio - OPEB

Performance Summary Through September 30, 2024

	Quarter	YTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr	Inception	Incept Date	Current Assets
Gross Time Weighted Return	5.35	15.40	27.48	6.00	10.77	9.38	8.88	8.38	08/31/2008	\$221,897,305
Universe Median										
Policy Index	6.02	13.73	24.27	5.58	9.27	8.29	7.82	7.40		
%-tile										
(45% Russell 3000, 25% Bloomberg US Aggregate Bond, 20% MSCI AC World X US Net, 10% HFRX Global Hedge Fund Index, established 8/31/2008)										

Richmond Capital Management - (Total Portfolio)

Gross Time Weighted Return	5.00	4.66	12.07	-1.03	0.78	1.97		1.97	09/30/2017	\$20,058,128
Universe Median	5.12	4.65	11.73	-1.48	0.43	1.45		1.45		
BB Gov/Cr Bond	5.10	4.39	11.31	-1.50	0.41	1.64		1.64		
%-tile	73	48	28	14	22	7		7		
(100.00% BB Gov/Cr Bond; established 9/30/2017)										

Blackrock Strategic Income I - (Total Portfolio)

Gross Time Weighted Return	4.37	5.89	11.84	2.26	3.35	3.26		3.26	09/30/2017	\$14,157,017
Universe Median	3.71	6.00	10.61	1.94	2.53	2.58		2.58		
Bloomberg US Agg	5.20	4.45	11.57	-1.39	0.33	1.47		1.47		
%-tile	25	54	27	41	25	25		25		
(100.00% Bloomberg US Agg; established 9/30/2017)										

Delaware Diversified Income I - (Total Portfolio)

Gross Time Weighted Return	5.33	5.04	12.89	-1.28	1.20	2.07		2.07	09/30/2017	\$16,071,364
Universe Median	5.20	5.18	12.54	-1.42	0.76	1.67		1.67		
Bloomberg US Agg	5.20	4.45	11.57	-1.39	0.33	1.47		1.47		
%-tile	31	60	31	43	24	23		23		
(100.00% Bloomberg US Agg; established 9/30/2017)										

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Total Portfolio - OPEB
Performance Summary Through September 30, 2024

	Quarter	YTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr	Inception	Incept Date	Current Assets
Eagle Capital Large Value - (Total Portfolio)										
Gross Time Weighted Return	3.83	23.66	36.41	10.45	16.52	14.57		14.57	09/30/2017	\$16,923,204
Universe Median	8.27	16.60	28.12	10.32	12.22	10.69		10.69		
Russell 1000 Value	9.43	16.68	27.76	9.03	10.69	9.53		9.53		
%-tile	99	1	1	49	1	1		1		
(100.00% Russell 1000 Value; established 9/30/2017)										
Vanguard 500 Index - (Total Portfolio)										
Gross Time Weighted Return	5.87	22.05	36.30	11.88	15.89	14.42		14.42	09/30/2017	\$28,682,032
Universe Median	5.77	20.48	34.62	10.57	14.85	13.11		13.11		
S&P 500 Index	5.89	22.08	36.35	11.91	15.98	14.50		14.50		
%-tile	40	21	23	18	18	8		8		
(100.00% S&P 500 Index; established 9/30/2017)										
TCW Large Cap Growth - (Total Portfolio)										
Gross Time Weighted Return	1.86	25.23	46.33	7.75	17.98	17.40		17.40	09/30/2017	\$14,478,553
Universe Median	3.55	21.91	39.28	9.67	17.14	16.20		16.20		
Russell 1000 Growth	3.19	24.55	42.19	12.02	19.74	18.20		18.20		
%-tile	78	24	6	66	33	27		27		
(100.00% Russell 1000 Growth; established 9/30/2017)										
Westfield Capital Large Growth - (Total Portfolio)										
Gross Time Weighted Return	3.32	24.56	44.52	11.83	19.72	17.66		17.66	09/30/2017	\$15,137,200
Universe Median	3.55	21.91	39.28	9.67	17.14	16.20		16.20		
Russell 1000 Growth	3.19	24.55	42.19	12.02	19.74	18.20		18.20		
%-tile	53	26	15	16	12	20		20		
(100.00% Russell 1000 Growth; established 9/30/2017)										

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Total Portfolio - OPEB
Performance Summary Through September 30, 2024

	Quarter	YTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr	Inception	Incept Date	Current Assets
Vanguard Mid-Cap Index Fund Admiral - (Total Portfolio)										
Gross Time Weighted Return	9.36	14.72	29.44	5.48	11.35	10.50		10.50	09/30/2017	\$14,987,615
Universe Median	8.12	13.35	26.89	6.38	10.92	9.38		9.38		
Russell Midcap	9.21	14.63	29.33	5.75	11.30	10.48		10.48		
%-tile	16	31	17	59	33	17		17		
(100.00% Russell Midcap; established 9/30/2017)										
Vaughan Nelson - (Total Portfolio)										
Gross Time Weighted Return	4.88	8.19	24.08	11.23	13.15	10.39		10.39	09/30/2017	\$6,965,243
Universe Median	8.36	10.97	25.43	7.10	11.18	8.62		8.62		
Russell 2000 Value	10.15	9.22	25.88	3.77	9.29	6.60		6.60		
%-tile	99	77	65	6	21	11		11		
(100.00% Russell 2000 Value; established 9/30/2017)										
Vanguard Total International Stock Fund - (Total Portfolio)										
Gross Time Weighted Return	8.03	13.81	24.92	4.03	7.77	5.51		5.51	09/30/2017	\$12,022,445
Universe Median	7.09	13.04	24.50	4.12	7.79	5.45		5.45		
MSCI AC Wld X US Net	8.06	14.21	25.35	4.14	7.59	5.44		5.44		
%-tile	24	33	42	52	51	46		46		
(100.00% MSCI AC Wld X US Net; established 9/30/2017)										
Vanguard International Growth Fund - (Total Portfolio)										
Gross Time Weighted Return	7.43	15.77	28.94	-3.65	10.76			9.92	02/07/2019	\$12,564,905
Universe Median	6.20	12.65	26.14	-0.06	7.47			7.68		
MSCI AC Wld x US Grw	6.98	14.35	27.12	1.12	7.41			7.64		
%-tile	31	15	28	88	3			9		
(100.00% MSCI AC Wld x US Grw; established 2/07/2019)										

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Total Portfolio - OPEB
Performance Summary Through September 30, 2024

	Quarter	YTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr	Inception	Incept Date	Current Assets
Loomis Sayles Global Equity - (Total Portfolio)										
Gross Time Weighted Return	6.35	14.93	28.93	4.60	8.77	8.76		8.76	09/30/2017	\$7,998,012
Universe Median	6.09	11.35	21.31	3.92	6.44	5.45		5.45		
HFRX Global Hedge	2.12	5.08	6.86	1.20	3.30	2.38		2.38		
%-tile	45	6	1	35	4	1		1		
(100.00% HFRX Global Hedge; established 9/30/2017)										
First Eagle Global Funds Class I - (Total Portfolio)										
Gross Time Weighted Return	9.96	18.49	27.29	9.27	9.94	8.33		8.33	09/30/2017	\$7,831,150
Universe Median	6.09	11.35	21.31	3.92	6.44	5.45		5.45		
HFRX Global Hedge	2.12	5.08	6.86	1.20	3.30	2.38		2.38		
%-tile	1	1	1	1	1	1		1		
(100.00% HFRX Global Hedge; established 9/30/2017)										
Blackrock Global Allocation Fund - (Total Portfolio)										
Gross Time Weighted Return	4.97	11.52	22.60	2.69	7.69	6.20		6.20	09/30/2017	\$6,644,699
Universe Median	6.09	11.35	21.31	3.92	6.44	5.45		5.45		
HFRX Global Hedge	2.12	5.08	6.86	1.20	3.30	2.38		2.38		
%-tile	77	46	35	75	19	21		21		
(100.00% HFRX Global Hedge; established 9/30/2017)										
Tweedy Browne Global Value Fund - (Total Portfolio)										
Gross Time Weighted Return	2.42	8.30	14.48	5.80	5.85			5.20	04/11/2019	\$9,050,574
Universe Median	7.76	12.63	22.17	7.10	8.14			7.10		
MSCI AC Wld x US Val	9.41	15.10	24.90	8.25	8.49			7.21		
%-tile	99	95	99	75	97			90		
(100.00% MSCI AC Wld x US Val; established 4/11/2019)										

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Total Portfolio - OPEB
Performance Summary Through September 30, 2024

	Quarter	YTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr	Inception	Incept Date	Current Assets
Fuller & Thaler Small Cap Growth - (Total Portfolio)										
Gross Time Weighted Return	3.88	21.25	37.37					31.68	05/04/2023	\$6,846,928
Universe Median	7.45	13.38	25.89					20.52		
Russell 2000 Growth	8.41	13.22	27.66					20.43		
%-tile	98	12	5					1		

(100.00% Russell 2000 Growth; established 5/04/2023)

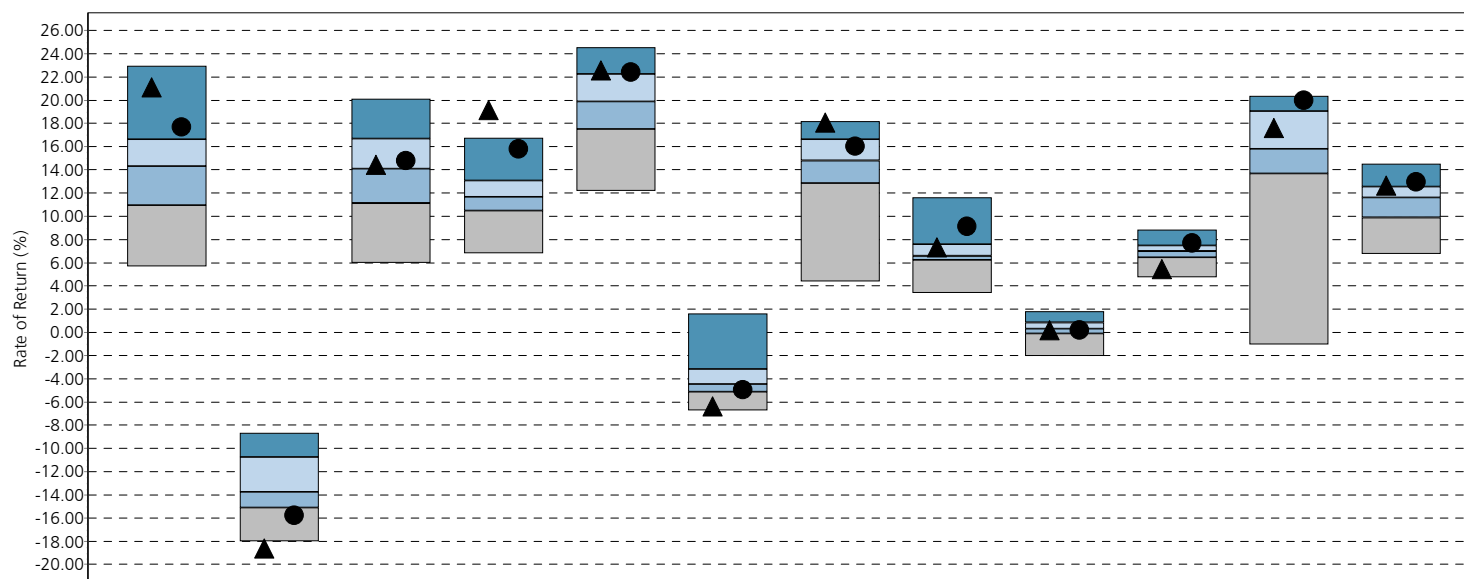
Hamlin Equity Income - (Total Portfolio)

Gross Time Weighted Return								5.68	07/29/2024	\$11,478,238
Universe Median								3.55		
Russell 1000 Value								4.11		
%-tile								1		

(100.00% Russell 1000 Value; established 7/29/2024)

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Consolidated Portfolio vs Master Trusts - Public : Plans < \$1 Billion Managers
December 31, 2003 Through December 31, 2023



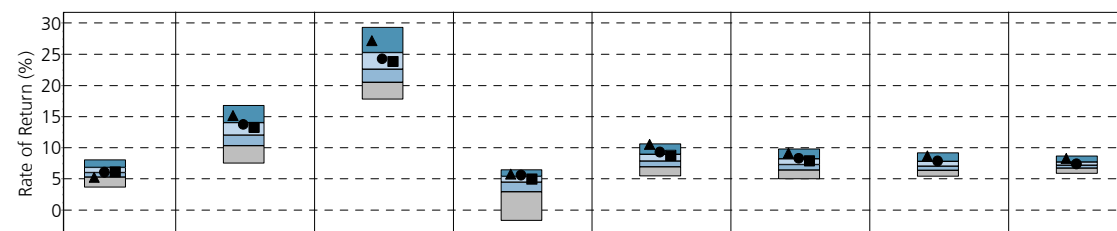
	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Highest Value	22.96	-8.70	20.10	16.74	24.50	1.58	18.17	11.59	1.79	8.81	20.31	14.47
First Quartile	16.63	-10.77	16.67	13.06	22.21	-3.21	16.61	7.54	0.82	7.47	19.02	12.51
Median Value	14.32	-13.78	14.05	11.64	19.87	-4.47	14.79	6.54	0.29	6.99	15.79	11.58
Third Quartile	10.91	-15.14	11.09	10.44	17.52	-5.11	12.80	6.19	-0.14	6.44	13.65	9.86
Lowest Value	5.67	-18.04	6.00	6.82	12.15	-6.71	4.39	3.35	-2.08	4.73	-1.05	6.73
Mean	13.96	-13.49	13.75	11.74	19.51	-3.87	14.17	6.88	0.19	7.01	15.16	11.24
Members	32	29	32	32	23	23	22	22	22	21	21	57

	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Total Portfolio	21.11	3	-18.60	99	14.41	47	19.12	1	22.58	16	-6.37	95	18.11	4	7.35	32	0.18	61	5.43	96	17.61	35	12.67	20
● Policy Benchmark	17.65	15	-15.71	82	14.76	45	15.81	4	22.39	22	-4.99	73	16.04	36	9.12	7	0.21	60	7.70	18	19.95	22	12.97	13

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

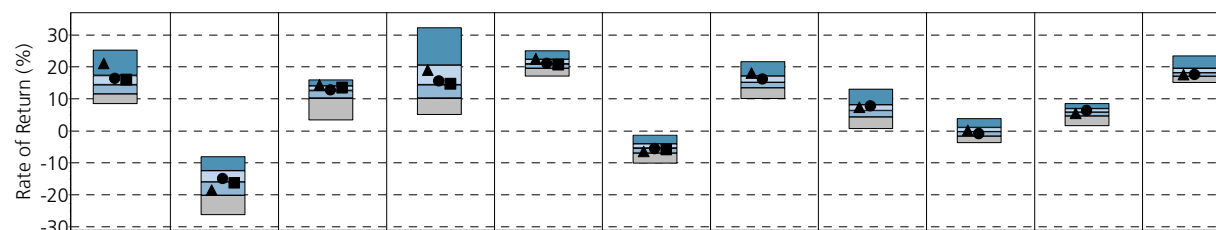
Trailing Periods



	Quarter	Calendar YTD	One Year	Three Years	Five Years	Seven Years	Ten Years	8/2008-9/2024
Highest Value	8.11	16.84	29.39	6.52	10.63	9.83	9.23	8.71
First Quartile	6.85	14.03	25.30	5.40	8.99	8.25	7.82	7.72
Median Value	6.02	12.07	22.64	4.49	7.91	7.33	7.07	7.22
Third Quartile	5.32	10.39	20.53	2.92	6.97	6.44	6.40	6.72
Lowest Value	3.68	7.53	17.82	-1.66	5.48	4.99	5.40	5.88
Mean	6.05	12.13	22.95	3.98	7.96	7.36	7.13	7.22

	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Total Portfolio	5.26	76	15.16	8	27.17	8	5.76	15	10.54	1	9.15	8	8.72	4	8.28	6
● Policy Index	6.02	50	13.73	28	24.27	35	5.58	20	9.27	19	8.29	24	7.82	24	7.40	39
■ Dynamic Index	6.18	44	13.29	34	23.91	38	5.02	34	8.81	28	7.94	33	N/A	N/A	N/A	N/A

Annual Periods



	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Highest Value	25.31	-7.97	16.04	32.37	25.25	-1.19	21.69	13.23	3.97	8.57	23.53
First Quartile	17.41	-12.43	14.11	20.58	22.38	-3.95	17.23	8.24	1.15	7.00	19.72
Median Value	14.50	-15.87	12.73	14.49	21.01	-5.33	15.25	6.44	-0.17	6.01	18.28
Third Quartile	11.63	-20.16	10.25	10.33	19.62	-6.95	13.50	4.36	-1.60	4.75	17.12
Lowest Value	8.44	-26.30	3.49	5.13	17.16	-10.13	10.19	0.64	-3.65	1.63	15.05
Mean	14.97	-16.26	11.92	15.55	21.05	-5.47	15.47	6.37	-0.15	5.78	18.49

	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Total Portfolio	21.11	9	-18.60	68	14.41	19	19.12	29	22.58	22	-6.37	67	18.11	17	7.35	36
● Policy Index	16.44	35	-14.99	41	12.79	49	15.57	43	21.17	46	-5.62	55	16.17	35	7.80	30
■ Dynamic Index	16.20	37	-16.17	53	13.62	34	14.82	47	20.88	51	-5.70	56	N/A	N/A	N/A	N/A

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Performance Profile
August 31, 2008 Through September 30, 2024

	Ended	Return
Best Quarter	6/2020	17.25
Worst Quarter	3/2020	-15.17
Best 4 Quarters	9/2024	27.17
Worst 4 Quarters	9/2022	-20.52

Total # of Periods: 193
 # of Positive Periods: 128
 # of Negative Periods: 65

	Latest Month	Latest Quarter	Year To Date	One Year	Two Years	Three Years	Five Years	Ten Years	Since Inception
Consolidated Portfolio	1.94	5.26	15.16	27.17	22.01	5.76	10.54	8.72	8.28
Policy Index	1.92	6.02	13.73	24.27	18.85	5.58	9.27	7.82	7.40
Excess	0.02	-0.76	1.44	2.90	3.16	0.18	1.27	0.90	0.89
Riskless Index	0.44	1.38	4.06	5.51	5.08	3.57	2.37	1.68	1.12
Real ROR	1.74	4.85	12.14	24.17	18.45	0.93	6.14	5.75	5.90
CPI	0.20	0.40	2.73	2.42	3.04	4.72	4.11	2.80	2.25

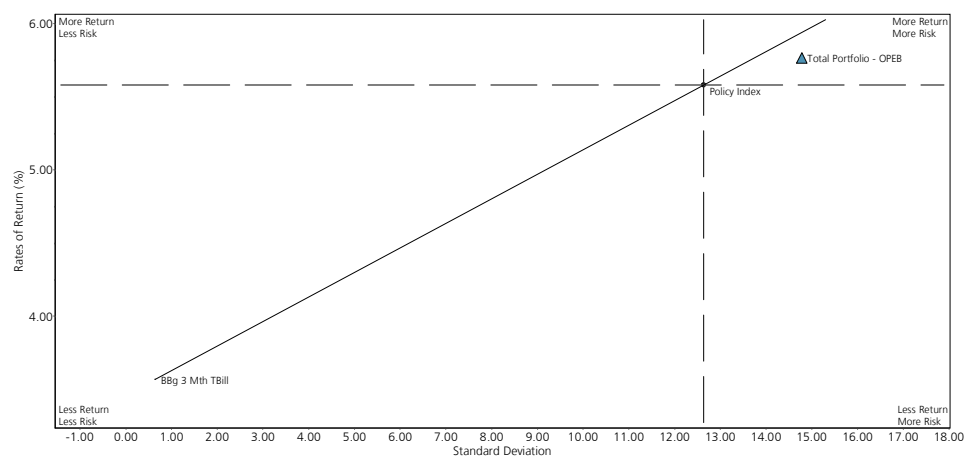
Period	Return	Std Dev	Sharpe Ratio	Alpha	Beta	R-Squared	Relative Risk	Track Error	Treynor Ratio	Info Ratio
One Year	27.17	9.83	2.20	1.30	1.07	98.17	1.08	1.46	20.33	1.67
Two Years	22.01	11.67	1.45	1.13	1.13	98.23	1.14	2.05	14.99	1.38
Three Years	5.76	14.57	0.15	0.02	1.16	98.44	1.17	2.69	1.89	0.16
Five Years	10.54	14.70	0.56	0.31	1.16	98.72	1.16	2.58	7.07	0.55
Ten Years	8.72	12.13	0.58	0.09	1.14	98.70	1.15	2.06	6.15	0.49
Since Inception	8.28	10.29	0.70	2.56	0.72	64.38	0.90	6.93	9.92	0.07

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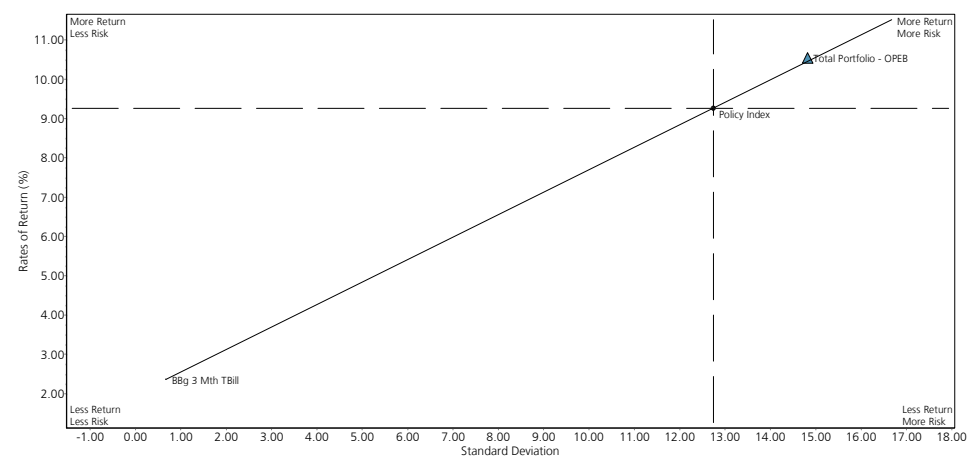
Risk vs Reward Analysis

August 31, 2008 Through September 30, 2024

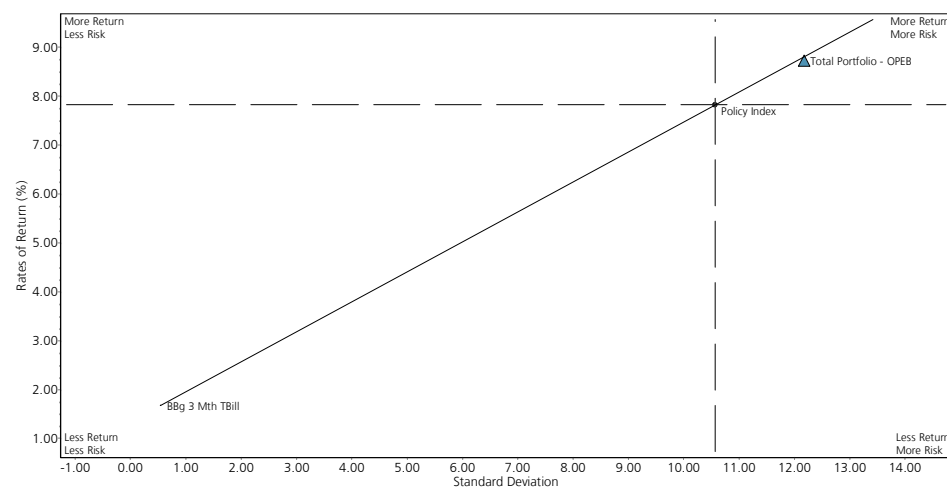
3 Years



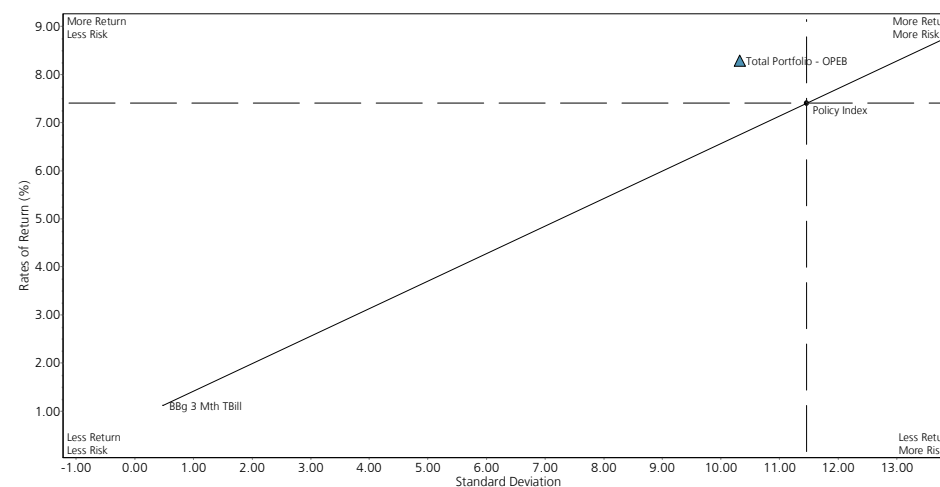
5 Years



10 Years



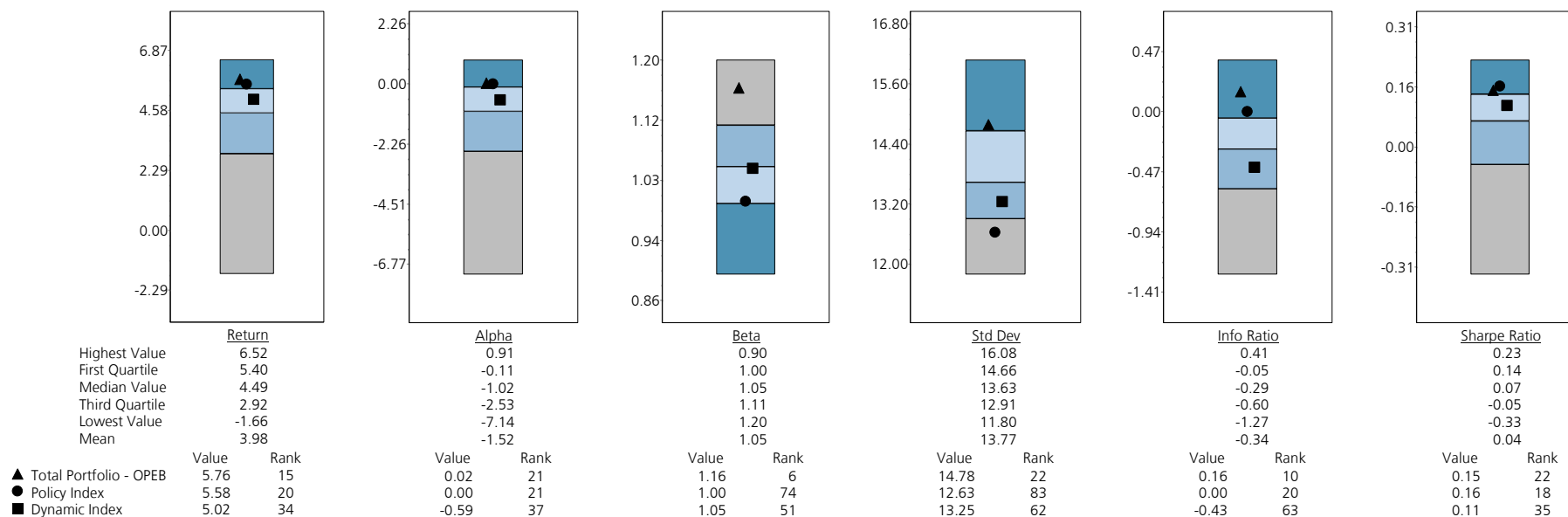
Inception



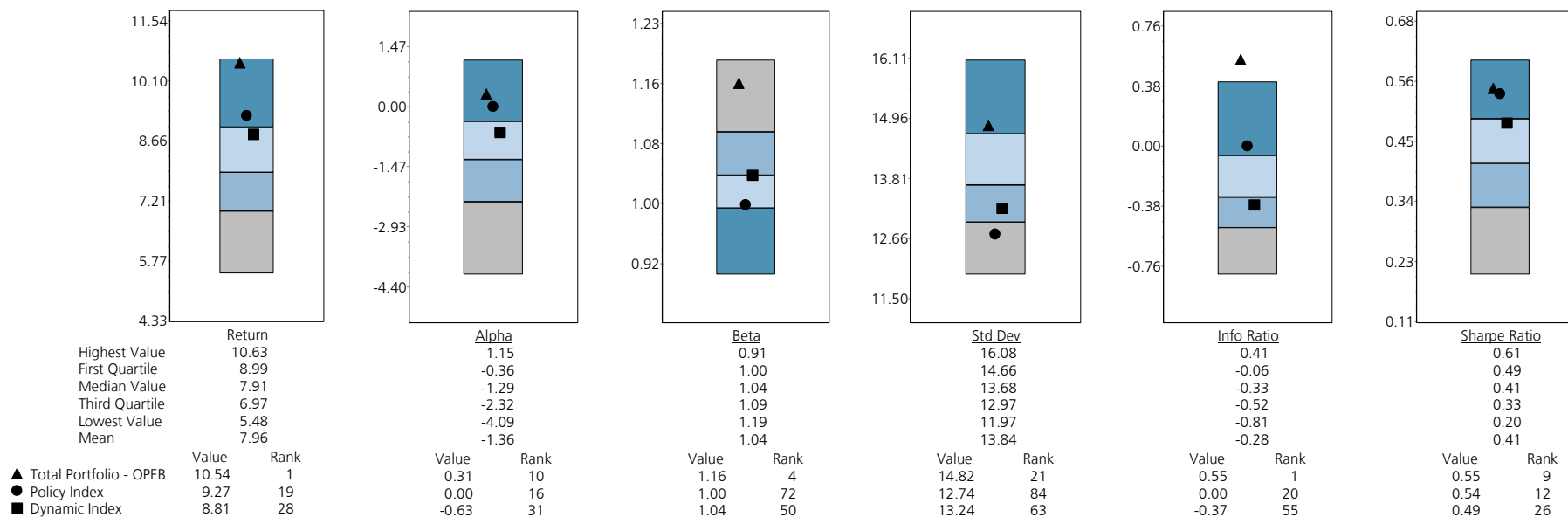
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Consolidated Portfolio vs 50% Equity, 35% Fixed, 15% International Managers September 30, 2021 Through September 30, 2024

3 Year



5 Year

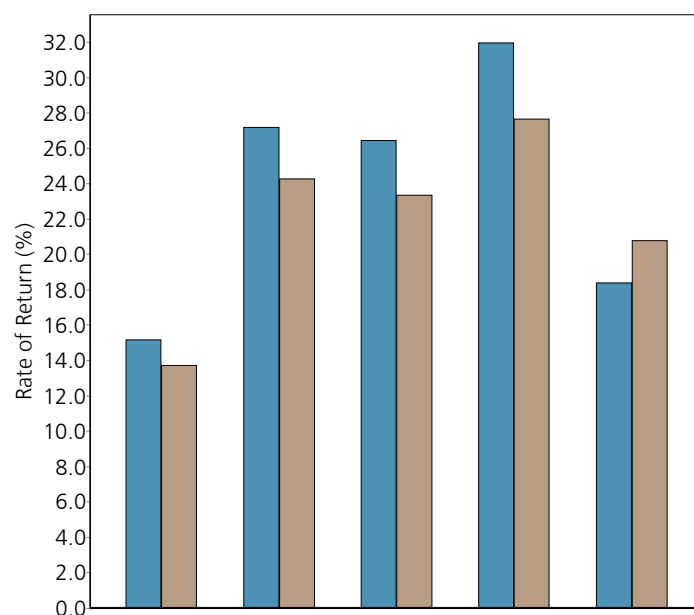


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Performance in Rising and Declining Markets

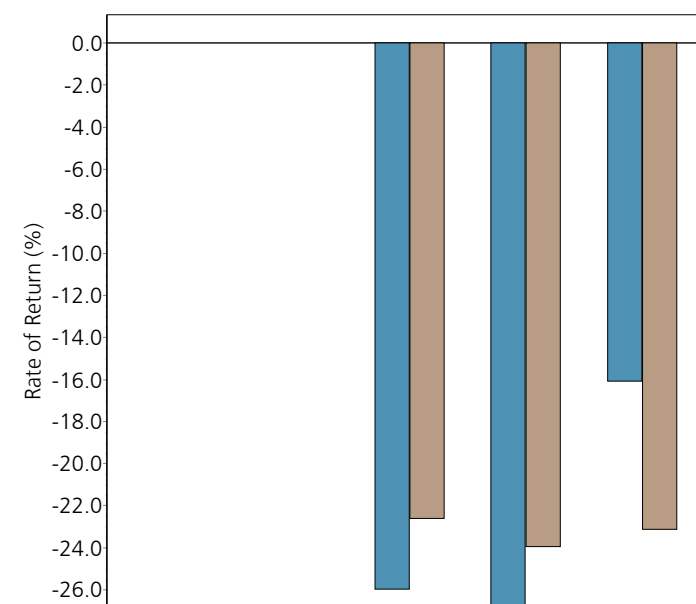
August 31, 2008 Through September 30, 2024

Up Market Performance



	Year to Date	One Year	Three Years	Five Years	Since Inception
Consolidated Portfolio	15.16	27.17	26.45	31.95	18.39
Policy Index	13.73	24.27	23.33	27.65	20.79
Difference	1.44	2.90	3.11	4.30	-2.40
Ratio	1.10	1.12	1.13	1.16	0.88
Up Periods	3	4	8	14	48

Down Market Performance



	Year to Date	One Year	Three Years	Five Years	Since Inception
Consolidated Portfolio	N/A	N/A	-26.01	-26.88	-16.10
Policy Index	N/A	N/A	-22.63	-23.99	-23.15
Difference	N/A	N/A	-3.38	-2.89	7.04
Ratio	N/A	N/A	1.15	1.12	0.70
Down Periods	0	0	4	6	17

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb OPEB
October 22, 2024

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.

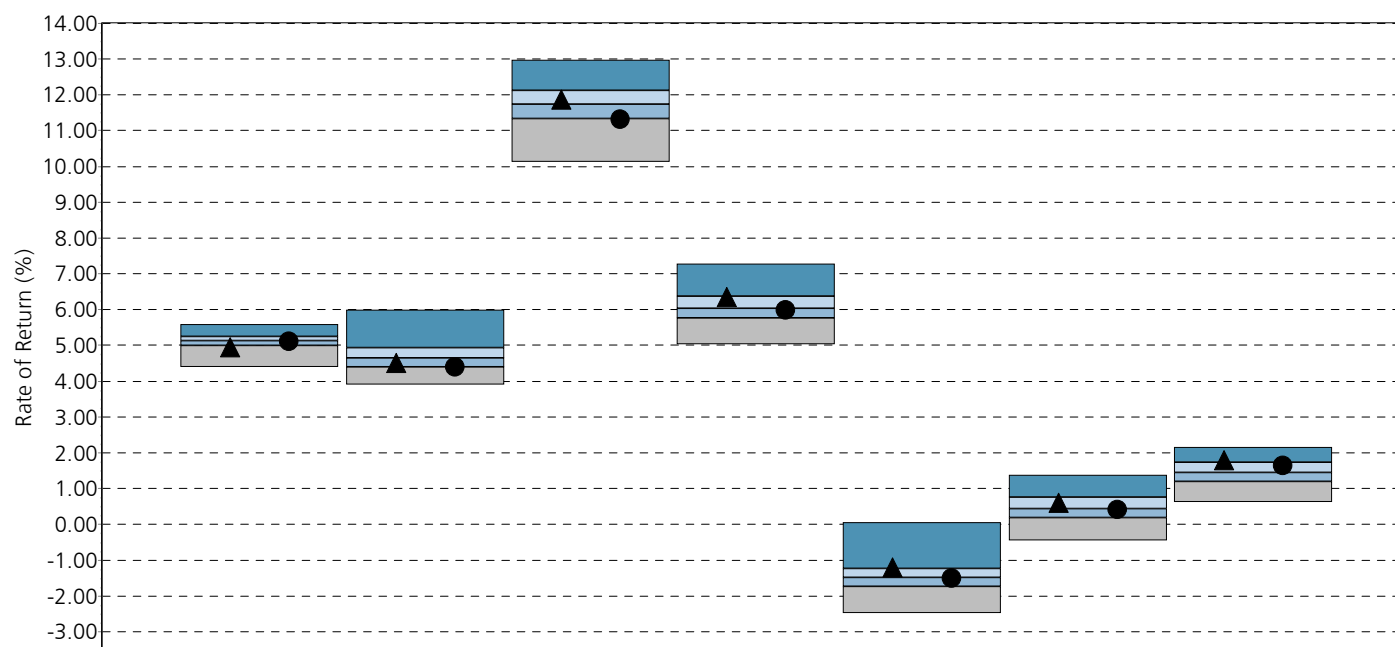
TOTAL FUND BENCHMARK

9/30/2017 - Present

100% Bloomberg Barclays Government/Credit Bond

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TOTAL FUND versus Intermediate Core Bond Managers
September 30, 2017 Through September 30, 2024



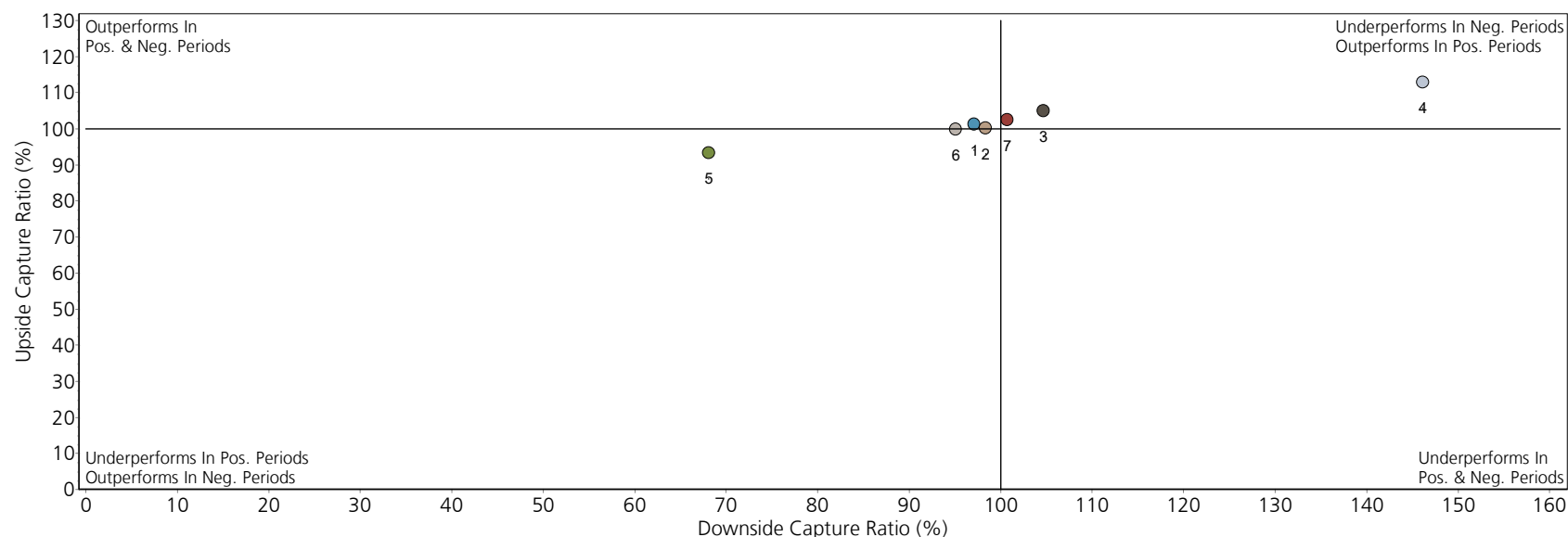
	<u>Latest Quarter</u>	<u>Calendar YTD</u>	<u>One Year</u>	<u>Two Years</u>	<u>Three Years</u>	<u>Five Years</u>	<u>Since Inception</u>
Highest Value	5.59	5.99	12.96	7.27	0.05	1.37	2.16
First Quartile	5.24	4.93	12.13	6.38	-1.23	0.76	1.73
Median Value	5.12	4.65	11.73	6.03	-1.48	0.43	1.45
Third Quartile	4.99	4.40	11.34	5.75	-1.74	0.18	1.20
Lowest Value	4.40	3.91	10.13	5.03	-2.48	-0.45	0.63
Mean	5.09	4.69	11.72	6.06	-1.44	0.45	1.45

	<u>Return</u> <u>Rank</u>		<u>Return</u> <u>Rank</u>		<u>Return</u> <u>Rank</u>		<u>Return</u> <u>Rank</u>		<u>Return</u> <u>Rank</u>		<u>Return</u> <u>Rank</u>		<u>Return</u> <u>Rank</u>	
▲ Richmond Capital Management	4.95	79	4.52	65	11.86	42	6.34	27	-1.20	21	0.60	34	1.79	20
● BB Gov/Cr Bond	5.10	54	4.39	76	11.31	76	5.99	53	-1.50	51	0.41	51	1.64	31

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Capture Ratio

September 30, 2017 Through September 30, 2024



	1	2	3	4	5	6	7
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	9/2017-9/2024
Up Periods	5.00	3.00	6.00	8.00	8.00	6.00	44.00
Upside Capture ROR	15.48	6.32	4.51	13.73	10.20	4.51	18.13
BB Gov/Cr Bond	15.29	6.31	4.30	12.16	10.94	4.51	17.69
% Of Capture	101.24	100.20	104.97	112.85	93.26	99.92	102.49
Down Periods	7.00	9.00	6.00	4.00	4.00	6.00	40.00
Downside Capture ROR	-8.06	-18.40	-6.07	-4.22	-0.75	-4.48	-13.59
BB Gov/Cr Bond	-8.30	-18.71	-5.80	-2.89	-1.10	-4.72	-13.50
% Of Capture	97.06	98.36	104.66	146.16	68.06	95.06	100.69

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb OPEB
 October 22, 2024

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.

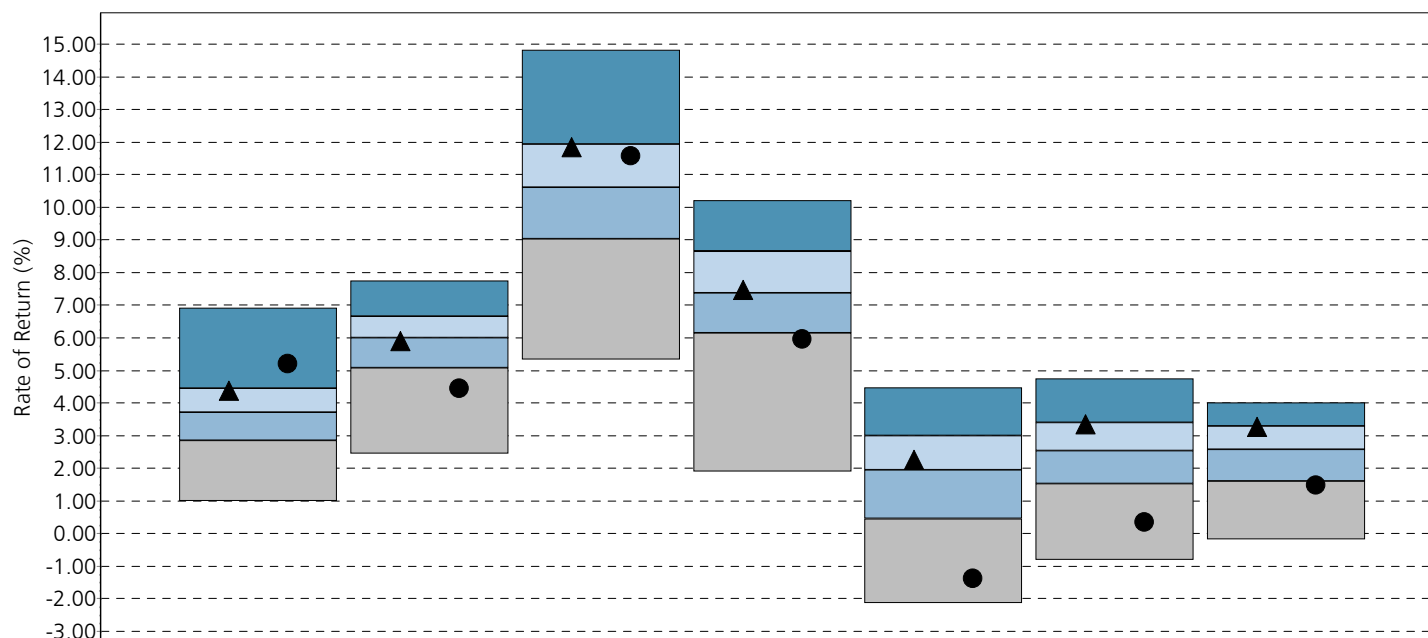
TOTAL FUND BENCHMARK

9/30/2017 - Present

100% Bloomberg US Aggregate Bond

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TOTAL FUND versus Nontraditional Bond Managers
September 30, 2017 Through September 30, 2024



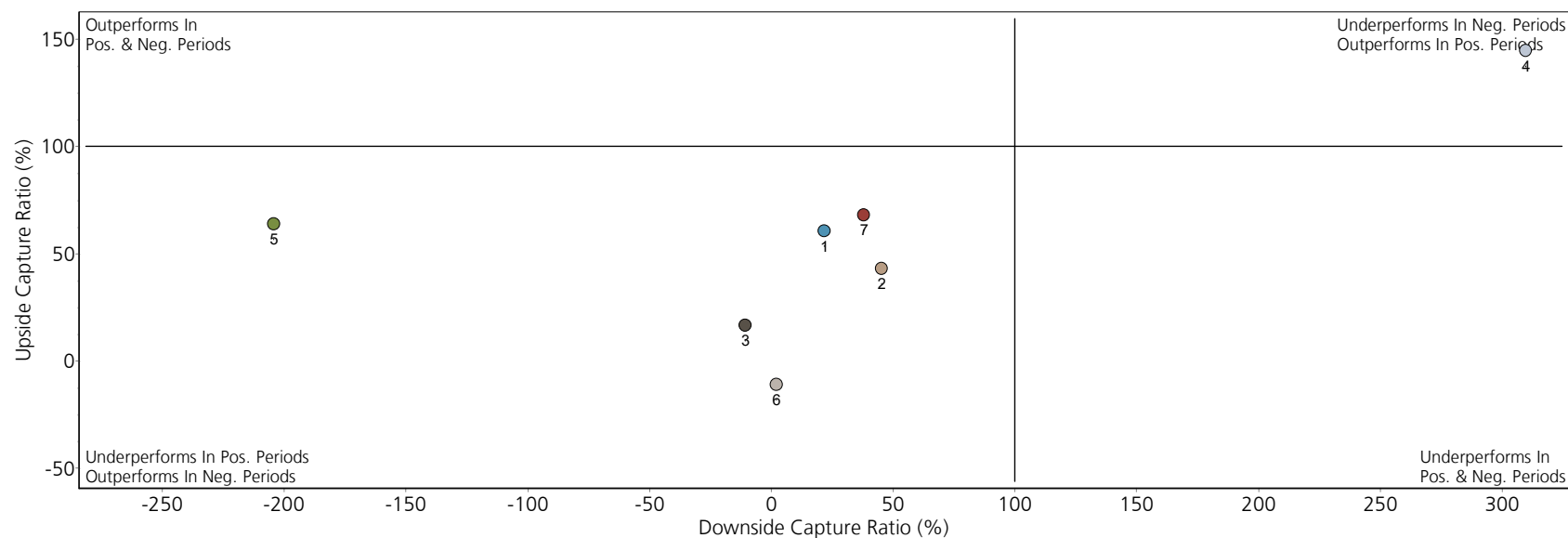
	Latest Quarter		Calendar YTD		One Year		Two Years		Three Years		Five Years		Since Inception	
Highest Value	6.90		7.75		14.81		10.22		4.46		4.74		4.00	
First Quartile	4.44		6.65		11.93		8.64		3.00		3.39		3.28	
Median Value	3.71		6.00		10.61		7.36		1.94		2.53		2.58	
Third Quartile	2.85		5.08		9.03		6.14		0.45		1.51		1.61	
Lowest Value	0.99		2.45		5.33		1.90		-2.14		-0.82		-0.18	
Mean	3.55		5.78		10.54		7.18		1.63		2.37		2.36	

	Return		Rank		Return		Rank		Return		Rank		Return		Rank	
▲ Blackrock Strategic Income I	4.37	25	5.89	54	11.84	27	7.46	43	2.26	41	3.35	25	3.26	25		
● Bloomberg US Agg	5.20	6	4.45	84	11.57	31	5.97	79	-1.39	91	0.33	89	1.47	76		

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Capture Ratio

September 30, 2017 Through September 30, 2024



	1	2	3	4	5	6	7
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	9/2017-9/2024
Up Periods	5.00	3.00	5.00	8.00	8.00	6.00	43.00
Upside Capture ROR	9.34	2.98	0.54	13.84	6.07	-0.50	11.52
Bloomberg US Agg	15.41	6.90	3.27	9.57	9.49	4.53	16.91
% Of Capture	60.65	43.18	16.61	144.59	63.94	-11.01	68.15
Down Periods	7.00	9.00	7.00	4.00	4.00	6.00	41.00
Downside Capture ROR	-1.86	-8.43	0.50	-5.84	1.45	-0.09	-4.74
Bloomberg US Agg	-8.56	-18.62	-4.66	-1.89	-0.71	-4.32	-12.53
% Of Capture	21.79	45.28	-10.79	309.61	-204.32	2.01	37.84

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb OPEB
October 22, 2024

Prepared by:
Earle Dodd, Van Price, Allen Wright

Delaware Diversified Income I

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.

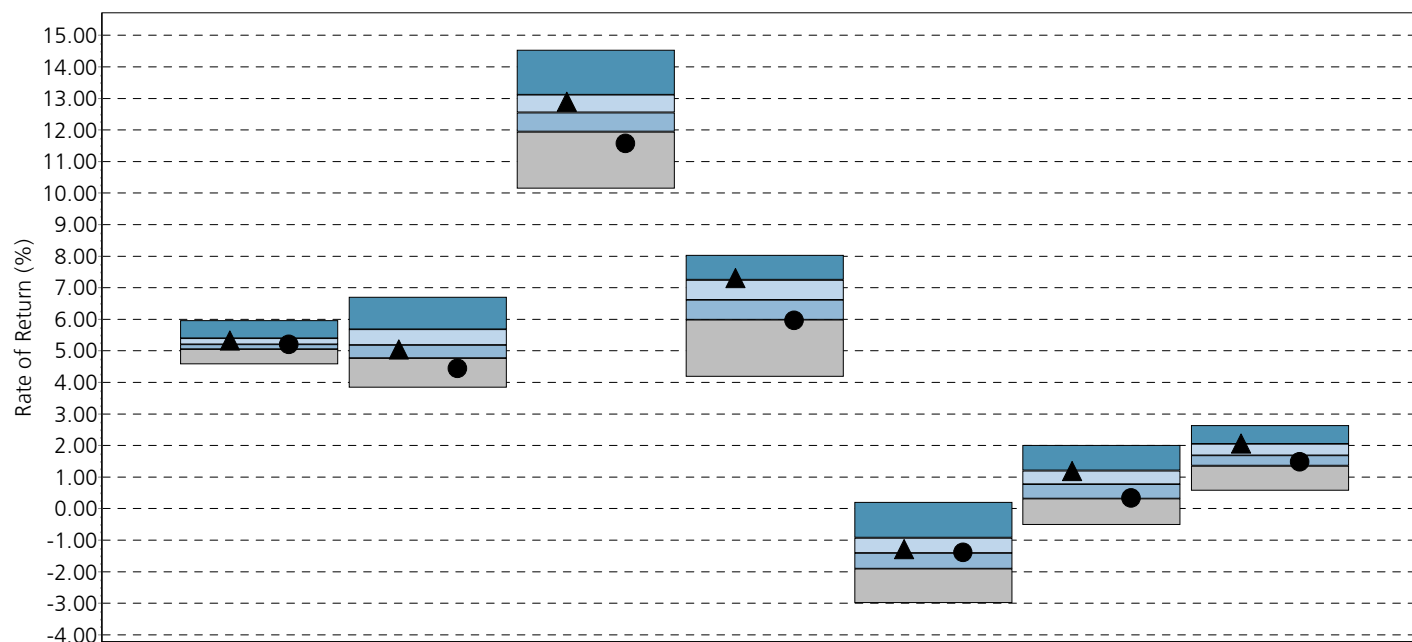
TOTAL FUND BENCHMARK

9/30/2017 - Present

100% Bloomberg US Aggregate Bond

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TOTAL FUND versus Intermediate Core Plus Bond Managers
September 30, 2017 Through September 30, 2024



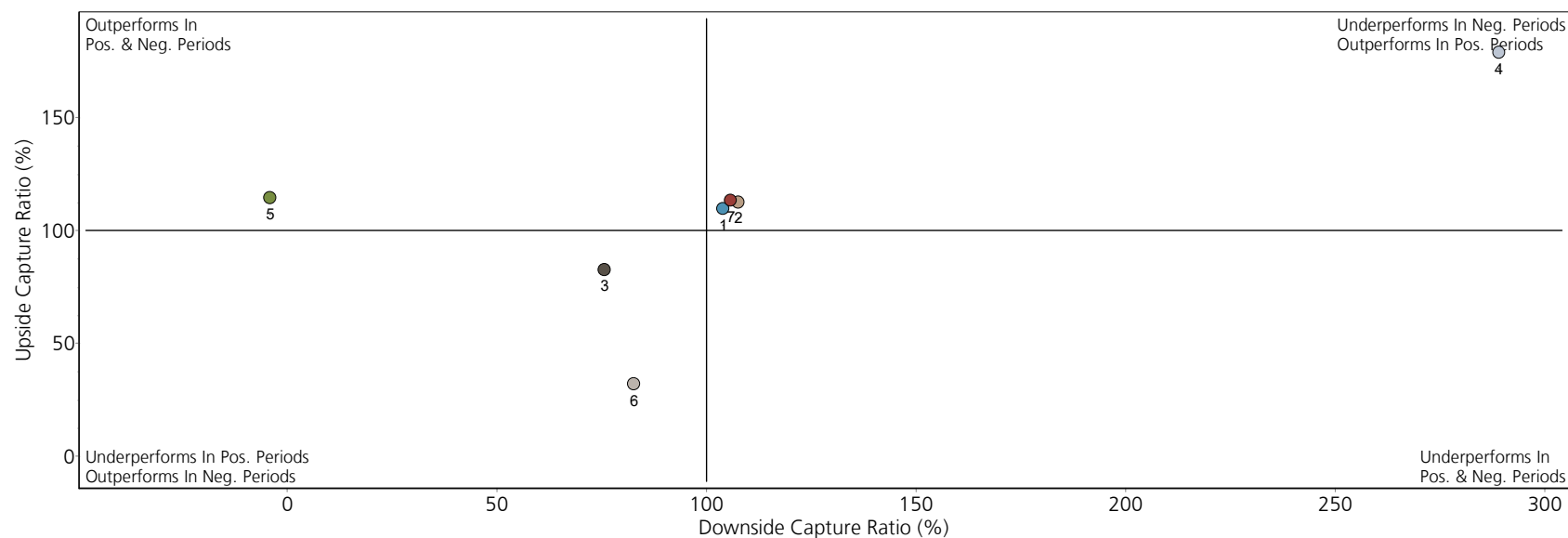
	<u>Latest Quarter</u>	<u>Calendar YTD</u>	<u>One Year</u>	<u>Two Years</u>	<u>Three Years</u>	<u>Five Years</u>	<u>Since Inception</u>
Highest Value	5.95	6.70	14.52	8.03	0.20	2.01	2.64
First Quartile	5.39	5.68	13.11	7.24	-0.93	1.20	2.05
Median Value	5.20	5.18	12.54	6.62	-1.42	0.76	1.67
Third Quartile	5.04	4.76	11.94	5.98	-1.90	0.30	1.34
Lowest Value	4.56	3.84	10.14	4.18	-2.99	-0.52	0.57
Mean	5.22	5.20	12.48	6.55	-1.41	0.75	1.67

	<u>Return</u> <u>Rank</u>		<u>Return</u> <u>Rank</u>		<u>Return</u> <u>Rank</u>		<u>Return</u> <u>Rank</u>		<u>Return</u> <u>Rank</u>		<u>Return</u> <u>Rank</u>		<u>Return</u> <u>Rank</u>	
▲ Delaware Diversified Income I	5.33	31	5.04	60	12.89	31	7.31	22	-1.28	43	1.20	24	2.07	23
● Bloomberg US Agg	5.20	50	4.45	86	11.57	85	5.97	75	-1.39	48	0.33	73	1.47	63

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Capture Ratio

September 30, 2017 Through September 30, 2024



	1	2	3	4	5	6	7
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	9/2017-9/2024
Up Periods	5.00	3.00	5.00	8.00	8.00	6.00	43.00
Upside Capture ROR	16.88	7.76	2.71	17.13	10.87	1.45	19.18
Bloomberg US Agg	15.41	6.90	3.27	9.57	9.49	4.53	16.91
% Of Capture	109.59	112.60	82.69	178.92	114.50	31.93	113.41
Down Periods	7.00	9.00	7.00	4.00	4.00	6.00	41.00
Downside Capture ROR	-8.89	-20.03	-3.53	-5.45	0.03	-3.57	-13.24
Bloomberg US Agg	-8.56	-18.62	-4.66	-1.89	-0.71	-4.32	-12.53
% Of Capture	103.85	107.55	75.70	289.04	-4.11	82.56	105.65

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb OPEB
October 22, 2024

Prepared by:
Earle Dodd, Van Price, Allen Wright

Eagle Capital Large Value

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Performance Analysis

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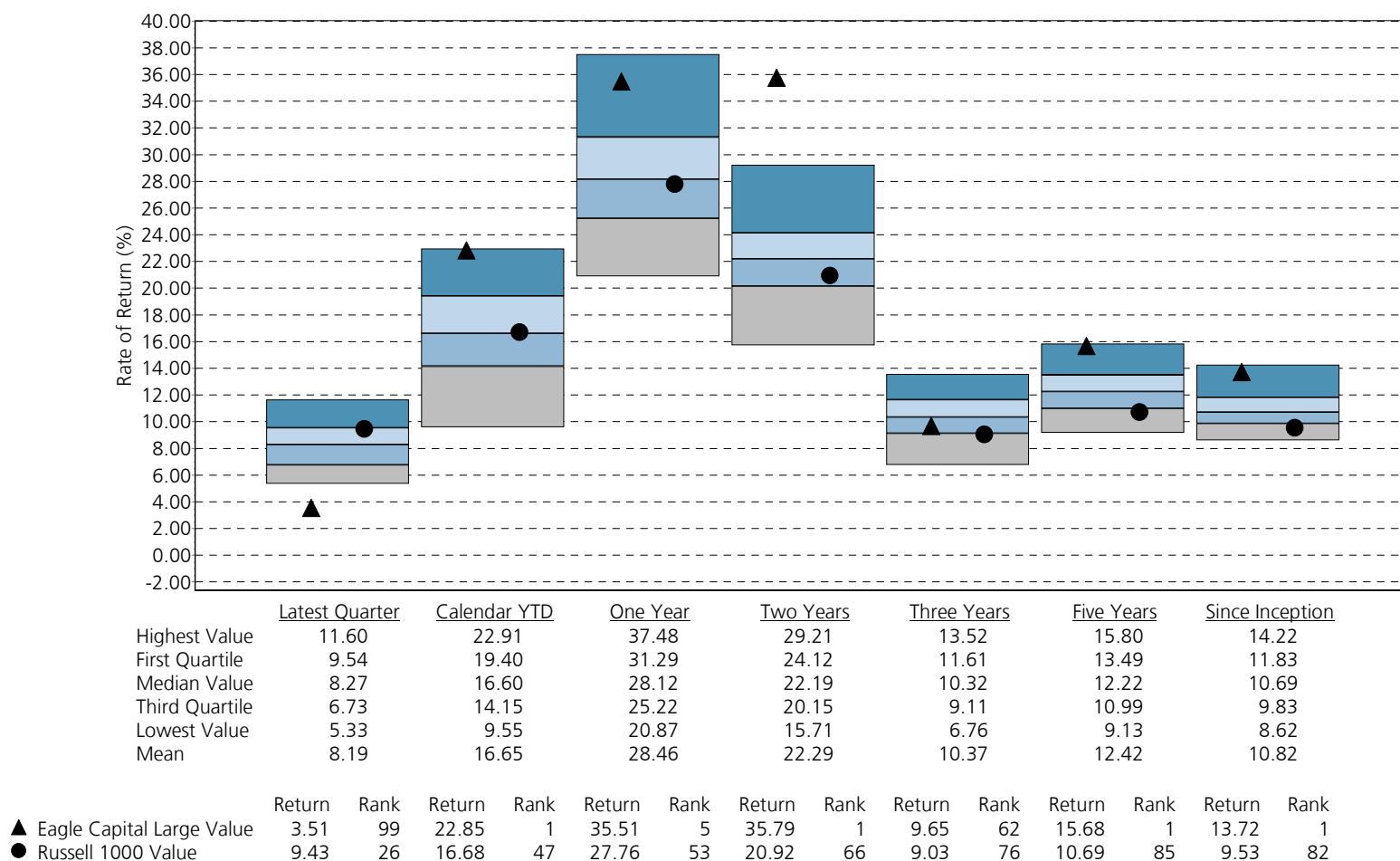
TOTAL FUND BENCHMARK

9/30/2017 - Present

100% Russell 1000 Value

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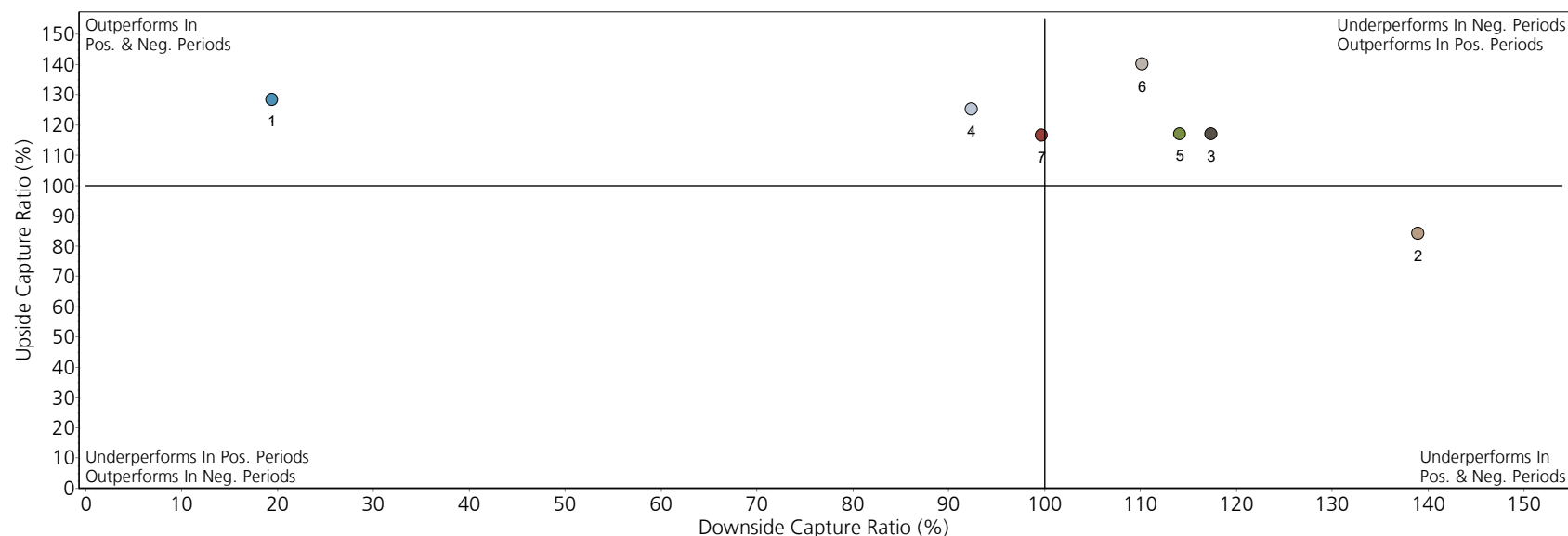
TOTAL FUND versus Large Cap Value Managers
September 30, 2017 Through September 30, 2024



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Capture Ratio

September 30, 2017 Through September 30, 2024



	1	2	3	4	5	6	7
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	9/2017-9/2024
Up Periods	6.00	5.00	8.00	6.00	10.00	8.00	53.00
Upside Capture ROR	43.39	26.02	43.52	58.47	46.04	20.17	66.18
Russell 1000 Value	33.78	30.93	37.22	46.72	39.33	14.40	56.77
% Of Capture	128.45	84.12	116.91	125.14	117.04	140.10	116.58
Down Periods	6.00	7.00	4.00	6.00	2.00	4.00	31.00
Downside Capture ROR	-3.24	-40.83	-10.32	-27.66	-10.47	-21.83	-40.54
Russell 1000 Value	-16.68	-29.38	-8.79	-29.94	-9.18	-19.81	-40.66
% Of Capture	19.40	138.97	117.34	92.39	114.07	110.17	99.70

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb OPEB
 October 22, 2024

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.

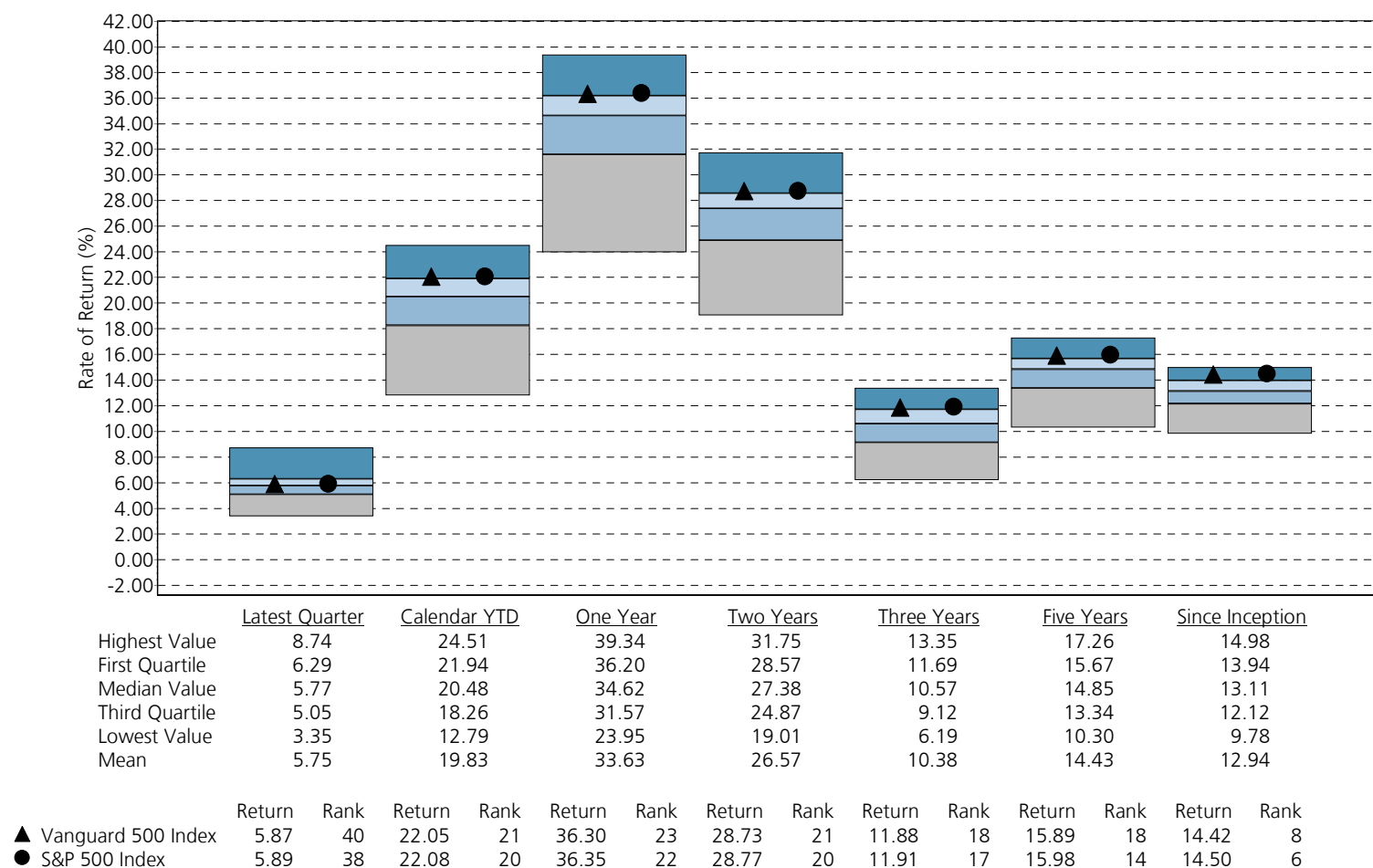
TOTAL FUND BENCHMARK

9/30/2017 - Present

100% S&P 500 Index

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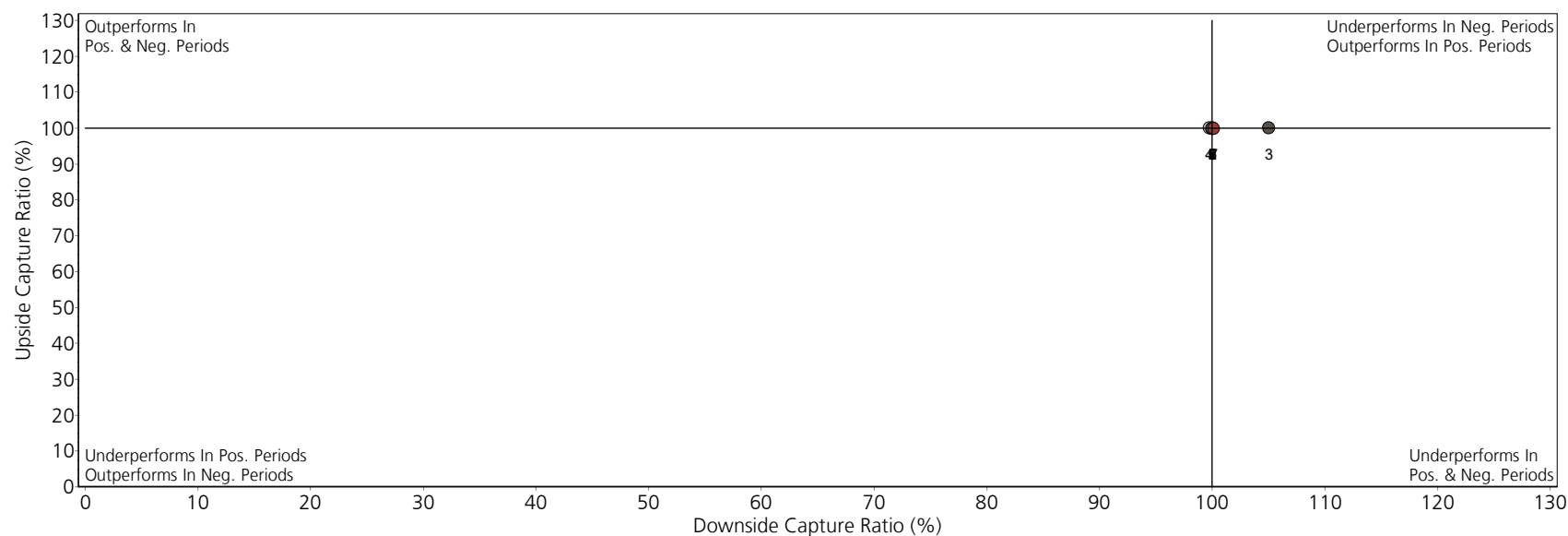
TOTAL FUND versus Large Blend Managers
September 30, 2017 Through September 30, 2024



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Capture Ratio

September 30, 2017 Through September 30, 2024



	1	2	3	4	5	6	7
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	9/2017-9/2024
Up Periods	8.00	5.00	9.00	7.00	10.00	8.00	58.00
Upside Capture ROR	41.05	29.51	37.29	57.25	42.61	20.16	58.17
S&P 500 Index	41.09	29.53	37.31	57.26	42.67	20.19	58.22
% Of Capture	99.90	99.96	99.93	99.99	99.87	99.85	99.91
Down Periods	4.00	7.00	3.00	5.00	2.00	4.00	26.00
Downside Capture ROR	-10.49	-36.79	-6.58	-24.65	-7.84	-20.46	-44.43
S&P 500 Index	-10.49	-36.78	-6.27	-24.71	-7.84	-20.45	-44.35
% Of Capture	100.01	100.04	105.01	99.77	100.00	100.07	100.18

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb OPEB
 October 22, 2024

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.

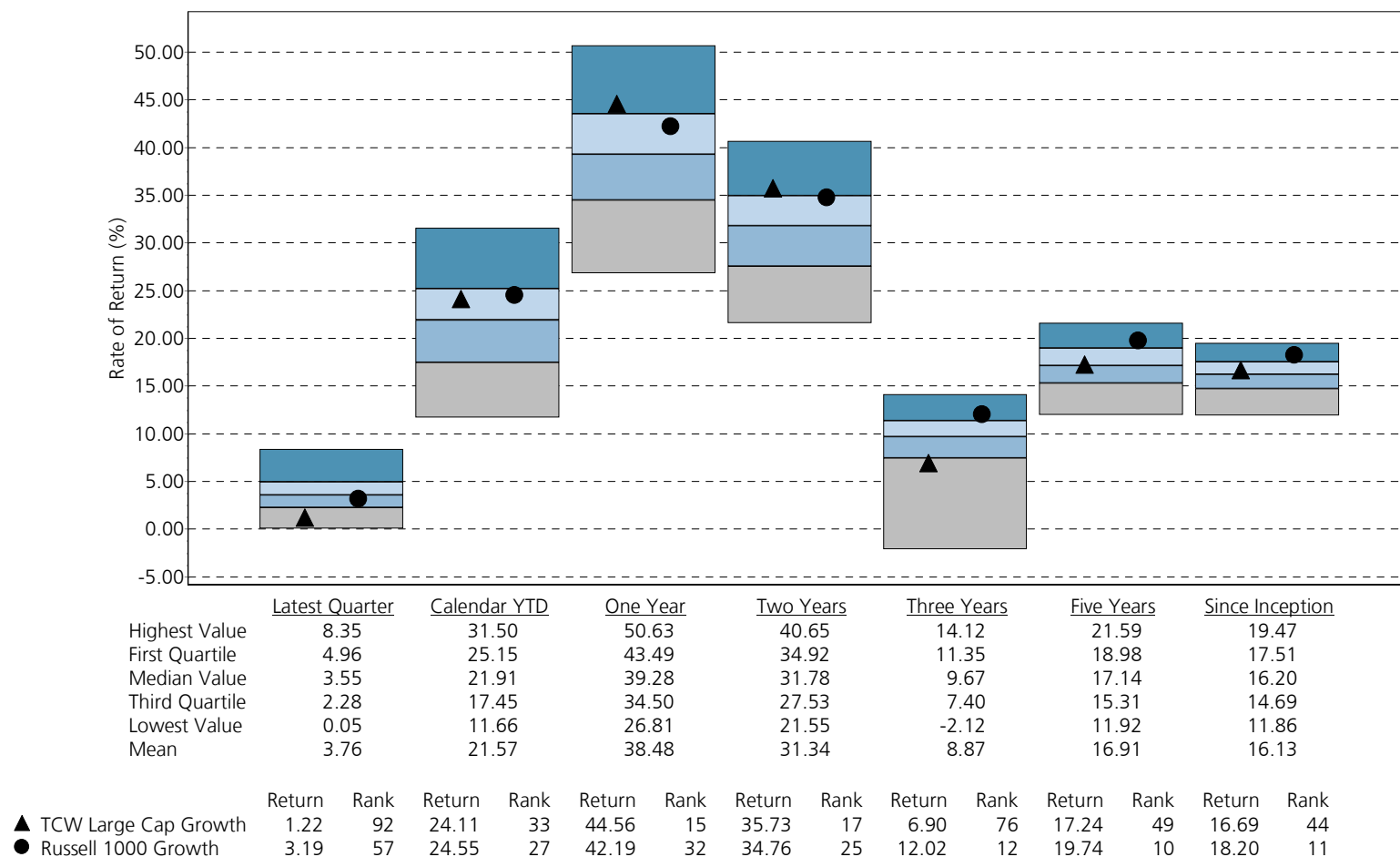
TOTAL FUND BENCHMARK

9/30/2017 - Present

100% Russell 1000 Growth

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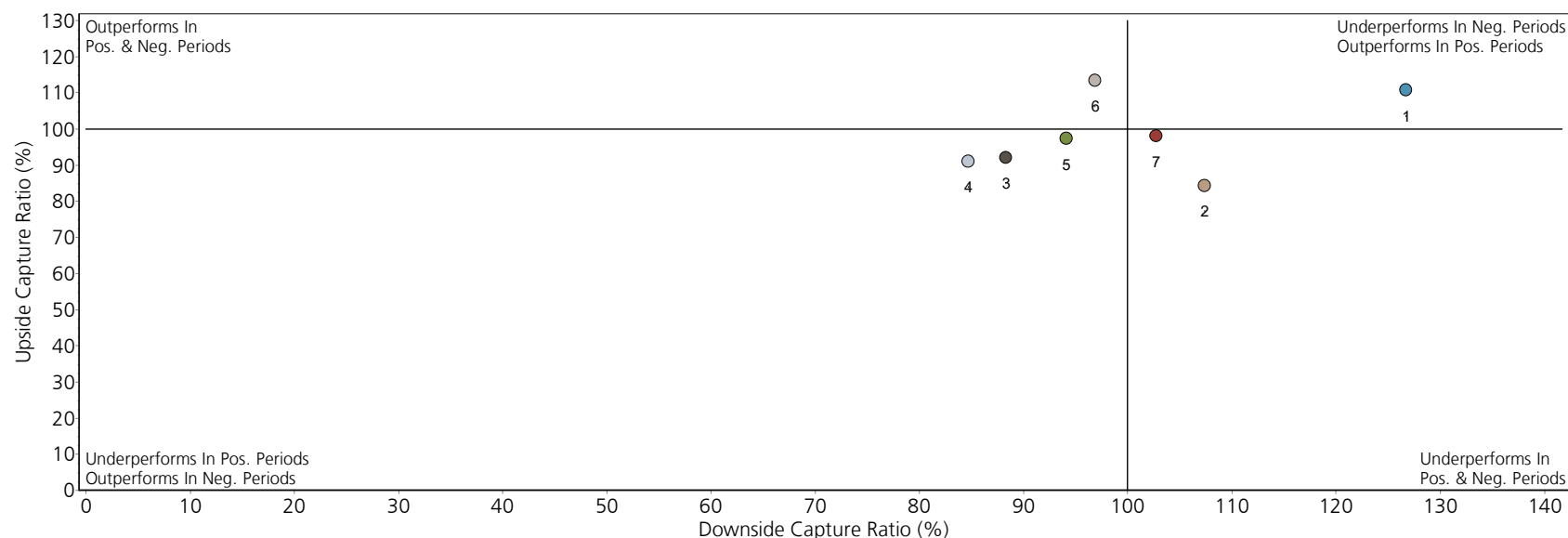
TOTAL FUND versus Large Cap Growth Managers
September 30, 2017 Through September 30, 2024



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Capture Ratio

September 30, 2017 Through September 30, 2024



	1	2	3	4	5	6	7
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	9/2017-9/2024
Up Periods	8.00	4.00	8.00	8.00	10.00	8.00	56.00
Upside Capture ROR	62.35	24.29	35.12	71.98	45.48	28.27	71.92
Russell 1000 Growth	56.31	28.80	38.12	79.05	46.71	24.95	73.33
% Of Capture	110.73	84.35	92.15	91.06	97.36	113.33	98.08
Down Periods	4.00	8.00	4.00	4.00	2.00	4.00	28.00
Downside Capture ROR	-11.04	-48.31	-6.73	-19.18	-6.62	-20.52	-46.24
Russell 1000 Growth	-8.72	-44.98	-7.62	-22.65	-7.03	-21.18	-45.03
% Of Capture	126.68	107.40	88.30	84.66	94.10	96.88	102.70

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb OPEB
October 22, 2024

Prepared by:
Earle Dodd, Van Price, Allen Wright

Westfield Capital Large Growth

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Performance Analysis

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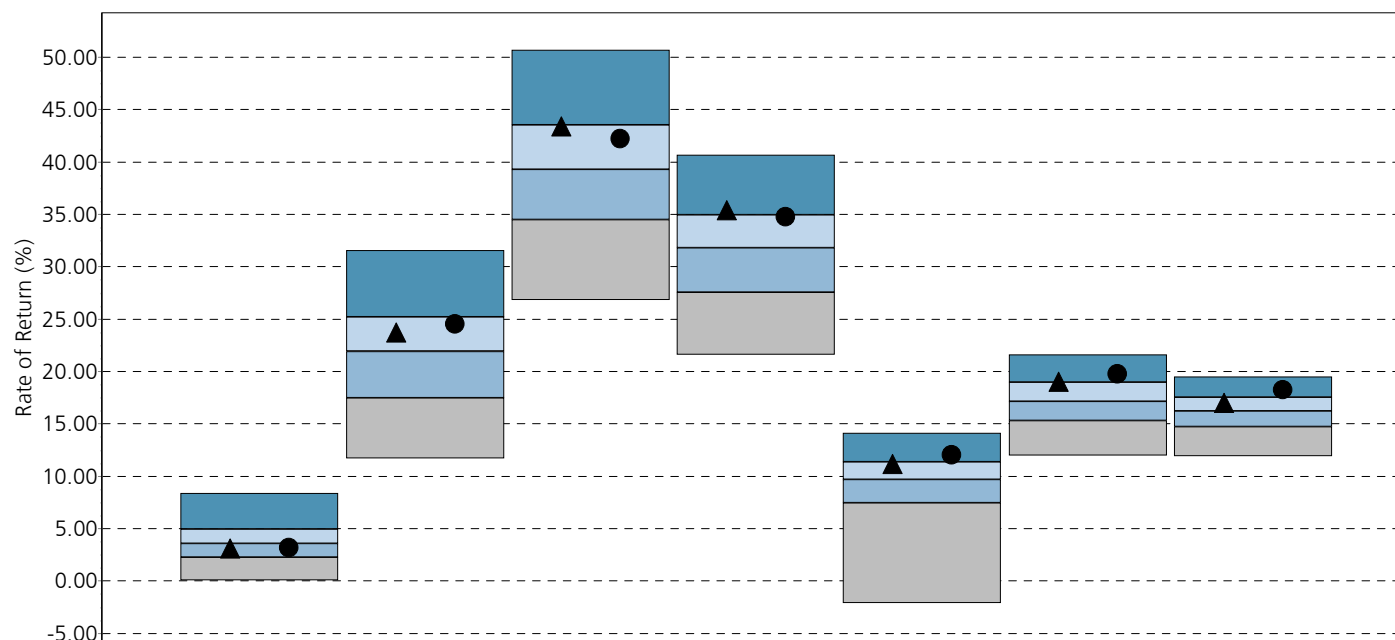
TOTAL FUND BENCHMARK

9/30/2017 - Present

100% Russell 1000 Growth

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TOTAL FUND versus Large Cap Growth Managers
September 30, 2017 Through September 30, 2024

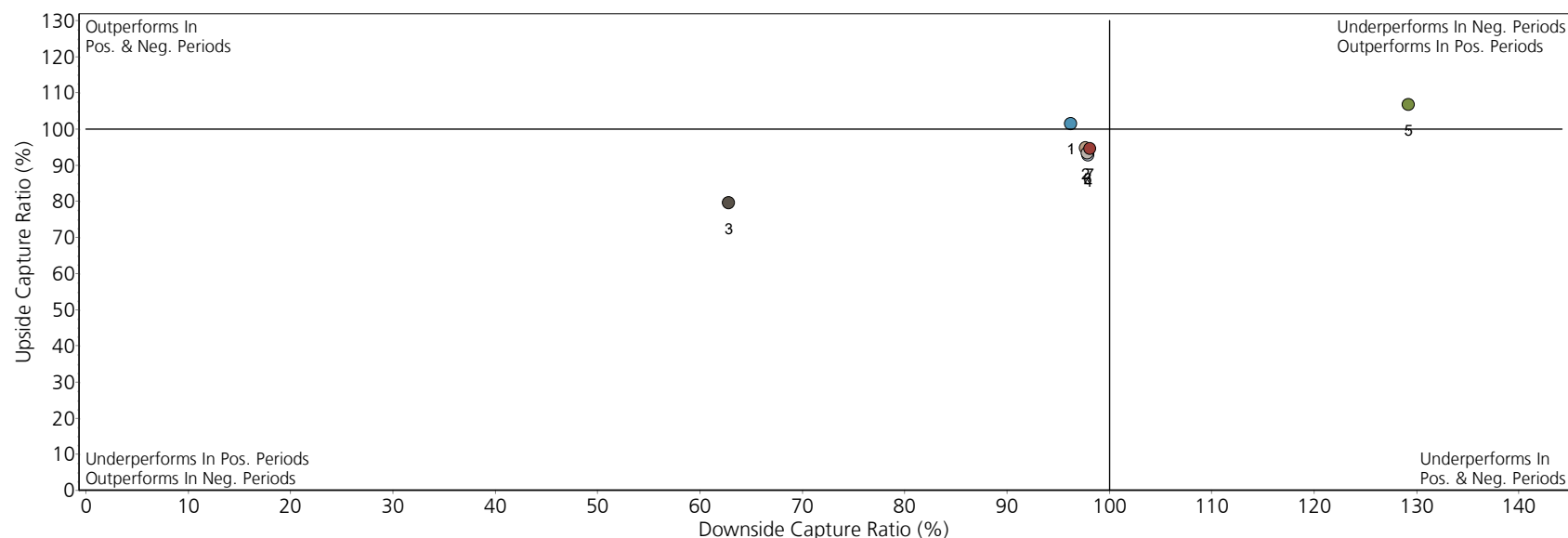


	Latest Quarter		Calendar YTD		One Year		Two Years		Three Years		Five Years		Since Inception	
Highest Value	8.35		31.50		50.63		40.65		14.12		21.59		19.47	
First Quartile	4.96		25.15		43.49		34.92		11.35		18.98		17.51	
Median Value	3.55		21.91		39.28		31.78		9.67		17.14		16.20	
Third Quartile	2.28		17.45		34.50		27.53		7.40		15.31		14.69	
Lowest Value	0.05		11.66		26.81		21.55		-2.12		11.92		11.86	
Mean	3.76		21.57		38.48		31.34		8.87		16.91		16.13	
	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Westfield Capital Large Growth	3.14	59	23.76	34	43.40	25	35.39	19	11.13	28	19.03	23	17.00	38
● Russell 1000 Growth	3.19	57	24.55	27	42.19	32	34.76	25	12.02	12	19.74	10	18.20	11

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Capture Ratio

September 30, 2017 Through September 30, 2024



	1	2	3	4	5	6	7
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	9/2017-9/2024
Up Periods	8.00	4.00	8.00	8.00	10.00	8.00	56.00
Upside Capture ROR	57.15	27.26	30.29	73.30	49.88	23.27	69.36
Russell 1000 Growth	56.31	28.80	38.12	79.05	46.71	24.95	73.33
% Of Capture	101.51	94.65	79.48	92.73	106.79	93.30	94.58
Down Periods	4.00	8.00	4.00	4.00	2.00	4.00	28.00
Downside Capture ROR	-8.39	-43.93	-4.78	-22.18	-9.09	-20.72	-44.16
Russell 1000 Growth	-8.72	-44.98	-7.62	-22.65	-7.03	-21.18	-45.03
% Of Capture	96.21	97.65	62.82	97.90	129.21	97.83	98.06

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb OPEB
 October 22, 2024

Prepared by:
 Earle Dodd, Van Price, Allen Wright

Vanguard Mid-Cap Index Fund Admiral

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Performance Analysis

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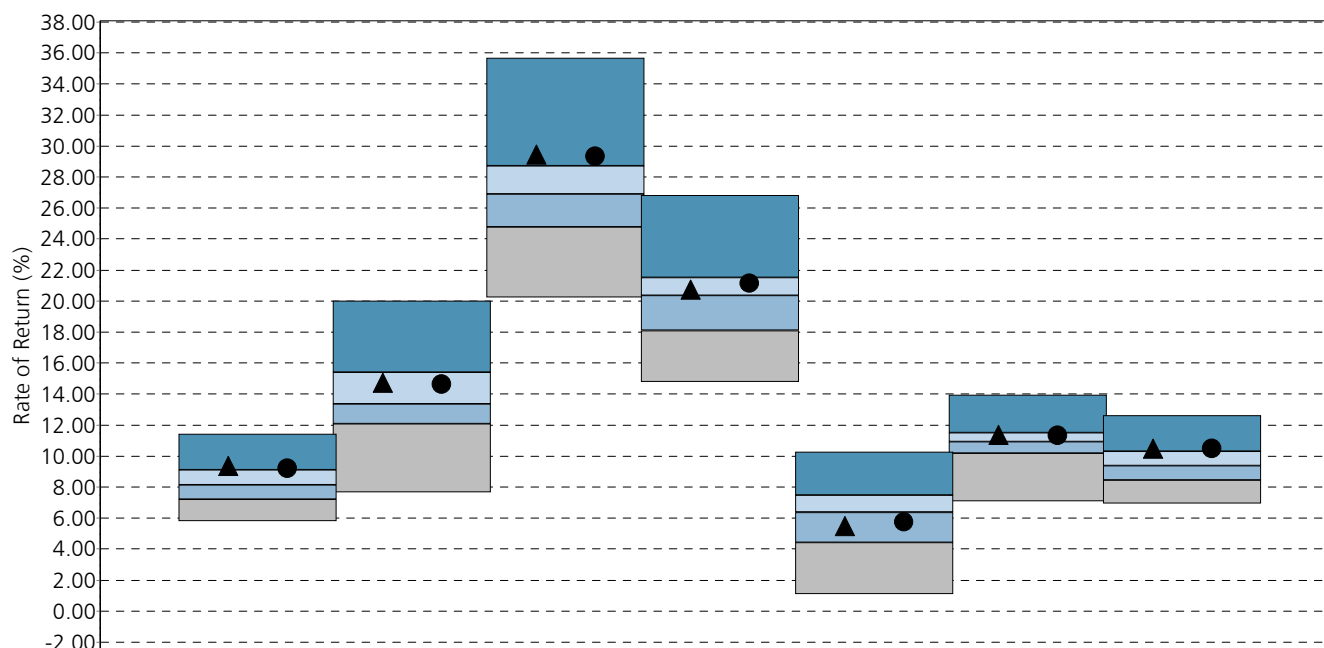
TOTAL FUND BENCHMARK

9/30/2017 - Present

100% Russell Midcap

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TOTAL FUND versus Mid Cap Blend Managers
September 30, 2017 Through September 30, 2024



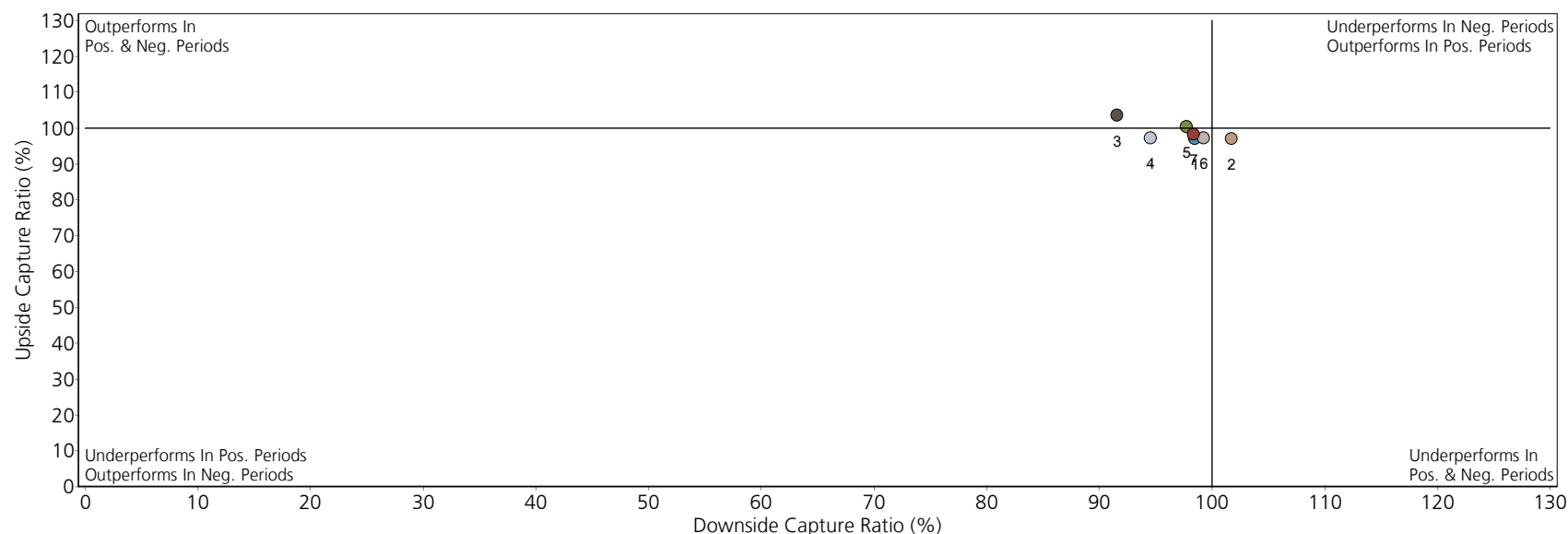
	<u>Latest Quarter</u>	<u>Calendar YTD</u>	<u>One Year</u>	<u>Two Years</u>	<u>Three Years</u>	<u>Five Years</u>	<u>Since Inception</u>
Highest Value	11.40	20.01	35.65	26.80	10.25	13.95	12.60
First Quartile	9.10	15.40	28.72	21.50	7.46	11.51	10.28
Median Value	8.12	13.35	26.89	20.37	6.38	10.92	9.38
Third Quartile	7.22	12.08	24.76	18.09	4.39	10.15	8.46
Lowest Value	5.78	7.64	20.22	14.76	1.08	7.07	6.92
Mean	8.18	13.74	27.12	20.20	6.04	10.77	9.38

	<u>Return</u>		<u>Rank</u>		<u>Return</u>		<u>Rank</u>		<u>Return</u>		<u>Rank</u>		<u>Return</u>		<u>Rank</u>		<u>Return</u>		<u>Rank</u>	
▲ Vanguard Mid-Cap Index Fund Admiral	9.36	16	14.72	31	29.44	17	20.73	42	5.48	59	11.35	33	10.50	17						
● Russell Midcap	9.21	19	14.63	33	29.33	17	21.13	32	5.75	56	11.30	36	10.48	17						

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Capture Ratio

September 30, 2017 Through September 30, 2024



	1	2	3	4	5	6	7
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	9/2017-9/2024
Up Periods	5.00	5.00	9.00	8.00	10.00	7.00	53.00
Upside Capture ROR	43.53	29.24	33.96	61.96	43.29	15.31	62.96
Russell Midcap	44.87	30.16	32.82	63.76	43.15	15.76	64.13
% Of Capture	97.01	96.95	103.49	97.17	100.31	97.15	98.17
Down Periods	7.00	7.00	3.00	4.00	2.00	5.00	31.00
Downside Capture ROR	-18.79	-37.10	-7.05	-26.93	-8.61	-21.28	-43.13
Russell Midcap	-19.08	-36.48	-7.70	-28.49	-8.81	-21.44	-43.85
% Of Capture	98.49	101.71	91.57	94.54	97.74	99.27	98.36

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb OPEB
 October 22, 2024

Prepared by:
 Earle Dodd, Van Price, Allen Wright

Vaughan Nelson

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Performance Analysis

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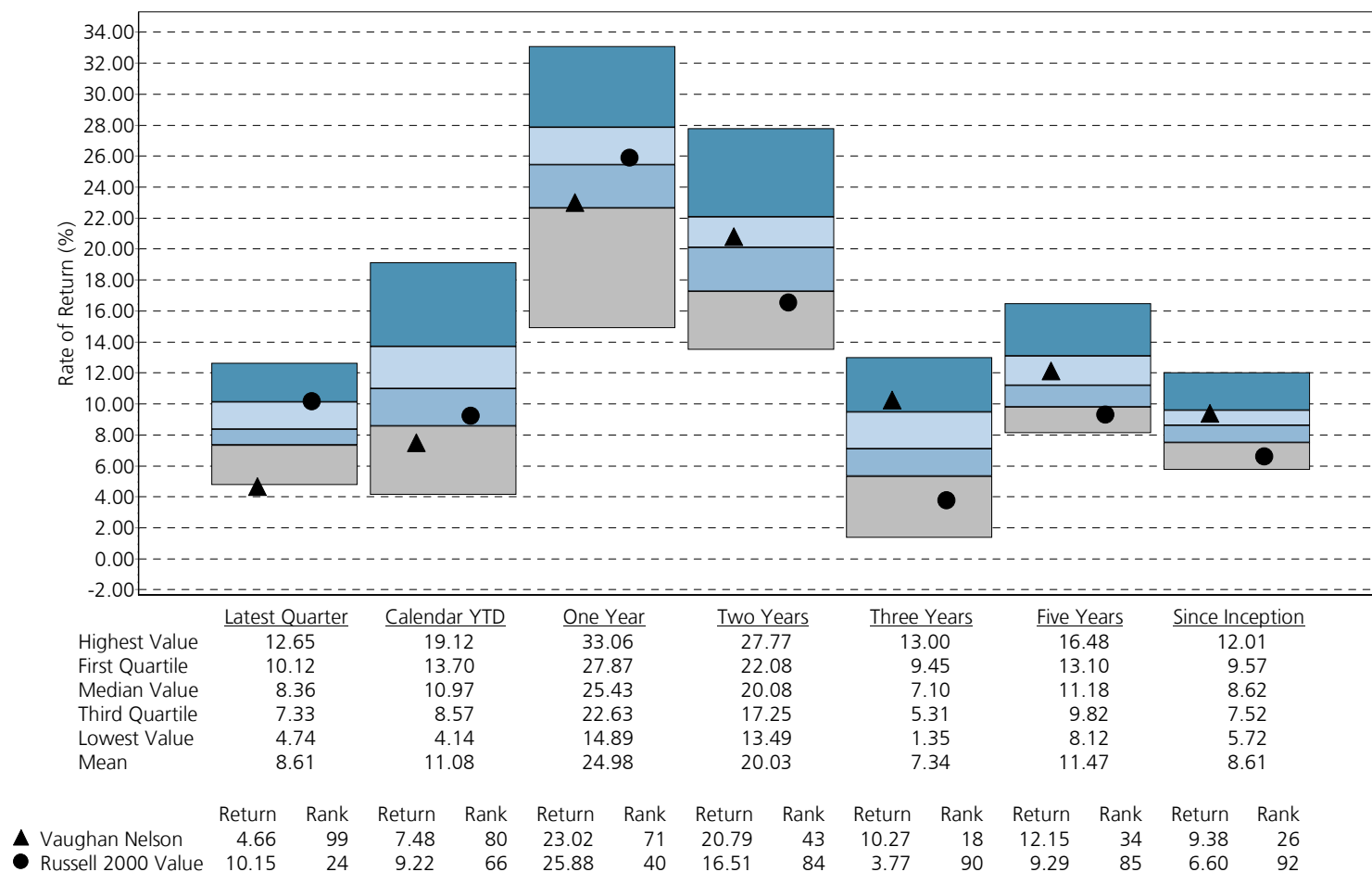
TOTAL FUND BENCHMARK

9/30/2017 - Present

100% Russell 2000 Value

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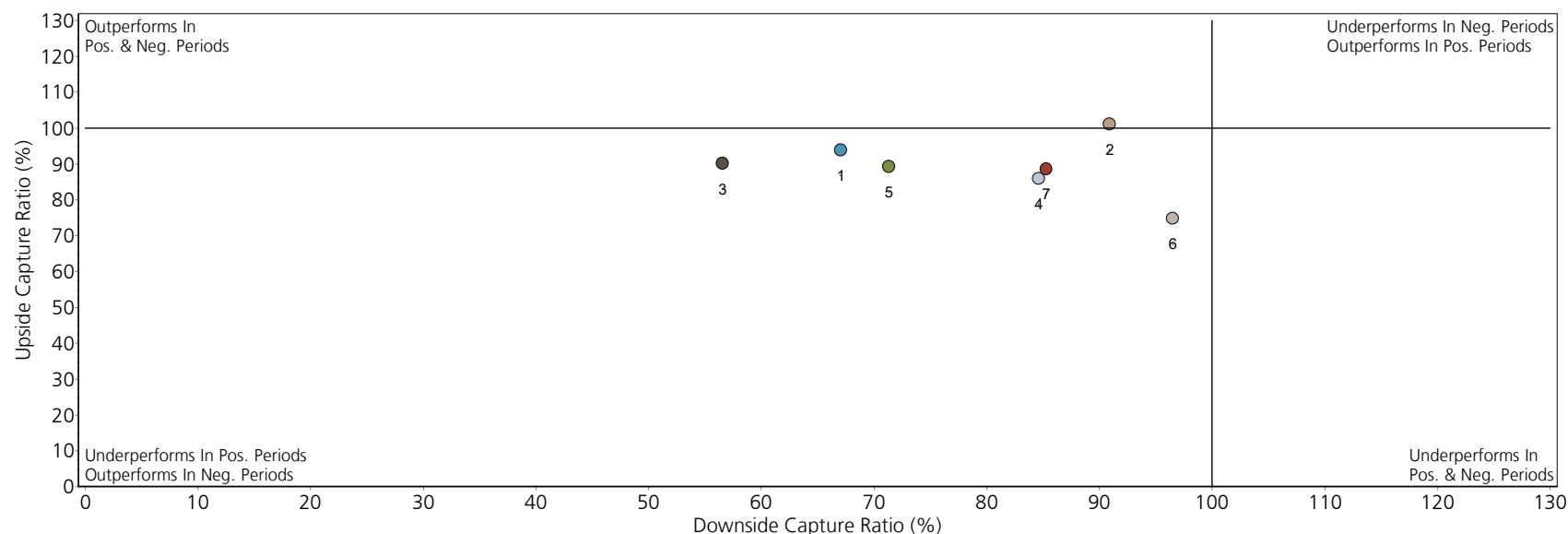
TOTAL FUND versus Small Cap Value Managers
September 30, 2017 Through September 30, 2024



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Capture Ratio

September 30, 2017 Through September 30, 2024



	1	2	3	4	5	6	7
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	9/2017-9/2024
Up Periods	5.00	6.00	8.00	8.00	9.00	8.00	51.00
Upside Capture ROR	52.46	34.79	37.30	60.63	40.48	13.08	68.05
Russell 2000 Value	55.87	34.43	41.41	70.57	45.35	17.51	76.79
% Of Capture	93.90	101.03	90.08	85.93	89.26	74.72	88.61
Down Periods	7.00	6.00	4.00	4.00	3.00	4.00	33.00
Downside Capture ROR	-17.73	-33.08	-5.25	-32.71	-11.26	-24.94	-43.68
Russell 2000 Value	-26.45	-36.39	-9.29	-38.65	-15.79	-25.85	-51.23
% Of Capture	67.03	90.91	56.55	84.63	71.30	96.48	85.26

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb OPEB
October 22, 2024

Prepared by:
Earle Dodd, Van Price, Allen Wright

Eagle Small Cap Growth Fund

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

TOTAL FUND BENCHMARK

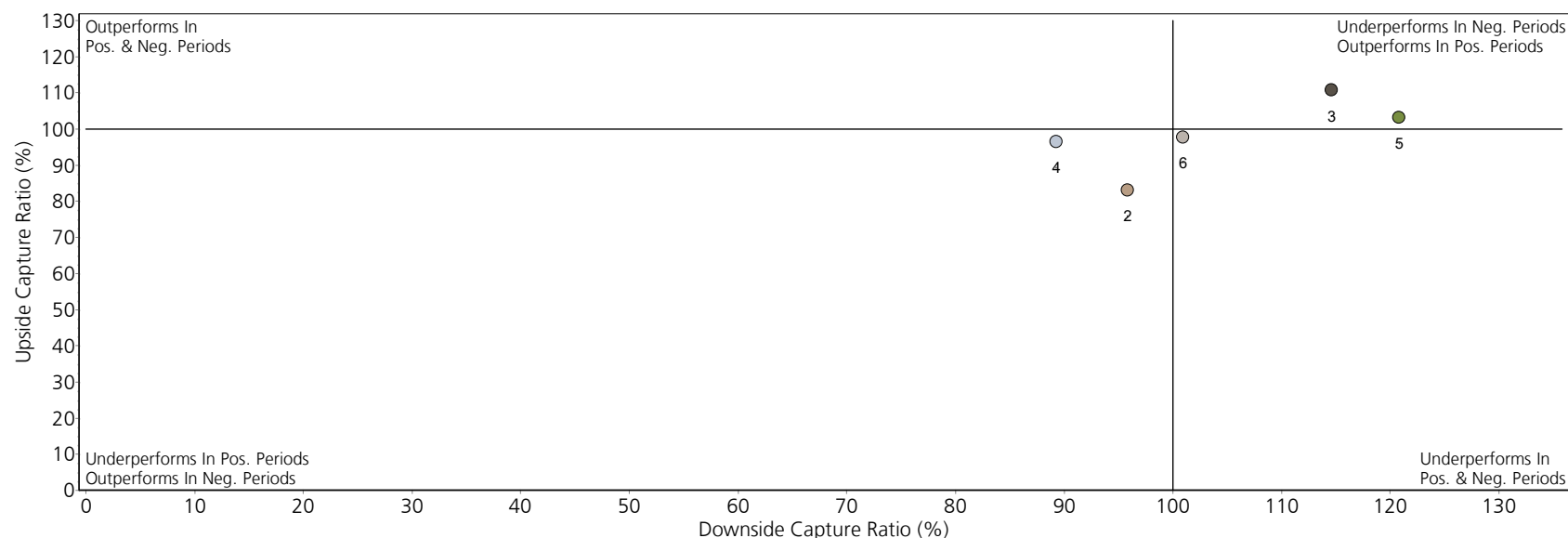
9/30/2017 - Present

100% Russell 2000 Growth

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Capture Ratio

September 30, 2017 Through September 30, 2024



	1	2	3	4	5	6	7
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	9/2017-9/2024
Up Periods	6.00	5.00	7.00	8.00	8.00	8.00	50.00
Upside Capture ROR	N/A	20.63	26.58	82.29	49.74	23.39	N/A
Russell 2000 Growth	52.29	24.84	24.01	85.33	48.24	23.91	76.92
% Of Capture	N/A	83.05	110.71	96.43	103.10	97.79	N/A
Down Periods	6.00	7.00	5.00	4.00	4.00	4.00	34.00
Downside Capture ROR	N/A	-39.31	-19.56	-24.42	-16.10	-27.06	N/A
Russell 2000 Growth	-22.08	-41.01	-17.07	-27.36	-13.33	-26.81	-48.22
% Of Capture	N/A	95.84	114.56	89.28	120.80	100.94	N/A

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**Investment Performance****Period Ending September 30, 2024**

Prepared for:
Cobb OPEB
October 22, 2024

Prepared by:
Earle Dodd, Van Price, Allen Wright

Vanguard Total International Stock 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.

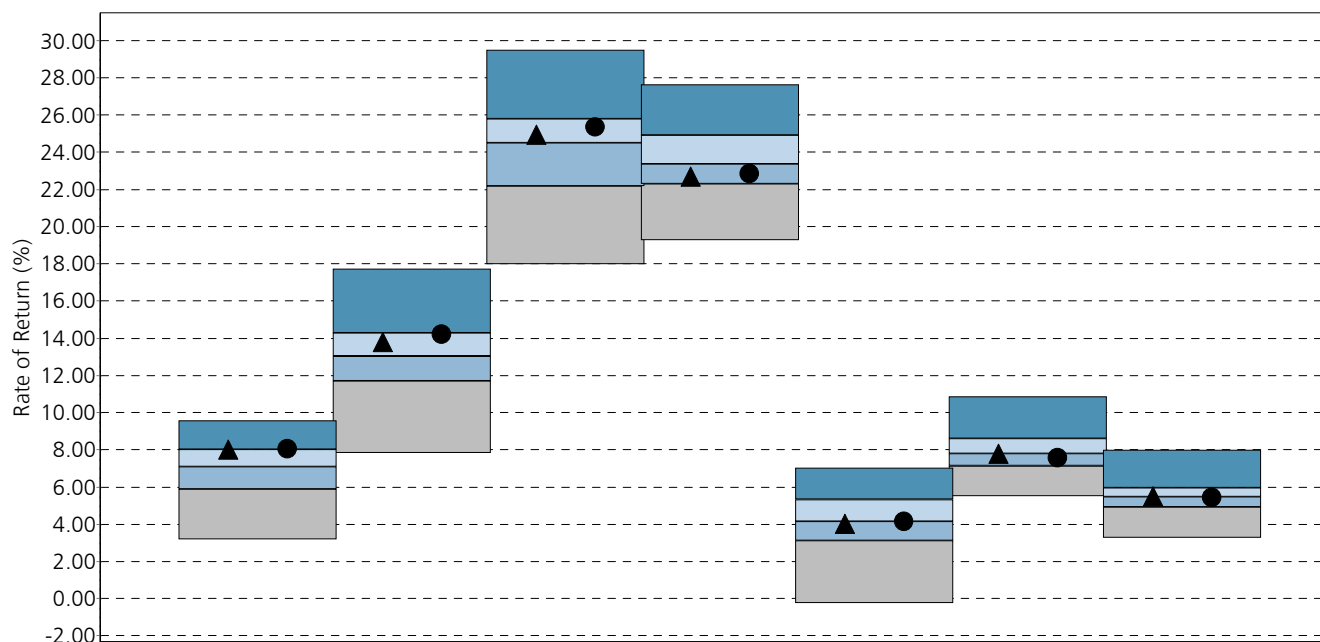
TOTAL FUND BENCHMARK

9/30/2017 - Present

100% MSCI AC World X US Net

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TOTAL FUND versus Foreign Large Blend Managers
September 30, 2017 Through September 30, 2024



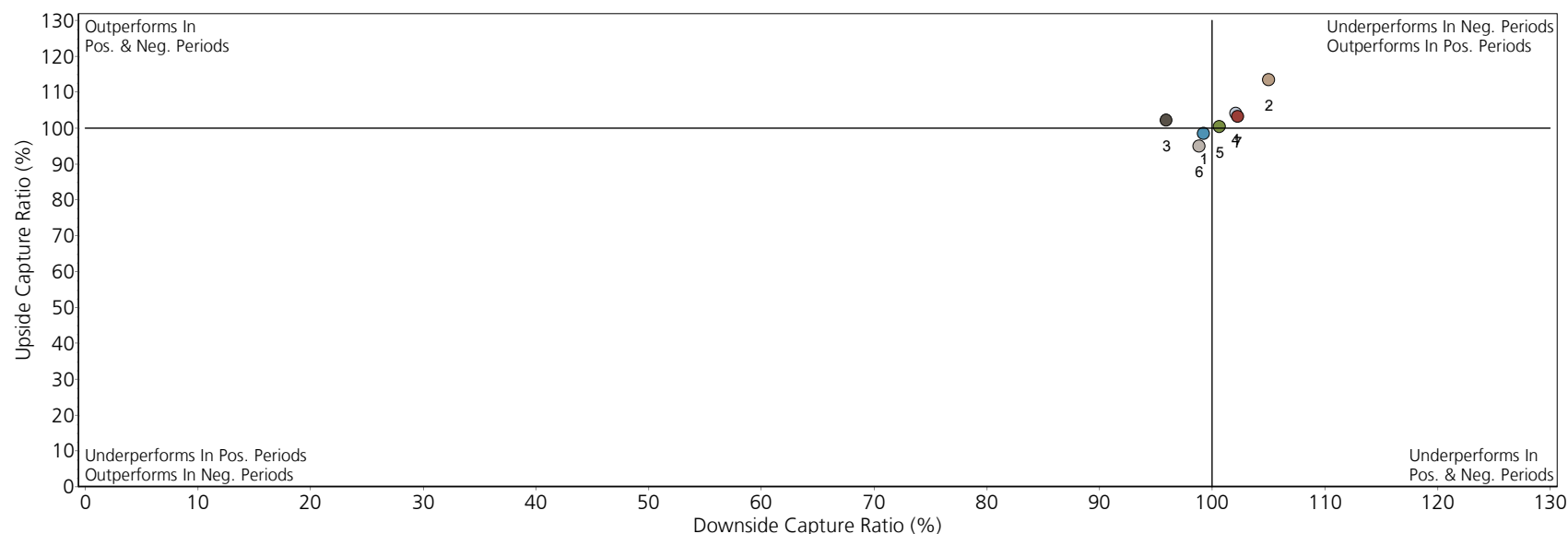
	Latest Quarter		Calendar YTD		One Year		Two Years		Three Years		Five Years		Since Inception	
Highest Value	9.56		17.69		29.46		27.64		7.01		10.85		7.96	
First Quartile	8.03		14.28		25.78		24.91		5.32		8.60		5.95	
Median Value	7.09		13.04		24.50		23.35		4.12		7.79		5.45	
Third Quartile	5.86		11.71		22.17		22.28		3.11		7.14		4.90	
Lowest Value	3.19		7.84		17.98		19.27		-0.24		5.51		3.26	
Mean	6.91		12.98		24.11		23.55		4.14		7.89		5.48	

	Return		Rank		Return		Rank		Return		Rank		Return		Rank	
▲ Vanguard Total International Stock Fund	8.03	24	13.81	33	24.92	42	22.69	67	4.03	52	7.77	51	5.51	46		
● MSCI AC Wld X US Net	8.06	23	14.21	26	25.35	31	22.85	64	4.14	49	7.59	58	5.44	51		

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Capture Ratio

September 30, 2017 Through September 30, 2024



	1	2	3	4	5	6	7
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	9/2017-9/2024
Up Periods	7.00	5.00	8.00	7.00	9.00	5.00	50.00
Upside Capture ROR	39.65	22.83	19.79	53.31	34.25	10.79	52.90
MSCI AC Wld X US Net	40.26	20.13	19.37	51.26	34.12	11.36	51.27
% Of Capture	98.49	113.42	102.17	103.99	100.38	94.93	103.17
Down Periods	5.00	7.00	4.00	5.00	3.00	7.00	34.00
Downside Capture ROR	-17.44	-31.60	-9.28	-27.41	-9.46	-22.70	-38.85
MSCI AC Wld X US Net	-17.57	-30.08	-9.67	-26.85	-9.40	-22.95	-37.99
% Of Capture	99.24	105.05	95.93	102.10	100.66	98.88	102.28

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**Investment Performance****Period Ending September 30, 2024**

Prepared for:
Cobb OPEB
October 22, 2024

Prepared by:
Earle Dodd, Van Price, Allen Wright

Vanguard International Growth 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.

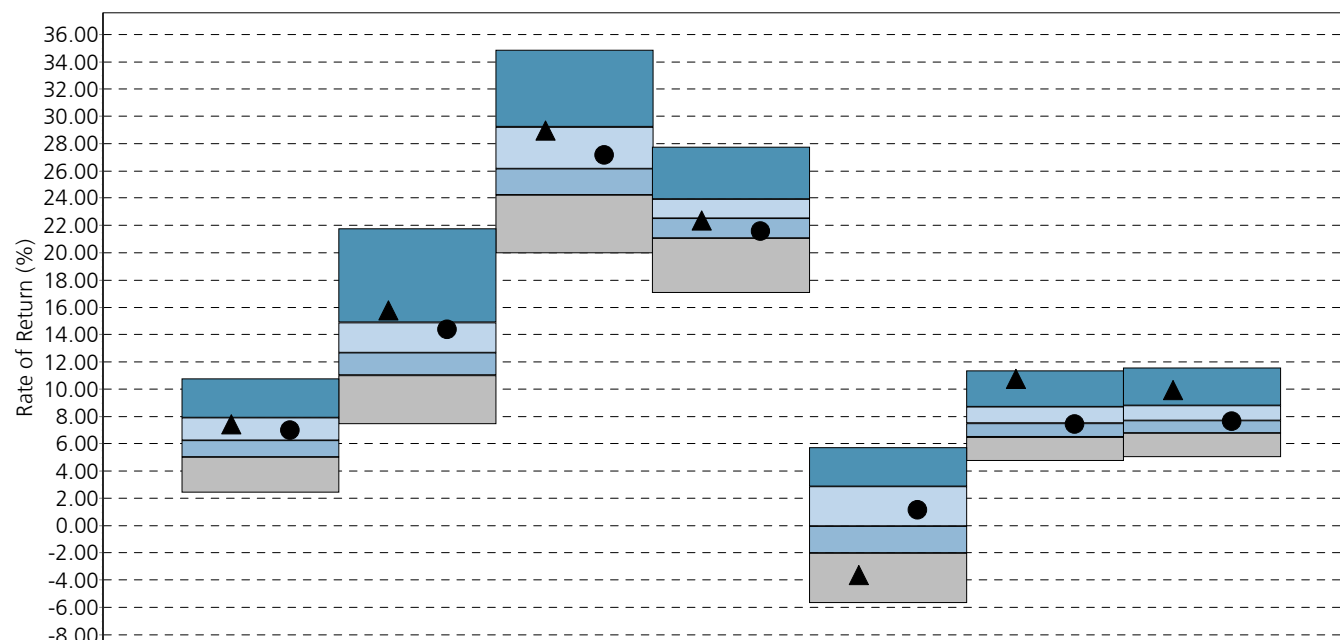
TOTAL FUND BENCHMARK

2/7/2019 - Present

100% MSCI AC World Index ex USA Growth

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TOTAL FUND versus Foreign Large Growth Managers
February 28, 2019 Through September 30, 2024

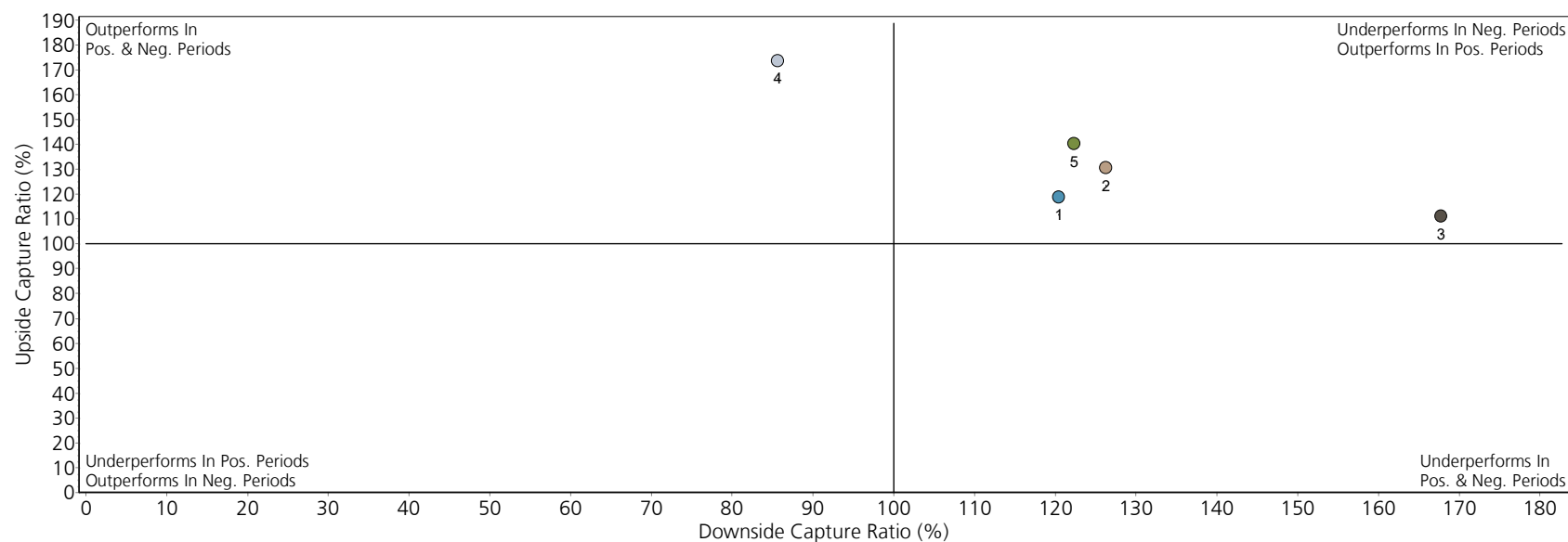


	Latest Quarter		Calendar YTD		One Year		Two Years		Three Years		Five Years		Since Inception	
Highest Value	10.76		21.74		34.82		27.75		5.73		11.33		11.55	
First Quartile	7.88		14.85		29.22		23.93		2.83		8.67		8.79	
Median Value	6.20		12.65		26.14		22.50		-0.06		7.47		7.68	
Third Quartile	5.02		11.00		24.22		21.07		-2.05		6.45		6.75	
Lowest Value	2.38		7.41		19.97		17.05		-5.69		4.73		5.00	
Mean	6.40		12.94		26.62		22.52		0.12		7.63		7.86	
▲ Vanguard International Growth Fund	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
● MSCI AC Wld x US Grw	7.43	31	15.77	15	28.94	28	22.35	52	-3.65	88	10.76	3	9.92	9
	6.98	33	14.35	31	27.12	40	21.55	68	1.12	41	7.41	52	7.64	51

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Capture Ratio

February 7, 2019 Through September 30, 2024



	1	2	3	4	5
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	2/2019-9/2024
Up Periods	7.00	3.00	7.00	7.00	38.00
Upside Capture ROR	50.07	27.41	18.50	93.31	85.92
MSCI AC Wld x US Grw	42.12	20.99	16.67	53.74	61.23
% Of Capture	118.88	130.60	110.99	173.65	140.32
Down Periods	5.00	9.00	5.00	5.00	29.00
Downside Capture ROR	-23.50	-45.68	-16.24	-17.37	-44.79
MSCI AC Wld x US Grw	-19.51	-36.19	-9.68	-20.28	-36.61
% Of Capture	120.45	126.23	167.73	85.65	122.34

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb OPEB
October 22, 2024

Prepared by:
Earle Dodd, Van Price, Allen Wright

Loomis Sayles Global Equity

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Performance Analysis

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

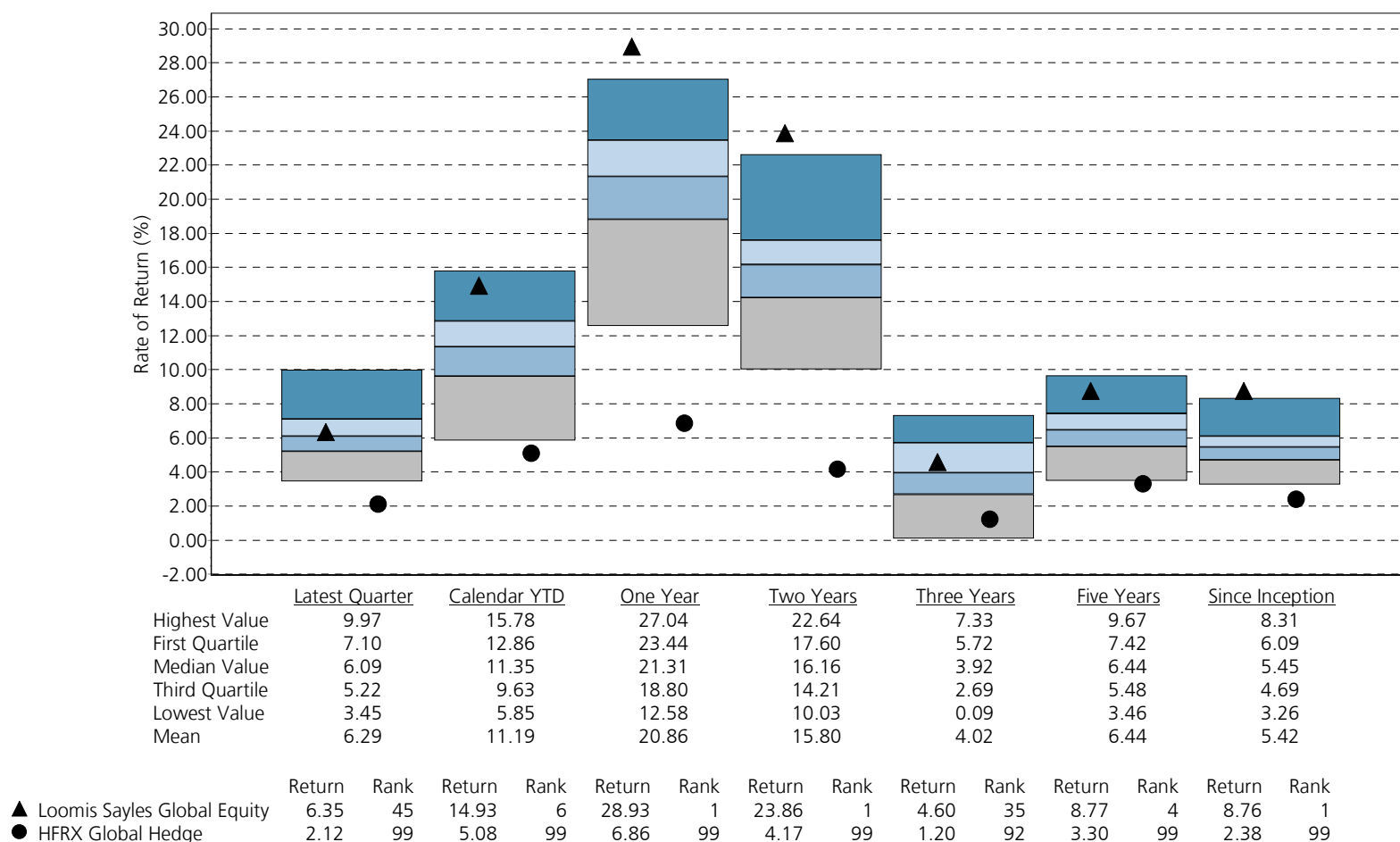
TOTAL FUND BENCHMARK

9/30/2017 - Present

100% HFRX Global Hedge Fund Index

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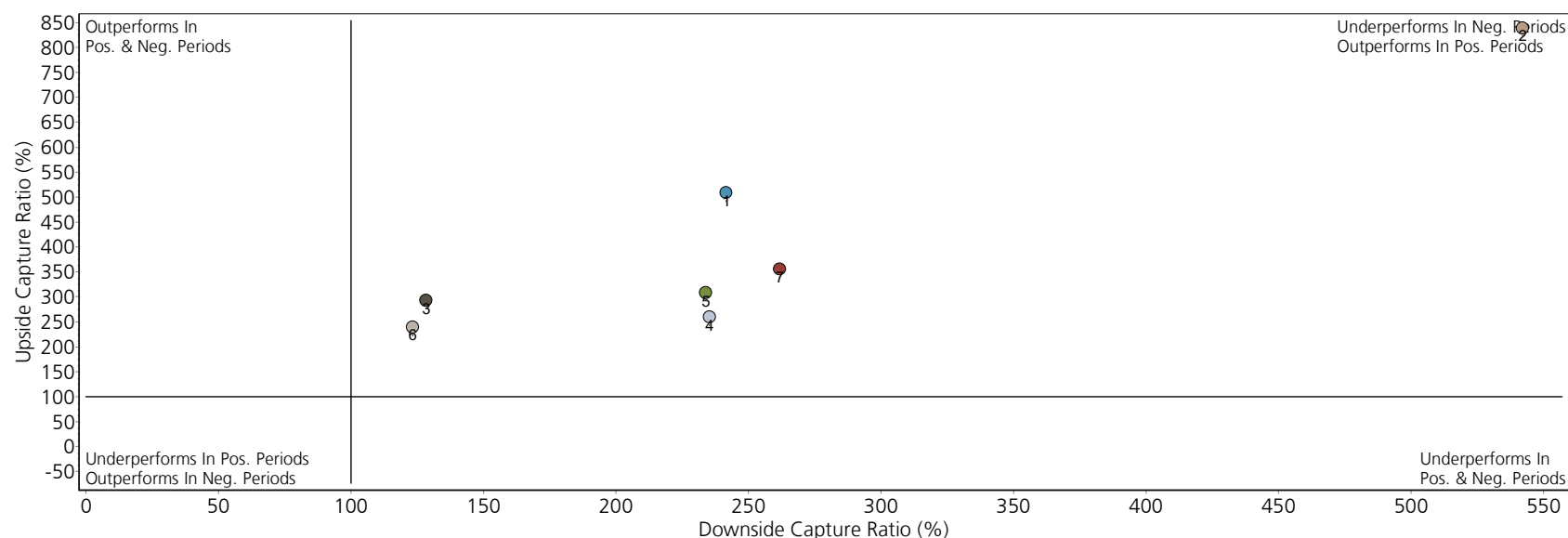
TOTAL FUND versus Global Allocation Universe Managers
September 30, 2017 Through September 30, 2024



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Capture Ratio

September 30, 2017 Through September 30, 2024



	1	2	3	4	5	6	7
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	9/2017-9/2024
Up Periods	7.00	5.00	7.00	8.00	10.00	4.00	52.00
Upside Capture ROR	32.02	18.51	17.90	40.49	29.39	7.82	41.67
HFRX Global Hedge	6.30	2.21	6.11	15.59	9.55	3.27	11.72
% Of Capture	508.33	838.57	292.76	259.71	307.56	238.86	355.42
Down Periods	5.00	7.00	5.00	4.00	2.00	8.00	32.00
Downside Capture ROR	-7.26	-35.07	-2.98	-17.87	-2.00	-11.93	-29.23
HFRX Global Hedge	-3.01	-6.47	-2.32	-7.59	-0.85	-9.68	-11.16
% Of Capture	241.64	542.08	128.40	235.35	234.02	123.25	261.84

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb OPEB
October 22, 2024

Prepared by:
Earle Dodd, Van Price, Allen Wright

First Eagle Global Funds Class I

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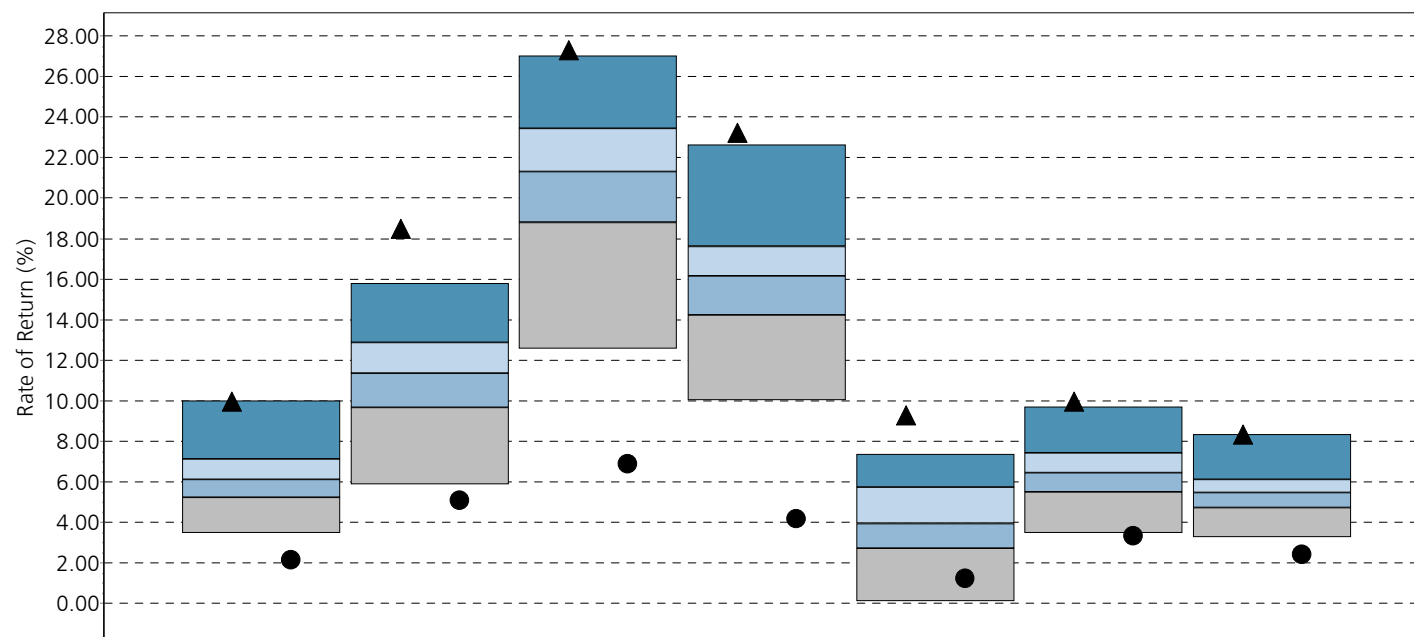
TOTAL FUND BENCHMARK

9/30/2017 - Present

100% HFRX Global Hedge Fund Index

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TOTAL FUND versus Global Allocation Universe Managers
September 30, 2017 Through September 30, 2024



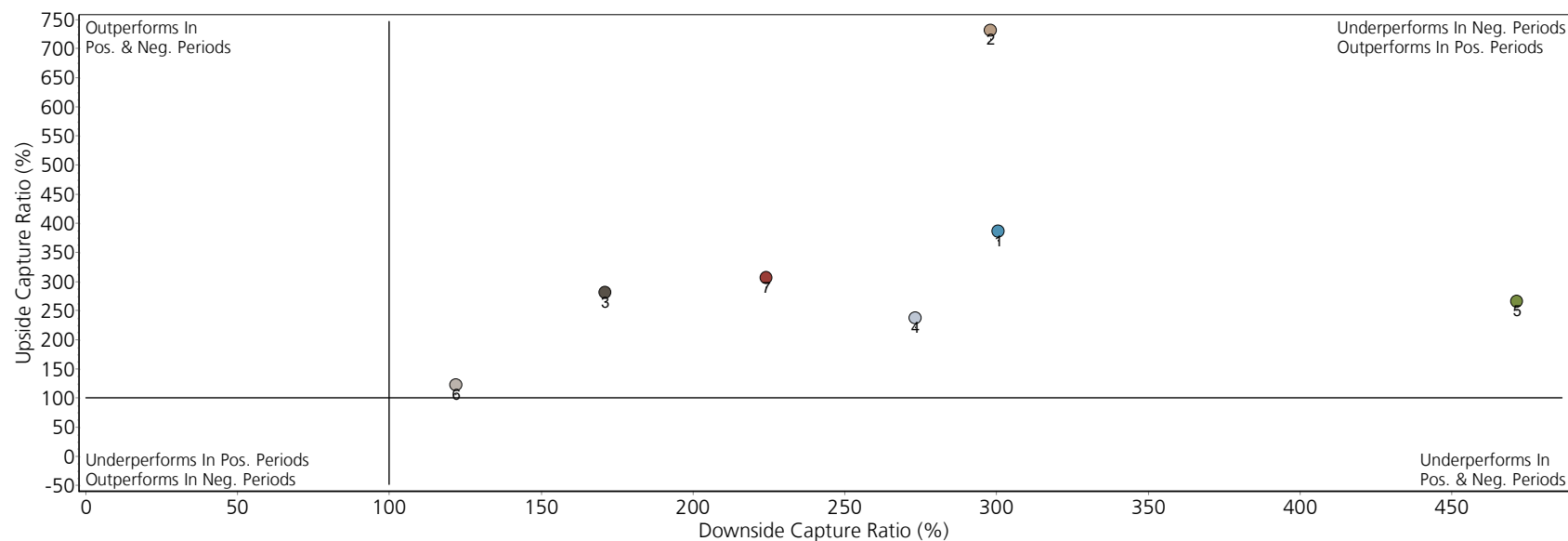
	Latest Quarter		Calendar YTD		One Year		Two Years		Three Years		Five Years		Since Inception	
Highest Value	9.97		15.78		27.04		22.64		7.33		9.67		8.31	
First Quartile	7.10		12.86		23.44		17.60		5.72		7.42		6.09	
Median Value	6.09		11.35		21.31		16.16		3.92		6.44		5.45	
Third Quartile	5.22		9.63		18.80		14.21		2.69		5.48		4.69	
Lowest Value	3.45		5.85		12.58		10.03		0.09		3.46		3.26	
Mean	6.29		11.19		20.86		15.80		4.02		6.44		5.42	

	Return		Rank		Return		Rank		Return		Rank		Return		Rank	
▲ First Eagle Global Funds Class I	9.96		1		18.49		1		27.29		1		23.25		1	
● HFRX Global Hedge	2.12		99		5.08		99		6.86		99		4.17		99	

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Capture Ratio

September 30, 2017 Through September 30, 2024



	1	2	3	4	5	6	7
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	9/2017-9/2024
Up Periods	7.00	5.00	7.00	8.00	10.00	4.00	52.00
Upside Capture ROR	24.30	16.14	17.18	37.01	25.44	4.01	35.85
HFRX Global Hedge	6.30	2.21	6.11	15.59	9.55	3.27	11.72
% Of Capture	385.71	731.25	281.05	237.43	266.22	122.50	305.77
Down Periods	5.00	7.00	5.00	4.00	2.00	8.00	32.00
Downside Capture ROR	-9.03	-19.28	-3.97	-20.75	-4.02	-11.80	-25.01
HFRX Global Hedge	-3.01	-6.47	-2.32	-7.59	-0.85	-9.68	-11.16
% Of Capture	300.50	298.00	171.13	273.24	471.29	121.89	224.08

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb OPEB
 October 22, 2024

Prepared by:
 Earle Dodd, Van Price, Allen Wright

Blackrock Global Allocation 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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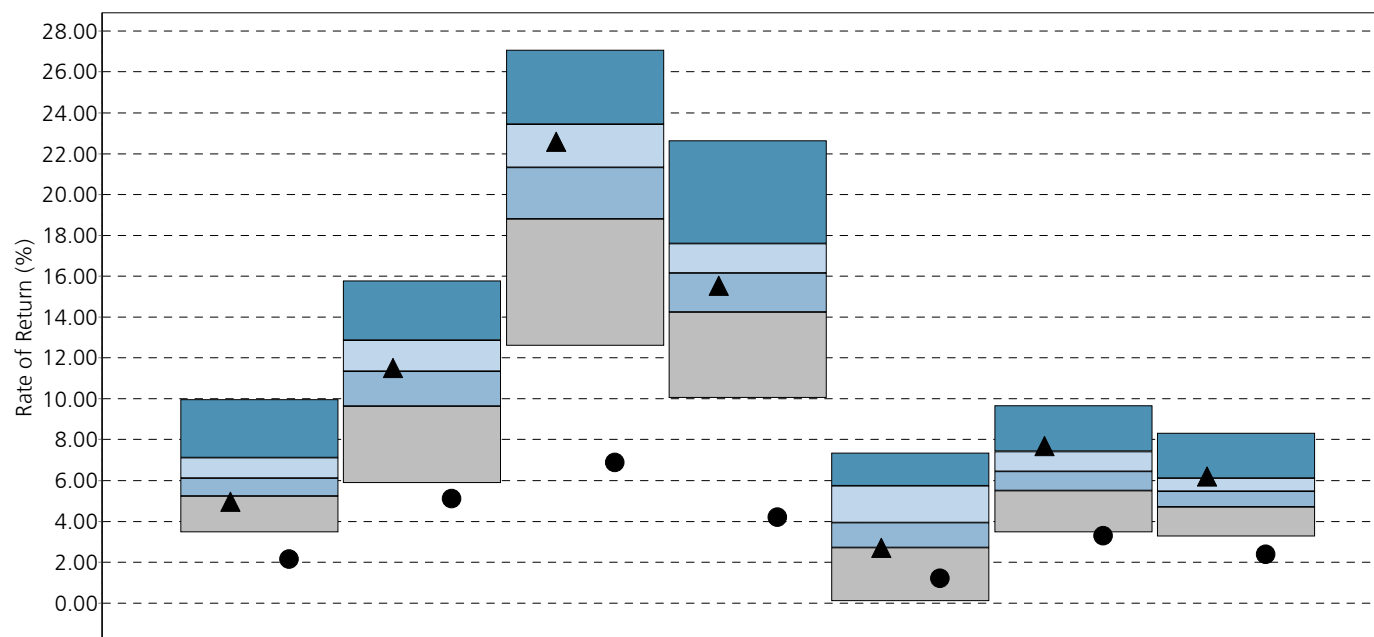
TOTAL FUND BENCHMARK

9/30/2017 - Present

100% HFRX Global Hedge Fund Index

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TOTAL FUND versus Global Allocation Universe Managers
September 30, 2017 Through September 30, 2024



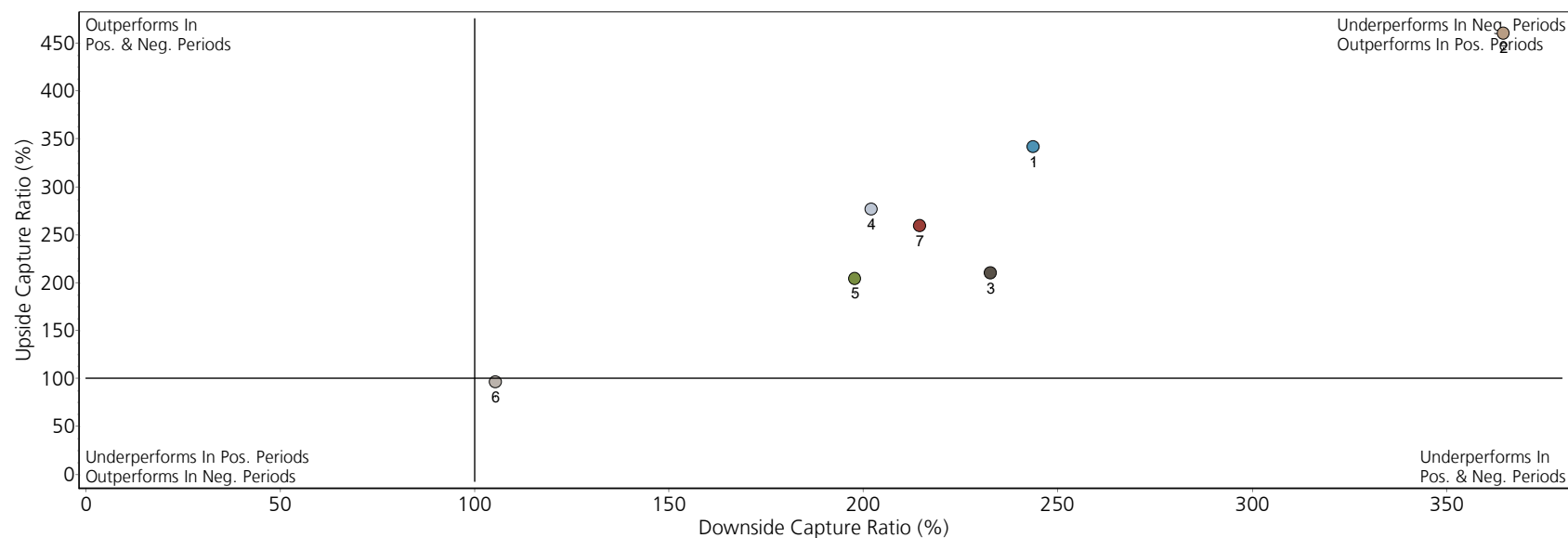
	<u>Latest Quarter</u>	<u>Calendar YTD</u>	<u>One Year</u>	<u>Two Years</u>	<u>Three Years</u>	<u>Five Years</u>	<u>Since Inception</u>
Highest Value	9.97	15.78	27.04	22.64	7.33	9.67	8.31
First Quartile	7.10	12.86	23.44	17.60	5.72	7.42	6.09
Median Value	6.09	11.35	21.31	16.16	3.92	6.44	5.45
Third Quartile	5.22	9.63	18.80	14.21	2.69	5.48	4.69
Lowest Value	3.45	5.85	12.58	10.03	0.09	3.46	3.26
Mean	6.29	11.19	20.86	15.80	4.02	6.44	5.42

	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Blackrock Global Allocation Fund	4.97	77	11.52	46	22.60	35	15.53	58	2.69	75	7.69	19	6.20	21
● HFRX Global Hedge	2.12	99	5.08	99	6.86	99	4.17	99	1.20	92	3.30	99	2.38	99

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Capture Ratio

September 30, 2017 Through September 30, 2024



	1	2	3	4	5	6	7
	12/2022-12/2023	12/2021-12/2022	12/2020-12/2021	12/2019-12/2020	12/2018-12/2019	12/2017-12/2018	9/2017-9/2024
Up Periods	7.00	5.00	7.00	8.00	10.00	4.00	52.00
Upside Capture ROR	21.53	10.16	12.83	43.07	19.49	3.16	30.42
HFRX Global Hedge	6.30	2.21	6.11	15.59	9.55	3.27	11.72
% Of Capture	341.71	460.39	209.81	276.29	204.02	96.53	259.49
Down Periods	5.00	7.00	5.00	4.00	2.00	8.00	32.00
Downside Capture ROR	-7.33	-23.60	-5.40	-15.34	-1.69	-10.21	-23.94
HFRX Global Hedge	-3.01	-6.47	-2.32	-7.59	-0.85	-9.68	-11.16
% Of Capture	243.71	364.72	232.64	202.07	197.74	105.45	214.47

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb OPEB
 October 22, 2024

Prepared by:
 Earle Dodd, Van Price, Allen Wright

Tweedy Browne Global Value 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.

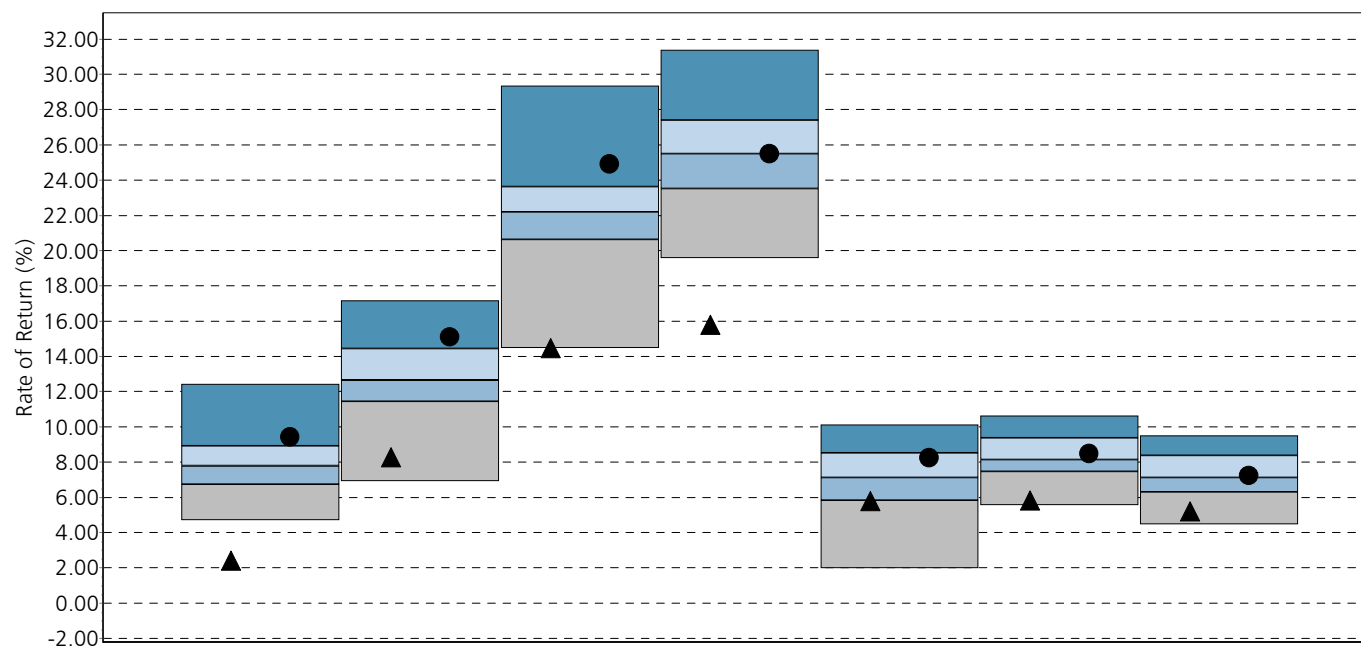
TOTAL FUND BENCHMARK

4/11/2019 - Present

100% MSCI AC World Index ex USA Value

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TOTAL FUND versus Foreign Large Value Managers
April 30, 2019 Through September 30, 2024



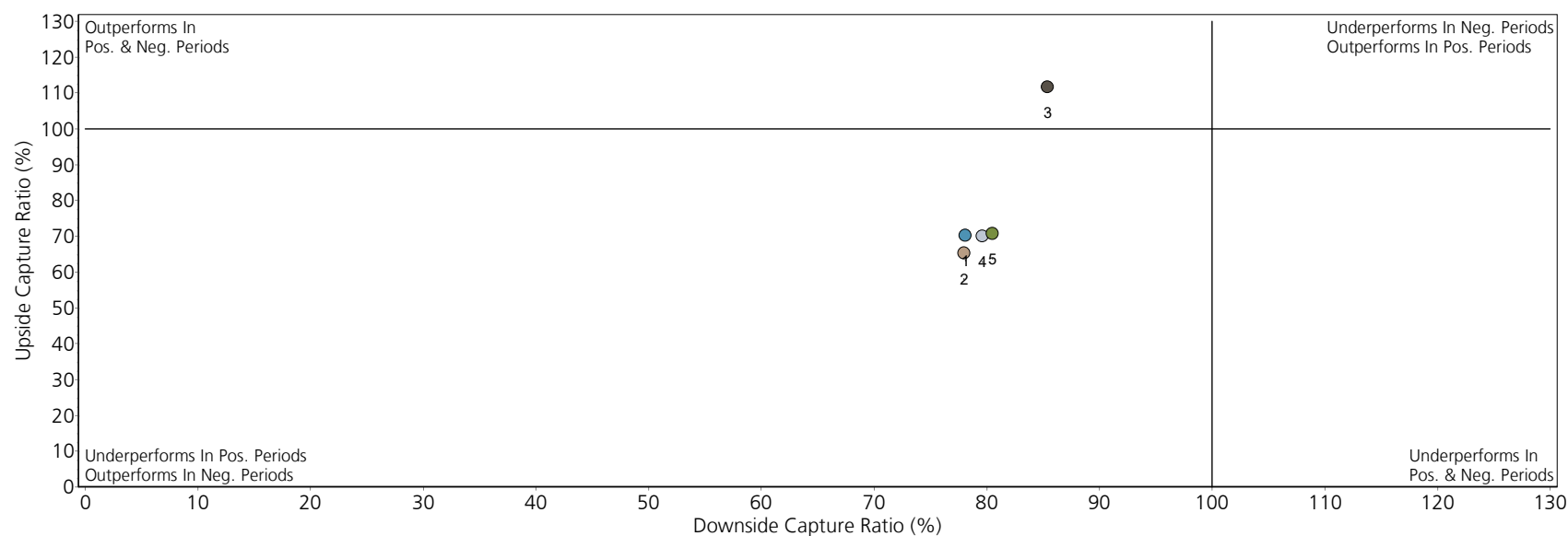
	<u>Latest Quarter</u>		<u>Calendar YTD</u>		<u>One Year</u>		<u>Two Years</u>		<u>Three Years</u>		<u>Five Years</u>		<u>Since Inception</u>	
Highest Value	12.39		17.15		29.34		31.35		10.12		10.63		9.50	
First Quartile	8.91		14.44		23.62		27.39		8.50		9.37		8.35	
Median Value	7.76		12.63		22.17		25.48		7.10		8.14		7.10	
Third Quartile	6.71		11.44		20.63		23.49		5.81		7.46		6.29	
Lowest Value	4.68		6.93		14.48		19.55		1.98		5.57		4.48	
Mean	7.80		12.74		22.20		25.31		7.07		8.26		7.15	

	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
▲ Tweedy Browne Global Value Fund	2.42	99	8.30	95	14.48	99	15.78	99	5.80	75	5.85	97	5.20	90
● MSCI AC Wld x US Val	9.41	14	15.10	17	24.90	15	25.49	49	8.25	29	8.49	39	7.21	46

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Capture Ratio

April 11, 2019 Through September 30, 2024



	1 12/2022-12/2023	2 12/2021-12/2022	3 12/2020-12/2021	4 12/2019-12/2020	5 4/2019-9/2024
Up Periods	7.00	7.00	7.00	7.00	39.00
Upside Capture ROR	27.69	14.32	26.96	34.49	41.22
MSCI AC Wld x US Val	39.42	21.93	24.16	49.25	58.22
% Of Capture	70.25	65.30	111.61	70.04	70.81
Down Periods	5.00	5.00	5.00	5.00	26.00
Downside Capture ROR	-11.92	-19.11	-8.96	-26.39	-32.37
MSCI AC Wld x US Val	-15.27	-24.51	-10.49	-33.13	-40.20
% Of Capture	78.07	77.98	85.37	79.63	80.53

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb OPEB
October 22, 2024

Prepared by:
Earle Dodd, Van Price, Allen Wright

Fuller & Thaler 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.

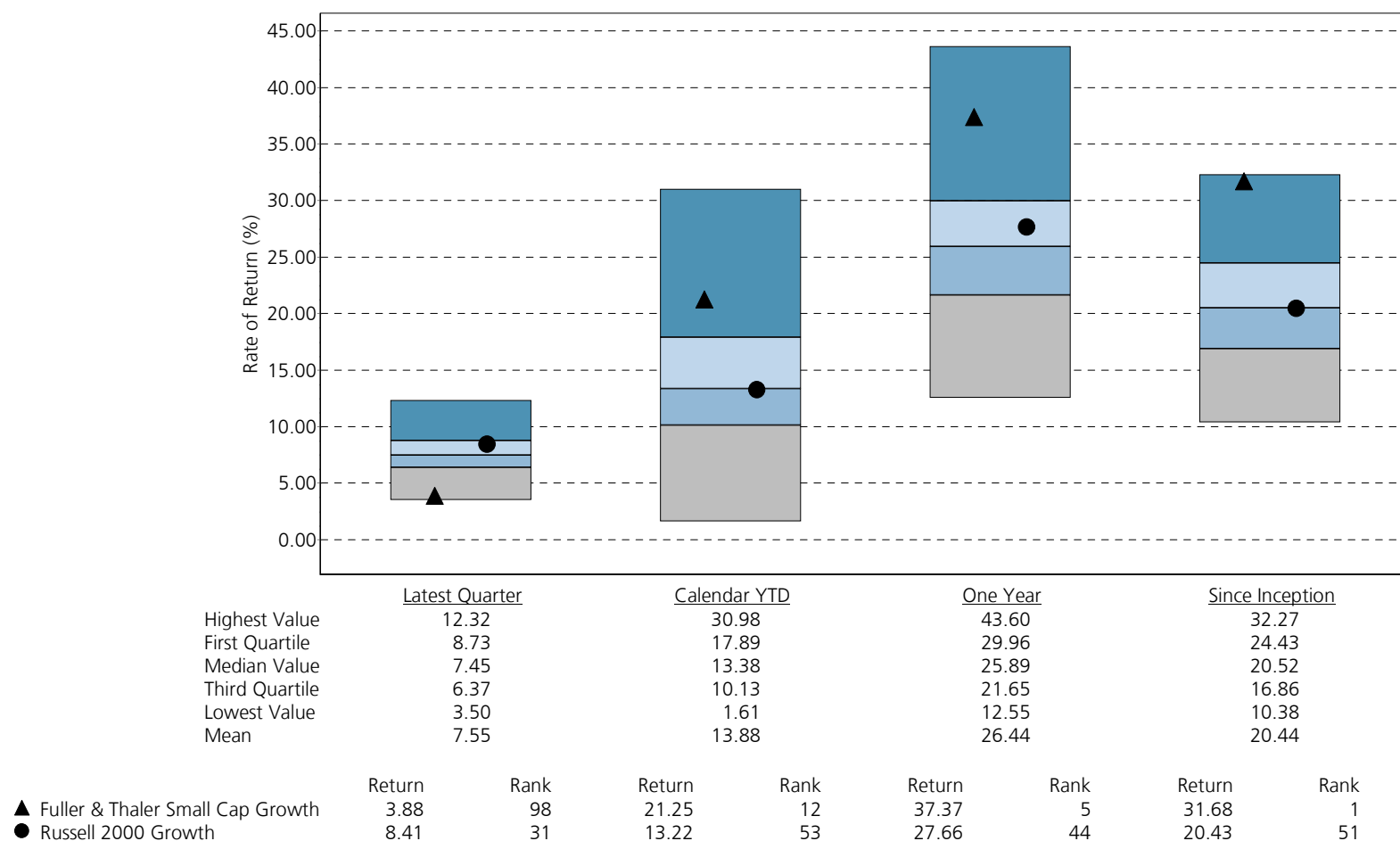
TOTAL FUND BENCHMARK

5/4/2023 - Present

100% Russell 2000 Growth

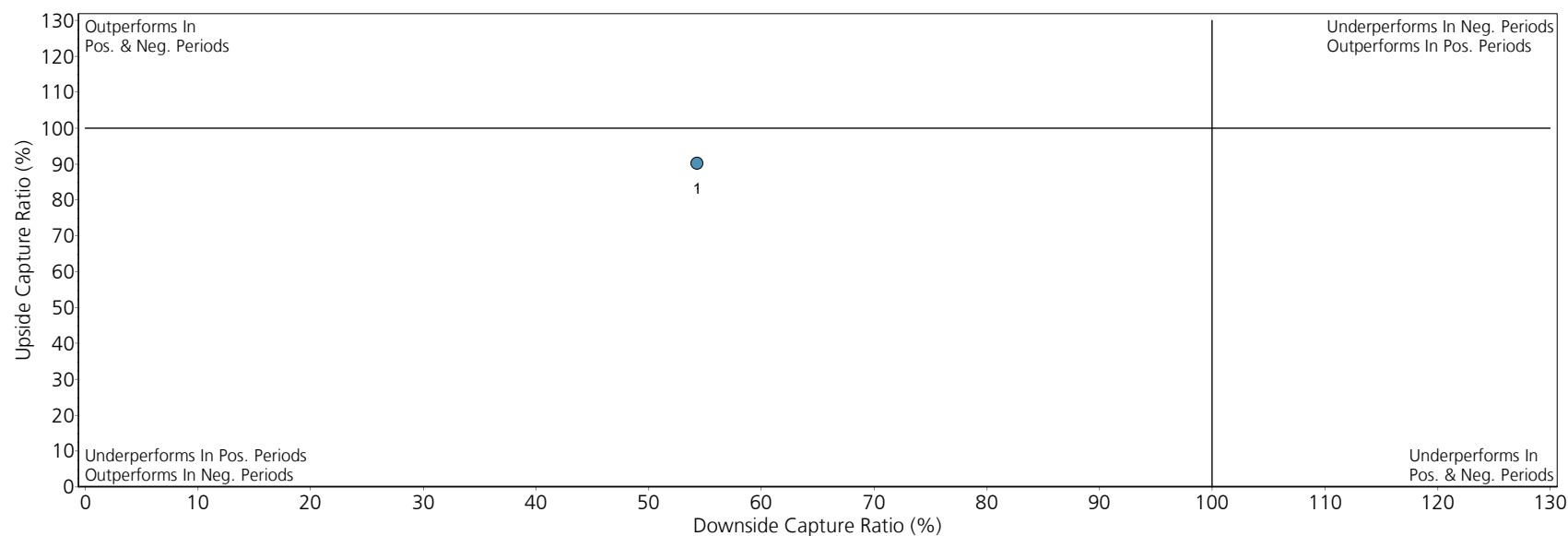
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TOTAL FUND versus Small Cap Growth Managers
May 31, 2023 Through September 30, 2024



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Capture Ratio **May 4, 2023 Through December 31, 2023**



	1
	5/2023-9/2024
Up Periods	9.00
Upside Capture ROR	70.14
Russell 2000 Growth	77.77
% Of Capture	90.19
Down Periods	7.00
Downside Capture ROR	-15.16
Russell 2000 Growth	-27.93
% Of Capture	54.30

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Investment Performance

Period Ending September 30, 2024

Prepared for:
Cobb OPEB
 October 22, 2024

Prepared by:
 Earle Dodd, Van Price, Allen Wright

Hamlin Equity Income

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.

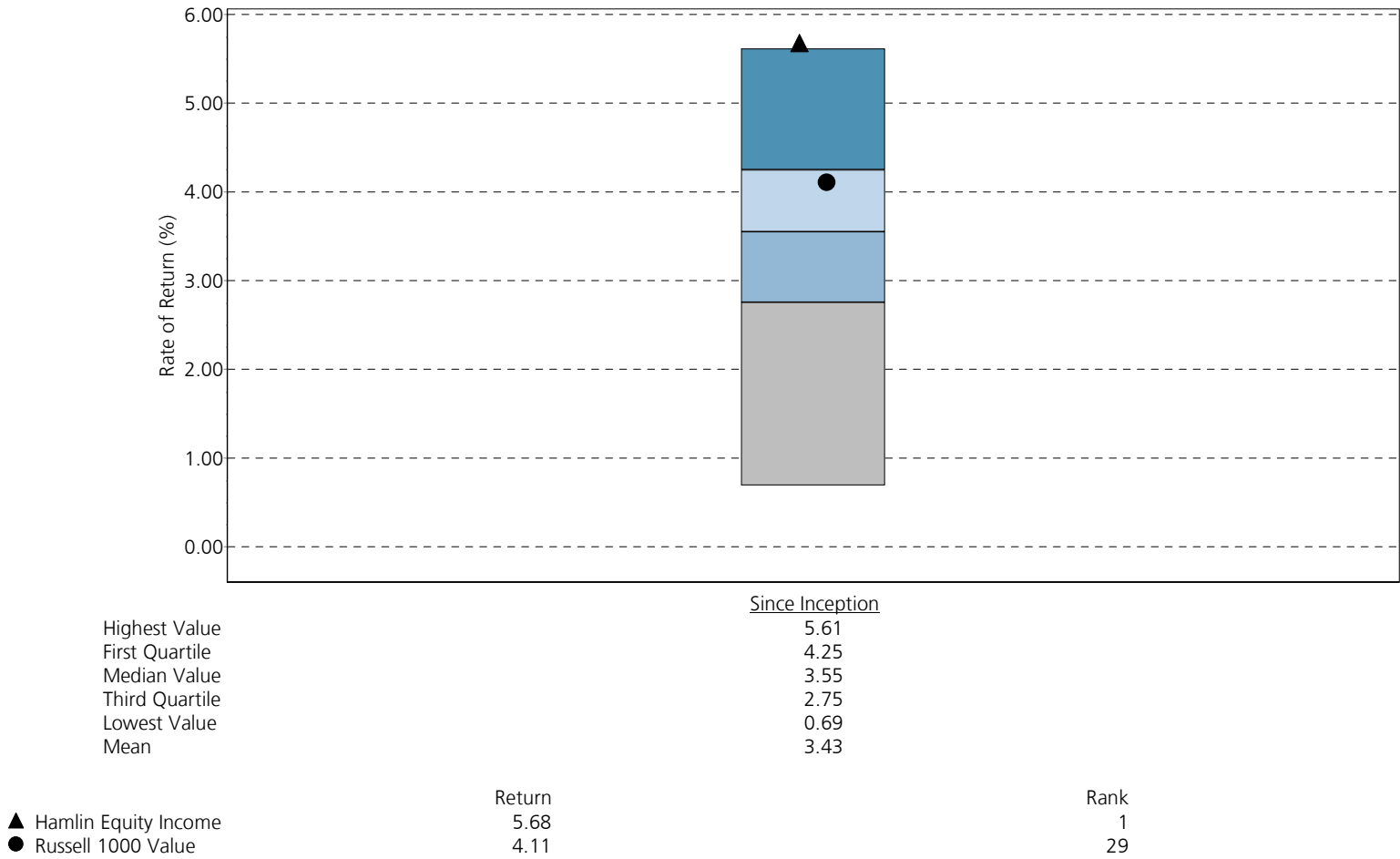
TOTAL FUND BENCHMARK

7/29/2024 - Present

100% Russell 1000 Value

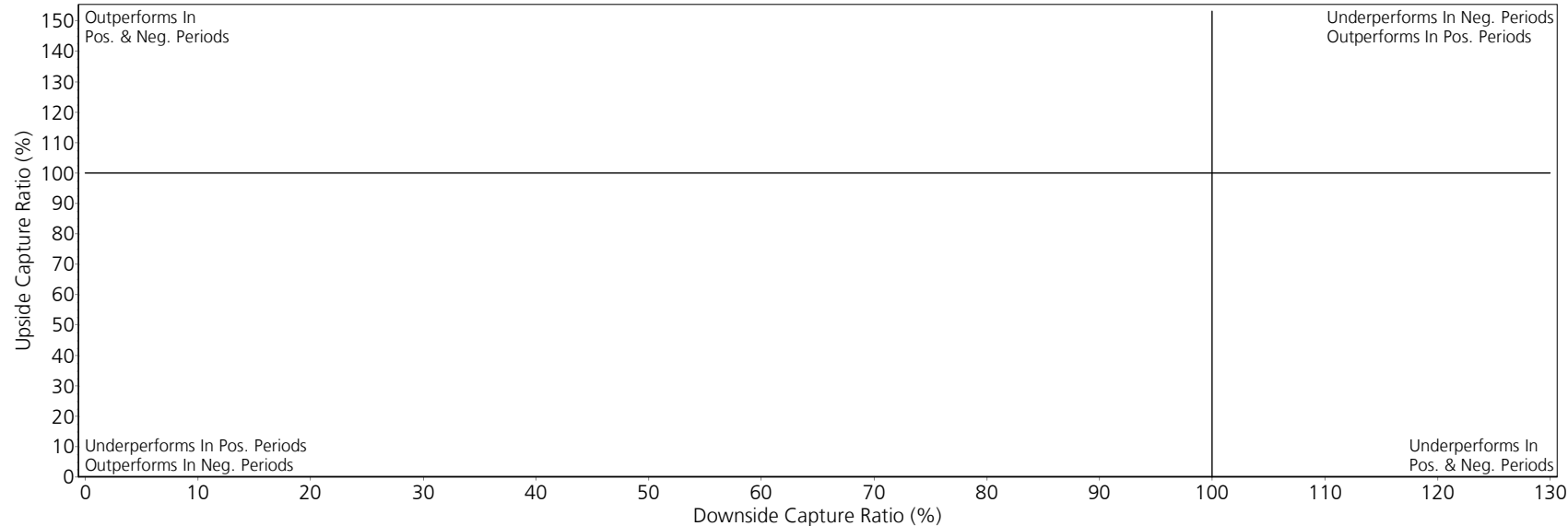
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TOTAL FUND versus Large Value Managers
July 31, 2024 Through September 30, 2024



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Capture Ratio
July 29, 2024 Through December 31, 2023



	1
	7/2024-9/2024
Up Periods	2.00
Upside Capture ROR	5.68
Russell 1000 Value	4.11
% Of Capture	138.18
Down Periods	0.00
Downside Capture ROR	N/A
Russell 1000 Value	N/A
% Of Capture	N/A

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Cobb OPEB - Investments Not Reviewed by UBS

UBS does not conduct due diligence and has not otherwise reviewed the following investments or strategies, which are included in this report at your request. You have retained this investment or strategy without the assistance of UBS or any of its employees. The inclusion of these investments/strategies in this performance report does not constitute a recommendation by UBS that you continue to invest or add funds to the strategy.

UBS does not make initial or ongoing recommendations on this investment or manager strategy to existing or prospective clients.

The IC program offers a broad spectrum of investments and manager strategies that are researched by UBS and for which clients can receive investment advice and research.

Your IC fee will not be offset or reduced as a result of not accessing our researched options.

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 UBS Institutional Consulting ("IC") or UBS Consolidated Advisory Program ("CAP") 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. 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.

If this output is provided as part of a proposal, it is marketing material. It is provided to you for discussion and consideration and is intended to aid (and be used by) your UBS Consultant or Financial Advisor in providing you with actual individualized investment recommendations. Therefore, they should only be considered in conjunction with the actual recommendations and advice of your UBS Consultant or Financial Advisor, our standard account documents, agreements, disclosures, including the ADV Disclosure for applicable advisory programs, and the additional factors that warrant consideration for your particular financial situation, including costs. The options presented are for discussion purposes only and do not constitute a recommendation to buy, hold, or sell any securities or investment products. This material is not intended and should not be construed to constitute investment advice and does not itself create a fiduciary relationship between you and UBS. You must make independent decisions with respect to any proposals contained within this report. In making those decisions you have reviewed the terms of any Plan with respect to which you are a fiduciary and your obligations to any such Plan under ERISA. If you would like more details about any of the information provided, or personalized recommendations or advice, please contact your UBS Financial Advisor.

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 IC or CAP Services Agreement or you have asked us to include those assets as an accommodation but they are not included as part of your IC or CAP Services Agreement with us. If assets are included solely as an accommodation, those assets are identified as such in this report. In either situation, the inclusion of assets held at another financial institution is based on information, including valuation and transactional information, furnished to UBS by you or your custodian. We have not verified, and are not responsible for, the accuracy or completeness of this information. 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 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 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. We require that you hold and purchase only eligible managed assets in your UBS advisory accounts.

Investment Monitoring: Your IC or CAP Agreement defines the investment monitoring performed as part of your respective investment advisory program. If we have included assets held in UBS brokerage accounts, it is important that you understand that we do not act as an investment adviser or fiduciary on brokerage assets. We do not monitor brokerage account investments through the IC or CAP Programs and we do not monitor investments as a brokerage service unless specifically agreed to in writing. This report is provided solely to help you evaluate your account performance and/or progress toward your financial objectives. By providing this report to you, we are not agreeing to monitor any brokerage account investments contained within the report. If you want ongoing monitoring of your brokerage investments, please speak with your financial advisor about the possibility of including such investments as part of an investment advisory relationship with us. Inclusion of brokerage assets in this report also distorts the actual performance of your advisory assets.

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 or Financial Advisor. Such pricing may impact the performance information provided in these reports. If pricing is indicated as "NA", the required data for that field was not provided by the other financial institution or you; this will impact 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. When you hold your assets at UBS, this report will generally show performance net of manager and UBS Institutional Consulting fees, unless you and your UBS Financial Advisor decided to reflect fee information differently. If you hold your assets away from UBS, this report will generally show performance net of manager and UBS Institutional Consulting fees if your custodian provides that level of fee information, unless you and your UBS Financial Advisor decided to reflect fee information differently. Therefore, this report may reflect performance before the deduction of manager fees and/or UBS Institutional Consulting advisory 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 instruction. For reports that reflect combined account information, the inception 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 inception dates, the consolidated Additions/Withdrawals, Income Earned and Investment Appreciation/ Depreciation will include all activity that occurred during the consolidated reporting time period. The inception date of each account is listed at the beginning of this report. 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.

Using Margin in your IC or CAP Investment Advisory Accounts. Using margin in an advisory account is a more aggressive, higher risk approach to pursuing your investment objectives. Unless you have selected a strategy that requires the use of margin as part of its implementation, we do not recommend the use of margin in advisory accounts, including IC and CAP accounts. The decision to leverage in an advisory account rests solely with you and is made against our recommendation. Your decision should be made only if you understand: (1) the risks of margin in an advisory account; (2) how margin may affect your ability to achieve investment objectives; (3) that you may lose more than your original investment. You will pay interest to UBS on the outstanding margin loan balance. Using margin to purchase securities in an advisory account increases the amount of (but not the percentage of) the advisory fee you pay. Positive or negative performance of a margined advisory account will be magnified by virtue of using margin. You will not benefit from using margin in an advisory account if the performance of your account does not exceed the interest expense being charged on the loan plus the additional advisory account fees incurred by your account as a result of the deposit of the loan proceeds.

Using Advisory Accounts as collateral for a credit line. If you currently have UBS Bank USA Credit Line collateralized by advisory accounts, UBS Bank USA pays UBS Financial Services a servicing fee based on the amount of outstanding loan balances to compensate UBS for referring clients and for administrative and operational support relating to the loan. If you maintain a balance on a non-purpose loan, your Financial Advisor will receive compensation primarily based upon the outstanding balance and the corresponding spread on the loan. This provides an incentive for your Financial Advisor to refer you for a non-purpose loan and to draw down on the loan. As UBS and your Financial Advisor are compensated primarily through advisory fees paid on your account, we (and your Financial Advisor) benefit if you draw down on your loan to meet liquidity needs rather than sell securities or other investments in your UBS account, which would reduce our advisory fee. A draw down would preserve your Financial Advisor's advisory fee revenue and may generate additional loan-related compensation for him. This presents a potential conflict of interest for your Financial Advisor when addressing your needs for liquidity. Please consider your options and these conflicts of interest carefully when deciding whether to liquidate assets or draw down on a non-purpose loan.

UBS Financial Services Inc. is in the business of establishing and maintaining investment accounts and we will receive compensation from you in connection with investments that you make, as well as additional compensation from third parties whose investments we distribute. This presents a conflict of interest when we recommend that you move your assets to UBS from another financial institution, and also when we make investment recommendations for assets you hold at, or purchase through, UBS. For more information on how we are compensated by clients and third parties, conflicts of interest and investments available at UBS please refer to the 'Your relationship with UBS' booklet provided at ubs.com/relationshipwithubs, or ask your UBS Financial Advisor for a copy. Neither UBS, our affiliates nor our Financial Advisors will act as investment adviser to you with respect to the liquidation of securities held in an advisory account to meet a margin call or credit line loan demand

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> <http://advisor.morningstar.com/familyinfo.asp> <http://advisor.morningstar.com/familyinfo.asp> <http://advisor.morningstar.com/familyinfo.asp> <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> <http://advisor.morningstar.com/familyinfo.asp> <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.

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 ©2021 Wilshire Associates Incorporated, all rights reserved.

Ranking Methodology: Universe ranking assigns a whole number rank between 1 and 99 for a set of values. This is the distribution. Ranking is determined by comparing a value to the values in the set, and using the rank assigned to the value that is equal to or 'better' than the value being compared. A 'better' value is based on whether a higher value is better or a lower value is better. A set of values can be ranked either high to low (as in rates of return, where a higher value is better than a lower value) or low to high (such as Beta). **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. **The benchmarks that constitute the policy index change over time as your portfolio changes. For historical policy index information, see the Benchmark Comparisons Used in this Report exhibit.**

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 you or 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, UBS Financial Services Inc. offers investment advisory services in its capacity as an SEC-registered investment adviser and brokerage services in its capacity as an SEC-registered broker-dealer. Investment advisory services and brokerage services are separate and distinct, differ in material ways and are governed by different laws and separate arrangements. It is important that clients understand the ways in which we conduct business and that they carefully read the agreements and disclosures that we provide to them about the products or services we offer. A small number of our financial advisors are not permitted to offer advisory services to you, and can only work with you directly as UBS broker-dealer representatives. Your financial advisor will let you know if this is the case and, if you desire advisory services, will be happy to refer you to another financial advisor who can help you. Our agreements and disclosures will inform you about whether we and our financial advisors are acting in our capacity as an investment adviser or broker-dealer. For more information, please review the PDF document at ubs.com/relationshipsummary. 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, AAP, MAC and Institutional Consulting ("IC") programs offer some of the same Separately Managed 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) or by you (in MAC or IC). 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

Accrued Interest: In accounting, accrued interest refers to the amount of interest that has been incurred, as of a specific date, on a loan or other financial obligation but has not yet been paid out. Accrued interest can either be in the form of accrued interest revenue, for the lender, or accrued interest expense, for the borrower. The term accrued interest can also refer to the amount of bond interest that has accumulated since the last time a bond interest payment was made.

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.

Annual Income is money (or some equivalent value) that an individual or business receives, usually in exchange for providing a good or service or through investing capital. Income is used to fund day-to-day expenditures. Investments, pensions, and Social Security are primary sources of income for retirees. For individuals, income is most often received in the form of wages or salary. Business income can refer to a company's remaining revenues after paying all expenses and taxes. In this case, income is referred to as "earnings." Most forms of income are subject to taxation.

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.

Cost: This is the Cost basis information. Cost basis is the original value of an asset for tax purposes, usually the purchase price, adjusted for stock splits, dividends, and return of capital distributions. This value is used to determine the capital gain, which is equal to the difference between the asset's cost basis and the current market value.

Coupon Rate: A coupon rate is the yield paid by a fixed-income security; a fixed-income security's coupon rate is the annual coupon payments paid by the issuer relative to the bond's face or par value. The coupon rate, or coupon payment, is the yield the bond paid on its issue date. This yield changes as the value of the bond changes, thus giving the bond's **Yield to Maturity**. The portfolio's coupon rate is the weighted average of the assets' coupon rates.

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.

Distribution of Assets: Distribution of Assets displays monthly data related to net contributions, market values, rates of return, and Index Values.

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.

Investment Class: Group of financial instruments which have similar financial characteristics and which tend to behave similarly in the marketplace.

Investment Style: Method and philosophy followed by a manager when selecting financial instruments.

Management Firm: Professional organization managing various assets in order to meet specified investment goals for the benefit of its clients.

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.

Maturity Date: The maturity date is the date on which the principal amount of a note, draft, acceptance bond or other debt instrument becomes due. On this date, which is generally printed on the certificate of the instrument in question, the principal investment is repaid to the investor, while the interest payments that were regularly paid out during the life of the bond, cease to roll in. The maturity date also refers to the termination date (due date) on which an installment loan must be paid back in full.

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".

Par value: Par value is the face value of a bond. The market price of a bond may be above or below par, depending on factors such as the level of interest rates and the bond's credit status. Par value for a bond is typically \$1,000 or \$100 because these are the usual denominations in which they are issued.

Performance Attribution: Attribution analysis is a sophisticated method for evaluating the performance of a portfolio or fund manager. Manager Contribution focuses on three factors: the manager's investment style, their specific asset selections, and the market timing of those selections. It attempts to provide a quantitative analysis of the aspects of a fund manager's investment selections and philosophy that lead to that fund's performance. Asset Allocation provides an analysis of the effects on relative performance (i.e., performance vs. an index) that are related to a portfolio's allocation between asset classes. Total Fund Attribution combines the Manager Contribution results with the impacts of Asset Allocation decisions.

Real rate of return is the annual percentage of profit earned on an investment, adjusted for inflation. Therefore, the real rate of return accurately indicates the actual purchasing power of a given amount of money over time. Adjusting the nominal return to compensate for inflation allows the investor to determine how much of a nominal return is real return. In addition to adjusting for inflation, investors also must consider the impact of other factors such as taxes and investing fees in order to calculate real returns on their money or to choose among various investing options.

Tracking error is the divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark. This is often in the context of a hedge fund, mutual fund, or exchange-traded fund (ETF) that did not work as effectively as intended, creating an unexpected profit or loss. Tracking error is reported as a standard deviation percentage difference, which reports the difference between the return an investor receives and that of the benchmark they were attempting to imitate.

Treynor ratio, also known as the reward-to-volatility ratio, is a performance metric for determining how much excess return was generated for each unit of risk taken on by a portfolio. Excess return in this sense refers to the return earned above the return that could have been earned in a risk-free investment. Although there is no true risk-free investment, treasury bills are often used to represent the risk-free return in the Treynor ratio. Risk in the Treynor ratio refers to systematic risk as measured by a portfolio's beta. Beta measures the tendency of a portfolio's return to change in response to changes in return for the overall market.

Upside market Capture ratio: The Upside Capture Ratio is the ratio of the Upside Capture Return -of a portfolio against a benchmark index- divided by the Market Benchmark Index's return (from zero or positive returns).

Upside Capture Return; The Upside Capture Return, which is measured based a related benchmark index's returns, is the portfolio's compound return for returns in periods, in which the respective benchmark index's return is above or equal to zero.

Yield to maturity (YTM) is the total return anticipated on a bond if the bond is held until it matures. Yield to maturity is considered a long-term bond yield but is expressed as an annual rate. In other words, it is the internal rate of return (IRR) of an investment in a bond if the investor holds the bond until maturity, with all payments made as scheduled and reinvested at the same rate.

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.

Unit Values: Unit Value links periodic rates of return, beginning with an initial value of 100. It can be used to calculate rates of return between any two dates in the report.

Index Definitions

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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Quarterly Investment Review

Cobb County

10/14/2024

Data as of 09/30/2024

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Active Evaluation Criteria

1	Manager Tenure (MGR) > 3 years
2	Total Net Assets (ASSETS) > \$500 Mil
3	3 year Annualized Return vs. peers (3 YR PEER) in top 50%
4	5 year Annualized Return vs. peers (5 YR PEER) in top 50%
5	Net Expense Ratio vs. peers (NET EXP PEER) in top 50%

Passive Evaluation Criteria

1	Manager Tenure (MGR) > 3 years
2	Total Net Assets (ASSETS) > \$500 Mil
3	3 year Tracking Error vs. peers (3 YR TRACK ERR PEER) in top 25%
4	Net Expense Ratio vs. peers (NET EXP PEER) in top 25%

(1) Fund was re-categorized following UBS assessment of investment style.
(2) This investment or strategy is not available through UBS. Please see “Investment Eligibility” and “Non-Program Investments Displayed in this Report” sections of the "Important Information About this Report" section for details.
(3) Since your last Report, this investment option has been removed from the UBS fund eligibility list and is no longer available through UBS
Criteria and Weighting Factors were defined by the plan sponsor. Refer to the Definitions section for definitions. Scoring Methodologies can be found in the "Important Information About This Report" section.



ACTIVE FUNDS CATEGORY	INVESTMENT	SCORE		FUND ACTION	QTRS ON WATCH	CRITERIA (1 - 5)				
		Q2 24	Q3 24			MGR	ASSETS	3 YR PEER	5 YR PEER	NET EXP PEER
Large Blend	American Funds Washington Mutual R6 - RWMGX	4	4			●	●	●	○	●
Large Growth	JPMorgan Large Cap Growth R6 - JLGMX	5	5			●	●	●	●	●
Mid-Cap Value	Victory Sycamore Established Value R6 - VEVRX	5	5			●	●	●	●	●
Mid-Cap Growth	Delaware Ivy Mid Cap Growth R6 - IGRFX	4	4			●	●	○	●	●
Small Blend	ClearBridge Small Cap I - LMNSX	3	3			●	●	○	○	●
Real Estate	Nuveen Real Estate Securities R6 - FREGX	4	4			●	●	●	○	●
Foreign Large Blend	MFS Intl Diversification R6 - MDIZX	3	3			○	●	○	●	●
Foreign Large Growth	American Funds Europacific Growth R6 - RERGX	5	5			●	●	●	●	●
Global Large-Stock Growth	American Funds New Perspective R6 - RNPGX	5	5			●	●	●	●	●
Intermediate Core-Plus Bond	Western Asset Core Plus Bond IS - WAPSX ²	3	3			●	●	○	○	●
High Yield Bond	PGIM High Yield R6 - PHYQX	4	5			●	●	●	●	●
Money Market-Taxable	Vanguard Treasury Money Market Investor - VUSXX	5	5			●	●	●	●	●
Target-Date 2000-2010	American Funds 2010 Trgt Date Retire R6 - RFTTX	5	5			●	●	●	●	●
Target Date 2015	American Funds 2015 Trgt Date Retire R6 - RFJTX	5	5			●	●	●	●	●
Target Date 2020	American Funds 2020 Trgt Date Retire R6 - RRCTX	5	5			●	●	●	●	●
Target Date 2025	American Funds 2025 Trgt Date Retire R6 - RFDTX	5	5			●	●	●	●	●
Target Date 2030	American Funds 2030 Trgt Date Retire R6 - RFETX	5	5			●	●	●	●	●

Score and Criteria Legend: Meets ● Does Not Meet ○

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ACTIVE FUNDS CATEGORY	INVESTMENT	SCORE		FUND ACTION	QTRS ON WATCH	CRITERIA (1 - 5)				
		Q2 24	Q3 24			MGR	ASSETS	3 YR PEER	5 YR PEER	NET EXP PEER
Target Date 2035	American Funds 2035 Trgt Date Retire R6 - RFFT	5	5			●	●	●	●	●
Target Date 2040	American Funds 2040 Trgt Date Retire R6 - RFGT	5	5			●	●	●	●	●
Target Date 2045	American Funds 2045 Trgt Date Retire R6 - RFHT	5	5			●	●	●	●	●
Target Date 2050	American Funds 2050 Trgt Date Retire R6 - RFIT	5	5			●	●	●	●	●
Target Date 2055	American Funds 2055 Trgt Date Retire R6 - RFKT	5	5			●	●	●	●	●
Target-Date 2060	American Funds 2060 Trgt Date Retire R6 - RFUT	5	5			●	●	●	●	●
Target-Date 2065+	American Funds 2065 Trgt Date Retire R6 - RFVT	4	4			●	●	●	-	●

Score and Criteria Legend: Meets ● Does Not Meet ○

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PASSIVE FUNDS CATEGORY	INVESTMENT	SCORE		FUND ACTION	QTRS ON WATCH	CRITERIA (1 - 4)			
		Q2 24	Q3 24			MGR	ASSETS	3 YR TRACK ERR/PEER	NET EXP PEER
Large Blend	Vanguard Institutional Index Instl Pl - VIIIX	4	4			●	●	●	●

Score and Criteria Legend: Meets ● Does Not Meet ○

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ACTIVE

INVESTMENT	MGR	ASSETS (000,000)	3 YR PEER	5 YR PEER	NET EXP PEER	SCORE OF 5
Large Blend						
American Funds Washington Mutual R6 - RWMGX	27.27	\$192,499	12.95	14.06	0.26	4
Peer Rank Percentile	-	-	10	63	17	-
Russell 1000 TR USD	-	-	10.83	15.64	-	-
Peer Group Median (50th Percentile)	8.43	\$1,194	10.60	14.86	0.70	-
Large Growth						
JPMorgan Large Cap Growth R6 - JLGMX	20.18	\$98,006	11.64	21.25	0.44	5
Peer Rank Percentile	-	-	9	3	11	-
Russell 1000 Growth TR USD	-	-	12.02	19.74	-	-
Peer Group Median (50th Percentile)	9.72	\$1,506	8.13	16.39	0.84	-
Mid-Cap Value						
Victory Sycamore Established Value R6 - VEVRX	26.19	\$19,452	9.98	13.22	0.54	5
Peer Rank Percentile	-	-	21	14	13	-
Russell Mid Cap Value TR USD	-	-	7.39	10.33	-	-
Peer Group Median (50th Percentile)	11.01	\$775	8.66	10.42	0.90	-
Mid-Cap Growth						
Delaware Ivy Mid Cap Growth R6 - IGRFX	23.65	\$6,678	-2.11	11.05	0.68	4
Peer Rank Percentile	-	-	68	34	14	-
Russell Mid Cap Growth TR USD	-	-	2.32	11.48	-	-
Peer Group Median (50th Percentile)	11.84	\$958	-0.23	10.37	0.99	-
Small Blend						
ClearBridge Small Cap I - LMNSX	13.01	\$992	1.12	6.84	0.85	3
Peer Rank Percentile	-	-	90	94	35	-
Russell 2000 TR USD	-	-	1.84	9.39	-	-
Peer Group Median (50th Percentile)	10.76	\$440	4.08	9.99	0.96	-

Criteria Legend:

Meets Criteria

Does Not Meet Criteria

*** = data is missing for one or more criteria (see Executive Summary for detailed criteria).

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Refer to the Executive Summary section for a list of criteria and criteria abbreviations utilized for this plan.

ACTIVE

INVESTMENT	MGR	ASSETS (000,000)	3 YR PEER	5 YR PEER	NET EXP PEER	SCORE OF 5
Real Estate						
Nuveen Real Estate Securities R6 - FREGX	13.54	\$1,120	3.73	4.77	0.84	4
Peer Rank Percentile	-	-	25	57	42	-
FTSE NAREIT Equity REITs TR USD	-	-	5.07	5.46	-	-
Peer Group Median (50th Percentile)	9.79	\$250	2.90	4.87	0.96	-
Foreign Large Blend						
MFS Intl Diversification R6 - MDIZX	2.74	\$40,535	4.16	8.29	0.73	3
Peer Rank Percentile	-	-	52	37	35	-
MSCI ACWI Ex USA NR USD	-	-	4.14	7.59	-	-
Peer Group Median (50th Percentile)	8.42	\$817	4.22	7.81	0.88	-
Foreign Large Growth						
American Funds Europacific Growth R6 - RERGX	23.35	\$140,317	0.06	7.52	0.47	5
Peer Rank Percentile	-	-	49	50	7	-
MSCI ACWI Ex USA Growth NR USD	-	-	0.81	7.09	-	-
Peer Group Median (50th Percentile)	11.37	\$1,191	-0.03	7.48	0.92	-
Global Large-Stock Growth						
American Funds New Perspective R6 - RNPGX	23.85	\$146,079	5.46	13.85	0.42	5
Peer Rank Percentile	-	-	32	17	2	-
MSCI ACWI Large Cap Growth NR USD	-	-	8.14	15.65	-	-
Peer Group Median (50th Percentile)	9.83	\$744	4.32	12.33	0.98	-
Intermediate Core-Plus Bond						
Western Asset Core Plus Bond IS - WAPSX	17.76	\$11,629	-3.62	-0.51	0.42	3
Peer Rank Percentile	-	-	98	95	19	-
Bloomberg US Agg Bond TR USD	-	-	-1.39	0.33	-	-
Peer Group Median (50th Percentile)	9.61	\$1,433	-1.39	0.75	0.63	-

Criteria Legend:

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ACTIVE

INVESTMENT	MGR	ASSETS (000,000)	3 YR PEER	5 YR PEER	NET EXP PEER	SCORE OF 5
High Yield Bond						
PGIM High Yield R6 - PHYQX	16.97	\$19,509	2.78	4.60	0.38	5
Peer Rank Percentile	-	-	50	26	9	-
ICE BofA US High Yield TR USD	-	-	3.08	4.55	-	-
Peer Group Median (50th Percentile)	9.91	\$523	2.77	4.01	0.76	-
Money Market-Taxable						
Vanguard Treasury Money Market Investor - VUSXX	6.78	\$80,089	3.52	2.28	0.09	5
Peer Rank Percentile	-	-	5	3	2	-
ICE BofA USD 3M Dep OR CM TR USD	-	-	3.50	2.45	-	-
Peer Group Median (50th Percentile)	18.01	\$28,337	3.32	2.11	0.33	-
Target-Date 2000-2010						
American Funds 2010 Trgt Date Retire R6 - RFTTX	12.76	\$4,064	4.14	6.16	0.29	5
Peer Rank Percentile	-	-	1	4	20	-
S&P Target Date 2010 TR USD	-	-	3.10	5.31	-	-
Peer Group Median (50th Percentile)	11.12	\$97	2.47	5.21	0.45	-
Target Date 2015						
American Funds 2015 Trgt Date Retire R6 - RFJTX	12.76	\$5,124	4.20	6.55	0.30	5
Peer Rank Percentile	-	-	1	6	18	-
S&P Target Date 2015 TR USD	-	-	3.32	5.75	-	-
Peer Group Median (50th Percentile)	10.90	\$231	2.56	5.48	0.51	-
Target Date 2020						
American Funds 2020 Trgt Date Retire R6 - RRCTX	12.76	\$16,221	4.42	6.98	0.31	5
Peer Rank Percentile	-	-	1	7	18	-
S&P Target Date 2020 TR USD	-	-	3.73	6.15	-	-
Peer Group Median (50th Percentile)	11.26	\$551	2.68	5.98	0.54	-

Criteria Legend:

Meets Criteria

Does Not Meet Criteria

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ACTIVE

INVESTMENT	MGR	ASSETS (000,000)	3 YR PEER	5 YR PEER	NET EXP PEER	SCORE OF 5
Target Date 2025						
American Funds 2025 Trgt Date Retire R6 - RFDTX	12.76	\$34,473	4.39	7.81	0.32	5
Peer Rank Percentile	-	-	4	3	15	-
S&P Target Date 2025 TR USD	-	-	4.09	7.01	-	-
Peer Group Median (50th Percentile)	10.42	\$635	3.03	6.52	0.59	-
Target Date 2030						
American Funds 2030 Trgt Date Retire R6 - RFETX	12.76	\$50,583	5.03	8.87	0.33	5
Peer Rank Percentile	-	-	5	2	15	-
S&P Target Date 2030 TR USD	-	-	4.95	8.10	-	-
Peer Group Median (50th Percentile)	9.17	\$905	3.77	7.58	0.60	-
Target Date 2035						
American Funds 2035 Trgt Date Retire R6 - RFFT X	12.76	\$49,332	5.75	10.39	0.35	5
Peer Rank Percentile	-	-	9	1	17	-
S&P Target Date 2035 TR USD	-	-	5.81	9.25	-	-
Peer Group Median (50th Percentile)	10.01	\$725	4.73	8.83	0.60	-
Target Date 2040						
American Funds 2040 Trgt Date Retire R6 - RFGTX	12.76	\$45,224	6.55	11.41	0.37	5
Peer Rank Percentile	-	-	11	3	17	-
S&P Target Date 2040 TR USD	-	-	6.63	10.17	-	-
Peer Group Median (50th Percentile)	9.17	\$801	5.63	9.85	0.64	-
Target Date 2045						
American Funds 2045 Trgt Date Retire R6 - RFHTX	12.76	\$38,081	6.69	11.66	0.37	5
Peer Rank Percentile	-	-	22	5	18	-
S&P Target Date 2045 TR USD	-	-	7.17	10.75	-	-
Peer Group Median (50th Percentile)	10.21	\$685	6.21	10.51	0.63	-

Criteria Legend:

Meets Criteria

Does Not Meet Criteria

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ACTIVE

INVESTMENT	MGR	ASSETS (000,000)	3 YR PEER	5 YR PEER	NET EXP PEER	SCORE OF 5
Target Date 2050						
American Funds 2050 Trgt Date Retire R6 - RFITX	12.76	\$34,210	6.56	11.71	0.38	5
Peer Rank Percentile	-	-	40	3	18	-
S&P Target Date 2050 TR USD	-	-	7.45	11.06	-	-
Peer Group Median (50th Percentile)	10.01	\$576	6.35	10.74	0.64	-
Target Date 2055						
American Funds 2055 Trgt Date Retire R6 - RFKTX	12.76	\$24,014	6.49	11.67	0.38	5
Peer Rank Percentile	-	-	44	7	18	-
S&P Target Date 2055 TR USD	-	-	7.50	11.14	-	-
Peer Group Median (50th Percentile)	9.42	\$428	6.40	10.83	0.64	-
Target-Date 2060						
American Funds 2060 Trgt Date Retire R6 - RFUTX	9.52	\$14,428	6.45	11.65	0.39	5
Peer Rank Percentile	-	-	47	11	18	-
S&P Target Date 2060+ TR USD	-	-	7.53	11.18	-	-
Peer Group Median (50th Percentile)	7.82	\$254	6.37	10.85	0.64	-
Target-Date 2065+						
American Funds 2065 Trgt Date Retire R6 - RFVTX	4.75	\$3,631	6.46	-	0.39	4
Peer Rank Percentile	-	-	47	-	19	-
S&P Target Date 2060+ TR USD	-	-	7.53	11.18	-	-
Peer Group Median (50th Percentile)	3.75	\$24	6.39	11.07	0.63	-

Criteria Legend:

Meets Criteria

Does Not Meet Criteria

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PASSIVE					
INVESTMENT	MGR	ASSETS (000,000)	3 YR TRACK ERR PEER	NET EXP PEER	SCORE OF 4
Large Blend					
Vanguard Institutional Index Instl Pl - VIIIIX	6.84	\$309,798	0.00	0.02	4
Peer Rank Percentile	-	-	1	2	-
S&P 500 TR USD	-	-	-	-	-
Peer Group Median (50th Percentile)	8.43	\$1,194	2.96	0.70	-

Criteria Legend:

Meets Criteria

Does Not Meet Criteria

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Refer to the Definitions section for definitions of all criteria.
Refer to the Executive Summary section for a list of criteria and criteria abbreviations utilized for this plan.

Related to the subsequent Performance Summary pages in this report:

Performance data for periods greater than one year are annualized returns. 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 redeemed, will be worth more or less than their original cost. Current performance can be lower or higher than return data quoted herein.

Standardized Returns assume reinvestment of dividends and capital gains. It depicts performance without adjusting for the effects of taxation or any applicable maximum sales charges but are adjusted to reflect ongoing fund expenses. If adjusted for taxation or maximum sales charges, the performance quoted would be significantly reduced. For variable annuities(if applicable), additional expenses will be taken in account, including M&E risk charges, fund-level expenses such as management fees and operating fees, and contract level administration fees charges as surrender, contract and sales charges.

In some cases multiple benchmarks may be displayed in order to assist you in reviewing the results of the fund. Secondary benchmarks will be italicized if included.

For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>

Performance is presented after deduction of fund management fees and certain other expenses associated with the Funds. However, performance is shown gross of the deduction of Investment Advisory fees. The payment of these fees will reduce the plan's overall performance and will have a cumulative effect over time. The net effect of the deduction of advisory fees on annualized performance, and the compounded or cumulative effect over time, is determined by the amount of the fee and the plan's investment performance. For example, for a plan in the RPCS Program that experiences an annual gross performance of 10% but incurs a 2% annual fee that is deducted quarterly on a prorated basis, the plan will experience net annual performance of approximately 7.98% per year, a reduction of 2.02% per year. Compounding will similarly affect the plan's overall performance on a cumulative basis. Actual performance will be lower or higher than the results shown.

Please see the fund prospectus which includes investment objectives, risks, fees, expense, and other information that you should read and consider carefully before investing. To obtain a prospectus and most recent performance, contact your financial advisor or the fund company at the website shown in the "Fund Fact Sheets" section of this report.

(1) Fund was re-categorized following UBS assessment of investment style.

(2) Results shown for periods of time prior to INCEPTION DATE include pre-Inception Returns. Note however that SI ("Since Inception Returns") always reflect results for the actual share class and thus do not include pre-Inception Returns. Please see the Important Information About This Report section for details.

See the Important Information About This Report section for definitions of Fund Score and the Scoring Process.

Values in () following performance represent Peer Group Percentile Rank.



UBS

Cobb County

Performance Summary

ACTIVE FUND ASSETS - \$183,937,458

INVESTMENT	ASSETS	LAST QTR	YTD	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	SI	INCEPTION DATE	GROSS EXP	NET EXP	SCORE
Large Blend												
American Funds Washington Mutual R6 - RWMGX²	\$12,222,769	6.97 (19)	19.21 (61)	32.77 (63)	12.95 (10)	14.06 (63)	12.06 (50)	14.23	01-May-2009	0.26	0.26	4
Russell 1000 TR USD		6.08	21.18	35.68	10.83	15.64	13.10	-	-	-	-	-
Peer Group Median (50th Percentile)		5.79	20.45	34.52	10.60	14.86	12.05	-	-	0.78	0.70	-
Number of Funds in Peer Group		1459	1437	1421	1312	1232	1058	-	-	-	-	-
Large Growth												
JPMorgan Large Cap Growth R6 - JLGMX²	\$42,031,004	2.43 (65)	27.39 (14)	44.56 (17)	11.64 (9)	21.25 (3)	17.81 (2)	17.06	30-Nov-2010	0.52	0.44	5
Russell 1000 Growth TR USD		3.19	24.55	42.19	12.02	19.74	16.52	-	-	-	-	-
Peer Group Median (50th Percentile)		3.20	22.75	40.03	8.13	16.39	14.03	-	-	0.93	0.84	-
Number of Funds in Peer Group		1167	1156	1148	1099	1053	954	-	-	-	-	-
Mid-Cap Value												
Victory Sycamore Established Value R6 - VEVRX²	\$3,566,028	9.24 (46)	14.41 (38)	26.53 (49)	9.98 (21)	13.22 (14)	12.05 (1)	11.54	04-Mar-2014	0.54	0.54	5
Russell Mid Cap Value TR USD		10.08	15.08	29.01	7.39	10.33	8.93	-	-	-	-	-
Peer Group Median (50th Percentile)		9.06	12.89	26.25	8.66	10.42	8.70	-	-	0.99	0.90	-
Number of Funds in Peer Group		401	400	396	386	380	341	-	-	-	-	-
Mid-Cap Growth												
Delaware Ivy Mid Cap Growth R6 - IGRFX²	\$7,349,931	5.76 (56)	6.76 (84)	22.01 (74)	-2.11 (68)	11.05 (34)	11.43 (23)	11.38	31-Jul-2014	0.86	0.68	4
Russell Mid Cap Growth TR USD		6.54	12.91	29.33	2.32	11.48	11.30	-	-	-	-	-
Peer Group Median (50th Percentile)		6.03	11.90	25.84	-0.23	10.37	10.41	-	-	1.06	0.99	-
Number of Funds in Peer Group		533	531	531	522	497	454	-	-	-	-	-

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ACTIVE FUND ASSETS - \$183,937,458

INVESTMENT	ASSETS	LAST QTR	YTD	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	SI	INCEPTION DATE	GROSS EXP	NET EXP	SCORE
Small Blend												
ClearBridge Small Cap I - LMNSX²	\$5,737,036	8.89 (47)	6.79 (91)	17.18 (95)	1.12 (90)	6.84 (94)	8.10 (74)	10.12	01-Dec-1994	0.86	0.85	3
Russell 2000 TR USD		9.27	11.17	26.76	1.84	9.39	8.78	-	-	-	-	-
Peer Group Median (50th Percentile)		8.78	10.89	25.22	4.08	9.99	8.84	-	-	1.04	0.96	-
Number of Funds in Peer Group		608	600	595	576	563	480	-	-	-	-	-
Real Estate												
Nuveen Real Estate Securities R6 - FREGX²	\$2,258,929	15.71 (57)	13.73 (51)	31.76 (62)	3.73 (25)	4.77 (57)	7.32 (50)	6.64	30-Apr-2013	0.84	0.84	4
FTSE NAREIT Equity REITs TR USD		16.09	15.93	34.74	5.07	5.46	7.83	-	-	-	-	-
Peer Group Median (50th Percentile)		15.92	13.75	32.79	2.90	4.87	7.32	-	-	1.08	0.96	-
Number of Funds in Peer Group		240	239	238	230	219	192	-	-	-	-	-
Foreign Large Blend												
MFS Intl Diversification R6 - MDIZX²	\$5,394,320	9.26 (8)	15.26 (13)	25.45 (32)	4.16 (52)	8.29 (37)	7.16 (7)	7.12	02-Oct-2017	0.74	0.73	3
MSCI ACWI Ex USA NR USD		8.06	14.21	25.35	4.14	7.59	5.22	-	-	-	-	-
Peer Group Median (50th Percentile)		7.14	13.10	24.51	4.22	7.81	5.44	-	-	1.01	0.88	-
Number of Funds in Peer Group		731	727	721	680	653	516	-	-	-	-	-
Foreign Large Growth												
American Funds Europacific Growth R6 - RERGX²	\$6,622,676	5.41 (60)	12.99 (45)	24.71 (66)	0.06 (49)	7.52 (50)	6.26 (52)	8.29	01-May-2009	0.47	0.47	5
MSCI ACWI Ex USA Growth NR USD		6.92	14.06	26.75	0.81	7.09	5.97	-	-	-	-	-
Peer Group Median (50th Percentile)		6.11	12.65	26.14	-0.03	7.48	6.30	-	-	1.02	0.92	-
Number of Funds in Peer Group		412	404	403	394	368	306	-	-	-	-	-

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ACTIVE FUND ASSETS - \$183,937,458

INVESTMENT	ASSETS	LAST QTR	YTD	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	SI	INCEPTION DATE	GROSS EXP	NET EXP	SCORE
Global Large-Stock Growth												
American Funds New Perspective R6 - RNPGX²	\$12,339,723	5.86 (20)	18.18 (44)	31.71 (52)	5.46 (32)	13.85 (17)	11.77 (13)	13.18	01-May-2009	0.42	0.42	5
MSCI ACWI Large Cap Growth NR USD		3.48	22.28	38.03	8.14	15.65	12.54	-	-	-	-	-
Peer Group Median (50th Percentile)		4.81	17.86	32.14	4.32	12.33	10.24	-	-	1.13	0.98	-
Number of Funds in Peer Group		345	345	344	329	291	240	-	-	-	-	-
Intermediate Core-Plus Bond												
Western Asset Core Plus Bond IS - WAPSX²	\$6,106,051	5.25 (44)	3.23 (99)	12.93 (32)	-3.62 (98)	-0.51 (95)	2.08 (44)	4.44	04-Aug-2008	0.42	0.42	3
Bloomberg US Agg Bond TR USD		5.20	4.45	11.57	-1.39	0.33	1.84	-	-	-	-	-
Peer Group Median (50th Percentile)		5.20	5.20	12.55	-1.39	0.75	2.01	-	-	0.75	0.63	-
Number of Funds in Peer Group		625	618	606	557	527	442	-	-	-	-	-
High Yield Bond												
PGIM High Yield R6 - PHYQX²	\$2,420,639	5.67 (5)	8.61 (11)	16.12 (11)	2.78 (50)	4.60 (26)	5.34 (5)	6.11	31-Oct-2011	0.38	0.38	5
ICE BofA US High Yield TR USD		5.28	8.03	15.66	3.08	4.55	4.95	-	-	-	-	-
Peer Group Median (50th Percentile)		4.49	7.31	14.27	2.77	4.01	4.18	-	-	0.92	0.76	-
Number of Funds in Peer Group		672	668	665	620	594	525	-	-	-	-	-
Money Market-Taxable												
Vanguard Treasury Money Market Investor - VUSXX	\$3,427,928	1.32 (3)	4.02 (2)	5.42 (2)	3.52 (5)	2.28 (3)	1.59 (2)	2.44	14-Dec-1992	0.09	0.09	5
ICE BofA USD 3M Dep OR CM TR USD		1.47	4.20	5.64	3.50	2.45	1.84	-	-	-	-	-
Peer Group Median (50th Percentile)		1.26	3.82	5.15	3.32	2.11	1.39	-	-	0.36	0.33	-
Number of Funds in Peer Group		608	589	583	542	501	389	-	-	-	-	-

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ACTIVE FUND ASSETS - \$183,937,458

INVESTMENT	ASSETS	LAST QTR	YTD	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	SI	INCEPTION DATE	GROSS EXP	NET EXP	SCORE
Target-Date 2000-2010												
American Funds 2010 Trgt Date Retire R6 - RFTTX²	\$1,711,572	6.21 (4)	10.15 (7)	18.61 (8)	4.14 (1)	6.16 (4)	5.60 (4)	7.54	13-Jul-2009	0.29	0.29	5
S&P Target Date 2010 TR USD		5.20	9.03	17.12	3.10	5.31	5.06	-	-	-	-	-
Peer Group Median (50th Percentile)		4.90	8.53	16.43	2.47	5.21	5.00	-	-	0.48	0.45	-
Number of Funds in Peer Group		97	97	97	89	85	65	-	-	-	-	-
Target Date 2015												
American Funds 2015 Trgt Date Retire R6 - RFJTX²	\$2,407,428	6.30 (1)	10.49 (6)	19.37 (5)	4.20 (1)	6.55 (6)	5.94 (3)	8.01	13-Jul-2009	0.30	0.30	5
S&P Target Date 2015 TR USD		5.26	9.39	17.79	3.32	5.75	5.51	-	-	-	-	-
Peer Group Median (50th Percentile)		5.23	9.10	17.64	2.56	5.48	5.38	-	-	0.62	0.51	-
Number of Funds in Peer Group		114	114	114	106	99	73	-	-	-	-	-
Target Date 2020												
American Funds 2020 Trgt Date Retire R6 - RRCTX²	\$3,911,324	6.40 (1)	11.05 (3)	20.50 (5)	4.42 (1)	6.98 (7)	6.39 (4)	8.64	13-Jul-2009	0.31	0.31	5
S&P Target Date 2020 TR USD		5.43	10.19	19.05	3.73	6.15	5.93	-	-	-	-	-
Peer Group Median (50th Percentile)		5.45	10.03	19.08	2.68	5.98	5.70	-	-	0.66	0.54	-
Number of Funds in Peer Group		147	147	147	139	132	100	-	-	-	-	-
Target Date 2025												
American Funds 2025 Trgt Date Retire R6 - RFDTX²	\$7,539,786	6.25 (4)	11.40 (12)	21.39 (17)	4.39 (4)	7.81 (3)	7.07 (2)	9.60	13-Jul-2009	0.32	0.32	5
S&P Target Date 2025 TR USD		5.59	10.65	19.81	4.09	7.01	6.55	-	-	-	-	-
Peer Group Median (50th Percentile)		5.60	10.64	20.19	3.03	6.52	6.08	-	-	0.72	0.59	-
Number of Funds in Peer Group		210	208	207	199	181	151	-	-	-	-	-

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ACTIVE FUND ASSETS - \$183,937,458

INVESTMENT	ASSETS	LAST QTR	YTD	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	SI	INCEPTION DATE	GROSS EXP	NET EXP	SCORE
Target Date 2030												
American Funds 2030 Trgt Date Retire R6 - RFETX²	\$10,895,050	6.16 (17)	12.58 (18)	23.58 (8)	5.03 (5)	8.87 (2)	8.01 (1)	10.45	13-Jul-2009	0.33	0.33	5
S&P Target Date 2030 TR USD		5.97	12.07	22.17	4.95	8.10	7.28	-	-	-	-	-
Peer Group Median (50th Percentile)		5.79	12.00	22.64	3.77	7.58	6.92	-	-	0.76	0.60	-
Number of Funds in Peer Group		213	211	210	201	181	144	-	-	-	-	-
Target Date 2035												
American Funds 2035 Trgt Date Retire R6 - RFFTX²	\$9,159,081	6.22 (24)	14.16 (18)	26.15 (9)	5.75 (9)	10.39 (1)	9.06 (1)	11.18	13-Jul-2009	0.35	0.35	5
S&P Target Date 2035 TR USD		6.25	13.57	24.56	5.81	9.25	8.03	-	-	-	-	-
Peer Group Median (50th Percentile)		6.00	13.57	25.04	4.73	8.83	7.71	-	-	0.76	0.60	-
Number of Funds in Peer Group		207	207	206	193	175	146	-	-	-	-	-
Target Date 2040												
American Funds 2040 Trgt Date Retire R6 - RFGTX²	\$9,015,392	6.27 (38)	15.82 (15)	28.87 (10)	6.55 (11)	11.41 (3)	9.67 (1)	11.07	27-Jul-2009	0.37	0.37	5
S&P Target Date 2040 TR USD		6.49	14.91	26.62	6.63	10.17	8.61	-	-	-	-	-
Peer Group Median (50th Percentile)		6.14	14.98	27.16	5.63	9.85	8.29	-	-	0.83	0.64	-
Number of Funds in Peer Group		207	205	204	196	176	144	-	-	-	-	-
Target Date 2045												
American Funds 2045 Trgt Date Retire R6 - RFHTX²	\$8,745,510	6.38 (41)	16.31 (28)	29.73 (14)	6.69 (22)	11.66 (5)	9.86 (1)	11.75	13-Jul-2009	0.37	0.37	5
S&P Target Date 2045 TR USD		6.69	15.76	27.95	7.17	10.75	8.97	-	-	-	-	-
Peer Group Median (50th Percentile)		6.28	15.97	28.63	6.21	10.51	8.65	-	-	0.84	0.63	-
Number of Funds in Peer Group		202	202	201	193	175	146	-	-	-	-	-

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ACTIVE FUND ASSETS - \$183,937,458

INVESTMENT	ASSETS	LAST QTR	YTD	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	SI	INCEPTION DATE	GROSS EXP	NET EXP	SCORE
Target Date 2050												
American Funds 2050 Trgt Date Retire R6 - RFITX²	\$8,855,137	6.28 (49)	16.43 (43)	30.07 (19)	6.56 (40)	11.71 (3)	9.91 (1)	11.79	13-Jul-2009	0.38	0.38	5
S&P Target Date 2050 TR USD		6.74	16.25	28.68	7.45	11.06	9.18	-	-	-	-	-
Peer Group Median (50th Percentile)		6.27	16.33	29.11	6.35	10.74	8.80	-	-	0.87	0.64	-
Number of Funds in Peer Group		204	203	202	194	176	144	-	-	-	-	-
Target Date 2055												
American Funds 2055 Trgt Date Retire R6 - RFKTX	\$8,700,152	6.16 (58)	16.58 (38)	30.36 (16)	6.49 (44)	11.67 (7)	9.89 (1)	10.82	01-Feb-2010	0.38	0.38	5
S&P Target Date 2055 TR USD		6.82	16.35	28.82	7.50	11.14	9.26	-	-	-	-	-
Peer Group Median (50th Percentile)		6.27	16.39	29.26	6.40	10.83	8.86	-	-	0.89	0.64	-
Number of Funds in Peer Group		202	202	201	193	175	140	-	-	-	-	-
Target-Date 2060												
American Funds 2060 Trgt Date Retire R6 - RFUTX²	\$3,363,472	6.20 (55)	16.60 (37)	30.49 (15)	6.45 (47)	11.65 (11)	- (-)	9.91	27-Mar-2015	0.39	0.39	5
S&P Target Date 2060+ TR USD		6.87	16.42	28.90	7.53	11.18	9.32	-	-	-	-	-
Peer Group Median (50th Percentile)		6.27	16.39	29.25	6.37	10.85	9.17	-	-	0.93	0.64	-
Number of Funds in Peer Group		201	201	200	192	167	42	-	-	-	-	-
Target-Date 2065+												
American Funds 2065 Trgt Date Retire R6 - RFVTX²	\$156,520	6.15 (55)	16.60 (40)	30.43 (18)	6.46 (47)	- (-)	- (-)	16.15	27-Mar-2020	0.39	0.39	4
S&P Target Date 2060+ TR USD		6.87	16.42	28.90	7.53	11.18	9.32	-	-	-	-	-
Peer Group Median (50th Percentile)		6.20	16.44	29.20	6.39	11.07	-	-	-	1.01	0.63	-
Number of Funds in Peer Group		241	197	196	150	32	0	-	-	-	-	-

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PASSIVE FUND ASSETS - \$32,949,199

INVESTMENT	ASSETS	LAST QTR	YTD	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	SI	INCEPTION DATE	GROSS EXP	NET EXP	SCORE
Large Blend												
Vanguard Institutional Index Instl Pl - VIIIX ²	\$32,949,199	5.88 (43)	22.06 (25)	36.32 (26)	11.89 (22)	15.96 (19)	13.37 (8)	9.02	07-Jul-1997	0.02	0.02	4
S&P 500 TR USD		5.89	22.08	36.35	11.91	15.98	13.38	11.13	-	-	-	-
Russell 1000 TR USD		6.08	21.18	35.68	10.83	15.64	13.10	-	-	-	-	-
Peer Group Median (50th Percentile)		5.79	20.45	34.52	10.60	14.86	12.05	-	-	0.78	0.70	-
Number of Funds in Peer Group		1459	1437	1421	1312	1232	1058	-	-	-	-	-

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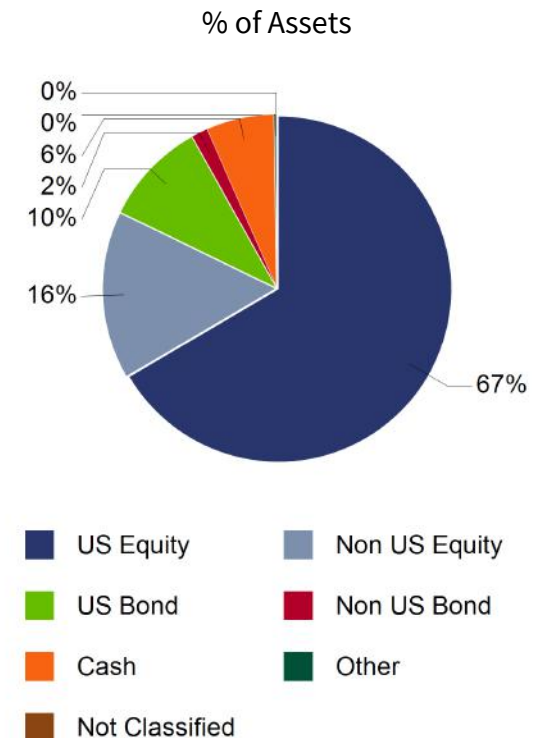
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INVESTMENT	ASSETS	% OF ASSETS
Total Plan Assets	\$216,886,657	100.00%
Large Blend	\$45,171,968	20.83%
American Funds Washington Mutual R6 - RWMGX	\$12,222,769	5.64%
Vanguard Institutional Index Instl Pl - VIIIX	\$32,949,199	15.19%
Large Growth	\$42,031,004	19.38%
JPMorgan Large Cap Growth R6 - JLGMX	\$42,031,004	19.38%
Mid-Cap Value	\$3,566,028	1.64%
Victory Sycamore Established Value R6 - VEVX	\$3,566,028	1.64%
Mid-Cap Growth	\$7,349,931	3.39%
Delaware Ivy Mid Cap Growth R6 - IGRFX	\$7,349,931	3.39%
Small Blend	\$5,737,036	2.65%
ClearBridge Small Cap I - LMNSX	\$5,737,036	2.65%
Real Estate	\$2,258,929	1.04%
Nuveen Real Estate Securities R6 - FREGX	\$2,258,929	1.04%
Foreign Large Blend	\$5,394,320	2.49%
MFS Intl Diversification R6 - MDIZX	\$5,394,320	2.49%
Foreign Large Growth	\$6,622,676	3.05%
American Funds Europacific Growth R6 - RERGX	\$6,622,676	3.05%
Global Large-Stock Growth	\$12,339,723	5.69%
American Funds New Perspective R6 - RNPGX	\$12,339,723	5.69%



% Allocation Pie Chart represents composite underlying holdings of all funds in the plan. See the Important Information About this Report section for definitions of each holdings category.


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INVESTMENT	ASSETS	% OF ASSETS
Intermediate Core-Plus Bond	\$6,106,051	2.82%
Western Asset Core Plus Bond IS - WAPSX	\$6,106,051	2.82%
High Yield Bond	\$2,420,639	1.12%
PGIM High Yield R6 - PHYQX	\$2,420,639	1.12%
Money Market-Taxable	\$3,427,928	1.58%
Vanguard Treasury Money Market Investor - VUSXX	\$3,427,928	1.58%
Target Date	\$74,460,424	34.33%
American Funds 2010 Trgt Date Retire R6 - RFTTX	\$1,711,572	0.79%
American Funds 2015 Trgt Date Retire R6 - RFJTX	\$2,407,428	1.11%
American Funds 2020 Trgt Date Retire R6 - RRCTX	\$3,911,324	1.80%
American Funds 2025 Trgt Date Retire R6 - RFDTX	\$7,539,786	3.48%
American Funds 2030 Trgt Date Retire R6 - RFETX	\$10,895,050	5.02%
American Funds 2035 Trgt Date Retire R6 - RFFTX	\$9,159,081	4.22%
American Funds 2040 Trgt Date Retire R6 - RFGTX	\$9,015,392	4.16%
American Funds 2045 Trgt Date Retire R6 - RFHTX	\$8,745,510	4.03%
American Funds 2050 Trgt Date Retire R6 - RFITX	\$8,855,137	4.08%
American Funds 2055 Trgt Date Retire R6 - RFKTX	\$8,700,152	4.01%
American Funds 2060 Trgt Date Retire R6 - RFUTX	\$3,363,472	1.55%
American Funds 2065 Trgt Date Retire R6 - RFVTX	\$156,520	0.07%

% Allocation Pie Chart represents composite underlying holdings of all funds in the plan. See the Important Information About this Report section for definitions of each holdings category.


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U.S. Equity Style

	VALUE			BLEND			GROWTH		
LARGE				American Funds Washington Mutual R6	\$12,222,769	4	JPMorgan Large Cap Growth R6	\$42,031,004	5
				Vanguard Institutional Index Instl Pl	\$32,949,199	4			
MEDIUM	Victory Sycamore Established Value R6	\$3,566,028	5				Delaware Ivy Mid Cap Growth R6	\$7,349,931	4
SMALL				ClearBridge Small Cap I	\$5,737,036	3			

The vertical axis of equity funds shows the market capitalization of the stocks owned and the horizontal axis shows the investment style.
Style box content includes: Fund Name, Assets, and Current Score.

Foreign/World Equity Style

	VALUE			BLEND			GROWTH		
LARGE				MFS Intl Diversification R6	\$5,394,320	3	American Funds Europacific Growth R6	\$6,622,676	5
MEDIUM									
SMALL									

The vertical axis of equity funds shows the market capitalization of the stocks owned and the horizontal axis shows the investment style.
Style box content includes: Fund Name, Assets, and Current Score.

Refer to the Important Information About this Report section for Portfolio Style box definitions.

Fixed Income Style

	LIMITED	MODERATE	EXTENSIVE
HIGH			
MEDIUM		Western Asset Core Plus Bond IS\$6,106,0513	
LOW	PGIM High Yield R6\$2,420,6395		

The vertical axis of fixed income funds shows the average credit quality of the bonds owned, and the horizontal axis shows interest rate sensitivity as measured by a bond's duration. Style box content includes: Fund Name, Assets, and Current Score.

Other Styles

	TARGET DATE FUNDS	ASSET ALLOCATION	SPECIALTY
	Target Date Series\$74,460,424-		Nuveen Real Estate Securities R6\$2,258,9294

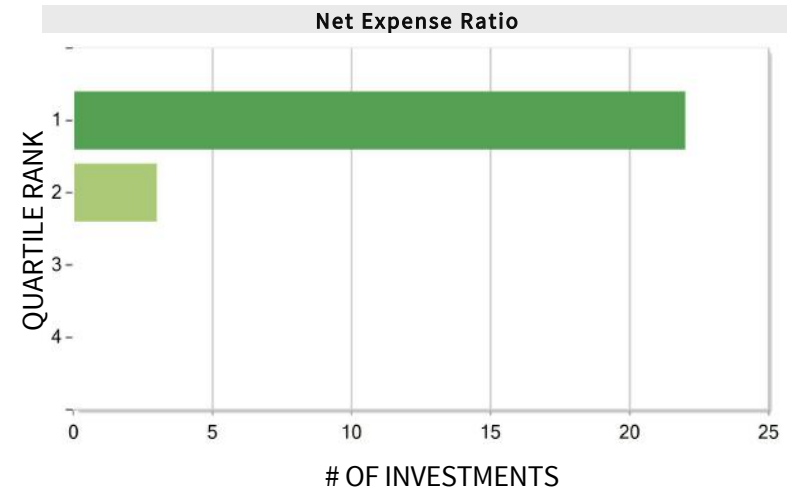
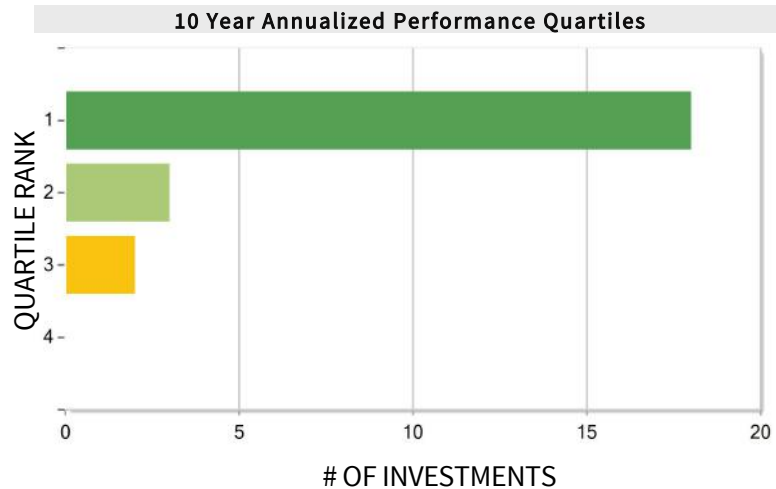
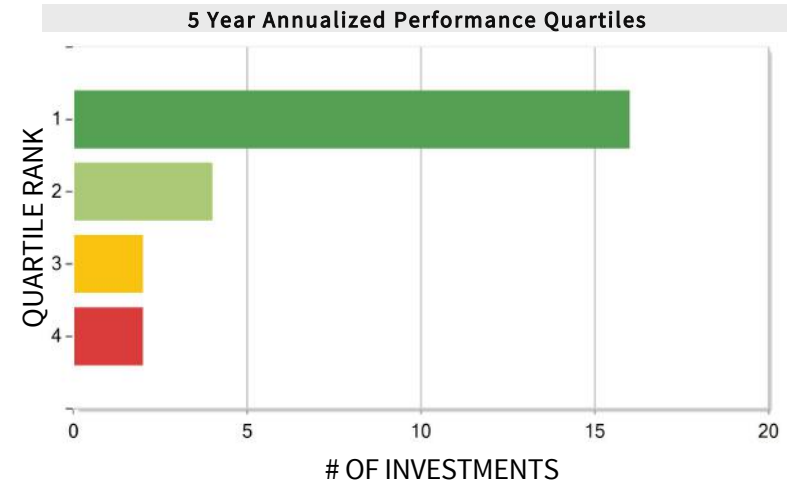
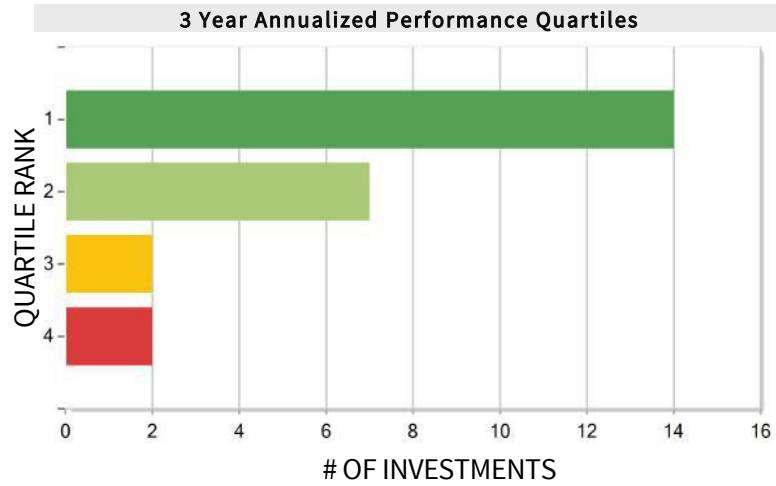
Target Date, Asset Allocation, and Specialty Asset Category boxes have been segregated from the traditional Equity Style box to distinguish funds assigned to them. Multisector funds are typically not categorized within the Morningstar StyleBox. Style box content includes: Fund Name, Assets, and Current Score.

Funds not included in the style charts
American Funds New Perspective R6
Vanguard Treasury Money Market Investor

Refer to the Important Information About this Report section for Portfolio Style box definitions.

Cobb County

Performance and Net Expense Ratio Quartiles



Please note: The performance quartile charts represent the number of funds in each peer group quartile for each respective metric and include all funds displayed in the report, including all current funds, proposed funds, funds on watch, and funds to be removed, provided performance history is available.



UBS

Cobb County

Investment Fee Analysis

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CATEGORY	INVESTMENT	ASSETS (\$)	ASSETS (%)	NET EXP (%)	NET EXP (\$)	PEER MEDIAN NET EXP (%)
Large Blend	American Funds Washington Mutual R6 - RWMGX	\$12,222,769	5.6%	0.26%	\$31,779	0.70%
Large Blend	Vanguard Institutional Index Instl Pl - VIIIX	\$32,949,199	15.2%	0.02%	\$6,590	0.70%
Large Growth	JPMorgan Large Cap Growth R6 - JLGMX	\$42,031,004	19.4%	0.44%	\$184,936	0.84%
Mid-Cap Value	Victory Sycamore Established Value R6 - VEVRX	\$3,566,028	1.6%	0.54%	\$19,257	0.90%
Mid-Cap Growth	Delaware Ivy Mid Cap Growth R6 - IGRFX	\$7,349,931	3.4%	0.68%	\$49,980	0.99%
Small Blend	ClearBridge Small Cap I - LMNSX	\$5,737,036	2.6%	0.85%	\$48,765	0.96%
Real Estate	Nuveen Real Estate Securities R6 - FREGX	\$2,258,929	1.0%	0.84%	\$18,975	0.96%
Foreign Large Blend	MFS Intl Diversification R6 - MDIZX	\$5,394,320	2.5%	0.73%	\$39,379	0.88%
Foreign Large Growth	American Funds Europacific Growth R6 - RERGX	\$6,622,676	3.1%	0.47%	\$31,127	0.92%
Global Large-Stock Growth	American Funds New Perspective R6 - RNP GX	\$12,339,723	5.7%	0.42%	\$51,827	0.98%
Intermediate Core-Plus Bond	Western Asset Core Plus Bond IS - WAP SX ³	\$6,106,051	2.8%	0.42%	\$25,645	0.63%
High Yield Bond	PGIM High Yield R6 - PHYQX	\$2,420,639	1.1%	0.38%	\$9,198	0.76%
Money Market-Taxable	Vanguard Treasury Money Market Investor - VUSXX	\$3,427,928	1.6%	0.09%	\$3,085	0.33%
Target-Date 2000-2010	American Funds 2010 Trgt Date Retire R6 - RFTTX	\$1,711,572	0.8%	0.29%	\$4,964	0.45%
Target Date 2015	American Funds 2015 Trgt Date Retire R6 - RFJTX	\$2,407,428	1.1%	0.30%	\$7,222	0.51%
Target Date 2020	American Funds 2020 Trgt Date Retire R6 - RRCTX	\$3,911,324	1.8%	0.31%	\$12,125	0.54%
Target Date 2025	American Funds 2025 Trgt Date Retire R6 - RFDTX	\$7,539,786	3.5%	0.32%	\$24,127	0.59%
Target Date 2030	American Funds 2030 Trgt Date Retire R6 - RFETX	\$10,895,050	5.0%	0.33%	\$35,954	0.60%
Target Date 2035	American Funds 2035 Trgt Date Retire R6 - RFFTX	\$9,159,081	4.2%	0.35%	\$32,057	0.60%
Target Date 2040	American Funds 2040 Trgt Date Retire R6 - RFGTX	\$9,015,392	4.2%	0.37%	\$33,357	0.64%
Target Date 2045	American Funds 2045 Trgt Date Retire R6 - RFHTX	\$8,745,510	4.0%	0.37%	\$32,358	0.63%
Target Date 2050	American Funds 2050 Trgt Date Retire R6 - RFITX	\$8,855,137	4.1%	0.38%	\$33,650	0.64%
Target Date 2055	American Funds 2055 Trgt Date Retire R6 - RFKTX	\$8,700,152	4.0%	0.38%	\$33,061	0.64%
Target-Date 2060	American Funds 2060 Trgt Date Retire R6 - RFUTX	\$3,363,472	1.6%	0.39%	\$13,118	0.64%
Target-Date 2065+	American Funds 2065 Trgt Date Retire R6 - RFVTX	\$156,520	0.1%	0.39%	\$610	0.63%

(1) The net expense ratio for Core Assets is the weighted average of each Core Asset investment's individual expense ratio (excluding custom fund assets).

(2) Fund was re-categorized following UBS assessment of investment style.

(3) This investment or strategy is not available through UBS. Please see "Investment Eligibility" and "Non-Program Investments Displayed in this Report" sections of the "Important Information About this Report" section for details.

(4) Since your last Report, this investment option has been removed from the UBS fund eligibility list and is no longer available through UBS.



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CATEGORY	INVESTMENT	ASSETS (\$)	ASSETS (%)	NET EXP (%)	NET EXP (\$)	PEER MEDIAN NET EXP (%)
	TOTAL CORE ASSETS	\$216,886,657	100.0%	0.36% ¹	\$783,144	

(1) The net expense ratio for Core Assets is the weighted average of each Core Asset investment's individual expense ratio (excluding custom fund assets).
(2) Fund was re-categorized following UBS assessment of investment style.
(3) This investment or strategy is not available through UBS. Please see "Investment Eligibility" and "Non-Program Investments Displayed in this Report" sections of the "Important Information About this Report" section for details.
(4) Since your last Report, this investment option has been removed from the UBS fund eligibility list and is no longer available through UBS.

American Funds Washington Mutual R6 - RWMGX

Family: American Funds

Fund Manager: Alan N. Berro

Fund Inception Date: 01-May-2009

Category: Large Blend

Benchmark: Russell 1000 TR USD

Prospectus Objective: Growth and Income

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 3.00

Overall Morningstar Rating for RWMGX as of 9/30/2024
rated against 1312 funds in its category.

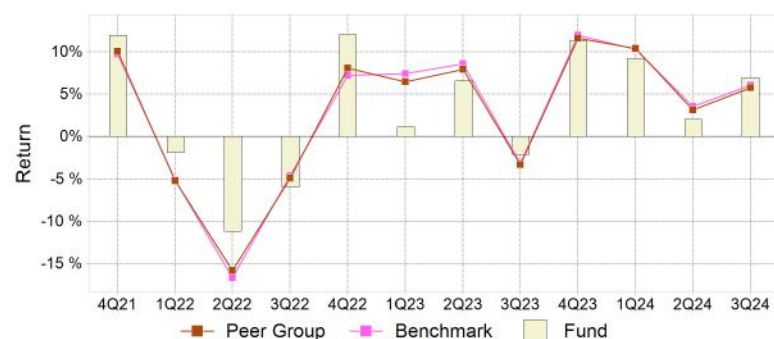
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	6.97	1.18	0.89	19 / 1459
YTD	19.21	-1.24	-1.97	61 / 1437
1 Year	32.77	-1.75	-2.91	63 / 1421
3 Year	12.95	2.35	2.12	10 / 1312
5 Year	14.06	-0.80	-1.58	63 / 1232
10 Year	12.06	0.01	-1.04	50 / 1058
5 Year Up/Down	83.45 / 83.41	-12.68 / -14.45		
Since Inception	14.23	-	1.99	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

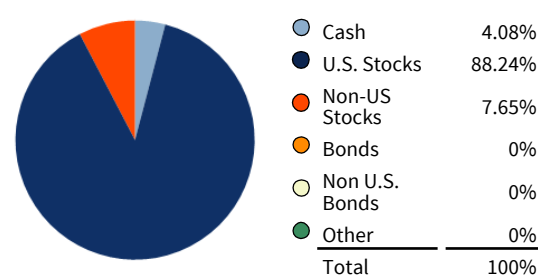
Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	17.59	-8.18	28.90	8.08	25.93	-2.66	20.54
Peer Group	24.36	-18.10	26.82	17.50	30.18	-5.43	21.22

Quarterly Returns History



Fund Composition 30-Jun-2024



Equity Style % 30-Jun-2024

Value	Blend	Growth	
20.80%	26.14%	34.59%	Large
5.17%	10.85%	1.96%	Med
0.20%	0.26%	0.03%	Small


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Fund Fact Sheets

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American Funds Washington Mutual R6 - RWMGX

Family: American Funds

Fund Manager: Alan N. Berro

Fund Inception Date: 01-May-2009

Category: Large Blend

Benchmark: Russell 1000 TR USD

Prospectus Objective: Growth and Income

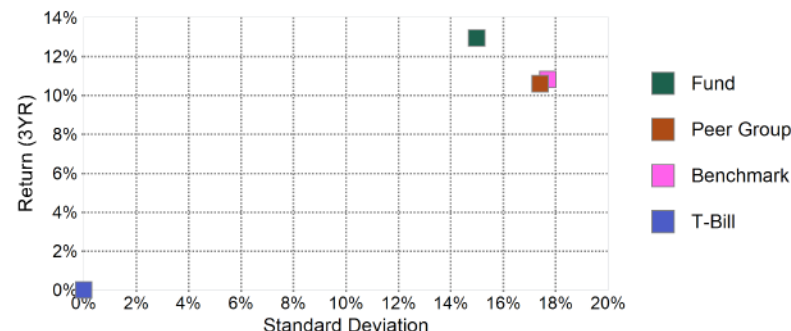
Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 3.00

Overall Morningstar Rating for RWMGX as of 9/30/2024
rated against 1312 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)								
Sharpe Ratio - 1 Year		2.34	0.23	0.21	Top								
Sharpe Ratio - 3 Year		0.66	0.19	0.18	2nd								
Sharpe Ratio - 5 Year		0.75	0.03	-0.01	3rd								
Sharpe Ratio - 10 Year		0.78	0.06	0.01	Bottom								
Std. Deviation - 3 Year		14.99	-2.43	-2.71		2017	2018	2019	2020	2021	2022	2023	
Std. Deviation - 5 Year		16.29	-1.74	-2.14	Fund	20.54%	-2.66%	25.93%	8.08%	28.90%	-8.18%	17.59%	
Std. Deviation - 10 Year		13.73	-1.54	-1.78	Peer Group 25 Percentile	22.50%	-4.36%	31.44%	20.21%	28.53%	-14.60%	26.27%	
Mean - 3 Year		12.95	2.35	2.12	Peer Group 50 Percentile	21.22%	-5.43%	30.18%	17.50%	26.82%	-18.10%	24.36%	
Mean - 5 Year		14.06	-0.80	-1.58	Peer Group 75 Percentile	19.53%	-7.39%	27.67%	13.48%	24.74%	-19.47%	19.37%	
Mean - 10 Year		12.06	0.01	-1.04	Benchmark	21.69%	-4.78%	31.43%	20.96%	26.45%	-19.13%	26.53%	
Alpha (Best Fit) - 3 Year		-	-	-									
Alpha (Standard) - 3 Year		3.07	2.97	3.07									
Alpha (Standard) - 5 Year		0.34	0.78	0.34									
Beta (Best Fit) - 3 Year		-	-	-									
Beta (Standard) - 3 Year		0.81	-0.15	-0.19									
R-Squared (Best Fit) - 3 Year		-	-	-									
R-Squared (Standard) - 3 Year		91.29	-5.76	-8.71									
Sector Weightings (%)		Fund Risk/Return (3 Year)											
Basic Materials		2.73											



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Vanguard Institutional Index Instl Pl - VIIIX

Family: Vanguard

Fund Manager: Michelle Louie

Fund Inception Date: 07-Jul-1997

Total Net Assets: \$309,798,000,000

Category: Large Blend

Benchmark: Russell 1000 TR USD

Prospectus Objective: Growth and Income

Home Page: www.vanguard.com

Phone: 888-809-8102

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for VIIIX as of 9/30/2024 rated against 1312 funds in its category.

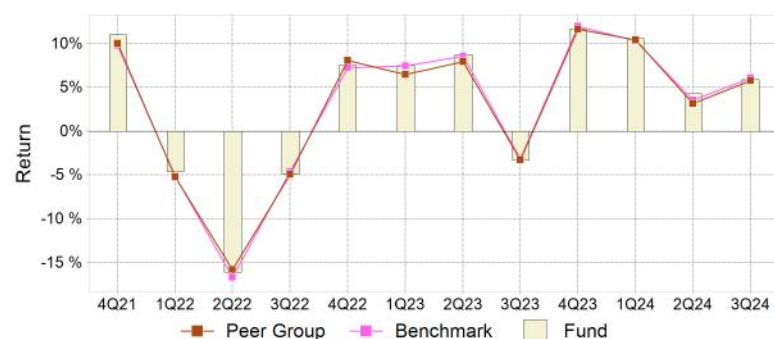
Performance	Fund	Benchmark	Difference	Peers
Last Cal. QTR	5.88	6.08	-0.20	5.79
YTD	22.06	21.18	0.88	20.45
1 Year	36.32	35.68	0.64	34.52
3 Year	11.89	10.83	1.06	10.60
5 Year	15.96	15.64	0.32	14.86
10 Year	13.37	13.10	0.27	12.05
Since Inception	9.02	12.24	-3.22	-

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

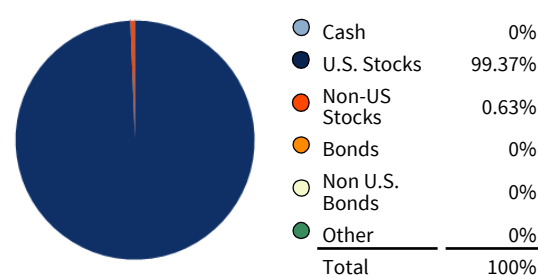
Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	26.26	-18.13	28.69	18.41	31.48	-4.41	21.82
Peer Group	24.36	-18.10	26.82	17.50	30.18	-5.43	21.22

Rolling Quarter Return Analysis



Fund Composition 31-Aug-2024



Equity Style % 31-Aug-2024

	Value	Blend	Growth	
	22.47%	40.57%	18.51%	Large
	5.87%	8.94%	3.16%	Med
	0.18%	0.25%	0.06%	Small


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JPMorgan Large Cap Growth R6 - JLGMMX

Family: JPMorgan

Fund Manager: Giri K Devulapally

Fund Inception Date: 30-Nov-2010

Category: Large Growth

Benchmark: Russell 1000 Growth TR USD

Prospectus Objective: Growth

Home Page: www.jpmorganfunds.com

Phone: 800-480-4111

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for JLGMMX as of 9/30/2024 rated against 1099 funds in its category.

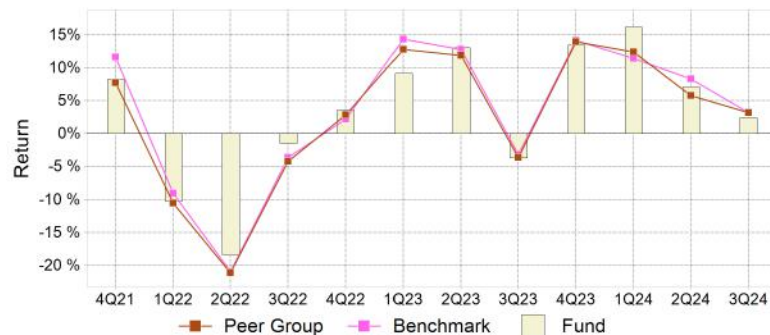
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	2.43	-0.77	-0.76	65 / 1167
YTD	27.39	4.64	2.84	14 / 1156
1 Year	44.56	4.53	2.37	17 / 1148
3 Year	11.64	3.51	-0.38	9 / 1099
5 Year	21.25	4.86	1.51	3 / 1053
10 Year	17.81	3.78	1.29	2 / 954
5 Year Up/Down	99.64 / 94.31	7.51 / -6.04		
Since Inception	17.06	-	4.77	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

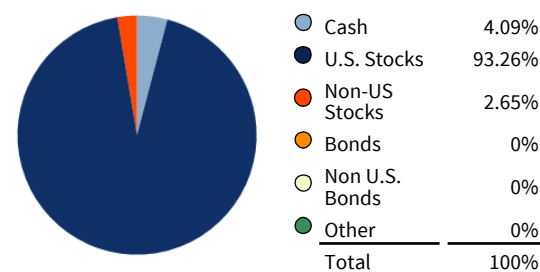
Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	34.95	-25.21	18.79	56.42	39.39	0.57	38.37
Peer Group	38.88	-30.82	22.23	35.39	33.18	-1.29	29.16

Quarterly Returns History



Fund Composition 31-Aug-2024



Equity Style % 31-Aug-2024

	Value	Blend	Growth	
	6.79%	43.59%	43.08%	Large Med Small
	0.38%	1.16%	4.52%	
	0.00%	0.00%	0.48%	


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Fund Fact Sheets

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JPMorgan Large Cap Growth R6 - JLGMMX

Family: JPMorgan

Fund Manager: Giri K Devulapally

Fund Inception Date: 30-Nov-2010

Category: Large Growth

Benchmark: Russell 1000 Growth TR USD

Prospectus Objective: Growth

Home Page: www.jpmmorganfunds.com

Phone: 800-480-4111

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for JLGMMX as of 9/30/2024
rated against 1099 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)							
Sharpe Ratio - 1 Year		1.99	0.05	-0.14	Top							
Sharpe Ratio - 3 Year		0.48	0.16	-0.01	2nd							
Sharpe Ratio - 5 Year		0.92	0.19	0.05	3rd							
Sharpe Ratio - 10 Year		0.92	0.16	0.03	Bottom							
Std. Deviation - 3 Year		19.90	-0.96	-0.95		2017	2018	2019	2020	2021	2022	2023
Std. Deviation - 5 Year		20.78	0.25	0.20	Fund	38.37%	0.57%	39.39%	56.42%	18.79%	-25.21%	34.95%
Std. Deviation - 10 Year		17.91	0.70	0.78	Peer Group 25 Percentile	32.25%	1.04%	36.04%	43.98%	25.87%	-26.56%	43.50%
Mean - 3 Year		11.64	3.51	-0.38	Peer Group 50 Percentile	29.16%	-1.29%	33.18%	35.39%	22.23%	-30.82%	38.88%
Mean - 5 Year		21.25	4.86	1.51	Peer Group 75 Percentile	25.68%	-3.87%	30.43%	29.67%	17.39%	-34.17%	31.42%
Mean - 10 Year		17.81	3.78	1.29	Benchmark	30.21%	-1.51%	36.39%	38.49%	27.60%	-29.14%	42.68%
Alpha (Best Fit) - 3 Year		-	-	-								
Alpha (Standard) - 3 Year		0.11	3.21	0.11								
Alpha (Standard) - 5 Year		1.54	3.82	1.54								
Beta (Best Fit) - 3 Year		-	-	-								
Beta (Standard) - 3 Year		0.94	-0.04	-0.06								
R-Squared (Best Fit) - 3 Year		-	-	-								
R-Squared (Standard) - 3 Year		96.43	0.91	-3.57								
Sector Weightings (%)		Fund Risk/Return (3 Year)										
Basic Materials	0.35	Return (3YR) 0%2%4%6%8%10%12%14% 0%2%4%6%8%10%12%14%16%18%20%22% Standard Deviation Fund Peer Group Benchmark T-Bill										
Consumer Cyclical	14.26											
Financial Services	5.87											
Real Estate	0.00											
Consumer Defensive	1.86											
Healthcare	12.24											
Utilities	0.00											
Communication Services	15.48											
Energy	0.61											
Industrials	6.79											
Technology	42.54											



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Victory Sycamore Established Value R6 - VEVRX

Family: Victory Capital
Fund Manager: Gary H. Miller
Fund Inception Date: 04-Mar-2014

Category: Mid-Cap Value
Benchmark: Russell Mid Cap Value TR USD
Prospectus Objective: Growth
Home Page: www.VictoryFunds.com
Phone: 800-539-3863

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for VEVRX as of 9/30/2024
rated against 386 funds in its category.

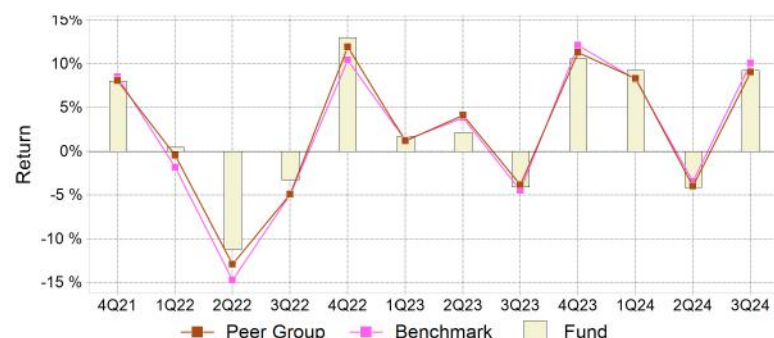
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	9.24	0.18	-0.84	46 / 401
YTD	14.41	1.52	-0.67	38 / 400
1 Year	26.53	0.28	-2.48	49 / 396
3 Year	9.98	1.32	2.59	21 / 386
5 Year	13.22	2.80	2.89	14 / 380
10 Year	12.05	3.35	3.12	1 / 341
5 Year Up/Down	97.44 / 87.87	2.10 / -6.99		
Since Inception	11.54	-	0.12	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

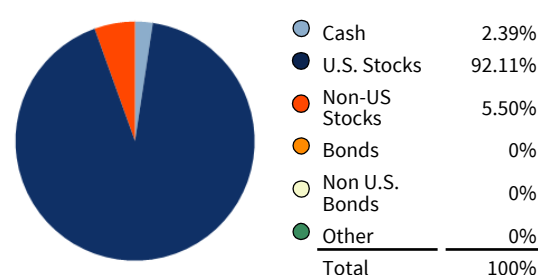
Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	10.35	-2.48	31.95	8.16	28.82	-9.95	16.08
Peer Group	12.18	-8.04	28.82	3.05	26.78	-13.15	13.54

Quarterly Returns History



Fund Composition 30-Jun-2024



Equity Style % 30-Jun-2024

Value	Blend	Growth	
1.81%	6.33%	1.06%	Large
21.76%	39.20%	5.21%	Med
8.37%	14.46%	1.80%	Small



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Victory Sycamore Established Value R6 - VEVRX

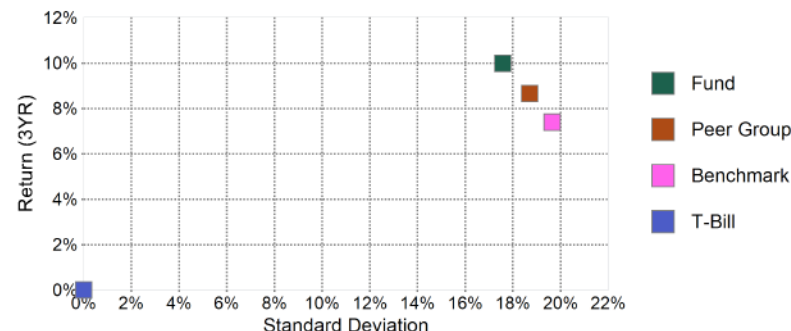
Family: Victory Capital
Fund Manager: Gary H. Miller
Fund Inception Date: 04-Mar-2014

Category: Mid-Cap Value
Benchmark: Russell Mid Cap Value TR USD
Prospectus Objective: Growth
Home Page: www.VictoryFunds.com
Phone: 800-539-3863

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for VEVRX as of 9/30/2024
rated against 386 funds in its category.

Risk Measures	Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)																						
Sharpe Ratio - 1 Year	1.37	0.14	0.06	Top																						
Sharpe Ratio - 3 Year	0.43	0.08	0.15	2nd																						
Sharpe Ratio - 5 Year	0.60	0.14	0.14	3rd																						
Sharpe Ratio - 10 Year	0.67	0.21	0.19	Bottom																						
Std. Deviation - 3 Year	17.59	-1.12	-2.07		2017	2018	2019	2020	2021	2022	2023															
Std. Deviation - 5 Year	20.22	-1.13	-1.49	Fund	16.08%	-9.95%	28.82%	8.16%	31.95%	-2.48%	10.35%															
Std. Deviation - 10 Year	16.78	-1.04	-0.91	Peer Group 25 Percentile	15.78%	-11.10%	29.53%	6.32%	31.86%	-5.50%	15.87%															
Mean - 3 Year	9.98	1.32	2.59	Peer Group 50 Percentile	13.54%	-13.15%	26.78%	3.05%	28.82%	-8.04%	12.18%															
Mean - 5 Year	13.22	2.80	2.89	Peer Group 75 Percentile	11.64%	-15.05%	24.07%	-0.05%	25.92%	-10.27%	10.20%															
Mean - 10 Year	12.05	3.35	3.12	Benchmark	13.34%	-12.29%	27.06%	4.96%	28.34%	-12.03%	12.71%															
Alpha (Best Fit) - 3 Year	-	-	-																							
Alpha (Standard) - 3 Year	2.66	1.27	2.66																							
Alpha (Standard) - 5 Year	3.03	2.64	3.03																							
Beta (Best Fit) - 3 Year	-	-	-																							
Beta (Standard) - 3 Year	0.89	-0.05	-0.11																							
R-Squared (Best Fit) - 3 Year	-	-	-																							
R-Squared (Standard) - 3 Year	97.77	1.96	-2.23																							
Sector Weightings (%)				Fund Risk/Return (3 Year)																						
Basic Materials	6.46			<table><thead><tr><th>Series</th><th>Standard Deviation (3YR)</th><th>Return (3YR)</th></tr></thead><tbody><tr><td>Fund</td><td>17.59</td><td>10.35%</td></tr><tr><td>Peer Group</td><td>15.87</td><td>8.04%</td></tr><tr><td>Benchmark</td><td>12.18</td><td>7.18%</td></tr><tr><td>T-Bill</td><td>0.03</td><td>0.03%</td></tr></tbody></table>								Series	Standard Deviation (3YR)	Return (3YR)	Fund	17.59	10.35%	Peer Group	15.87	8.04%	Benchmark	12.18	7.18%	T-Bill	0.03	0.03%
Series	Standard Deviation (3YR)	Return (3YR)																								
Fund	17.59	10.35%																								
Peer Group	15.87	8.04%																								
Benchmark	12.18	7.18%																								
T-Bill	0.03	0.03%																								
Consumer Cyclical	14.75																									
Financial Services	14.77																									
Real Estate	8.59																									
Consumer Defensive	5.82																									
Healthcare	9.45																									
Utilities	3.57																									
Communication Services	0.03																									
Energy	6.12																									
Industrials	19.78																									
Technology	10.66																									



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Delaware Ivy Mid Cap Growth R6 - IGRFX

Family: Delaware Funds by Macquarie

Fund Manager: Kimberly A. Scott

Fund Inception Date: 31-Jul-2014

Category: Mid-Cap Growth

Benchmark: Russell Mid Cap Growth TR USD

Prospectus Objective: Growth

Home Page: www.ivyinvestments.com

Phone: 800-523-1918

Morningstar Overall Rating: 3.00

Overall Morningstar Rating for IGRFX as of 9/30/2024
rated against 522 funds in its category.

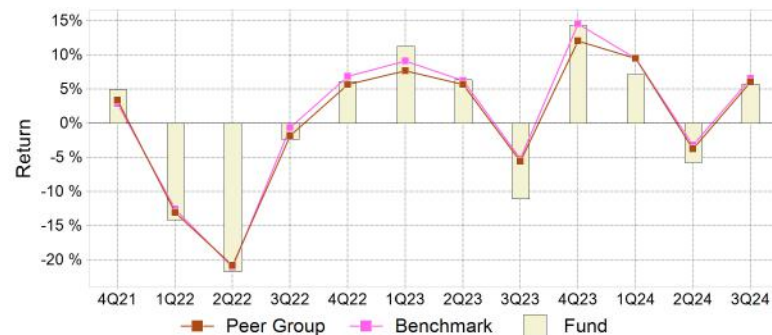
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	5.76	-0.27	-0.78	56 / 533
YTD	6.76	-5.14	-6.15	84 / 531
1 Year	22.01	-3.83	-7.32	74 / 531
3 Year	-2.11	-1.88	-4.43	68 / 522
5 Year	11.05	0.68	-0.43	34 / 497
10 Year	11.43	1.02	0.13	23 / 454
5 Year Up/Down	106.69 / 108.64	9.18 / 7.30		
Since Inception	11.38	-	0.32	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

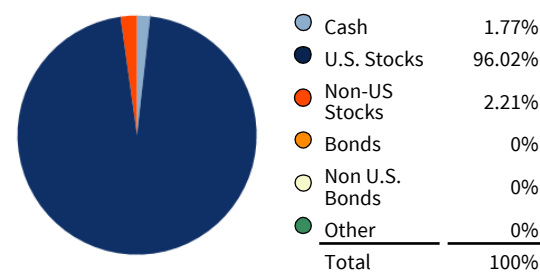
Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	20.35	-30.45	16.91	48.98	38.56	0.36	27.51
Peer Group	20.38	-28.27	12.18	38.96	33.80	-5.17	25.01

Quarterly Returns History



Fund Composition 31-Aug-2024



Equity Style % 31-Aug-2024

	Value	Blend	Growth	
0.00%	0.00%	0.00%	0.00%	Large
2.25%	30.06%	44.10%		Med
1.35%	10.61%	11.61%		Small


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Delaware Ivy Mid Cap Growth R6 - IGRFX

Family: Delaware Funds by Macquarie

Fund Manager: Kimberly A. Scott

Fund Inception Date: 31-Jul-2014

Category: Mid-Cap Growth

Benchmark: Russell Mid Cap Growth TR USD

Prospectus Objective: Growth

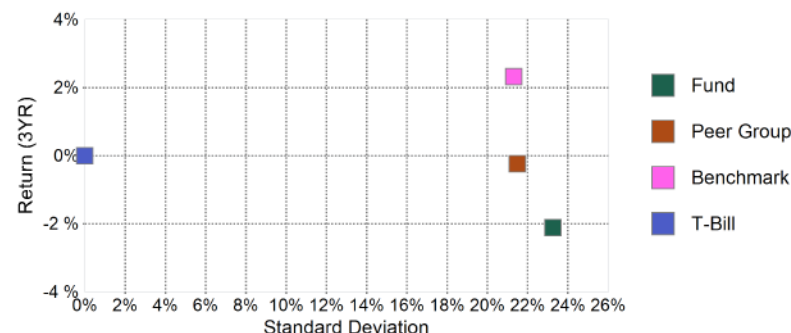
Home Page: www.ivyinvestments.com

Phone: 800-523-1918

Morningstar Overall Rating: 3.00

Overall Morningstar Rating for IGRFX as of 9/30/2024
rated against 522 funds in its category.

Risk Measures	Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)																											
Sharpe Ratio - 1 Year	0.84	-0.21	-0.41	Top																											
Sharpe Ratio - 3 Year	-0.13	-0.07	-0.18	2nd																											
Sharpe Ratio - 5 Year	0.47	0.01	-0.03	3rd																											
Sharpe Ratio - 10 Year	0.57	0.03	-0.02	Bottom																											
Std. Deviation - 3 Year	23.26	1.76	1.95		2017	2018	2019	2020	2021	2022	2023																				
Std. Deviation - 5 Year	23.33	1.38	1.67	Fund	27.51%	0.36%	38.56%	48.98%	16.91%	-30.45%	20.35%																				
Std. Deviation - 10 Year	19.47	1.17	1.46	Peer Group 25 Percentile	28.37%	-2.25%	37.62%	48.50%	16.96%	-24.19%	24.20%																				
Mean - 3 Year	-2.11	-1.88	-4.43	Peer Group 50 Percentile	25.01%	-5.17%	33.80%	38.96%	12.18%	-28.27%	20.38%																				
Mean - 5 Year	11.05	0.68	-0.43	Peer Group 75 Percentile	22.93%	-7.37%	30.55%	29.75%	7.84%	-33.24%	17.33%																				
Mean - 10 Year	11.43	1.02	0.13	Benchmark	25.27%	-4.75%	35.47%	35.59%	12.73%	-26.72%	25.87%																				
Alpha (Best Fit) - 3 Year	-	-	-																												
Alpha (Standard) - 3 Year	-4.07	-1.61	-4.07																												
Alpha (Standard) - 5 Year	-0.66	0.03	-0.66																												
Beta (Best Fit) - 3 Year	-	-	-																												
Beta (Standard) - 3 Year	1.07	0.10	0.07																												
R-Squared (Best Fit) - 3 Year	-	-	-																												
R-Squared (Standard) - 3 Year	96.04	1.83	-3.96																												
Sector Weightings (%)		Fund Risk/Return (3 Year)																													
Basic Materials	1.59	<tr><td>Consumer Cyclical</td><td>14.42</td></tr> <tr><td>Financial Services</td><td>6.68</td></tr> <tr><td>Real Estate</td><td>4.10</td></tr> <tr><td>Consumer Defensive</td><td>1.37</td></tr> <tr><td>Healthcare</td><td>19.87</td></tr> <tr><td>Utilities</td><td>0.00</td></tr> <tr><td>Communication Services</td><td>2.25</td></tr> <tr><td>Energy</td><td>0.00</td></tr> <tr><td>Industrials</td><td>19.40</td></tr> <tr><td>Technology</td><td>30.31</td></tr>										Consumer Cyclical	14.42	Financial Services	6.68	Real Estate	4.10	Consumer Defensive	1.37	Healthcare	19.87	Utilities	0.00	Communication Services	2.25	Energy	0.00	Industrials	19.40	Technology	30.31
Consumer Cyclical	14.42																														
Financial Services	6.68																														
Real Estate	4.10																														
Consumer Defensive	1.37																														
Healthcare	19.87																														
Utilities	0.00																														
Communication Services	2.25																														
Energy	0.00																														
Industrials	19.40																														
Technology	30.31																														


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Fund Fact Sheets

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ClearBridge Small Cap I - LMNSX

Family: Franklin Templeton Investments
Fund Manager: Albert Grosman
Fund Inception Date: 01-Dec-1994

Category: Small Blend
Benchmark: Russell 2000 TR USD
Prospectus Objective: Small Company
Home Page: www.leggmason.com
Phone: 877-656-3863

Morningstar Overall Rating: 2.00

Overall Morningstar Rating for LMNSX as of 9/30/2024
rated against 576 funds in its category.

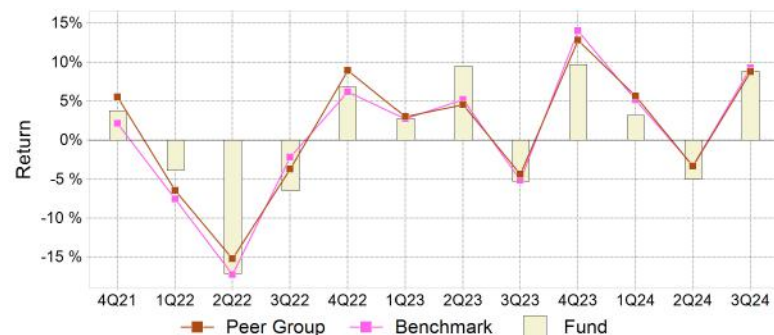
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	8.89	0.11	-0.38	47 / 608
YTD	6.79	-4.10	-4.38	91 / 600
1 Year	17.18	-8.04	-9.58	95 / 595
3 Year	1.12	-2.96	-0.72	90 / 576
5 Year	6.84	-3.15	-2.55	94 / 563
10 Year	8.10	-0.74	-0.68	74 / 480
5 Year Up/Down	98.62 / 105.90	2.92 / 12.00		
Since Inception	10.12	-	-0.91	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

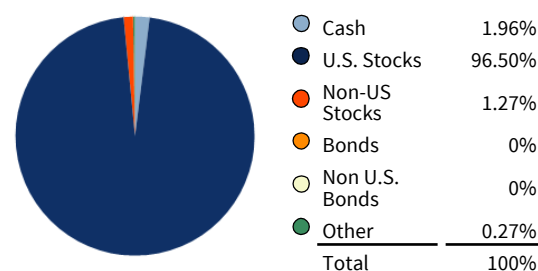
Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	17.15	-20.40	19.15	3.43	30.94	-8.88	12.10
Peer Group	16.50	-16.59	23.51	12.66	24.92	-11.68	13.40

Quarterly Returns History



Fund Composition 30-Jun-2024



Equity Style % 30-Jun-2024

	Value	Blend	Growth	
0.00%	0.00%	0.00%	0.00%	Large
0.00%	0.00%	0.00%	0.00%	Med
41.13%	37.65%	21.22%		Small



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Fund Fact Sheets

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ClearBridge Small Cap I - LMNSX

Family: Franklin Templeton Investments

Fund Manager: Albert Grosman

Fund Inception Date: 01-Dec-1994

Category: Small Blend

Benchmark: Russell 2000 TR USD

Prospectus Objective: Small Company

Home Page: www.leggmason.com

Phone: 877-656-3863

Morningstar Overall Rating: 2.00

Overall Morningstar Rating for LMNSX as of 9/30/2024
rated against 576 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)							
Sharpe Ratio - 1 Year		0.62	-0.31	-0.31	Top							
Sharpe Ratio - 3 Year		0.00	-0.13	-0.04	2nd							
Sharpe Ratio - 5 Year		0.30	-0.13	-0.10	3rd							
Sharpe Ratio - 10 Year		0.40	-0.05	-0.04	Bottom							
Std. Deviation - 3 Year		21.98	0.80	-0.53		2017	2018	2019	2020	2021	2022	2023
Std. Deviation - 5 Year		25.40	2.34	1.44	Fund	12.10%	-8.88%	30.94%	3.43%	19.15%	-20.40%	17.15%
Std. Deviation - 10 Year		21.05	1.34	0.70	Peer Group 25 Percentile	15.18%	-9.50%	27.04%	18.53%	26.83%	-14.66%	18.42%
Mean - 3 Year		1.12	-2.96	-0.72	Peer Group 50 Percentile	13.40%	-11.68%	24.92%	12.66%	23.51%	-16.59%	16.50%
Mean - 5 Year		6.84	-3.15	-2.55	Peer Group 75 Percentile	11.15%	-14.15%	22.33%	7.99%	19.46%	-19.53%	14.03%
Mean - 10 Year		8.10	-0.74	-0.68	Benchmark	14.65%	-11.01%	25.52%	19.96%	14.82%	-20.44%	16.93%
Alpha (Best Fit) - 3 Year		-	-	-								
Alpha (Standard) - 3 Year		-0.78	-2.74	-0.78								
Alpha (Standard) - 5 Year		-2.22	-3.12	-2.22								
Beta (Best Fit) - 3 Year		-	-	-								
Beta (Standard) - 3 Year		0.95	0.03	-0.05								
R-Squared (Best Fit) - 3 Year		-	-	-								
R-Squared (Standard) - 3 Year		94.25	-0.97	-5.75								
Sector Weightings (%)		Fund Risk/Return (3 Year)										
Basic Materials		8.70										
Consumer Cyclical		12.75										
Financial Services		13.57										
Real Estate		7.04										
Consumer Defensive		2.15										
Healthcare		12.85										
Utilities		3.04										
Communication Services		3.05										
Energy		8.60										
Industrials		17.96										
Technology		10.28										



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Nuveen Real Estate Securities R6 - FREGX

Family: Nuveen

Fund Manager: Scott C. Sedlak

Fund Inception Date: 30-Apr-2013

Category: Real Estate

Benchmark: FTSE NAREIT Equity REITs TR USD

Prospectus Objective: Specialty - Real Estate

Home Page: www.nuveen.com

Phone: 800-257-8787

Morningstar Overall Rating: 3.00

Overall Morningstar Rating for FREGX as of 9/30/2024 rated against 230 funds in its category.

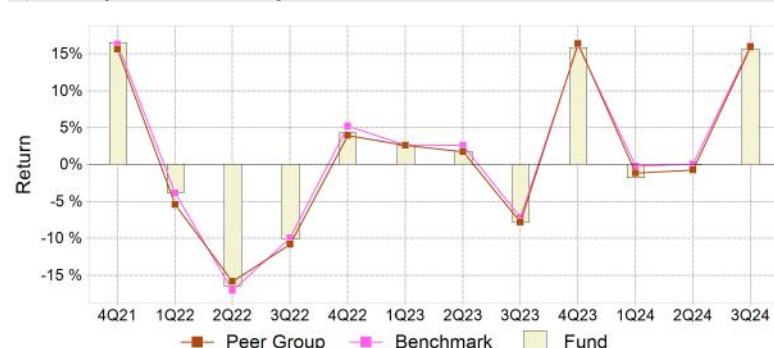
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	15.71	-0.21	-0.38	57 / 240
YTD	13.73	-0.02	-2.20	51 / 239
1 Year	31.76	-1.03	-2.98	62 / 238
3 Year	3.73	0.83	-1.34	25 / 230
5 Year	4.77	-0.10	-0.69	57 / 219
10 Year	7.32	0.00	-0.51	50 / 192
5 Year Up/Down	92.09 / 94.93	-2.71 / -2.27		
Since Inception	6.64	-	-4.52	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

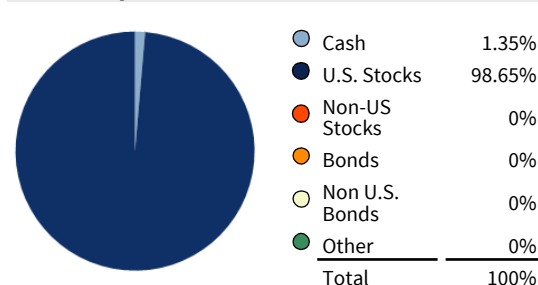
Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	11.66	-24.59	41.48	-5.95	25.74	-5.39	5.78
Peer Group	11.98	-26.21	41.50	-4.86	28.10	-5.41	5.79

Quarterly Returns History



Fund Composition 31-Jul-2024



Equity Style % 31-Jul-2024

	Value	Blend	Growth	
	0.00%	12.92%	12.20%	Large
	11.58%	40.51%	4.05%	Med
	1.35%	16.35%	1.05%	Small


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Cobb County

Fund Fact Sheets

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Nuveen Real Estate Securities R6 - FREGX

Family: Nuveen

Fund Manager: Scott C. Sedlak

Fund Inception Date: 30-Apr-2013

Category: Real Estate

Benchmark: FTSE NAREIT Equity REITs TR USD

Prospectus Objective: Specialty - Real Estate

Home Page: www.nuveen.com

Phone: 800-257-8787

Morningstar Overall Rating: 3.00

Overall Morningstar Rating for FREGX as of 9/30/2024
rated against 230 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)							
Sharpe Ratio - 1 Year		1.28	-0.01	-0.11	Top							
Sharpe Ratio - 3 Year		0.11	0.03	-0.07	2nd							
Sharpe Ratio - 5 Year		0.22	0.00	-0.03	3rd							
Sharpe Ratio - 10 Year		0.40	0.00	-0.02	Bottom							
Std. Deviation - 3 Year		20.88	-0.72	-0.64		2017	2018	2019	2020	2021	2022	2023
Std. Deviation - 5 Year		20.07	-0.73	-1.55	Fund	5.78%	-5.39%	25.74%	-5.95%	41.48%	-24.59%	11.66%
Std. Deviation - 10 Year		17.16	-0.44	-1.08	Peer Group 25 Percentile	8.28%	-4.29%	30.61%	-2.91%	43.98%	-25.15%	13.28%
Mean - 3 Year		3.73	0.83	-1.34	Peer Group 50 Percentile	5.79%	-5.41%	28.10%	-4.86%	41.50%	-26.21%	11.98%
Mean - 5 Year		4.77	-0.10	-0.69	Peer Group 75 Percentile	4.54%	-7.11%	25.27%	-7.50%	39.18%	-27.63%	10.76%
Mean - 10 Year		7.32	0.00	-0.51	Benchmark	5.23%	-4.62%	26.00%	-8.00%	43.24%	-24.37%	13.73%
Alpha (Best Fit) - 3 Year		-	-	-								
Alpha (Standard) - 3 Year		-1.30	0.74	-1.30								
Alpha (Standard) - 5 Year		-0.56	-0.12	-0.56								
Beta (Best Fit) - 3 Year		-	-	-								
Beta (Standard) - 3 Year		0.97	-0.02	-0.03								
R-Squared (Best Fit) - 3 Year		-	-	-								
R-Squared (Standard) - 3 Year		99.08	0.97	-0.92								
Sector Weightings (%)		Fund Risk/Return (3 Year)										
Basic Materials		0.00										
Consumer Cyclical		0.00										
Financial Services		0.00										
Real Estate		100.00										
Consumer Defensive		0.00										
Healthcare		0.00										
Utilities		0.00										
Communication Services		0.00										
Energy		0.00										
Industrials		0.00										
Technology		0.00										



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MFS Intl Diversification R6 - MDIZX

Family: MFS

Fund Manager: Nicholas Paul

Fund Inception Date: 02-Oct-2017

Category: Foreign Large Blend

Benchmark: MSCI ACWI Ex USA NR USD

Prospectus Objective: Growth

Home Page: <http://www.mfs.com>

Phone: 800-225-2606

Morningstar Overall Rating: 4.00

Overall Morningstar Rating for MDIZX as of 9/30/2024 rated against 680 funds in its category.

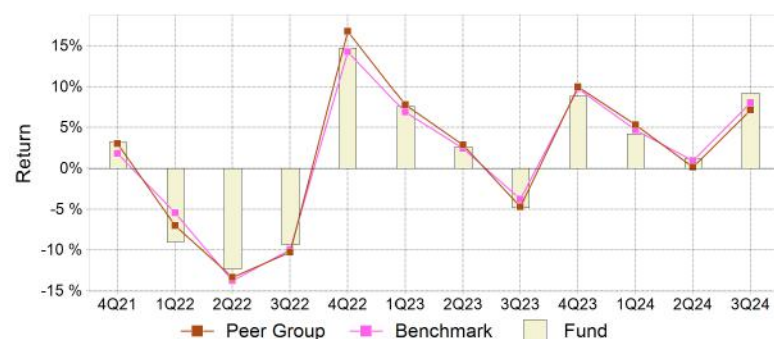
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	9.26	2.12	1.20	8 / 731
YTD	15.26	2.16	1.05	13 / 727
1 Year	25.45	0.94	0.10	32 / 721
3 Year	4.16	-0.06	0.02	52 / 680
5 Year	8.29	0.48	0.70	37 / 653
10 Year	7.16	1.72	1.94	7 / 516
5 Year Up/Down	100.96 / 98.07	-4.91 / -7.06		
Since Inception	7.12	-	1.94	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

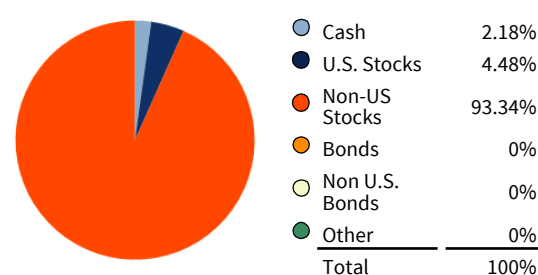
Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	14.44	-17.02	7.78	15.43	26.09	-10.92	30.25
Peer Group	16.23	-15.71	10.58	10.21	22.41	-14.83	26.08

Quarterly Returns History



Fund Composition 31-Aug-2024



Equity Style % 31-Aug-2024

	Value	Blend	Growth	
	19.38%	31.77%	29.81%	Large Med Small
	4.38%	8.79%	3.19%	
	0.49%	1.86%	0.33%	


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Cobb County

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MFS Intl Diversification R6 - MDIZX

Family: MFS

Fund Manager: Nicholas Paul

Fund Inception Date: 02-Oct-2017

Category: Foreign Large Blend

Benchmark: MSCI ACWI Ex USA NR USD

Prospectus Objective: Growth

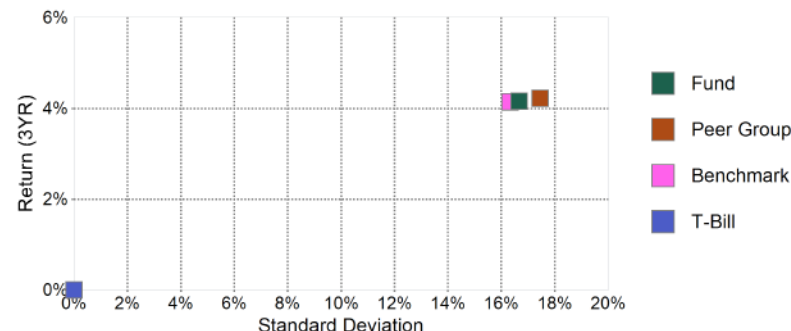
Home Page: <http://www.mfs.com>

Phone: 800-225-2606

Morningstar Overall Rating: 4.00

Overall Morningstar Rating for MDIZX as of 9/30/2024
rated against 680 funds in its category.

Risk Measures	Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)						
Sharpe Ratio - 1 Year	1.66	0.23	0.12	Top						
Sharpe Ratio - 3 Year	0.12	0.00	0.00	2nd						
Sharpe Ratio - 5 Year	0.42	0.04	0.04	3rd						
Sharpe Ratio - 10 Year	0.45	0.13	0.14	Bottom						
Std. Deviation - 3 Year	16.67	-0.79	0.33							
Std. Deviation - 5 Year	16.60	-1.54	-0.59							
Std. Deviation - 10 Year	14.09	-1.22	-0.88							
Mean - 3 Year	4.16	-0.06	0.02							
Mean - 5 Year	8.29	0.48	0.70							
Mean - 10 Year	7.16	1.72	1.94							
Alpha (Best Fit) - 3 Year	-	-	-							
Alpha (Standard) - 3 Year	0.06	-0.10	0.06							
Alpha (Standard) - 5 Year	0.89	0.64	0.89							
Beta (Best Fit) - 3 Year	-	-	-							
Beta (Standard) - 3 Year	1.00	-0.03	0.00							
R-Squared (Best Fit) - 3 Year	-	-	-							
R-Squared (Standard) - 3 Year	96.19	2.68	-3.81							
Sector Weightings (%)				Fund Risk/Return (3 Year)						
Basic Materials	9.13			The chart displays the 3-year risk/return profile. The x-axis represents Standard Deviation (0% to 20%) and the y-axis represents Return (3YR) (0% to 6%). The Fund (green square) is at approximately (17.5%, 4.2%). The Peer Group (orange square) is at approximately (17.8%, 4.3%). The Benchmark (pink square) is at approximately (16.5%, 4.1%). The T-Bill (blue square) is at approximately (0.5%, 0.1%).						
Consumer Cyclical	7.84									
Financial Services	20.01									
Real Estate	1.51									
Consumer Defensive	9.42									
Healthcare	9.03									
Utilities	1.88									
Communication Services	3.97									
Energy	4.67									
Industrials	16.16									
Technology	16.38									



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American Funds Europacific Growth R6 - RERGX

Family: American Funds

Fund Manager: Carl M. Kawaja

Fund Inception Date: 01-May-2009

Category: Foreign Large Growth

Benchmark: MSCI ACWI Ex USA Growth NR USD

Prospectus Objective: Foreign Stock

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 3.00

Overall Morningstar Rating for RERGX as of 9/30/2024
rated against 394 funds in its category.

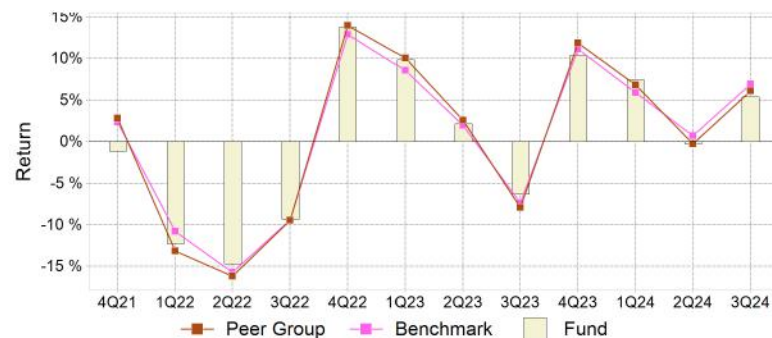
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	5.41	-0.70	-1.51	60 / 412
YTD	12.99	0.34	-1.07	45 / 404
1 Year	24.71	-1.43	-2.04	66 / 403
3 Year	0.06	0.09	-0.75	49 / 394
5 Year	7.52	0.04	0.43	50 / 368
10 Year	6.26	-0.04	0.29	52 / 306
5 Year Up/Down	104.80 / 103.23	-1.88 / -0.73		
Since Inception	8.29	-	3.65	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

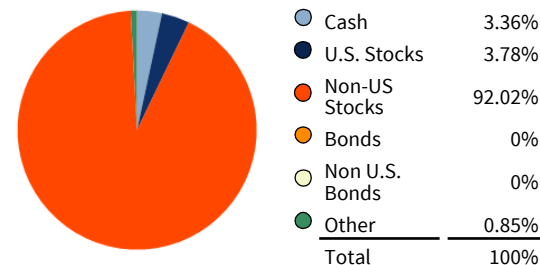
Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	16.05	-22.72	2.84	25.27	27.40	-14.91	31.17
Peer Group	16.08	-24.74	8.79	22.54	28.16	-14.16	31.05

Quarterly Returns History



Fund Composition 30-Jun-2024



Cash	3.36%
U.S. Stocks	3.78%
Non-US Stocks	92.02%
Bonds	0%
Non U.S. Bonds	0%
Other	0.85%
Total	100%

Equity Style % 30-Jun-2024

Value	Blend	Growth	
15.59%	21.35%	55.22%	Large Med Small
0.38%	3.45%	3.88%	
0.00%	0.03%	0.11%	


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American Funds Europacific Growth R6 - RERGX

Family: American Funds

Fund Manager: Carl M. Kawaja

Fund Inception Date: 01-May-2009

Category: Foreign Large Growth

Benchmark: MSCI ACWI Ex USA Growth NR USD

Prospectus Objective: Foreign Stock

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 3.00

Overall Morningstar Rating for RERGX as of 9/30/2024
rated against 394 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)								
Sharpe Ratio - 1 Year		1.52	0.14	0.01	Top								
Sharpe Ratio - 3 Year		-0.10	-0.01	-0.04	2nd								
Sharpe Ratio - 5 Year		0.36	0.00	0.01	3rd								
Sharpe Ratio - 10 Year		0.36	0.00	0.01	Bottom								
Std. Deviation - 3 Year		17.90	-1.60	-0.09		2017	2018	2019	2020	2021	2022	2023	
Std. Deviation - 5 Year		18.66	-0.20	1.28	Fund	31.17%	-14.91%	27.40%	25.27%	2.84%	-22.72%	16.05%	
Std. Deviation - 10 Year		15.68	-0.17	0.67	Peer Group 25 Percentile	34.91%	-11.01%	31.42%	30.32%	11.19%	-20.85%	18.63%	
Mean - 3 Year		0.06	0.09	-0.75	Peer Group 50 Percentile	31.05%	-14.16%	28.16%	22.54%	8.79%	-24.74%	16.08%	
Mean - 5 Year		7.52	0.04	0.43	Peer Group 75 Percentile	28.46%	-16.43%	26.95%	17.93%	3.48%	-28.60%	14.41%	
Mean - 10 Year		6.26	-0.04	0.29	Benchmark	32.01%	-14.43%	27.34%	22.20%	5.09%	-23.05%	14.03%	
Alpha (Best Fit) - 3 Year		-	-	-									
Alpha (Standard) - 3 Year		-0.79	-0.14	-0.79									
Alpha (Standard) - 5 Year		0.37	0.00	0.37									
Beta (Best Fit) - 3 Year		-	-	-									
Beta (Standard) - 3 Year		0.97	-0.07	-0.03									
R-Squared (Best Fit) - 3 Year		-	-	-									
R-Squared (Standard) - 3 Year		95.66	3.54	-4.34									
Sector Weightings (%)		Fund Risk/Return (3 Year)											
Basic Materials		8.37											
Consumer Cyclical		11.52											
Financial Services		13.17											
Real Estate		0.66											
Consumer Defensive		6.02											
Healthcare		12.59											
Utilities		0.87											
Communication Services		5.46											
Energy		5.64											
Industrials		15.35											
Technology		20.34											


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American Funds New Perspective R6 - RNP GX

Family: American Funds

Fund Manager: Robert W. Lovelace

Fund Inception Date: 01-May-2009

Category: Global Large-Stock Growth

Benchmark: MSCI ACWI Large Cap Growth NR USD

Prospectus Objective: World Stock

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 4.00

Overall Morningstar Rating for RNP GX as of 9/30/2024 rated against 329 funds in its category.

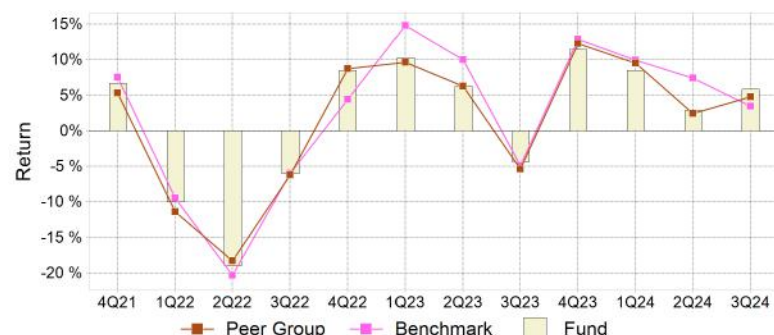
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	5.86	1.05	2.38	20 / 345
YTD	18.18	0.32	-4.10	44 / 345
1 Year	31.71	-0.43	-6.32	52 / 344
3 Year	5.46	1.14	-2.68	32 / 329
5 Year	13.85	1.52	-1.80	17 / 291
10 Year	11.77	1.53	-0.77	13 / 240
5 Year Up/Down	92.34 / 96.80	6.23 / 2.08		
Since Inception	13.18	-	5.11	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

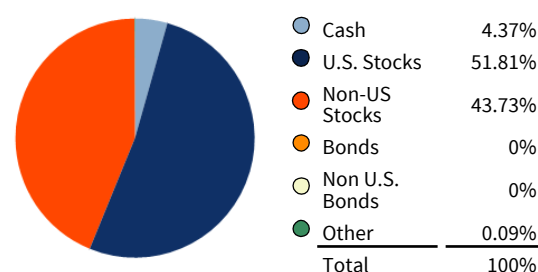
Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	25.01	-25.61	18.10	33.81	30.48	-5.56	29.30
Peer Group	24.21	-25.86	16.19	29.46	30.46	-6.73	30.38

Quarterly Returns History



Fund Composition 30-Jun-2024



Equity Style % 30-Jun-2024

	Value	Blend	Growth	
	10.63%	19.57%	58.20%	Large
	1.25%	3.95%	5.72%	Med
	0.07%	0.27%	0.33%	Small


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American Funds New Perspective R6 - RNPGR

Family: American Funds

Fund Manager: Robert W. Lovelace

Fund Inception Date: 01-May-2009

Category: Global Large-Stock Growth

Benchmark: MSCI ACWI Large Cap Growth NR USD

Prospectus Objective: World Stock

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 4.00

Overall Morningstar Rating for RNPGR as of 9/30/2024
rated against 329 funds in its category.

Risk Measures	Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)																						
Sharpe Ratio - 1 Year	1.88	0.12	-0.17	Top																						
Sharpe Ratio - 3 Year	0.19	0.05	-0.13	2nd																						
Sharpe Ratio - 5 Year	0.66	0.08	-0.08	3rd																						
Sharpe Ratio - 10 Year	0.68	0.08	-0.03	Bottom																						
Std. Deviation - 3 Year	18.55	-0.38	-1.43		2017	2018	2019	2020	2021	2022	2023															
Std. Deviation - 5 Year	19.11	0.25	-0.15	Fund	29.30%	-5.56%	30.48%	33.81%	18.10%	-25.61%	25.01%															
Std. Deviation - 10 Year	15.87	-0.01	-0.27	Peer Group 25 Percentile	34.43%	-4.48%	32.62%	35.36%	18.13%	-21.11%	29.07%															
Mean - 3 Year	5.46	1.14	-2.68	Peer Group 50 Percentile	30.38%	-6.73%	30.46%	29.46%	16.19%	-25.86%	24.21%															
Mean - 5 Year	13.85	1.52	-1.80	Peer Group 75 Percentile	27.51%	-9.38%	28.26%	24.37%	12.14%	-30.23%	19.40%															
Mean - 10 Year	11.77	1.53	-0.77	Benchmark	30.78%	-6.89%	33.55%	34.82%	18.18%	-29.13%	35.65%															
Alpha (Best Fit) - 3 Year	-	-	-																							
Alpha (Standard) - 3 Year	-2.16	1.08	-2.16																							
Alpha (Standard) - 5 Year	-1.11	1.20	-1.11																							
Beta (Best Fit) - 3 Year	-	-	-																							
Beta (Standard) - 3 Year	0.90	0.00	-0.10																							
R-Squared (Best Fit) - 3 Year	-	-	-																							
R-Squared (Standard) - 3 Year	94.17	4.07	-5.83																							
Sector Weightings (%)		Fund Risk/Return (3 Year)																								
Basic Materials	3.83	<table><thead><tr><th>Series</th><th>Standard Deviation (X)</th><th>Return (3YR) (Y)</th></tr></thead><tbody><tr><td>Fund</td><td>19.5%</td><td>5.5%</td></tr><tr><td>Peer Group</td><td>19.5%</td><td>4.5%</td></tr><tr><td>Benchmark</td><td>20.5%</td><td>8.5%</td></tr><tr><td>T-Bill</td><td>0.5%</td><td>0.5%</td></tr></tbody></table>										Series	Standard Deviation (X)	Return (3YR) (Y)	Fund	19.5%	5.5%	Peer Group	19.5%	4.5%	Benchmark	20.5%	8.5%	T-Bill	0.5%	0.5%
Series	Standard Deviation (X)											Return (3YR) (Y)														
Fund	19.5%											5.5%														
Peer Group	19.5%											4.5%														
Benchmark	20.5%											8.5%														
T-Bill	0.5%											0.5%														
Consumer Cyclical	11.27																									
Financial Services	10.31																									
Real Estate	0.41																									
Consumer Defensive	5.12																									
Healthcare	16.52																									
Utilities	0.56																									
Communication Services	10.89																									
Energy	2.93																									
Industrials	14.47																									
Technology	23.69																									



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Western Asset Core Plus Bond IS - WAPSX

Family: Franklin Templeton Investments

Fund Manager: Mark S. Lindbloom

Fund Inception Date: 04-Aug-2008

Category: Intermediate Core-Plus Bond

Benchmark: Bloomberg US Agg Bond TR USD

Prospectus Objective: Corporate Bond - General

Home Page: www.leggmason.com

Phone: 877-656-3863

Morningstar Overall Rating: 2.00

Overall Morningstar Rating for WAPSX as of 9/30/2024 rated against 557 funds in its category.

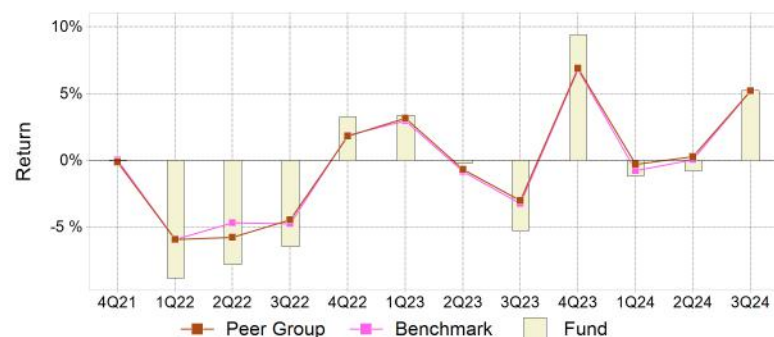
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	5.25	0.05	0.05	44 / 625
YTD	3.23	-1.97	-1.22	99 / 618
1 Year	12.93	0.38	1.36	32 / 606
3 Year	-3.62	-2.23	-2.23	98 / 557
5 Year	-0.51	-1.26	-0.84	95 / 527
10 Year	2.08	0.07	0.24	44 / 442
5 Year Up/Down	139.31 / 146.09	29.25 / 42.30		
Since Inception	4.44	-	-2.16	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	6.91	-18.83	-1.87	9.51	12.32	-1.47	6.99
Peer Group	6.20	-13.85	-0.80	8.41	9.26	-0.76	4.23

Quarterly Returns History

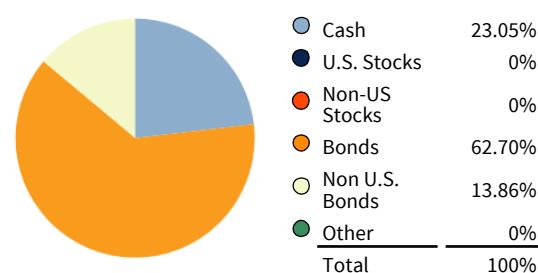


Fund Basics 31-Aug-2024	Fund	Peers
Manager Tenure (Yrs)	17.76	9.61
Track Record (Yrs)	26.17	23.75
Turnover Ratio %	55.00	144.00
Total Net Assets (\$Millions)	11,629.00	1,433.00
Price/Earnings	-	14.15
Assets in top 10 holdings %	25.00	25.89
Number of holdings	2,410.00	669.00

Sales Charges	Fund	Peers
Front End Load %	-	3.75
Deferred Load %	-	1.00

Expenses	Fund	Peers
12b1 Expense %	-	0.25
Gross Expense Ratio %	0.42	0.75
Net Expense Ratio %	0.42	0.63

Fund Composition 31-Aug-2024



Fixed Income Basics 31-Aug-2024	Fund	Peers
Avg. Effective Duration (Yrs)	6.92	6.14
Avg. Effective Maturity (Yrs)	11.13	8.79
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	58.90	50.00
AA %	5.21	5.06
A %	14.41	11.14
BBB %	21.14	19.54
BB %	5.60	5.60
B %	1.28	1.75
Below B %	1.72	0.49
Not Rated %	-8.25	1.51

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.


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Western Asset Core Plus Bond IS - WAPSX

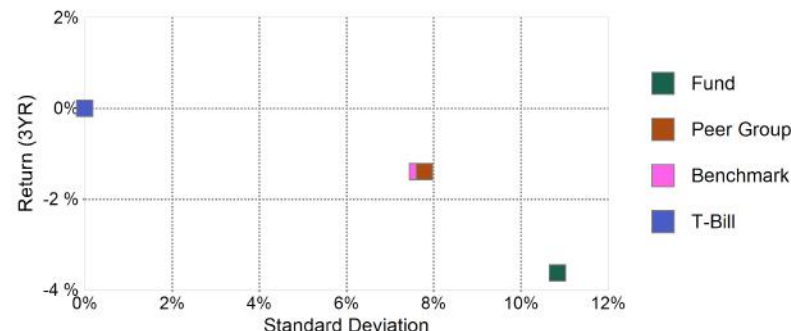
Family: Franklin Templeton Investments
Fund Manager: Mark S. Lindbloom
Fund Inception Date: 04-Aug-2008

Category: Intermediate Core-Plus Bond
Benchmark: Bloomberg US Agg Bond TR USD
Prospectus Objective: Corporate Bond - General
Home Page: www.leggmason.com
Phone: 877-656-3863

Morningstar Overall Rating: 2.00

Overall Morningstar Rating for WAPSX as of 9/30/2024
rated against 557 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)							
Sharpe Ratio - 1 Year		0.73	-0.19	-0.08	Top							
Sharpe Ratio - 3 Year		-0.61	-0.02	0.00	2nd							
Sharpe Ratio - 5 Year		-0.26	-0.07	0.03	3rd							
Sharpe Ratio - 10 Year		0.10	0.01	0.04	Bottom							
Std. Deviation - 3 Year		10.84	3.05	3.21		2017	2018	2019	2020	2021	2022	2023
Std. Deviation - 5 Year		9.22	2.33	2.96	Fund	6.99%	-1.47%	12.32%	9.51%	-1.87%	-18.83%	6.91%
Std. Deviation - 10 Year		6.98	1.70	2.05	Peer Group 25 Percentile	4.94%	-0.16%	10.02%	9.36%	-0.11%	-12.94%	6.91%
Mean - 3 Year		-3.62	-2.23	-2.23	Peer Group 50 Percentile	4.23%	-0.76%	9.26%	8.41%	-0.80%	-13.85%	6.20%
Mean - 5 Year		-0.51	-1.26	-0.84	Peer Group 75 Percentile	3.50%	-1.38%	8.28%	7.20%	-1.30%	-14.69%	5.40%
Mean - 10 Year		2.08	0.07	0.24	Benchmark	3.54%	0.01%	8.72%	7.51%	-1.54%	-13.01%	5.53%
Alpha (Best Fit) - 3 Year		-	-	-								
Alpha (Standard) - 3 Year		-0.14	-0.21	-0.14								
Alpha (Standard) - 5 Year		0.13	-0.37	0.13								
Beta (Best Fit) - 3 Year		-	-	-								
Beta (Standard) - 3 Year		1.41	0.40	0.41								
R-Squared (Best Fit) - 3 Year		-	-	-								
R-Squared (Standard) - 3 Year		96.67	-0.90	-3.33								
Sector Weightings (%)					Fund Risk/Return (3 Year)							
Basic Materials		-			Fund Peer Group Benchmark T-Bill							
Consumer Cyclical		-										
Financial Services		-										
Real Estate		-										
Consumer Defensive		-										
Healthcare		-										
Utilities		-										
Communication Services		-										
Energy		-										
Industrials		-										
Technology		-										



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PGIM High Yield R6 - PHYQX

Family: PGIM Investments

Fund Manager: Robert Spano

Fund Inception Date: 31-Oct-2011

Category: High Yield Bond

Benchmark: ICE BofA US High Yield TR USD

Prospectus Objective: Corporate Bond - High Yield

Home Page: www.prudentialfunds.com

Phone: 800-225-1852

Morningstar Overall Rating: 4.00

Overall Morningstar Rating for PHYQX as of 9/30/2024 rated against 620 funds in its category.

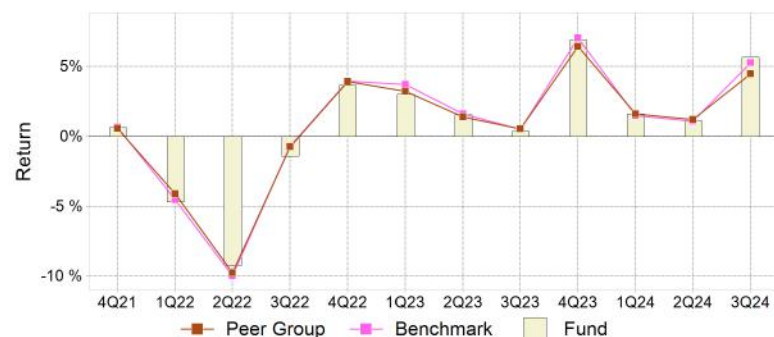
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	5.67	1.18	0.39	5 / 672
YTD	8.61	1.30	0.58	11 / 668
1 Year	16.12	1.85	0.46	11 / 665
3 Year	2.78	0.01	-0.30	50 / 620
5 Year	4.60	0.59	0.05	26 / 594
10 Year	5.34	1.16	0.39	5 / 525
5 Year Up/Down	101.61 / 101.64	7.57 / 4.69		
Since Inception	6.11	-	-1.64	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	12.31	-11.55	6.47	5.72	16.26	-1.18	7.70
Peer Group	12.12	-10.65	4.85	5.24	13.69	-2.83	6.65

Quarterly Returns History

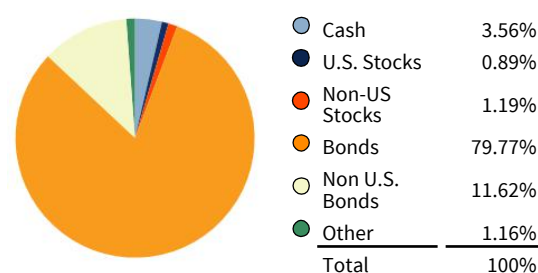


Fund Basics 31-Aug-2024	Fund	Peers
Manager Tenure (Yrs)	16.97	9.91
Track Record (Yrs)	45.50	21.83
Turnover Ratio %	22.00	38.00
Total Net Assets (\$Millions)	19,509.00	523.00
Price/Earnings	-	15.83
Assets in top 10 holdings %	9.42	11.90
Number of holdings	818.00	346.00

Sales Charges	Fund	Peers
Front End Load %	-	4.00
Deferred Load %	-	1.00

Expenses	Fund	Peers
12b1 Expense %	-	0.25
Gross Expense Ratio %	0.38	0.92
Net Expense Ratio %	0.38	0.76

Fund Composition 31-Aug-2024



Fixed Income Basics 31-Aug-2024	Fund	Peers
Avg. Effective Duration (Yrs)	3.01	3.00
Avg. Effective Maturity (Yrs)	5.08	4.36
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	7.08	0.15
AA %	0.04	0.00
A %	0.25	0.00
BBB %	5.54	3.92
BB %	45.68	42.02
B %	24.11	37.57
Below B %	11.39	10.57
Not Rated %	5.91	1.94

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.


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PGIM High Yield R6 - PHYQX

Family: PGIM Investments

Fund Manager: Robert Spano

Fund Inception Date: 31-Oct-2011

Category: High Yield Bond

Benchmark: ICE BofA US High Yield TR USD

Prospectus Objective: Corporate Bond - High Yield

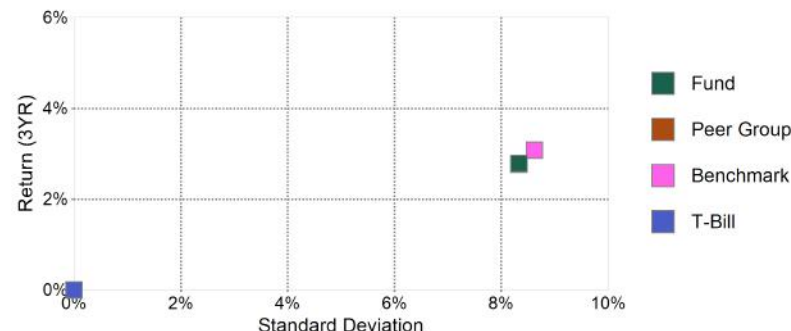
Home Page: www.prudentialfunds.com

Phone: 800-225-1852

Morningstar Overall Rating: 4.00

Overall Morningstar Rating for PHYQX as of 9/30/2024
rated against 620 funds in its category.

Risk Measures	Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)								
Sharpe Ratio - 1 Year	1.63	0.10	0.00	Top								
Sharpe Ratio - 3 Year	-0.04	0.01	-0.04	2nd								
Sharpe Ratio - 5 Year	0.28	0.05	0.00	3rd								
Sharpe Ratio - 10 Year	0.51	0.14	0.05	Bottom								
Std. Deviation - 3 Year	8.34	0.01	-0.28		2017	2018	2019	2020	2021	2022	2023	
Std. Deviation - 5 Year	9.64	0.41	0.18	Fund	7.70%	-1.18%	16.26%	5.72%	6.47%	-11.55%	12.31%	
Std. Deviation - 10 Year	7.65	0.18	-0.02	Peer Group 25 Percentile	7.48%	-1.84%	14.78%	6.42%	5.91%	-8.98%	12.85%	
Mean - 3 Year	2.78	0.01	-0.30	Peer Group 50 Percentile	6.65%	-2.83%	13.69%	5.24%	4.85%	-10.65%	12.12%	
Mean - 5 Year	4.60	0.59	0.05	Peer Group 75 Percentile	5.93%	-3.56%	12.03%	3.83%	3.88%	-11.69%	11.13%	
Mean - 10 Year	5.34	1.16	0.39	Benchmark	7.48%	-2.26%	14.41%	6.17%	5.36%	-11.22%	13.46%	
Alpha (Best Fit) - 3 Year	-	-	-									
Alpha (Standard) - 3 Year	-0.32	0.02	-0.32									
Alpha (Standard) - 5 Year	0.03	0.41	0.03									
Beta (Best Fit) - 3 Year	-	-	-									
Beta (Standard) - 3 Year	0.96	0.01	-0.04									
R-Squared (Best Fit) - 3 Year	-	-	-									
R-Squared (Standard) - 3 Year	98.57	0.37	-1.43									
Sector Weightings (%)												
Basic Materials	-			Fund Risk/Return (3 Year) Fund Peer Group Benchmark T-Bill								
Consumer Cyclical	-											
Financial Services	-											
Real Estate	-											
Consumer Defensive	-											
Healthcare	-											
Utilities	-											
Communication Services	-											
Energy	-											
Industrials	-											
Technology	-											



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Vanguard Treasury Money Market Investor - VUSXX

Family: Vanguard

Fund Manager: Nafis T. Smith

Fund Inception Date: 14-Dec-1992

Category: Money Market-Taxable

Benchmark: ICE BofA USD 3M Dep OR CM TR USD

Prospectus Objective: Money Mkt - Treasury

Home Page: www.vanguard.com

Phone: 800-662-7447

Morningstar Overall Rating: -

Overall Morningstar Rating for VUSXX as of 9/30/2024 rated against 542 funds in its category.

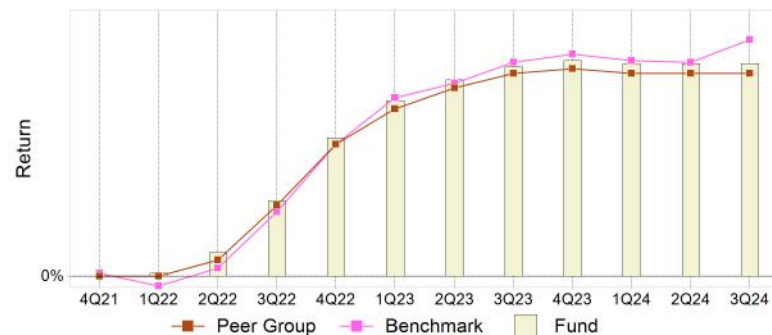
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	1.32	0.06	-0.15	3 / 608
YTD	4.02	0.20	-0.18	2 / 589
1 Year	5.42	0.27	-0.22	2 / 583
3 Year	3.52	0.20	0.02	5 / 542
5 Year	2.28	0.17	-0.17	3 / 501
10 Year	1.59	0.20	-0.25	2 / 389
5 Year Up/Down	91.72 / -183.34	6.53 / -80.89		
Since Inception	2.44	-	-0.37	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	5.05	1.50	0.01	0.47	2.14	1.80	0.79
Peer Group	4.82	1.36	0.01	0.28	1.87	1.49	0.50

Quarterly Returns History



Fund Basics 30-Jun-2024	Fund	Peers
Manager Tenure (Yrs)	6.78	18.01
Track Record (Yrs)	31.75	16.92
Turnover Ratio %	-	0.00
Total Net Assets (\$Millions)	80,089.00	28,337.00
Price/Earnings	-	-
Assets in top 10 holdings %	76.48	49.97
Number of holdings	26.00	78.00

Sales Charges	Fund	Peers
Front End Load %	-	2.88
Deferred Load %	-	1.00

Expenses	Fund	Peers
12b1 Expense %	-	0.15
Gross Expense Ratio %	0.09	0.36
Net Expense Ratio %	0.09	0.33

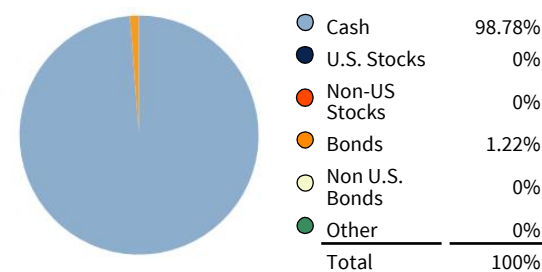
Fixed Income Basics 30-Jun-2024	Fund	Peers
Avg. Effective Duration (Yrs)	-	0.07
Avg. Effective Maturity (Yrs)	-	0.21
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	-	77.59
AA %	-	0.00
A %	-	0.00
BBB %	-	0.00
BB %	-	0.00
B %	-	0.00
Below B %	-	0.00
Not Rated %	-	0.37

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.

Fund Composition 30-Jun-2024


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Vanguard Treasury Money Market Investor - VUSXX

Family: Vanguard

Fund Manager: Nafis T. Smith

Fund Inception Date: 14-Dec-1992

Category: Money Market-Taxable

Benchmark: ICE BofA USD 3M Dep OR CM TR USD

Prospectus Objective: Money Mkt - Treasury

Home Page: www.vanguard.com

Phone: 800-662-7447

Morningstar Overall Rating: -

Overall Morningstar Rating for VUSXX as of 9/30/2024
rated against 542 funds in its category.

Risk Measures	Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)						
Sharpe Ratio - 1 Year	-0.51	3.91	-2.61	Top						
Sharpe Ratio - 3 Year	0.20	1.66	0.12	2nd						
Sharpe Ratio - 5 Year	-0.29	1.20	-0.92	3rd						
Sharpe Ratio - 10 Year	-0.58	1.71	-1.84	Bottom						
Std. Deviation - 3 Year	0.62	0.02	-0.05							
Std. Deviation - 5 Year	0.65	0.02	-0.01							
Std. Deviation - 10 Year	0.53	0.02	0.00							
Mean - 3 Year	3.52	0.20	0.02							
Mean - 5 Year	2.28	0.17	-0.17							
Mean - 10 Year	1.59	0.20	-0.25							
Alpha (Best Fit) - 3 Year	-	-	-							
Alpha (Standard) - 3 Year	0.02	0.19	0.02							
Alpha (Standard) - 5 Year	-0.09	0.16	-0.09							
Beta (Best Fit) - 3 Year	-	-	-							
Beta (Standard) - 3 Year	0.58	0.07	-0.42							
R-Squared (Best Fit) - 3 Year	-	-	-							
R-Squared (Standard) - 3 Year	41.94	13.12	-58.06							

Sector Weightings (%)

Basic Materials	-
Consumer Cyclical	-
Financial Services	-
Real Estate	-
Consumer Defensive	-
Healthcare	-
Utilities	-
Communication Services	-
Energy	-
Industrials	-
Technology	-

Fund Risk/Return (3 Year)


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American Funds 2010 Trgt Date Retire R6 - RFTTX

Family: American Funds

Fund Manager: Wesley K. Phoa

Fund Inception Date: 13-Jul-2009

Category: Target-Date 2000-2010

Benchmark: S&P Target Date 2010 TR USD

Prospectus Objective: Asset Allocation

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFTTX as of 9/30/2024
rated against 89 funds in its category.

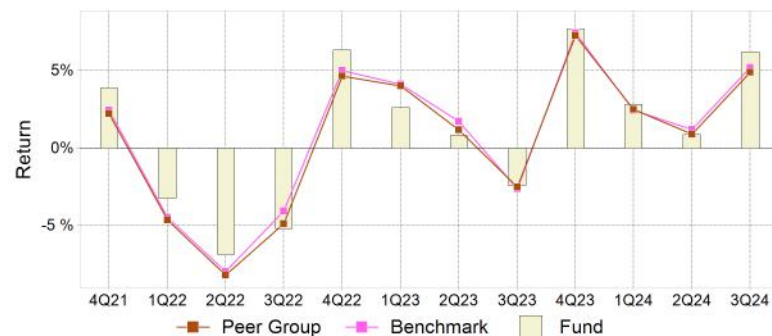
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	6.21	1.31	1.01	4 / 97
YTD	10.15	1.62	1.12	7 / 97
1 Year	18.61	2.18	1.49	8 / 97
3 Year	4.14	1.67	1.04	1 / 89
5 Year	6.16	0.95	0.85	4 / 85
10 Year	5.60	0.60	0.54	4 / 65
5 Year Up/Down	106.46 / 100.67	1.84 / -3.82		
Since Inception	7.54	-	2.39	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	8.67	-9.15	9.32	9.25	13.88	-2.49	10.41
Peer Group	9.94	-13.10	7.07	10.67	14.59	-3.27	10.63

Quarterly Returns History

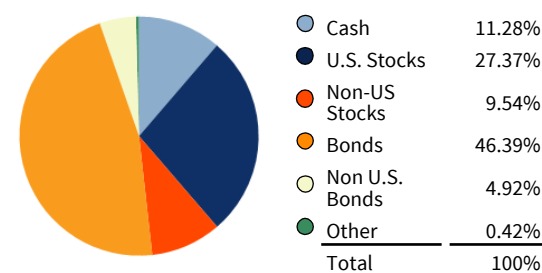


Fund Basics 30-Jun-2024	Fund	Peers
Manager Tenure (Yrs)	12.76	11.12
Track Record (Yrs)	17.58	15.00
Turnover Ratio %	8.00	26.00
Total Net Assets (\$Millions)	4,064.00	97.00
Price/Earnings	20.92	20.92
Assets in top 10 holdings %	82.94	80.38
Number of holdings	19.00	27.00

Sales Charges	Fund	Peers
Front End Load %	-	5.38
Deferred Load %	-	1.00

Expenses	Fund	Peers
12b1 Expense %	-	0.25
Gross Expense Ratio %	0.29	0.48
Net Expense Ratio %	0.29	0.45

Fund Composition 30-Jun-2024



Fixed Income Basics 30-Jun-2024	Fund	Peers
Avg. Effective Duration (Yrs)	4.92	5.01
Avg. Effective Maturity (Yrs)	-	7.49
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	70.90	70.90
AA %	3.40	3.39
A %	9.25	7.54
BBB %	7.88	10.14
BB %	4.22	4.22
B %	1.93	1.93
Below B %	0.62	0.62
Not Rated %	1.80	0.67

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.


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American Funds 2010 Trgt Date Retire R6 - RFTTX

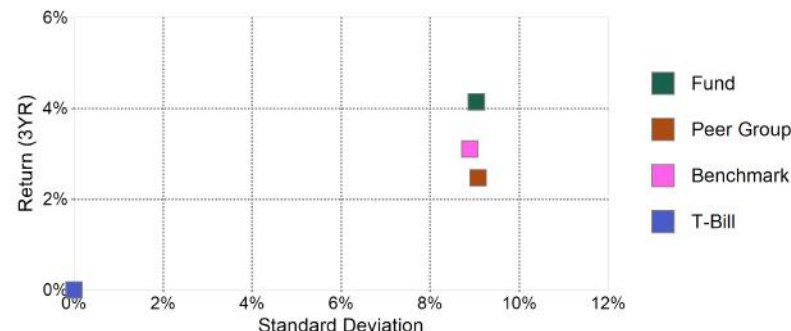
Family: American Funds
Fund Manager: Wesley K. Phoa
Fund Inception Date: 13-Jul-2009

Category: Target-Date 2000-2010
Benchmark: S&P Target Date 2010 TR USD
Prospectus Objective: Asset Allocation
Home Page: www.americanfunds.com
Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFTTX as of 9/30/2024
rated against 89 funds in its category.

Risk Measures	Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)						
Sharpe Ratio - 1 Year	1.72	0.23	0.23	Top						
Sharpe Ratio - 3 Year	0.11	0.17	0.11	2nd						
Sharpe Ratio - 5 Year	0.48	0.13	0.10	3rd						
Sharpe Ratio - 10 Year	0.59	0.11	0.07	Bottom						
Std. Deviation - 3 Year	9.04	-0.04	0.14							
Std. Deviation - 5 Year	8.51	-0.10	0.08							
Std. Deviation - 10 Year	6.94	-0.17	0.17							
Mean - 3 Year	4.14	1.67	1.04							
Mean - 5 Year	6.16	0.95	0.85							
Mean - 10 Year	5.60	0.60	0.54							
Alpha (Best Fit) - 3 Year	-	-	-							
Alpha (Standard) - 3 Year	1.02	1.56	1.02							
Alpha (Standard) - 5 Year	0.83	1.08	0.83							
Beta (Best Fit) - 3 Year	-	-	-							
Beta (Standard) - 3 Year	1.00	-0.01	0.00							
R-Squared (Best Fit) - 3 Year	-	-	-							
R-Squared (Standard) - 3 Year	96.54	-1.79	-3.46							
Sector Weightings (%)				Fund Risk/Return (3 Year)						
Basic Materials	3.62									
Consumer Cyclical	6.94									
Financial Services	15.36									
Real Estate	3.08									
Consumer Defensive	9.51									
Healthcare	13.87									
Utilities	4.99									
Communication Services	5.90									
Energy	7.09									
Industrials	12.12									
Technology	17.52									



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as of 09/30/2024

American Funds 2015 Trgt Date Retire R6 - RFJTX

Family: American Funds

Fund Manager: Wesley K. Phoa

Fund Inception Date: 13-Jul-2009

Category: Target-Date 2015

Benchmark: S&P Target Date 2015 TR USD

Prospectus Objective: Asset Allocation

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFJTX as of 9/30/2024 rated against 106 funds in its category.

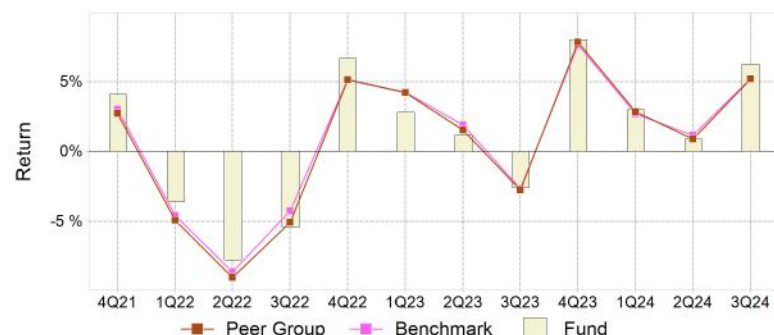
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	6.30	1.07	1.04	1 / 114
YTD	10.49	1.39	1.10	6 / 114
1 Year	19.37	1.73	1.58	5 / 114
3 Year	4.20	1.64	0.88	1 / 106
5 Year	6.55	1.07	0.80	6 / 99
10 Year	5.94	0.56	0.43	3 / 73
5 Year Up/Down	105.43 / 100.37	1.48 / -7.23		
Since Inception	8.01	-	2.42	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	9.57	-10.25	10.27	9.96	14.94	-2.72	11.19
Peer Group	10.91	-13.61	7.91	11.55	16.17	-3.95	11.80

Quarterly Returns History

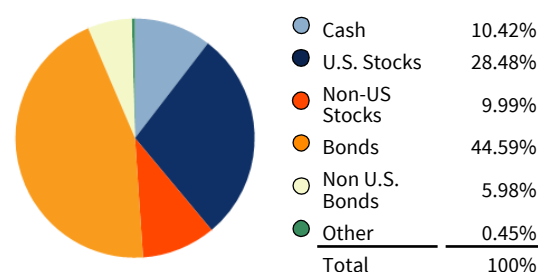


Fund Basics 30-Jun-2024	Fund	Peers
Manager Tenure (Yrs)	12.76	10.90
Track Record (Yrs)	17.58	15.00
Turnover Ratio %	7.00	17.00
Total Net Assets (\$Millions)	5,124.00	231.00
Price/Earnings	21.45	20.89
Assets in top 10 holdings %	73.05	76.12
Number of holdings	22.00	22.00

Sales Charges	Fund	Peers
Front End Load %	-	5.75
Deferred Load %	-	1.00

Expenses	Fund	Peers
12b1 Expense %	-	0.25
Gross Expense Ratio %	0.30	0.62
Net Expense Ratio %	0.30	0.51

Fund Composition 30-Jun-2024



Fixed Income Basics 30-Jun-2024	Fund	Peers
Avg. Effective Duration (Yrs)	5.06	5.18
Avg. Effective Maturity (Yrs)	-	7.63
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	66.36	65.58
AA %	3.33	3.33
A %	9.27	8.34
BBB %	8.65	10.76
BB %	6.40	3.55
B %	3.14	2.49
Below B %	1.10	0.47
Not Rated %	1.75	0.75

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.


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American Funds 2015 Trgt Date Retire R6 - RFJTX

Family: American Funds

Fund Manager: Wesley K. Phoa

Fund Inception Date: 13-Jul-2009

Category: Target-Date 2015

Benchmark: S&P Target Date 2015 TR USD

Prospectus Objective: Asset Allocation

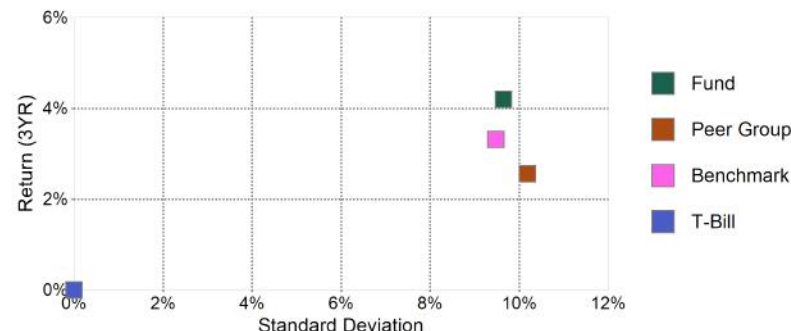
Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFJTX as of 9/30/2024
rated against 106 funds in its category.

Risk Measures	Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)								
Sharpe Ratio - 1 Year	1.74	0.28	0.23	Top								
Sharpe Ratio - 3 Year	0.12	0.17	0.09	2nd								
Sharpe Ratio - 5 Year	0.49	0.12	0.08	3rd								
Sharpe Ratio - 10 Year	0.59	0.10	0.05	Bottom								
Std. Deviation - 3 Year	9.65	-0.54	0.17		2017	2018	2019	2020	2021	2022	2023	
Std. Deviation - 5 Year	9.19	-0.47	0.03	Fund	11.19%	-2.72%	14.94%	9.96%	10.27%	-10.25%	9.57%	
Std. Deviation - 10 Year	7.46	-0.44	-0.05	Peer Group 25 Percentile	12.66%	-3.46%	16.59%	12.08%	9.11%	-12.83%	11.38%	
Mean - 3 Year	4.20	1.64	0.88	Peer Group 50 Percentile	11.80%	-3.95%	16.17%	11.55%	7.91%	-13.61%	10.91%	
Mean - 5 Year	6.55	1.07	0.80	Peer Group 75 Percentile	10.92%	-4.51%	14.93%	9.97%	7.03%	-14.53%	10.01%	
Mean - 10 Year	5.94	0.56	0.43	Benchmark	11.39%	-3.67%	15.40%	10.28%	8.01%	-12.16%	11.38%	
Alpha (Best Fit) - 3 Year	-	-	-									
Alpha (Standard) - 3 Year	0.86	1.58	0.86									
Alpha (Standard) - 5 Year	0.78	1.13	0.78									
Beta (Best Fit) - 3 Year	-	-	-									
Beta (Standard) - 3 Year	1.01	-0.06	0.01									
R-Squared (Best Fit) - 3 Year	-	-	-									
R-Squared (Standard) - 3 Year	97.28	-1.34	-2.72									
Sector Weightings (%)		Fund Risk/Return (3 Year)										
Basic Materials	3.81											
Consumer Cyclical	7.09											
Financial Services	14.58											
Real Estate	2.70											
Consumer Defensive	9.02											
Healthcare	14.21											
Utilities	4.64											
Communication Services	6.01											
Energy	6.66											
Industrials	12.58											
Technology	18.68											


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American Funds 2020 Trgt Date Retire R6 - RRCTX

Family: American Funds

Fund Manager: Wesley K. Phoa

Fund Inception Date: 13-Jul-2009

Category: Target-Date 2020

Benchmark: S&P Target Date 2020 TR USD

Prospectus Objective: Asset Allocation

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RRCTX as of 9/30/2024 rated against 139 funds in its category.

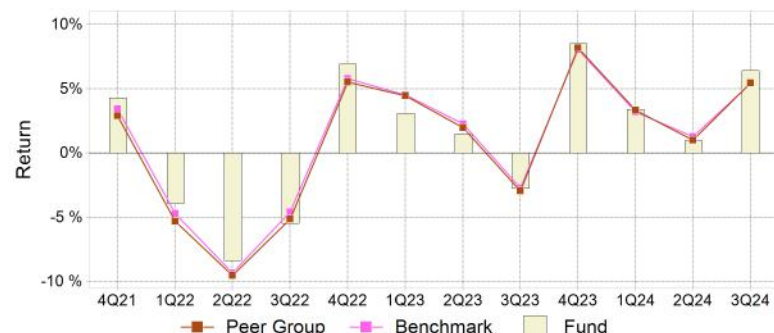
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	6.40	0.95	0.97	1 / 147
YTD	11.05	1.02	0.86	3 / 147
1 Year	20.50	1.42	1.45	5 / 147
3 Year	4.42	1.74	0.69	1 / 139
5 Year	6.98	1.00	0.83	7 / 132
10 Year	6.39	0.69	0.46	4 / 100
5 Year Up/Down	102.52 / 96.75	-1.22 / -8.55		
Since Inception	8.64	-	2.69	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	10.46	-11.01	10.64	10.99	15.59	-2.69	12.87
Peer Group	11.68	-14.47	8.82	12.03	17.21	-4.69	13.36

Quarterly Returns History



Fund Basics 30-Jun-2024	Fund	Peers
Manager Tenure (Yrs)	12.76	11.26
Track Record (Yrs)	17.58	14.92
Turnover Ratio %	6.00	19.00
Total Net Assets (\$Millions)	16,221.00	551.00
Price/Earnings	21.89	20.94
Assets in top 10 holdings %	69.62	76.92
Number of holdings	22.00	23.00

Sales Charges	Fund	Peers
Front End Load %	-	5.50
Deferred Load %	-	1.00

Expenses	Fund	Peers
12b1 Expense %	-	0.25
Gross Expense Ratio %	0.31	0.66
Net Expense Ratio %	0.31	0.54

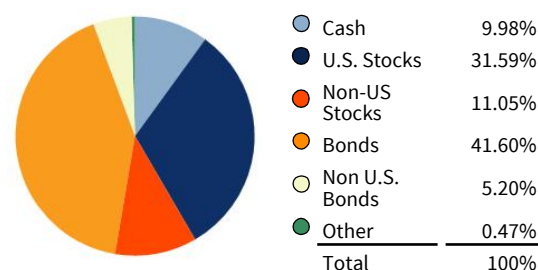
Fixed Income Basics 30-Jun-2024	Fund	Peers
Avg. Effective Duration (Yrs)	5.42	5.42
Avg. Effective Maturity (Yrs)	-	7.75
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	67.86	62.19
AA %	2.82	3.83
A %	8.42	8.42
BBB %	8.52	11.34
BB %	6.57	4.33
B %	3.24	3.24
Below B %	1.14	1.07
Not Rated %	1.43	0.87

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.

Fund Composition 30-Jun-2024



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American Funds 2020 Trgt Date Retire R6 - RRCTX

Family: American Funds

Fund Manager: Wesley K. Phoa

Fund Inception Date: 13-Jul-2009

Category: Target-Date 2020

Benchmark: S&P Target Date 2020 TR USD

Prospectus Objective: Asset Allocation

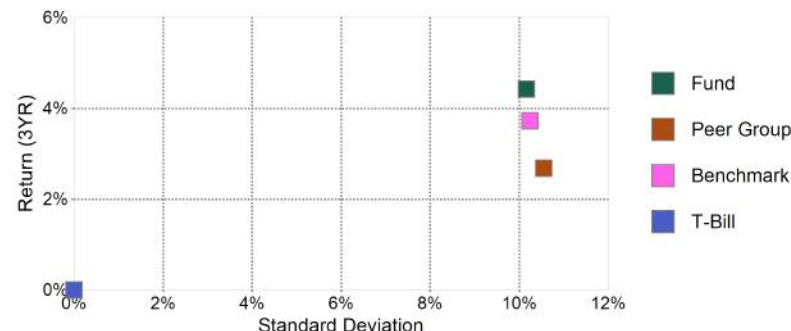
Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RRCTX as of 9/30/2024
rated against 139 funds in its category.

Risk Measures	Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)								
Sharpe Ratio - 1 Year	1.77	0.25	0.20	Top								
Sharpe Ratio - 3 Year	0.14	0.16	0.07	2nd								
Sharpe Ratio - 5 Year	0.51	0.13	0.09	3rd								
Sharpe Ratio - 10 Year	0.61	0.12	0.07	Bottom								
Std. Deviation - 3 Year	10.17	-0.39	-0.08		2017	2018	2019	2020	2021	2022	2023	
Std. Deviation - 5 Year	9.66	-0.72	-0.30	Fund	12.87%	-2.69%	15.59%	10.99%	10.64%	-11.01%	10.46%	
Std. Deviation - 10 Year	7.94	-0.69	-0.33	Peer Group 25 Percentile	13.95%	-3.94%	18.13%	12.94%	9.72%	-13.55%	12.71%	
Mean - 3 Year	4.42	1.74	0.69	Peer Group 50 Percentile	13.36%	-4.69%	17.21%	12.03%	8.82%	-14.47%	11.68%	
Mean - 5 Year	6.98	1.00	0.83	Peer Group 75 Percentile	12.54%	-5.33%	15.65%	10.10%	8.12%	-14.97%	10.92%	
Mean - 10 Year	6.39	0.69	0.46	Benchmark	12.80%	-4.16%	16.52%	10.24%	8.76%	-12.81%	12.32%	
Alpha (Best Fit) - 3 Year	-	-	-									
Alpha (Standard) - 3 Year	0.67	1.68	0.67									
Alpha (Standard) - 5 Year	0.91	1.29	0.91									
Beta (Best Fit) - 3 Year	-	-	-									
Beta (Standard) - 3 Year	0.98	-0.05	-0.02									
R-Squared (Best Fit) - 3 Year	-	-	-									
R-Squared (Standard) - 3 Year	97.95	-0.99	-2.05									
Sector Weightings (%)		Fund Risk/Return (3 Year)										
Basic Materials	3.76											
Consumer Cyclical	7.37											
Financial Services	14.11											
Real Estate	2.45											
Consumer Defensive	8.75											
Healthcare	14.36											
Utilities	4.30											
Communication Services	6.19											
Energy	6.27											
Industrials	12.93											
Technology	19.51											



American Funds 2025 Trgt Date Retire R6 - RFDTX

Family: American Funds

Fund Manager: Wesley K. Phoa

Fund Inception Date: 13-Jul-2009

Category: Target-Date 2025

Benchmark: S&P Target Date 2025 TR USD

Prospectus Objective: Asset Allocation

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFDTX as of 9/30/2024 rated against 199 funds in its category.

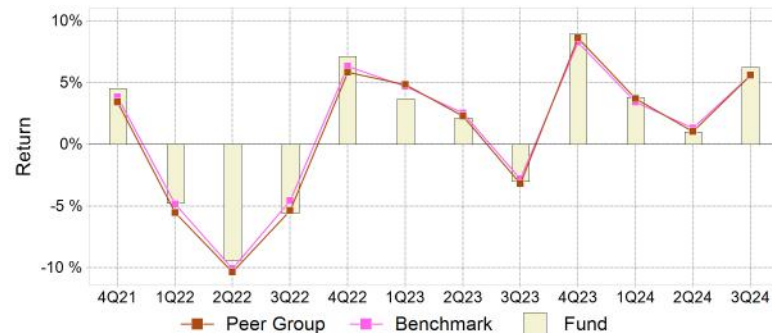
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	6.25	0.65	0.66	4 / 210
YTD	11.40	0.76	0.75	12 / 208
1 Year	21.39	1.20	1.58	17 / 207
3 Year	4.39	1.36	0.30	4 / 199
5 Year	7.81	1.29	0.80	3 / 181
10 Year	7.07	0.99	0.52	2 / 151
5 Year Up/Down	102.37 / 97.41	-0.12 / -8.73		
Since Inception	9.60	-	3.21	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	11.94	-12.74	11.44	13.67	17.85	-3.47	15.32
Peer Group	12.66	-15.55	9.87	12.72	18.56	-5.37	15.07

Quarterly Returns History



Fund Basics 30-Jun-2024	Fund	Peers
Manager Tenure (Yrs)	12.76	10.42
Track Record (Yrs)	17.58	14.42
Turnover Ratio %	5.00	20.00
Total Net Assets (\$Millions)	34,473.00	635.00
Price/Earnings	22.43	20.96
Assets in top 10 holdings %	65.15	84.93
Number of holdings	25.00	23.00

Sales Charges	Fund	Peers
Front End Load %	-	5.75
Deferred Load %	-	1.00

Expenses	Fund	Peers
12b1 Expense %	-	0.25
Gross Expense Ratio %	0.32	0.72
Net Expense Ratio %	0.32	0.59

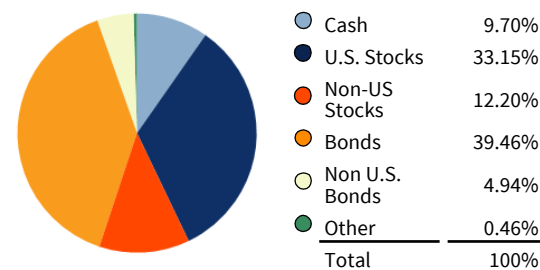
Fixed Income Basics 30-Jun-2024	Fund	Peers
Avg. Effective Duration (Yrs)	5.45	5.45
Avg. Effective Maturity (Yrs)	-	7.85
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	68.87	49.96
AA %	2.85	4.01
A %	8.45	9.97
BBB %	8.43	11.97
BB %	6.01	4.50
B %	2.93	2.93
Below B %	1.03	0.83
Not Rated %	1.43	0.90

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.

Fund Composition 30-Jun-2024


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Cobb County

Fund Fact Sheets

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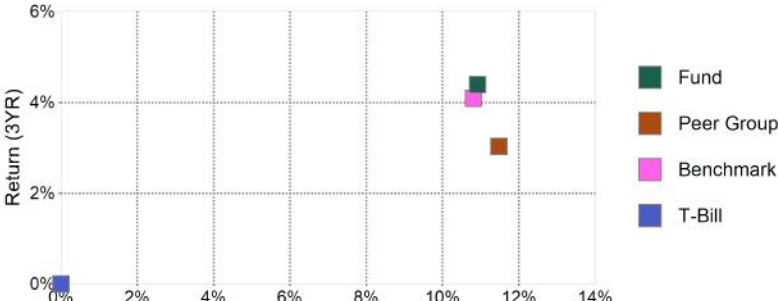
American Funds 2025 Trgt Date Retire R6 - RFDTX

Family: American Funds
Fund Manager: Wesley K. Phoa
Fund Inception Date: 13-Jul-2009

Category: Target-Date 2025
Benchmark: S&P Target Date 2025 TR USD
Prospectus Objective: Asset Allocation
Home Page: www.americanfunds.com
Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFDTX as of 9/30/2024
rated against 199 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)							
Sharpe Ratio - 1 Year		1.80	0.24	0.21	Top							
Sharpe Ratio - 3 Year		0.13	0.11	0.02	2nd							
Sharpe Ratio - 5 Year		0.54	0.14	0.08	3rd							
Sharpe Ratio - 10 Year		0.63	0.13	0.07	Bottom							
Std. Deviation - 3 Year		10.92	-0.56	0.10		2017	2018	2019	2020	2021	2022	2023
Std. Deviation - 5 Year		10.67	-0.92	-0.35	Fund	15.32%	-3.47%	17.85%	13.67%	11.44%	-12.74%	11.94%
Std. Deviation - 10 Year		8.93	-0.73	-0.32	Peer Group 25 Percentile	15.74%	-4.75%	19.57%	13.67%	10.90%	-13.78%	13.58%
Mean - 3 Year		4.39	1.36	0.30	Peer Group 50 Percentile	15.07%	-5.37%	18.56%	12.72%	9.87%	-15.55%	12.66%
Mean - 5 Year		7.81	1.29	0.80	Peer Group 75 Percentile	14.08%	-5.99%	17.61%	10.84%	8.72%	-16.11%	11.65%
Mean - 10 Year		7.07	0.99	0.52	Benchmark	14.55%	-5.02%	18.38%	11.22%	10.67%	-13.13%	12.99%
Alpha (Best Fit) - 3 Year		-	-	-								
Alpha (Standard) - 3 Year		0.29	1.31	0.29								
Alpha (Standard) - 5 Year		0.91	1.59	0.91								
Beta (Best Fit) - 3 Year		-	-	-								
Beta (Standard) - 3 Year		1.00	-0.05	0.00								
R-Squared (Best Fit) - 3 Year		-	-	-								
R-Squared (Standard) - 3 Year		98.76	-0.18	-1.24								
Sector Weightings (%)		Fund Risk/Return (3 Year)										
Basic Materials		3.78										
Consumer Cyclical		8.02										
Financial Services		13.41										
Real Estate		2.08										
Consumer Defensive		8.19										
Healthcare		14.51										
Utilities		3.75										
Communication Services		6.53										
Energy		5.66										
Industrials		13.51										
Technology		20.57										



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American Funds 2030 Trgt Date Retire R6 - RFETX

Family: American Funds

Fund Manager: Wesley K. Phoa

Fund Inception Date: 13-Jul-2009

Category: Target-Date 2030

Benchmark: S&P Target Date 2030 TR USD

Prospectus Objective: Asset Allocation

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFETX as of 9/30/2024 rated against 201 funds in its category.

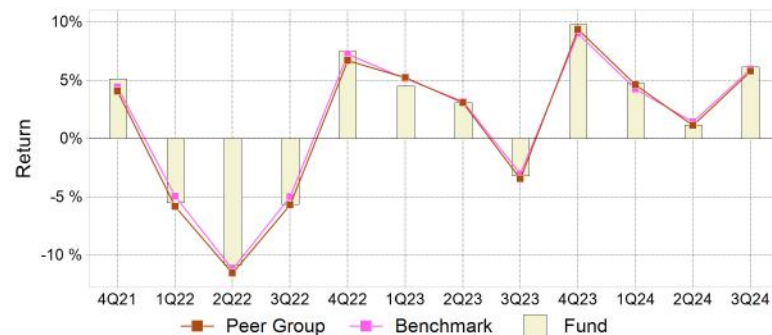
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	6.16	0.37	0.19	17 / 213
YTD	12.58	0.58	0.51	18 / 211
1 Year	23.58	0.94	1.41	8 / 210
3 Year	5.03	1.26	0.08	5 / 201
5 Year	8.87	1.29	0.77	2 / 181
10 Year	8.01	1.09	0.73	1 / 144
5 Year Up/Down	101.86 / 97.59	0.25 / -8.09		
Since Inception	10.45	-	3.61	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	14.52	-14.50	13.16	15.16	20.06	-4.16	18.40
Peer Group	14.47	-16.42	11.69	13.77	20.90	-6.47	17.19

Quarterly Returns History

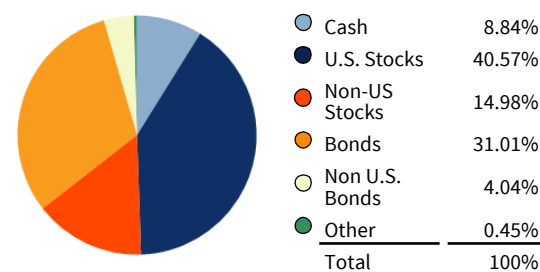


Fund Basics 30-Jun-2024	Fund	Peers
Manager Tenure (Yrs)	12.76	9.17
Track Record (Yrs)	17.58	13.33
Turnover Ratio %	2.00	18.00
Total Net Assets (\$Millions)	50,583.00	905.00
Price/Earnings	23.24	21.04
Assets in top 10 holdings %	60.08	80.47
Number of holdings	24.00	23.00

Sales Charges	Fund	Peers
Front End Load %	-	5.50
Deferred Load %	-	1.00

Expenses	Fund	Peers
12b1 Expense %	-	0.25
Gross Expense Ratio %	0.33	0.76
Net Expense Ratio %	0.33	0.60

Fund Composition 30-Jun-2024



Fixed Income Basics 30-Jun-2024	Fund	Peers
Avg. Effective Duration (Yrs)	5.63	5.63
Avg. Effective Maturity (Yrs)	-	8.07
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	73.39	49.91
AA %	2.97	4.12
A %	8.71	8.87
BBB %	8.18	12.41
BB %	3.49	3.72
B %	1.50	3.21
Below B %	0.45	0.66
Not Rated %	1.31	0.76

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.


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American Funds 2030 Trgt Date Retire R6 - RFETX

Family: American Funds

Fund Manager: Wesley K. Phoa

Fund Inception Date: 13-Jul-2009

Category: Target-Date 2030

Benchmark: S&P Target Date 2030 TR USD

Prospectus Objective: Asset Allocation

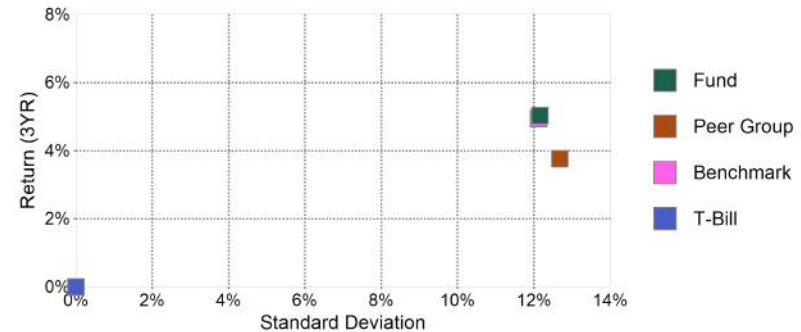
Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFETX as of 9/30/2024
rated against 201 funds in its category.

Risk Measures	Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)							
Sharpe Ratio - 1 Year	1.84	0.22	0.17	Top							
Sharpe Ratio - 3 Year	0.18	0.10	0.00	2nd							
Sharpe Ratio - 5 Year	0.57	0.12	0.07	3rd							
Sharpe Ratio - 10 Year	0.64	0.12	0.07	Bottom							
Std. Deviation - 3 Year	12.17	-0.52	0.04		2017	2018	2019	2020	2021	2022	2023
Std. Deviation - 5 Year	12.14	-0.82	-0.39	Fund	18.40%	-4.16%	20.06%	15.16%	13.16%	-14.50%	14.52%
Std. Deviation - 10 Year	10.32	-0.59	-0.20	Peer Group 25 Percentile	18.07%	-5.72%	21.88%	14.65%	12.66%	-14.76%	15.17%
Mean - 3 Year	5.03	1.26	0.08	Peer Group 50 Percentile	17.19%	-6.47%	20.90%	13.77%	11.69%	-16.42%	14.47%
Mean - 5 Year	8.87	1.29	0.77	Peer Group 75 Percentile	16.27%	-7.08%	19.97%	11.87%	10.99%	-17.05%	13.39%
Mean - 10 Year	8.01	1.09	0.73	Benchmark	16.19%	-5.99%	20.38%	11.91%	12.61%	-13.96%	14.80%
Alpha (Best Fit) - 3 Year	-	-	-								
Alpha (Standard) - 3 Year	0.08	1.22	0.08								
Alpha (Standard) - 5 Year	0.90	1.51	0.90								
Beta (Best Fit) - 3 Year	-	-	-								
Beta (Standard) - 3 Year	1.00	-0.04	0.00								
R-Squared (Best Fit) - 3 Year	-	-	-								
R-Squared (Standard) - 3 Year	99.22	0.08	-0.78								
Sector Weightings (%)				Fund Risk/Return (3 Year)							
Basic Materials	3.74			Return (3YR) 0%2%4%6%8%10%12%14% Fund Peer Group Benchmark T-Bill							
Consumer Cyclical	9.31										
Financial Services	12.47										
Real Estate	1.64										
Consumer Defensive	7.17										
Healthcare	14.57										
Utilities	2.98										
Communication Services	7.19										
Energy	4.79										
Industrials	14.25										
Technology	21.89										


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as of 09/30/2024

American Funds 2035 Trgt Date Retire R6 - RFFTX

Family: American Funds

Fund Manager: Wesley K. Phoa

Fund Inception Date: 13-Jul-2009

Category: Target-Date 2035

Benchmark: S&P Target Date 2035 TR USD

Prospectus Objective: Asset Allocation

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFFTX as of 9/30/2024 rated against 193 funds in its category.

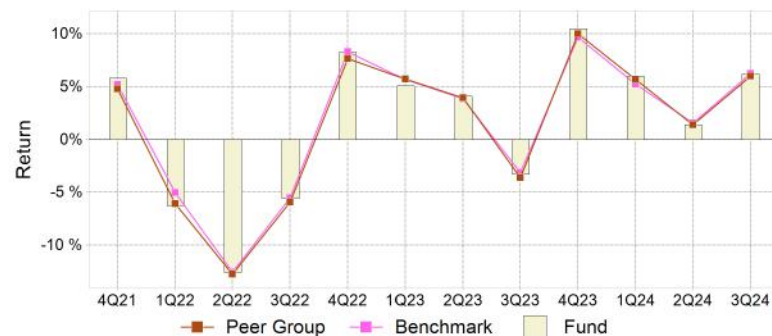
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	6.22	0.22	-0.03	24 / 207
YTD	14.16	0.59	0.59	18 / 207
1 Year	26.15	1.11	1.59	9 / 206
3 Year	5.75	1.02	-0.06	9 / 193
5 Year	10.39	1.56	1.14	1 / 175
10 Year	9.06	1.35	1.03	1 / 146
5 Year Up/Down	103.77 / 98.65	2.64 / -5.69		
Since Inception	11.18	-	3.92	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	16.90	-16.24	15.54	17.55	23.29	-5.14	21.04
Peer Group	16.40	-17.12	14.03	14.34	22.73	-7.37	18.82

Quarterly Returns History

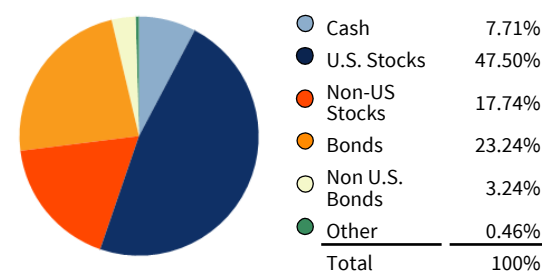


Fund Basics 30-Jun-2024	Fund	Peers
Manager Tenure (Yrs)	12.76	10.01
Track Record (Yrs)	17.58	14.42
Turnover Ratio %	1.00	19.00
Total Net Assets (\$Millions)	49,332.00	725.00
Price/Earnings	23.44	21.12
Assets in top 10 holdings %	60.38	86.35
Number of holdings	25.00	24.00

Sales Charges	Fund	Peers
Front End Load %	-	5.75
Deferred Load %	-	1.00

Expenses	Fund	Peers
12b1 Expense %	-	0.25
Gross Expense Ratio %	0.35	0.76
Net Expense Ratio %	0.35	0.60

Fund Composition 30-Jun-2024



Fixed Income Basics 30-Jun-2024	Fund	Peers
Avg. Effective Duration (Yrs)	5.63	5.74
Avg. Effective Maturity (Yrs)	-	8.53
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	74.37	49.94
AA %	2.80	4.54
A %	7.76	8.52
BBB %	7.18	12.43
BB %	4.05	4.50
B %	1.91	3.86
Below B %	0.57	1.02
Not Rated %	1.36	0.76

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.


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American Funds 2035 Trgt Date Retire R6 - RFFTX

Family: American Funds

Fund Manager: Wesley K. Phoa

Fund Inception Date: 13-Jul-2009

Category: Target-Date 2035

Benchmark: S&P Target Date 2035 TR USD

Prospectus Objective: Asset Allocation

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFFTX as of 9/30/2024
rated against 193 funds in its category.

Risk Measures	Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)							
Sharpe Ratio - 1 Year	1.91	0.21	0.17	Top							
Sharpe Ratio - 3 Year	0.23	0.08	0.00	2nd							
Sharpe Ratio - 5 Year	0.61	0.11	0.08	3rd							
Sharpe Ratio - 10 Year	0.66	0.12	0.08	Bottom							
Std. Deviation - 3 Year	13.56	-0.44	-0.02		2017	2018	2019	2020	2021	2022	2023
Std. Deviation - 5 Year	13.99	-0.56	-0.15	Fund	21.04%	-5.14%	23.29%	17.55%	15.54%	-16.24%	16.90%
Std. Deviation - 10 Year	11.85	-0.34	0.04	Peer Group 25 Percentile	19.95%	-6.63%	23.47%	16.15%	14.69%	-16.16%	17.23%
Mean - 3 Year	5.75	1.02	-0.06	Peer Group 50 Percentile	18.82%	-7.37%	22.73%	14.34%	14.03%	-17.12%	16.40%
Mean - 5 Year	10.39	1.56	1.14	Peer Group 75 Percentile	18.00%	-7.96%	21.94%	12.98%	13.40%	-17.89%	15.50%
Mean - 10 Year	9.06	1.35	1.03	Benchmark	17.78%	-6.88%	22.18%	12.79%	14.93%	-14.99%	16.63%
Alpha (Best Fit) - 3 Year	-	-	-								
Alpha (Standard) - 3 Year	-0.04	1.02	-0.04								
Alpha (Standard) - 5 Year	1.14	1.58	1.14								
Beta (Best Fit) - 3 Year	-	-	-								
Beta (Standard) - 3 Year	0.99	-0.04	-0.01								
R-Squared (Best Fit) - 3 Year	-	-	-								
R-Squared (Standard) - 3 Year	99.16	-0.02	-0.84								
Sector Weightings (%)		Fund Risk/Return (3 Year)									
Basic Materials	3.73	Fund Peer Group Benchmark T-Bill									
Consumer Cyclical	9.67										
Financial Services	12.21										
Real Estate	1.55										
Consumer Defensive	6.91										
Healthcare	14.45										
Utilities	2.76										
Communication Services	7.35										
Energy	4.57										
Industrials	14.48										
Technology	22.32										


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as of 09/30/2024

American Funds 2040 Trgt Date Retire R6 - RFGTX

Family: American Funds

Fund Manager: Wesley K. Phoa

Fund Inception Date: 27-Jul-2009

Category: Target-Date 2040

Benchmark: S&P Target Date 2040 TR USD

Prospectus Objective: Asset Allocation

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFGTX as of 9/30/2024 rated against 196 funds in its category.

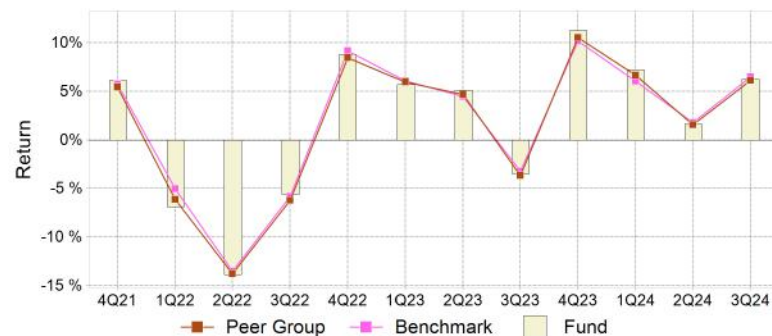
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	6.27	0.13	-0.22	38 / 207
YTD	15.82	0.84	0.91	15 / 205
1 Year	28.87	1.71	2.25	10 / 204
3 Year	6.55	0.92	-0.08	11 / 196
5 Year	11.41	1.56	1.24	3 / 176
10 Year	9.67	1.38	1.06	1 / 144
5 Year Up/Down	104.37 / 99.47	2.92 / -5.06		
Since Inception	11.07	-	3.46	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	19.33	-17.55	16.83	18.77	24.40	-5.52	21.97
Peer Group	18.12	-17.81	15.87	15.35	24.12	-7.94	20.18

Quarterly Returns History



Fund Basics 30-Jun-2024	Fund	Peers
Manager Tenure (Yrs)	12.76	9.17
Track Record (Yrs)	17.58	13.33
Turnover Ratio %	1.00	17.00
Total Net Assets (\$Millions)	45,224.00	801.00
Price/Earnings	23.82	21.02
Assets in top 10 holdings %	67.34	87.04
Number of holdings	23.00	22.00

Sales Charges	Fund	Peers
Front End Load %	-	5.50
Deferred Load %	-	1.00

Expenses	Fund	Peers
12b1 Expense %	-	0.25
Gross Expense Ratio %	0.37	0.83
Net Expense Ratio %	0.37	0.64

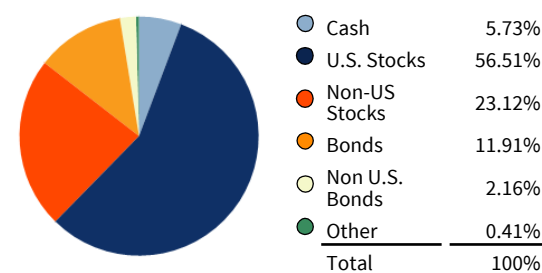
Fixed Income Basics 30-Jun-2024	Fund	Peers
Avg. Effective Duration (Yrs)	5.77	5.78
Avg. Effective Maturity (Yrs)	-	8.56
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	73.68	44.22
AA %	2.66	4.06
A %	7.69	8.40
BBB %	7.48	13.10
BB %	4.64	4.72
B %	2.20	3.67
Below B %	0.67	1.02
Not Rated %	0.98	0.68

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.

Fund Composition 30-Jun-2024


UBS

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American Funds 2040 Trgt Date Retire R6 - RFGTX

Family: American Funds
Fund Manager: Wesley K. Phoa
Fund Inception Date: 27-Jul-2009

Category: Target-Date 2040
Benchmark: S&P Target Date 2040 TR USD
Prospectus Objective: Asset Allocation
Home Page: www.americanfunds.com
Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFGTX as of 9/30/2024
rated against 196 funds in its category.

Risk Measures	Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)							
Sharpe Ratio - 1 Year	1.96	0.20	0.17	Top							
Sharpe Ratio - 3 Year	0.27	0.06	-0.01	2nd							
Sharpe Ratio - 5 Year	0.64	0.11	0.08	3rd							
Sharpe Ratio - 10 Year	0.66	0.11	0.07	Bottom							
Std. Deviation - 3 Year	14.85	-0.17	0.18		2017	2018	2019	2020	2021	2022	2023
Std. Deviation - 5 Year	15.24	-0.51	-0.04	Fund	21.97%	-5.52%	24.40%	18.77%	16.83%	-17.55%	19.33%
Std. Deviation - 10 Year	12.75	-0.39	0.03	Peer Group 25 Percentile	21.01%	-7.28%	24.66%	17.15%	16.42%	-16.66%	18.98%
Mean - 3 Year	6.55	0.92	-0.08	Peer Group 50 Percentile	20.18%	-7.94%	24.12%	15.35%	15.87%	-17.81%	18.12%
Mean - 5 Year	11.41	1.56	1.24	Peer Group 75 Percentile	19.10%	-8.63%	23.18%	13.51%	15.00%	-18.41%	17.21%
Mean - 10 Year	9.67	1.38	1.06	Benchmark	18.87%	-7.41%	23.37%	13.37%	16.55%	-15.56%	18.16%
Alpha (Best Fit) - 3 Year	-	-	-								
Alpha (Standard) - 3 Year	-0.07	0.91	-0.07								
Alpha (Standard) - 5 Year	1.18	1.57	1.18								
Beta (Best Fit) - 3 Year	-	-	-								
Beta (Standard) - 3 Year	1.01	-0.01	0.01								
R-Squared (Best Fit) - 3 Year	-	-	-								
R-Squared (Standard) - 3 Year	98.92	-0.19	-1.08								
Sector Weightings (%)		Fund Risk/Return (3 Year)									
Basic Materials	3.73										



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as of 09/30/2024

American Funds 2045 Trgt Date Retire R6 - RFHTX

Family: American Funds

Fund Manager: Wesley K. Phoa

Fund Inception Date: 13-Jul-2009

Category: Target-Date 2045

Benchmark: S&P Target Date 2045 TR USD

Prospectus Objective: Asset Allocation

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFHTX as of 9/30/2024 rated against 193 funds in its category.

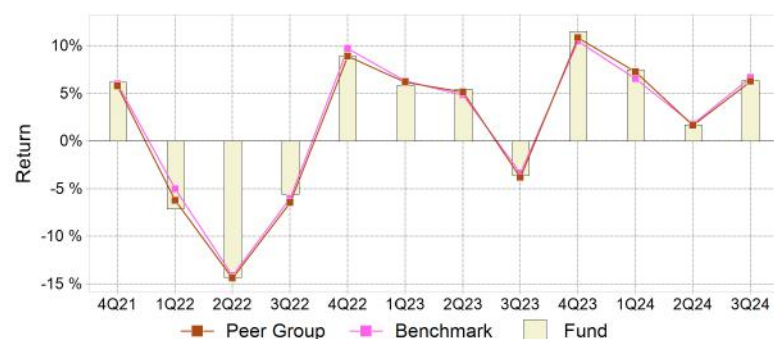
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	6.38	0.10	-0.31	41 / 202
YTD	16.31	0.34	0.55	28 / 202
1 Year	29.73	1.10	1.78	14 / 201
3 Year	6.69	0.48	-0.48	22 / 193
5 Year	11.66	1.15	0.91	5 / 175
10 Year	9.86	1.21	0.89	1 / 146
5 Year Up/Down	101.62 / 97.83	-0.73 / -6.26		
Since Inception	11.75	-	3.95	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	20.15	-18.18	17.18	19.21	24.68	-5.58	22.44
Peer Group	19.29	-18.18	16.81	15.78	24.78	-8.40	20.76

Quarterly Returns History

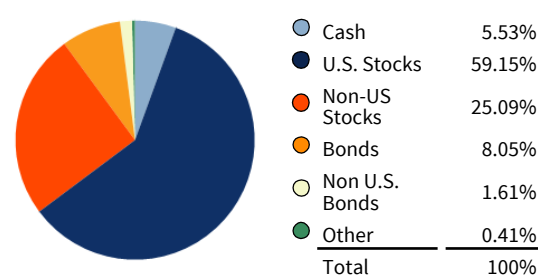


Fund Basics 30-Jun-2024	Fund	Peers
Manager Tenure (Yrs)	12.76	10.21
Track Record (Yrs)	17.58	14.42
Turnover Ratio %	2.00	17.50
Total Net Assets (\$Millions)	38,081.00	685.00
Price/Earnings	23.91	21.02
Assets in top 10 holdings %	70.95	87.12
Number of holdings	20.00	20.00

Sales Charges	Fund	Peers
Front End Load %	-	5.63
Deferred Load %	-	1.00

Expenses	Fund	Peers
12b1 Expense %	-	0.25
Gross Expense Ratio %	0.37	0.84
Net Expense Ratio %	0.37	0.63

Fund Composition 30-Jun-2024



Fixed Income Basics 30-Jun-2024	Fund	Peers
Avg. Effective Duration (Yrs)	6.06	5.92
Avg. Effective Maturity (Yrs)	-	8.57
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	79.42	49.86
AA %	1.79	4.31
A %	6.33	8.41
BBB %	6.56	12.90
BB %	3.62	5.51
B %	1.39	5.40
Below B %	0.44	1.25
Not Rated %	0.45	0.72

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.


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American Funds 2045 Trgt Date Retire R6 - RFHTX

Family: American Funds
Fund Manager: Wesley K. Phoa
Fund Inception Date: 13-Jul-2009

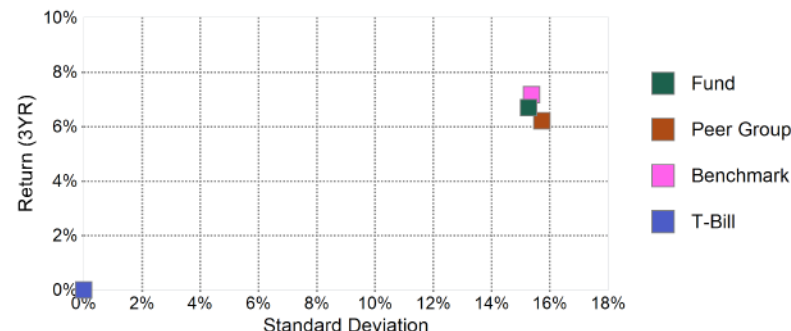
Category: Target-Date 2045
Benchmark: S&P Target Date 2045 TR USD
Prospectus Objective: Asset Allocation
Home Page: www.americanfunds.com
Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFHTX as of 9/30/2024
rated against 193 funds in its category.

Risk Measures	Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)							
Sharpe Ratio - 1 Year	1.97	0.17	0.15	Top							
Sharpe Ratio - 3 Year	0.28	0.04	-0.03	2nd							
Sharpe Ratio - 5 Year	0.64	0.09	0.06	3rd							
Sharpe Ratio - 10 Year	0.66	0.10	0.07	Bottom							
Std. Deviation - 3 Year	15.28	-0.45	-0.09		2017	2018	2019	2020	2021	2022	2023
Std. Deviation - 5 Year	15.62	-0.99	-0.37	Fund	22.44%	-5.58%	24.68%	19.21%	17.18%	-18.18%	20.15%
Std. Deviation - 10 Year	13.05	-0.77	-0.23	Peer Group 25 Percentile	21.44%	-7.56%	25.59%	17.49%	17.59%	-17.17%	19.96%
Mean - 3 Year	6.69	0.48	-0.48	Peer Group 50 Percentile	20.76%	-8.40%	24.78%	15.78%	16.81%	-18.18%	19.29%
Mean - 5 Year	11.66	1.15	0.91	Peer Group 75 Percentile	19.91%	-9.05%	24.17%	13.81%	15.95%	-18.78%	18.39%
Mean - 10 Year	9.86	1.21	0.89	Benchmark	19.56%	-7.74%	24.02%	13.66%	17.51%	-15.84%	19.14%
Alpha (Best Fit) - 3 Year	-	-	-								
Alpha (Standard) - 3 Year	-0.39	0.57	-0.39								
Alpha (Standard) - 5 Year	1.03	1.36	1.03								
Beta (Best Fit) - 3 Year	-	-	-								
Beta (Standard) - 3 Year	0.99	-0.03	-0.01								
R-Squared (Best Fit) - 3 Year	-	-	-								
R-Squared (Standard) - 3 Year	98.71	-0.36	-1.29								
Sector Weightings (%)				Fund Risk/Return (3 Year)							
Basic Materials	3.86										
Consumer Cyclical	10.30										
Financial Services	12.08										
Real Estate	1.35										
Consumer Defensive	6.36										
Healthcare	14.55										
Utilities	2.26										
Communication Services	7.44										
Energy	4.18										
Industrials	14.48										
Technology	23.14										

Series	Risk (3YR)	Return (3YR)
Fund	15.2%	6.8%
Peer Group	15.8%	6.3%
Benchmark	15.5%	7.2%
T-Bill	0.5%	0.2%



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as of 09/30/2024

American Funds 2050 Trgt Date Retire R6 - RFITX

Family: American Funds

Fund Manager: Wesley K. Phoa

Fund Inception Date: 13-Jul-2009

Category: Target-Date 2050

Benchmark: S&P Target Date 2050 TR USD

Prospectus Objective: Asset Allocation

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFITX as of 9/30/2024 rated against 194 funds in its category.

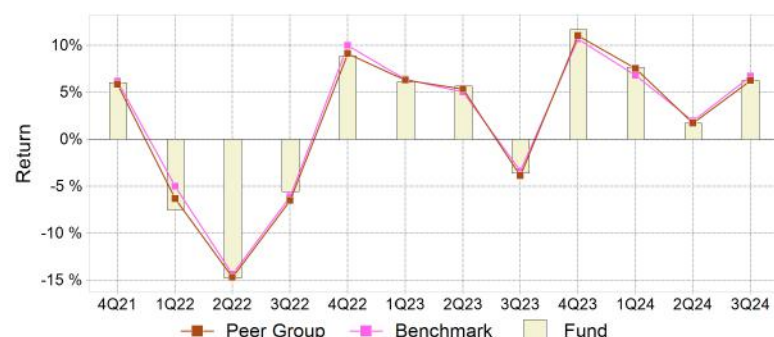
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	6.28	0.01	-0.46	49 / 204
YTD	16.43	0.10	0.18	43 / 203
1 Year	30.07	0.96	1.39	19 / 202
3 Year	6.56	0.21	-0.89	40 / 194
5 Year	11.71	0.97	0.65	3 / 176
10 Year	9.91	1.11	0.73	1 / 144
5 Year Up/Down	100.64 / 97.83	-0.97 / -5.80		
Since Inception	11.79	-	2.39	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	20.83	-18.89	17.27	19.42	25.04	-5.61	22.61
Peer Group	19.92	-18.30	17.10	15.95	25.00	-8.53	21.02

Quarterly Returns History

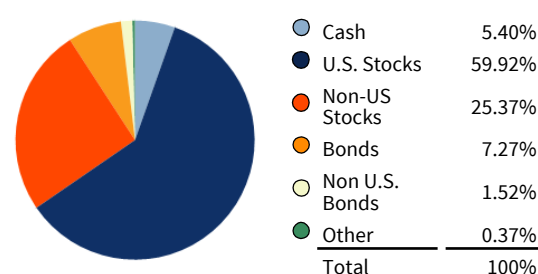


Fund Basics 30-Jun-2024	Fund	Peers
Manager Tenure (Yrs)	12.76	10.01
Track Record (Yrs)	17.58	13.33
Turnover Ratio %	1.00	17.00
Total Net Assets (\$Millions)	34,210.00	576.00
Price/Earnings	24.10	21.02
Assets in top 10 holdings %	73.82	88.39
Number of holdings	20.00	20.00

Sales Charges	Fund	Peers
Front End Load %	-	5.50
Deferred Load %	-	1.00

Expenses	Fund	Peers
12b1 Expense %	-	0.25
Gross Expense Ratio %	0.38	0.87
Net Expense Ratio %	0.38	0.64

Fund Composition 30-Jun-2024



Fixed Income Basics 30-Jun-2024	Fund	Peers
Avg. Effective Duration (Yrs)	6.11	5.92
Avg. Effective Maturity (Yrs)	-	8.54
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	81.58	49.84
AA %	1.70	4.02
A %	5.93	8.93
BBB %	6.11	13.04
BB %	2.93	5.43
B %	1.02	1.75
Below B %	0.32	0.71
Not Rated %	0.41	0.73

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.



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American Funds 2050 Trgt Date Retire R6 - RFITX

Family: American Funds

Fund Manager: Wesley K. Phoa

Fund Inception Date: 13-Jul-2009

Category: Target-Date 2050

Benchmark: S&P Target Date 2050 TR USD

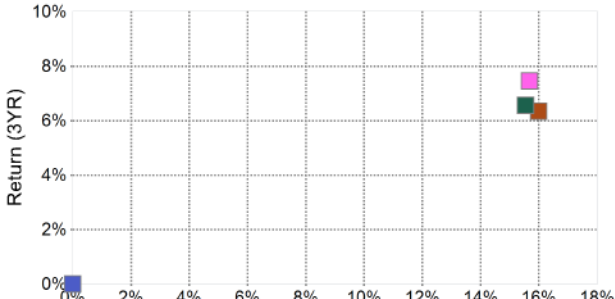
Prospectus Objective: Asset Allocation

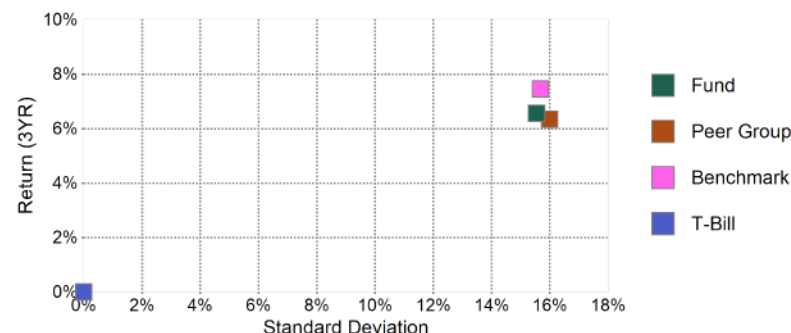
Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFITX as of 9/30/2024
rated against 194 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)								
Sharpe Ratio - 1 Year		1.96	0.15	0.12	Top								
Sharpe Ratio - 3 Year		0.27	0.02	-0.05	2nd								
Sharpe Ratio - 5 Year		0.63	0.07	0.05	3rd								
Sharpe Ratio - 10 Year		0.66	0.10	0.06	Bottom								
Std. Deviation - 3 Year		15.55	-0.45	-0.14		2017	2018	2019	2020	2021	2022	2023	
Std. Deviation - 5 Year		15.89	-0.88	-0.42	Fund	22.61%	-5.61%	25.04%	19.42%	17.27%	-18.89%	20.83%	
Std. Deviation - 10 Year		13.24	-0.67	-0.36	Peer Group 25 Percentile	21.64%	-7.67%	25.88%	17.67%	18.04%	-17.38%	20.54%	
Mean - 3 Year		6.56	0.21	-0.89	Peer Group 50 Percentile	21.02%	-8.53%	25.00%	15.95%	17.10%	-18.30%	19.92%	
Mean - 5 Year		11.71	0.97	0.65	Peer Group 75 Percentile	20.20%	-9.23%	24.37%	13.92%	16.34%	-19.06%	18.80%	
Mean - 10 Year		9.91	1.11	0.73	Benchmark	20.18%	-7.94%	24.35%	13.86%	17.99%	-15.97%	19.58%	
Alpha (Best Fit) - 3 Year		-	-	-									
Alpha (Standard) - 3 Year		-0.76	0.27	-0.76									
Alpha (Standard) - 5 Year		0.84	1.21	0.84									
Beta (Best Fit) - 3 Year		-	-	-									
Beta (Standard) - 3 Year		0.98	-0.03	-0.02									
R-Squared (Best Fit) - 3 Year		-	-	-									
R-Squared (Standard) - 3 Year		98.49	-0.55	-1.51									
Sector Weightings (%)		Fund Risk/Return (3 Year)											
Basic Materials		3.90											
Consumer Cyclical		10.50											
Financial Services		11.94											
Real Estate		1.25											
Consumer Defensive		6.13											
Healthcare		14.61											
Utilities		2.09											
Communication Services		7.52											
Energy		3.97											
Industrials		14.68											
Technology		23.41											



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American Funds 2055 Trgt Date Retire R6 - RFKTX

Family: American Funds

Fund Manager: Wesley K. Phoa

Fund Inception Date: 01-Feb-2010

Category: Target-Date 2055

Benchmark: S&P Target Date 2055 TR USD

Prospectus Objective: Asset Allocation

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFKTX as of 9/30/2024 rated against 193 funds in its category.

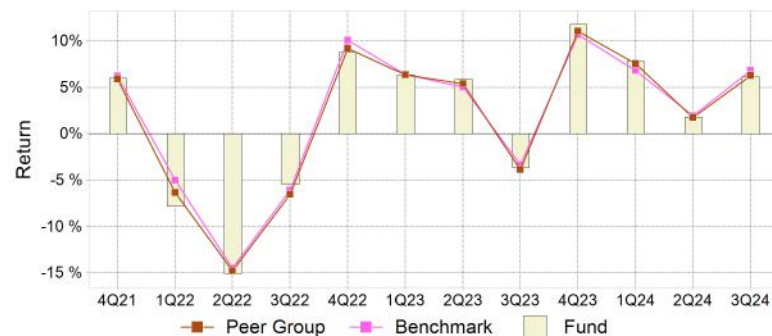
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	6.16	-0.11	-0.66	58 / 202
YTD	16.58	0.19	0.23	38 / 202
1 Year	30.36	1.10	1.54	16 / 201
3 Year	6.49	0.09	-1.01	44 / 193
5 Year	11.67	0.84	0.53	7 / 175
10 Year	9.89	1.03	0.63	1 / 140
5 Year Up/Down	100.43 / 98.12	-0.84 / -5.22		
Since Inception	10.82	-	0.30	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	21.40	-19.50	17.28	19.39	25.09	-5.65	22.63
Peer Group	20.01	-18.33	17.27	16.04	25.06	-8.60	21.24

Quarterly Returns History

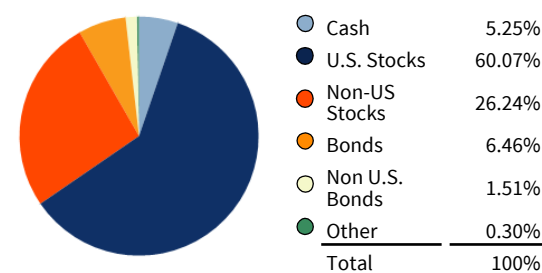


Fund Basics 30-Jun-2024	Fund	Peers
Manager Tenure (Yrs)	12.76	9.42
Track Record (Yrs)	14.58	11.83
Turnover Ratio %	1.00	16.00
Total Net Assets (\$Millions)	24,014.00	428.00
Price/Earnings	24.30	21.02
Assets in top 10 holdings %	76.58	89.61
Number of holdings	18.00	18.00

Sales Charges	Fund	Peers
Front End Load %	-	5.63
Deferred Load %	-	1.00

Expenses	Fund	Peers
12b1 Expense %	-	0.25
Gross Expense Ratio %	0.38	0.89
Net Expense Ratio %	0.38	0.64

Fund Composition 30-Jun-2024



Fixed Income Basics 30-Jun-2024	Fund	Peers
Avg. Effective Duration (Yrs)	6.16	5.92
Avg. Effective Maturity (Yrs)	-	8.53
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	83.49	51.74
AA %	1.62	4.02
A %	5.60	9.05
BBB %	5.75	12.98
BB %	2.31	5.43
B %	0.66	1.75
Below B %	0.21	0.78
Not Rated %	0.36	0.73

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.


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American Funds 2055 Trgt Date Retire R6 - RFKTX

Family: American Funds

Fund Manager: Wesley K. Phoa

Fund Inception Date: 01-Feb-2010

Category: Target-Date 2055

Benchmark: S&P Target Date 2055 TR USD

Prospectus Objective: Asset Allocation

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFKTX as of 9/30/2024
rated against 193 funds in its category.

Risk Measures	Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)							
Sharpe Ratio - 1 Year	1.94	0.13	0.10	Top							
Sharpe Ratio - 3 Year	0.26	0.01	-0.06	2nd							
Sharpe Ratio - 5 Year	0.63	0.07	0.04	3rd							
Sharpe Ratio - 10 Year	0.65	0.09	0.05	Bottom							
Std. Deviation - 3 Year	15.79	-0.25	0.04		2017	2018	2019	2020	2021	2022	2023
Std. Deviation - 5 Year	16.03	-0.78	-0.41	Fund	22.63%	-5.65%	25.09%	19.39%	17.28%	-19.50%	21.40%
Std. Deviation - 10 Year	13.33	-0.61	-0.39	Peer Group 25 Percentile	21.83%	-7.70%	26.00%	17.81%	18.23%	-17.54%	20.78%
Mean - 3 Year	6.49	0.09	-1.01	Peer Group 50 Percentile	21.24%	-8.60%	25.06%	16.04%	17.27%	-18.33%	20.01%
Mean - 5 Year	11.67	0.84	0.53	Peer Group 75 Percentile	20.43%	-9.39%	24.51%	14.17%	16.48%	-19.11%	18.88%
Mean - 10 Year	9.89	1.03	0.63	Benchmark	20.48%	-7.97%	24.48%	13.86%	18.19%	-15.97%	19.62%
Alpha (Best Fit) - 3 Year	-	-	-								
Alpha (Standard) - 3 Year	-0.90	0.13	-0.90								
Alpha (Standard) - 5 Year	0.74	1.10	0.74								
Beta (Best Fit) - 3 Year	-	-	-								
Beta (Standard) - 3 Year	0.99	-0.02	-0.01								
R-Squared (Best Fit) - 3 Year	-	-	-								
R-Squared (Standard) - 3 Year	98.29	-0.71	-1.71								
Sector Weightings (%)		Fund Risk/Return (3 Year)									
Basic Materials	3.99	Return (3YR) 0%2%4%6%8%10%12%14%16%18% 0%2%4%6%8%10% Fund Peer Group Benchmark T-Bill									
Consumer Cyclical	10.81										
Financial Services	11.77										
Real Estate	1.12										
Consumer Defensive	5.87										
Healthcare	14.58										
Utilities	1.86										
Communication Services	7.65										
Energy	3.73										
Industrials	14.77										
Technology	23.85										



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American Funds 2060 Trgt Date Retire R6 - RFUTX

Family: American Funds

Fund Manager: Wesley K. Phoa

Fund Inception Date: 27-Mar-2015

Category: Target-Date 2060

Benchmark: S&P Target Date 2060+ TR USD

Prospectus Objective: Asset Allocation

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 4.00

Overall Morningstar Rating for RFUTX as of 9/30/2024 rated against 192 funds in its category.

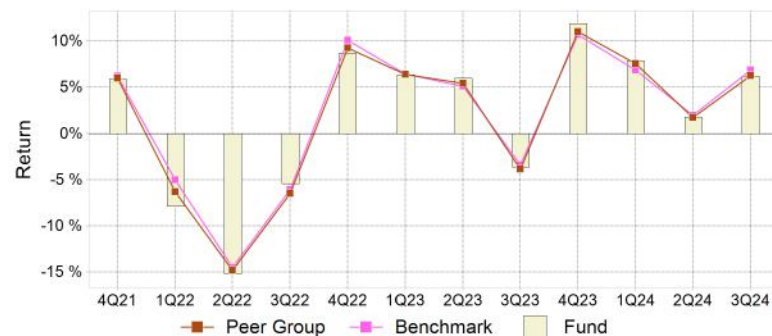
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	6.20	-0.07	-0.67	55 / 201
YTD	16.60	0.21	0.18	37 / 201
1 Year	30.49	1.24	1.59	15 / 200
3 Year	6.45	0.08	-1.08	47 / 192
5 Year	11.65	0.80	0.47	11 / 167
10 Year	-	-	-	- / 42
5 Year Up/Down	100.22 / 98.12	-1.34 / -5.30		
Since Inception	9.91	-	-0.57	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	21.61	-19.66	17.19	19.44	25.01	-5.64	22.49
Peer Group	20.06	-18.37	17.41	16.15	25.17	-8.65	21.27

Quarterly Returns History

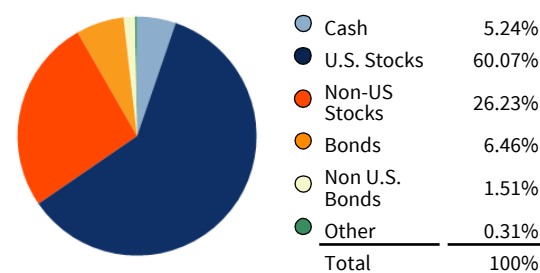


Fund Basics 30-Jun-2024	Fund	Peers
Manager Tenure (Yrs)	9.52	7.82
Track Record (Yrs)	9.50	8.50
Turnover Ratio %	1.00	14.00
Total Net Assets (\$Millions)	14,428.00	254.00
Price/Earnings	24.30	21.01
Assets in top 10 holdings %	79.23	88.74
Number of holdings	17.00	18.00

Sales Charges	Fund	Peers
Front End Load %	-	5.63
Deferred Load %	-	1.00

Expenses	Fund	Peers
12b1 Expense %	-	0.25
Gross Expense Ratio %	0.39	0.93
Net Expense Ratio %	0.39	0.64

Fund Composition 30-Jun-2024



Fixed Income Basics 30-Jun-2024	Fund	Peers
Avg. Effective Duration (Yrs)	6.16	5.92
Avg. Effective Maturity (Yrs)	-	8.18
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	83.45	51.50
AA %	1.63	4.02
A %	5.61	8.40
BBB %	5.76	12.93
BB %	2.32	5.53
B %	0.66	2.36
Below B %	0.21	0.86
Not Rated %	0.36	0.80

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.


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American Funds 2060 Trgt Date Retire R6 - RFUTX

Family: American Funds

Fund Manager: Wesley K. Phoa

Fund Inception Date: 27-Mar-2015

Category: Target-Date 2060

Benchmark: S&P Target Date 2060+ TR USD

Prospectus Objective: Asset Allocation

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 4.00

Overall Morningstar Rating for RFUTX as of 9/30/2024
rated against 192 funds in its category.

Risk Measures	Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)							
Sharpe Ratio - 1 Year	1.94	0.13	0.10	Top							
Sharpe Ratio - 3 Year	0.26	0.01	-0.06	2nd							
Sharpe Ratio - 5 Year	0.63	0.07	0.04	3rd							
Sharpe Ratio - 10 Year	-	-	-	Bottom							
Std. Deviation - 3 Year	15.82	-0.33	0.03		2017	2018	2019	2020	2021	2022	2023
Std. Deviation - 5 Year	16.04	-0.83	-0.43	Fund	22.49%	-5.64%	25.01%	19.44%	17.19%	-19.66%	21.61%
Std. Deviation - 10 Year	-	-	-	Peer Group 25 Percentile	21.80%	-7.87%	26.20%	17.83%	18.44%	-17.58%	20.87%
Mean - 3 Year	6.45	0.08	-1.08	Peer Group 50 Percentile	21.27%	-8.65%	25.17%	16.15%	17.41%	-18.37%	20.06%
Mean - 5 Year	11.65	0.80	0.47	Peer Group 75 Percentile	20.58%	-9.54%	24.62%	14.34%	16.52%	-19.16%	18.83%
Mean - 10 Year	-	-	-	Benchmark	20.75%	-7.95%	24.73%	13.99%	18.05%	-16.01%	19.74%
Alpha (Best Fit) - 3 Year	-	-	-								
Alpha (Standard) - 3 Year	-0.96	0.13	-0.96								
Alpha (Standard) - 5 Year	0.70	1.11	0.70								
Beta (Best Fit) - 3 Year	-	-	-								
Beta (Standard) - 3 Year	0.99	-0.02	-0.01								
R-Squared (Best Fit) - 3 Year	-	-	-								
R-Squared (Standard) - 3 Year	98.24	-0.77	-1.76								
Sector Weightings (%)		Fund Risk/Return (3 Year)									
Basic Materials	4.01	Fund Peer Group Benchmark T-Bill									
Consumer Cyclical	10.98										
Financial Services	11.73										
Real Estate	1.11										
Consumer Defensive	5.77										
Healthcare	14.51										
Utilities	1.78										
Communication Services	7.74										
Energy	3.67										
Industrials	14.80										
Technology	23.89										


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American Funds 2065 Trgt Date Retire R6 - RFVTX

Family: American Funds

Fund Manager: Michelle J. Black

Fund Inception Date: 27-Mar-2020

Category: Target-Date 2065+

Benchmark: S&P Target Date 2060+ TR USD

Prospectus Objective: Asset Allocation

Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 3.00

Overall Morningstar Rating for RFVTX as of 9/30/2024 rated against 150 funds in its category.

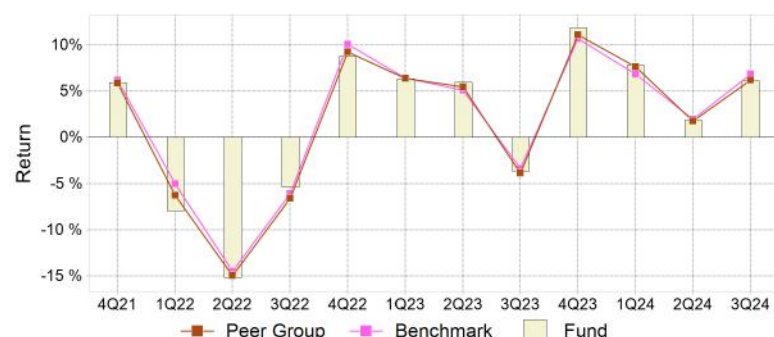
Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	6.15	-0.05	-0.72	55 / 241
YTD	16.60	0.16	0.18	40 / 197
1 Year	30.43	1.23	1.53	18 / 196
3 Year	6.46	0.07	-1.07	47 / 150
5 Year	-	-	-	- / 32
10 Year	-	-	-	- / 0
5 Year Up/Down	- / -	- / -	-	-
Since Inception	16.15	-	5.67	-

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns

	2023	2022	2021	2020	2019	2018	2017
Fund	21.55	-19.64	17.32	-	-	-	-
Peer Group	20.27	-18.55	17.32	16.49	26.91	-9.80	-

Quarterly Returns History

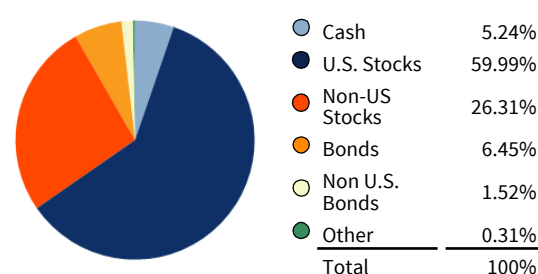


Fund Basics 30-Jun-2024	Fund	Peers
Manager Tenure (Yrs)	4.75	3.75
Track Record (Yrs)	4.50	3.75
Turnover Ratio %	1.00	18.00
Total Net Assets (\$Millions)	3,631.00	24.00
Price/Earnings	24.28	21.00
Assets in top 10 holdings %	79.27	88.09
Number of holdings	17.00	17.00

Sales Charges	Fund	Peers
Front End Load %	-	5.75
Deferred Load %	-	1.00

Expenses	Fund	Peers
12b1 Expense %	-	0.25
Gross Expense Ratio %	0.39	1.01
Net Expense Ratio %	0.39	0.63

Fund Composition 30-Jun-2024



Fixed Income Basics 30-Jun-2024	Fund	Peers
Avg. Effective Duration (Yrs)	6.16	6.15
Avg. Effective Maturity (Yrs)	-	8.69
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	83.42	80.11
AA %	1.63	2.10
A %	5.61	6.64
BBB %	5.77	6.72
BB %	2.33	2.43
B %	0.67	1.30
Below B %	0.21	0.21
Not Rated %	0.36	0.56

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.


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American Funds 2065 Trgt Date Retire R6 - RFVTX

Family: American Funds

Fund Manager: Michelle J. Black

Fund Inception Date: 27-Mar-2020

Category: Target-Date 2065+

Benchmark: S&P Target Date 2060+ TR USD

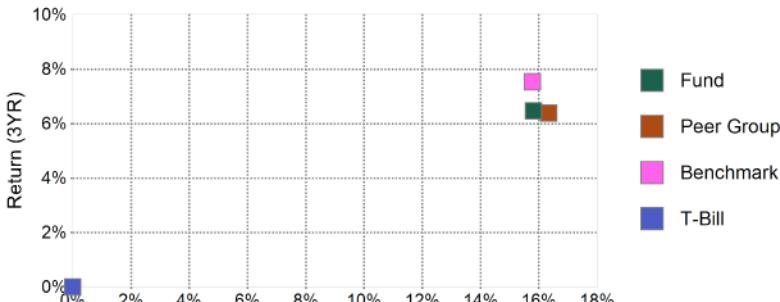
Prospectus Objective: Asset Allocation

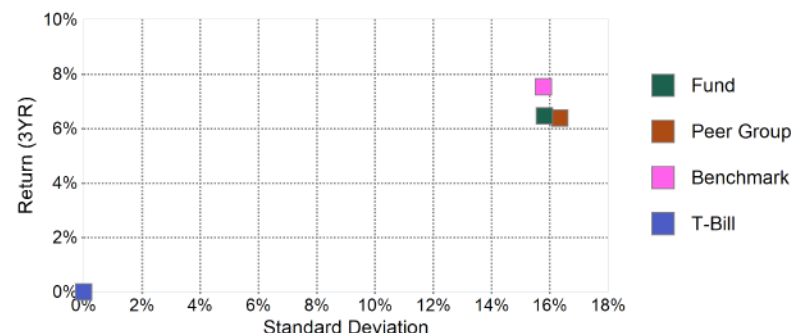
Home Page: www.americanfunds.com

Phone: 800-421-4225

Morningstar Overall Rating: 3.00

Overall Morningstar Rating for RFVTX as of 9/30/2024
rated against 150 funds in its category.

Risk Measures	Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)							
Sharpe Ratio - 1 Year	1.94	0.13	0.10	Top							
Sharpe Ratio - 3 Year	0.26	0.01	-0.06	2nd							
Sharpe Ratio - 5 Year	-	-	-	3rd							
Sharpe Ratio - 10 Year	-	-	-	Bottom							
Std. Deviation - 3 Year	15.82	-0.53	0.03		2017	2018	2019	2020	2021	2022	2023
Std. Deviation - 5 Year	-	-	-	Fund	-%	-%	-%	-%	17.32%	-19.64%	21.55%
Std. Deviation - 10 Year	-	-	-	Peer Group 25 Percentile	-%	-9.39%	27.08%	17.44%	18.52%	-17.88%	21.05%
Mean - 3 Year	6.46	0.07	-1.07	Peer Group 50 Percentile	-%	-9.80%	26.91%	16.49%	17.32%	-18.55%	20.27%
Mean - 5 Year	-	-	-	Peer Group 75 Percentile	-%	-10.20%	26.63%	15.13%	16.21%	-19.25%	18.79%
Mean - 10 Year	-	-	-	Benchmark	20.75%	-7.95%	24.73%	13.99%	18.05%	-16.01%	19.74%
Alpha (Best Fit) - 3 Year	-	-	-								
Alpha (Standard) - 3 Year	-0.96	0.09	-0.96								
Alpha (Standard) - 5 Year	-	-	-								
Beta (Best Fit) - 3 Year	-	-	-								
Beta (Standard) - 3 Year	0.99	-0.03	-0.01								
R-Squared (Best Fit) - 3 Year	-	-	-								
R-Squared (Standard) - 3 Year	98.24	-0.78	-1.76								
Sector Weightings (%)		Fund Risk/Return (3 Year)									
Basic Materials	4.02										
Consumer Cyclical	10.98										
Financial Services	11.74										
Real Estate	1.11										
Consumer Defensive	5.78										
Healthcare	14.50										
Utilities	1.79										
Communication Services	7.73										
Energy	3.67										
Industrials	14.81										
Technology	23.87										


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Cobb County

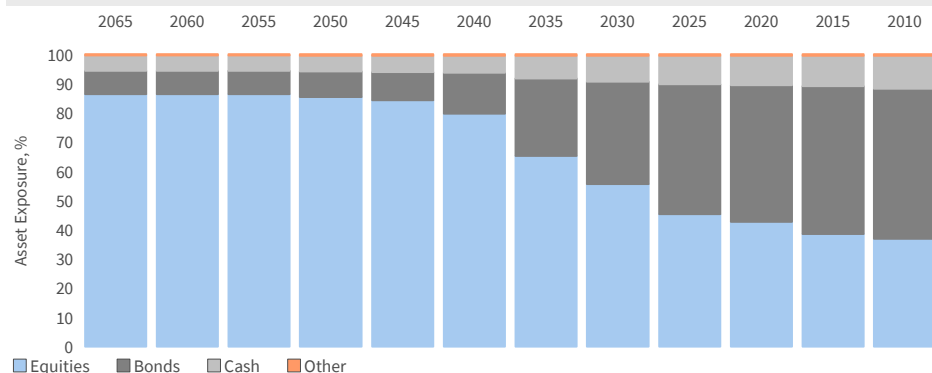
Target Date Fund Analysis

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American Funds Trgt Date Retire R6 Target Date Fund Family

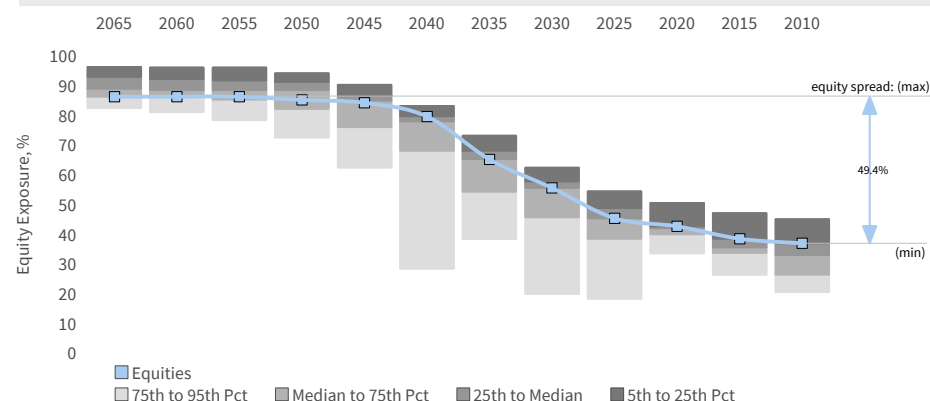
TARGET DATE ASSET ALLOCATION

as of: 06/30/2024



EQUITY GLIDE PATH VS. PEER GROUP

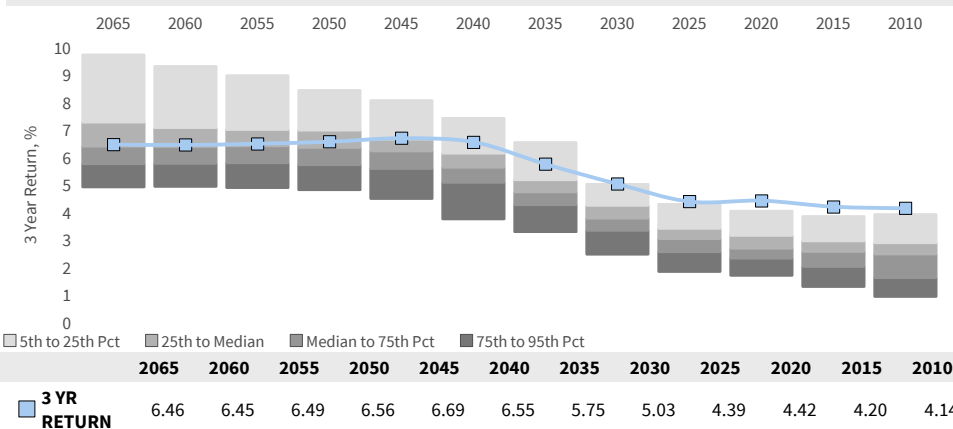
as of: 06/30/2024



ASSET ALLOCATION %	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010
Equities	86.30%	86.30%	86.31%	85.29%	84.24%	79.63%	65.24%	55.55%	45.35%	42.64%	38.47%	36.91%
Bonds	7.97%	7.97%	7.97%	8.79%	9.66%	14.07%	26.48%	35.05%	44.40%	46.80%	50.57%	51.31%
Cash	5.24%	5.24%	5.25%	5.40%	5.53%	5.73%	7.71%	8.84%	9.70%	9.98%	10.42%	11.28%
Other	0.49%	0.49%	0.47%	0.53%	0.57%	0.56%	0.58%	0.56%	0.56%	0.57%	0.55%	0.50%

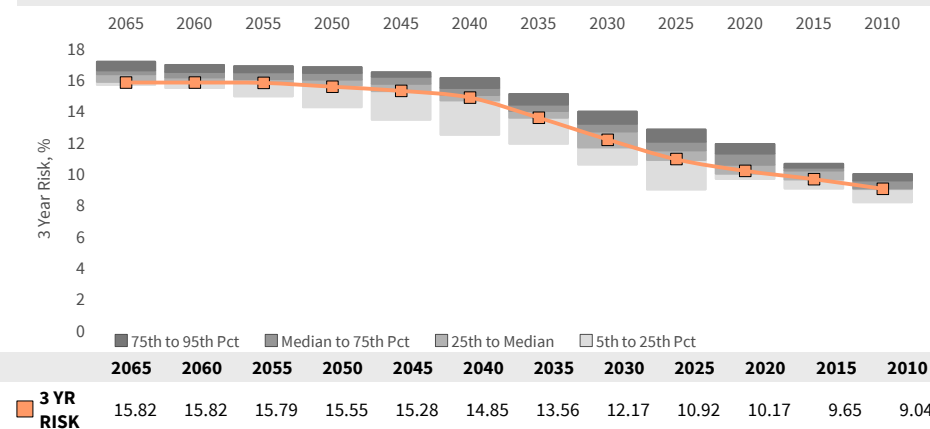
3 YR ANNUALIZED RETURN VS. PEER GROUP

as of: 09/30/2024



3YR RISK (STANDARD DEVIATION) VS. PEER GROUP

as of: 09/30/2024



Target Date Funds - Target date funds with the target date being the approximate date when investors plan to start withdrawing their money. Generally, the asset allocation of each fund will change on an annual basis with the asset allocation becoming more conservative as the fund nears the target retirement date. The principal value of the fund(s) is not guaranteed at any time, including at the target date. Each date used above corresponds with the fund families target date option of the same name. Please see the Definitions and Disclosures section for more information about *Peer Rank*.

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Insights for fiduciaries

Government spending bill makes extensive changes to 401(k) plan rules

The government spending bill signed into law on Friday, December 20, 2019, includes a set of provisions referred to as the SECURE Act, that make a number of changes to the rules governing 401(k) plans. The goal of these provisions is to help increase retirement savings and ease compliance with certain retirement plan rules.

Parts of the legislation will be implemented over time, while others take effect immediately. Most notably for businesses considering starting a retirement plan, the small business tax credit was dramatically expanded which will help offset the start-up costs for new retirement plans, and it is effective for plans beginning in January 2020.

The SECURE Act includes nearly thirty changes to retirement savings law. We highlight the key changes impacting employer-sponsored retirement plans below.

- Requires plans to cover certain longer-service, part-time employees who can currently be excluded from coverage (generally effective in 2021)
- Requires benefit statements to include estimates of the monthly income an employee could receive in retirement if the account balance were converted into an annuity (effective after the Department of Labor issues rules, model disclosures and specified assumptions)
- Provides a fiduciary safe harbor for selecting a lifetime income investment provider, such as an annuity provider, as (or as part of) a plan investment option (effective immediately)
- Requires portability of lifetime income investments held in plans, such as annuities, to other plans, to IRAs, or as a plan distribution (generally effective in 2020)
- Increases starting date for minimum required distributions from plans from age 70½ to age 72 (generally effective in 2020 for individuals who had not already reached age 70½)
- Caps the amount of time over which beneficiaries may take plan distributions (5 years or 10 years, depending on the beneficiary; exceptions for certain beneficiaries such as spouses and minor children) (generally effective in 2020)
- For safe harbor 401(k) plans, provides greater flexibility to elect into the minimum non-elective contribution safe harbor (generally effective 2020)
- Increases the small business plan startup tax credit that will now be capped at \$250 times the number of non-highly compensated employees eligible to participate in the plan up to a \$5,000 annual maximum (the credit is still limited to 50% of the start-up costs); it also adds a small business automatic enrollment tax credit of \$500 per year (generally effective 2020)
- Creates a new form of plan—“Pooled Employer Plan”—that would permit greater flexibility to combine unrelated businesses into a single retirement plan for purposes of achieving economies of scale and other efficiencies. The development of Pooled Employer Plans will depend in part on the issuance of guidance on specific aspects of the new rules from both the Treasury and the DOL, and in part on whether firms decide to sponsor these types of plans. (effective 2021)

As with any significant legislation, it will take some time for the retirement industry to implement certain changes, so you should expect additional information in the coming weeks and months.

For additional information about the SECURE ACT or any other questions, please contact your UBS Financial Advisor.



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2020-225948
Exp.: 01/31/2021, IS2000018



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- 03 What caused Late Boomers' low level of retirement wealth and what can be done about it?

Protection for retirement plans

In recent years, there has been a wave of lawsuits targeting defined contribution retirement plans. It is a good practice for sponsors of 401(k) and other defined contribution retirement plans to review their fidelity bonds and fiduciary liability policies on an annual basis to ensure that they are sufficiently protected.

Pension law (ERISA) requires most employer-sponsored retirement plans to buy a fidelity bond to protect the plan against losses caused by the fraudulent or dishonest acts of plan officials.¹ Fiduciary liability insurance, while not required by ERISA, protects the plan and the fiduciaries against claims for losses resulting from the act or the omissions of a fiduciary.

Who requires fidelity bonding?

Plan fiduciaries and others who "handle" plan funds and other property ("plan officials") must be bonded unless they are covered under a regulatory exemption. The general criteria for determining "handling" include:

- Physical contact with cash, checks or similar property
- Ability to transfer funds to the plan
- Ability to negotiate plan property
- Authority to sign checks and direct disbursements
- Decision-making responsibility for activities that require bonding²

"Funds or other property" generally refers to all funds or property that the plan uses or may use to pay benefits to participants and beneficiaries. That includes land, buildings, mortgages and stock in closely held corporations.

The parties to fidelity bonds. In a typical arrangement, the insurer provides the bond, and the plan is named as the insured party. The bond covers those handling funds or other property of the plan. The plan can make a claim on the bond if a plan official causes a covered loss to the plan because of fraud or dishonesty.

Plans must ensure bond coverage is adequate. Each individual generally must be bonded in an amount that is at least 10% of the amount of the plan funds that they handled in the prior year. The minimum amount is \$1,000 and the maximum is \$500,000 per person, or \$1,000,000 for a plan that holds employer securities.³ However, there is no specific penalty if coverage falls below the minimum amount. Retirement plans that are under-bonded on a consistent basis may attract the attention of the federal Department of Labor and may end up under investigation.

It makes sense that fiduciaries review the adequacy of bonding amounts at the beginning of each plan year as plan asset totals change. Since the fidelity bond is purchased to protect the plan, plan assets may be used to pay for the bond.

In situations where more than one plan is named on a bond, the above requirements apply on a per-plan basis. Additionally, the bond's limit of liability has to be sufficient to insure each plan as if it were separately bonded. Moreover, the amount of coverage available to one plan cannot be reduced by the payment of a loss sustained by another plan.⁴

Plans must review other key features of fidelity bonds. Plan sponsors and fiduciaries must review the features of fidelity bonds they are considering acquiring. For example, they must ensure that the fidelity bond does not have deductibles or other features that transfer risk to the plan. However, a deductible may apply to any coverage purchased in excess of ERISA requirements. In addition, the bond must offer a one-year discovery period after the bond is terminated in order to enable the discovery of losses that occurred during the bond's term.

Fiduciary liability insurance

Many plans maintain fiduciary liability insurance, even though it is not mandated by ERISA. They do so in recognition that plan liability may arise out of breaches of the numerous fiduciary duties involved in administering a plan. Fiduciary liability insurance protects the plan and fiduciaries against losses that result from acts or omissions, such as failures to observe the many and complex regulations, statutes, court rulings and other forms of guidance that define a fiduciary's obligations to the plan.



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Who is covered? Fiduciary liability insurance provides coverage to:

- Administrators
- Trustees
- Committees
- Plan sponsors

Coverage of fiduciaries can often include past and present fiduciaries and all plan and trust fund employees who are fiduciaries. The policy may also offer the plan protection for a situation in which a fiduciary was aware of a breach by a co-fiduciary and failed to remedy the breach. In addition, a plan may carry a fiduciary liability insurance policy to protect itself from losses that arise from a fiduciary's involvement in a prohibited transaction.

How much coverage is required? When deciding on how much coverage to buy for the plan, a fiduciary must buy the most suitable coverage at a cost no greater than necessary. Moreover, the insurance company that the fiduciary buys the policy from must have a satisfactory rating from a reputable rating agency.

Please consult with your legal counsel to determine your individual requirements.

How participants view their defined contribution plans

Many employers who offer a retirement plan to their employees believe that offering a comprehensive menu of attractive employee benefits is essential if their business is to entice and retain highly productive employees. They are also committed to working with their employees to help them lay the groundwork for a financially secure retirement.⁵

It's important for employers to benchmark the success of their retirement plans and gauge their employees' satisfaction with this important benefit. Access to specific information related to plan participation, contribution and satisfaction rates allows plan sponsors to refine their retirement plans to better meet the needs of their employees and ensure they align with their own corporate goals.

The Investment Company Institute's (ICI) most recent annual *American Views on Defined Contribution Plan Saving*⁶ report summarizes results from a nationally representative survey of Americans aged 18 or older. The research indicates that most US households have favorable impressions of 401(k) and similar retirement plans and appreciate the key features of these plans.

General overview

The research found that a majority (71%) of Americans held a "very" or "somewhat favorable" impression of Defined Contribution (DC) plans. Appreciation was highest among the households that owned employer-sponsored plans and individual retirement accounts, with 82% holding very or somewhat favorable opinions. However, 43% of households that were not account owners had a positive impression as well.

Deep dive into the data

For the most part, surveyed defined contribution account owners were extremely positive about the key features of their retirement plans, agreeing on the following points:

- Employer-sponsored retirement plans helped them "think about the long term, not just my current needs" (88%).
- Payroll deduction "makes it easier for me to save" (87%).
- The availability of a retirement plan at work can help facilitate saving. A common thread was, "I probably wouldn't save for retirement if I didn't have a retirement plan at work" (50%).
- The plan's tax treatment is a big incentive to contribute (82%). Agreement was high among all age and income groups, though it tended to increase with age and household income.
- Saving from each paycheck "makes me less worried about the short-term performance of my investments" (80%).
- The plan offers a good investment lineup (84%).
- Having a choice in and control of account investments is very important (93%).



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Americans reject changing key features of retirement plans

The survey asked respondents for their views on changing several key defined contribution account features. Their responses demonstrate overwhelming support for the status quo and a deep opposition to making substantial changes to how defined contribution plans operate.

- A very large majority (87%) disagreed that the government should take away the tax advantages of DC accounts.
- Almost nine out of 10 (89%) of all surveyed individuals opposed reducing the individual contribution limits.
- Any plans to reduce the amount that employers can contribute to DC plan accounts were also opposed by an overwhelming majority (89%) of surveyed individuals.
- Eighty-eight percent of all surveyed individuals disagreed with the idea of not allowing individuals to make investment decisions in their DC accounts, while 80% opposed a proposal for the government to “invest all retirement accounts in an investment option selected by a government-appointed board of experts.”

Plan accounts can help workers meet retirement goals

Employers who sponsor a 401(k) salary deferral plan should take heart from the survey results that illustrate participants’ high level of confidence that their retirement plans help them meet their retirement goals. Twenty-eight percent of defined contribution and IRA-owning individuals were “very confident,” while 53% were “somewhat” confident that retirement plan accounts can help them meet their retirement goals.

The survey’s authors conclude that their data shows that the majority of Americans appreciate their retirement plans and express a strong preference for preserving retirement account features and flexibility. They further note that this is especially true for individuals who need their plans the most as a way to supplement their Social Security benefits in retirement.

Do you need to re-engineer your retirement plan?

If your own research indicates that lower-than-hoped-for numbers of employees participate in your retirement plan and contribution levels for those that do contribute are lower than the average for your peers, you may need to revisit your plan to determine what improvements might be helpful. Think about employing the following strategies:

- **Leverage automatic features.** Would retooling your plan’s design increase participation and contribution levels? For example, with automatic enrollment, contributions can be set at a default deferral rate that automatically increases on a specified schedule, unless the employee opts out or elects a different contribution percentage.
- **Communicate regularly.** Your communications with employees should not be a one-time or occasional effort. Take advantage of multiple platforms—e-mails, videos, messaging apps, direct mail, seminars and face-to-face meetings—to reinforce the importance and value of starting retirement planning as soon as possible and to outline the steps that will help bring your employees closer to financial security. Be sure to deliver relevant content. Communications should focus on the issues that generally matter to participants while recognizing that they are individuals with their own personal experiences and goals.

Your UBS Advisor can help you examine the steps that may be helpful in driving participation, contribution and engagement levels among your business’s employees.

What caused Late Boomers’ low level of retirement wealth and what can be done about it?

A recent paper from the Center for Retirement Research at Boston College⁷ found that “Late Boomers” have surprisingly low levels of retirement wealth compared to earlier cohorts. The paper’s authors note that a decline in some wealth components for Late Boomers was to be expected because of the rise in the full retirement age for Social Security and the shift from pension plans to defined contribution plans that occurred over the last 40 years; however, increasing 401(k)/Individual Retirement Account (IRA) balances were, according to the authors, anticipated to offset the gap. That did not occur; retirement wealth fell across all but the top quintile.

The paper attempts to answer why this occurred, using data from the *Health and Retirement Study*⁸ (HRS), a biennial longitudinal survey of American households over age 50. The paper also used the *Survey of Consumer Finances*⁹ (SCF) for insights on the experiences of Late Boomers over their work life. What follows is a top-down view of the study’s results.



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Wealth components of Late Boomers

Researchers used data from the HRS to calculate retirement wealth from three sources: Social Security, defined benefit plans and defined contribution plans. The researchers analyzed five birth cohorts and focused on households ages 51 to 56 in order to compare the most recent cohort to the others.

The researchers employed the following assumptions:

1. Social Security wealth is equal to the expected present value of benefits at age 62, discounted back to the age at the survey year and prorated (based on earnings) to facilitate a comparison to other wealth that the household has accumulated by ages 51 to 56.
2. Projected income from defined benefit plans is also transformed into a wealth measure, like Social Security, by calculating the expected present value of lifetime benefits.
3. Defined contribution wealth is self-reported account balances.

In running the numbers, the researchers found that the results for the middle wealth quintile show that the pattern of wealth accumulation across all cohorts is fairly as much as expected. The pattern shows defined benefit wealth declining, Social Security wealth remaining roughly constant and defined contribution wealth growing. However, the pattern changes radically with Late Boomers in that defined contribution wealth falls sharply.

The study's authors additionally analyzed the Survey of Consumer Finances.³ This triennial survey is conducted every three years and asks households about their income, wealth and pension coverage, to try to construct "synthetic" cohorts to illustrate a picture of employment, earnings and wealth trends across lifecycles. Leveraging this survey, the paper's authors determined that until their late 40s, Late Boomers held more 401(k)/IRA assets than earlier cohorts at the same age; however, after that, growth stopped and their average assets fell.

Evaluating the results

The authors examined a variety of factors that might explain this decline in Late Boomer retirement wealth, but ultimately determined that the primary cause for the decline was due to what they described as "the weakened link between work and wealth." They noted that the Late Boomers were in their 40s during the Great Recession, and this major downturn in the economy impacted them greatly.

Analysis of the SCF illustrated that the employment rate of Late Boomers during the Great Recession dropped sharply, and the percentage of those working did not rebound fully as the economy recovered. Moreover, their average earnings were flat and then declined continuously afterward. The result? They entered their 50s with earnings well below those of Early and Mid-Boomers. Concurrent with their lower earnings, Late Boomers also saw their 401(k) plan balances flatten during the Great Recession and thereafter remain largely below those of other Boomers.

The study concludes that work for these middle quintiles of Late Boomers did not produce the boost to wealth accumulation that it had for prior generations.

Helping Late Boomers

What role can plan sponsors play to help Late Boomers boost their overall retirement savings? Plan sponsors could consider targeted outreach and communication efforts to encourage this cohort to increase the amount they contribute to their plans. Plan sponsors could also incorporate longevity statistics to drive home the point that contemporary retirements often last for several decades and that the biggest concern that retirees have is that they will outlive their retirement savings.

Additionally, plan sponsors may want to review their match to determine if it is in line with what's offered by businesses of a similar size within their industry. If the match is not aligned with other businesses, it may be worthwhile looking into whether it is economically feasible to boost the match. Likewise, plan sponsors should review the investment options offered by the plan to determine if expanding the investment menu would drive increased participation and contribution rates.

Encouraging employees from every age group to become more actively involved in retirement planning and to take the steps that will move them closer to retirement security is an ongoing process. For input and assistance with your participant messaging and engagement efforts, consult your UBS Advisor.



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¹ ERISA Section 412(a).

² Labor Regulation Section 2580.412-6.

³ ERISA Section 412(a).

⁴ Labor Regulation Section 2580.412-16.

Source: dol.gov/sites/dolgov/files/ebsa/about-ebsa/our-activities/resource-center/publications/protect-your-employee-benefit-plan-with-an-erisa-fidelity-bond.pdf.

⁵ The Pew Charitable Trusts, "Employer Barriers to and Motivations for Offering Retirement Benefits," 2017, pewtrusts.org/en/research-and-analysis/issue-briefs/2017/06/employer-barriers-to-and-motivations-for-offering-retirement-benefits.

⁶ ICI Research Report, February 2024. *American Views on Defined Contribution Plan Saving, 2023*. Sarah Holden, Daniel Schrass, Michael Bogdan and Jason Seligman. Available at ici.org/files/2024/24-ppr-dc-plan-saving.pdf.

⁷ Source: Anqi Chen, Alicia H. Munnell and Laura D. Quinby. 2023. "Why Do Late Boomers Have So Little Wealth and How Will Early Gen-Xers Fare?" Working Paper 2023-6. Chestnut Hill, MA: Center for Retirement Research at Boston College.

⁸ *Health and Retirement Study*. 1992-2022. "RAND HRS Longitudinal File 2018 V2 Public Use Dataset." Produced and distributed by the University of Michigan with funding from the National Institute on Aging, Ann Arbor, MI.

⁹ US Board of Governors of the Federal Reserve System. *Survey of Consumer Finances*, 1989 – 2009. Washington, DC.

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CALCULATION DEFINITIONS

Assets in top 10 holdings % - aggregate assets, expressed as a percentage, of the fund's top 10 portfolio holdings. This figure is meant to be a measure of portfolio risk. The higher the percentage, the more concentrated the fund is in a few companies or issues, and the more the fund is susceptible to the market fluctuations in these few holdings. This figure is calculated by MPI, using the most recent portfolio available for the fund and it currently counts cash as a holding.

12b-1 Fee - is a fee used to pay for a mutual fund's annual distribution costs. It is often used as a commission to brokers for selling the fund. The amount, which can be as high as 75 basis points for commissions and 25 basis points for service fees, is taken from a fund's returns.

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.

Asset Composition - reflects funds composition or weighting in various asset classes. "Other" includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks.

Average Style - reflects the average style exposure over the period specified. See Returns-Based Style Analysis/Exposure Chart definition for additional information.

Batting Average - measures the frequency with which a manager outperforms a selected Market Index. It is computed by dividing the number of positive excess returns by the total number of excess returns during the period.

Benchmark R-Squared (R^2)/PEER - 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 fund, can be explained by, or are associated with the values of another variable, such as the fund's asset category benchmark. It is helpful in assessing how likely it is that Alpha and Beta are statistically significant. The R^2 values range from 0.0 to 1.0. An investment with an R^2 of 1.0 is perfectly correlated with its asset category benchmark whereas an investment with an R^2 of 0.0 will behave independently of its benchmark. An R^2 of 0.95, for example, implies that 95% of the fluctuations in a portfolio are explained by fluctuations in the market, as represented by the fund's asset category benchmark. Within the report, a fund's Benchmark R-squared is also compared to the Benchmark R-squared of all funds in the same peer group and assigned a percentile rank. The value for the Median Peer's Benchmark R-squared is also provided for comparison purposes.

Beta - measures an investment'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 investment's returns and those of its asset category benchmark. Beta is computed by regressing the investment's excess returns over the risk-free rate (cash proxy) against the excess returns of the fund's asset category 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. A Beta higher than 1.0 indicates that the fund is more volatile than the market.

Correlation (R) - 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. An R of less than 0.3 is often considered low Correlation.

Deferred Load - is a back-end sales charge that is imposed when an investor sells an investment. This is most often charged as a percentage of assets as a commission to brokers for selling the fund.

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 fund's benchmark.

Down Market (Mkt) Capture Ratio - measures an investment's performance in down markets relative to its asset category benchmark. A down market is one in which the benchmark'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 its assigned benchmark declined.

Down Market Average Return - represents average monthly returns over a stated time period in which the market(benchmark) earned a negative return.

Downside Risk (Semi Standard Deviation, Semi StdDev, or Downside Deviation) - identifies volatility solely 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.

Excess - denotes that a statistic is being measured relative to the fund's asset category benchmark. The data set analyzed consists of the periodic differences between the investment's measure and that of its asset category benchmark.

Expense Ratio - is often referred to as the **Net Expense Ratio** and is obtained from a fund's prospectus. Prospectus-report expense ratios reflect the actual fees charged during a particular fiscal year. For Variable Annuity (Sub-Accounts) and the Group Annuity (IGSA) funds, the Net Expense field on the report will reflect Total Net Expense, as these products also include an insurance expense. The prospectus expense ratio for a fund-of-funds consists of only a wrap or sponsor fee. The expense ratio is 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 a fund. Portfolio transaction fees, or brokerage costs, as well as initial or deferred sales charges are not



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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 can also opt to waive all or a portion of the expenses that make up their overall expense ratio, referred to as **Exp Waiver** in this report. If you have any questions about the expense waiver type, amount, or expiration date, contact your UBS Consultant. The **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.

Front Load - is an initial, or front-end, sales charge and a one-time deduction from an investment made into the fund. The sales charge serves as a commission for the broker who sells the fund.

Fund Composition- is a breakdown of a fund's portfolio holdings, as of the date listed, into general investment classes. Cash encompasses both actual cash and cash equivalents (fixed-income securities with a maturity of one year or less) held by the portfolio plus receivables minus payables. Stocks include only the portfolio's common stocks. Bonds include everything from government notes to high-yield corporate bonds. "Other" includes preferred stocks (equity securities that pay dividends at a specific rate) as well as convertible bonds and convertible preferreds, which are corporate securities that are exchangeable for a set amount of another form of security (usually common shares) at a pre-stated price. "Other" also denotes all those not-so-neatly categorized securities, such as warrants and options. When listed, U.S. stocks reflects the portion of the portfolio invested in domestic companies, while Non-U.S. Stocks reflects the portion of the portfolio invested in Non-U.S. companies.

Fund Inception Date - is the date on which the fund began its operations.

GIC Sectors – jointly developed by Standard & Poor's and MSCI/Barra, the Global Industry Classification Standard (GICS®) was established as a global standard for categorizing companies into sectors and industries. The GICS methodology has been commonly accepted as an industry analysis framework for investment research, portfolio management and asset allocation. GICS was designed to classify a company according to its principal business activity. To make this determination, Standard & Poor's and MSCI/Barra use revenues as a key measure of a company's business activity. Earnings and market perception; however, are also important factors in the classification process and are taken into account during the review process.

Information Ratio - a measure of value added by an investment manager. It is the ratio of (annualized) excess return above its asset category benchmark to (annualized) Tracking Error. Excess return is calculated by linking the difference of the manager's return for each period minus its asset category benchmark's return for each period, then annualizing the result.

Manager Tenure - the number of years that the current manager has been the portfolio manager of the fund. For funds with more than one manager, average tenure is shown. If there is only one manager and he/she has been at the fund for less than six months (and there is biographical information available), a dash will appear.

Max Drawdown - is the maximum loss incurred by a portfolio during a specified time period. It is used to measure the 'worst case scenario' of investing in a portfolio at the worst possible time.

Morningstar Rating™ - is calculated for funds with at least a three year history. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a fund's monthly performance, placing more emphasis on downward variations and rewarding consistent performance. The top 10% of funds in each 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 Ratings for funds in each category are derived from a weighted average of the performance figures associated with three-, and if available, five- and 10-year Morningstar Rating metrics. 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.

Morningstar Sector Weighting - illustrates the percentage of a fund's equity assets invested in each of the 11 major industry sub-classifications, grouped by three "super sectors": Cyclical, Sensitive and Defensive. The broad sectors are broken down further as follows: Cyclical includes Basic Materials, Consumer Cyclical, Financial Services, and Real Estate; Sensitive includes Communication Services, Energy, Industrials, and Technology; and Defensive includes Healthcare, Consumer Defensive, and Utilities.

Morningstar Style Box- is a nine-square grid that provides a graphical representation of the "investment style" of stocks and mutual funds. For stocks and stock funds, it classifies securities according to market capitalization (the vertical axis) and growth and value factors (the horizontal axis). Fixed income funds are classified according to credit quality (the vertical axis) and sensitivity to changes in interest rates (the horizontal axis).

MPT Statistics (Modern Portfolio Theory) – measures a fund's relative risk, based on a least-squares regression of a fund's excess returns on the excess returns of a market index. Alpha, Beta, and R-squared are examples of modern-portfolio-theory measures; standard deviation is not considered an MPT statistic because it is not generated through the same formula or mathematical analysis as are the other three statistics.

Net Assets - is recorded in millions of dollars and represents a fund's total asset base, net of fees and expenses.

Peer Group – a universe of funds similar in portfolio characteristics and capitalizations as defined by Morningstar Inc. Throughout the report the funds are grouped into peer groups based on their respective asset class category as assigned by Morningstar or UBS.


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Peer Group Ranks: Each fund is ranked within a universe of funds similar in portfolio characteristics and capitalizations as defined by Morningstar Inc., with 1 being the highest percentile and 100 being the lowest, relative to peers. The funds are grouped into quartile "bands": the first band represents the 5th-25th percentile; the second, the 25th-50th; the 3rd, the 50th -75th; and the final, the 75th-95th. The top and bottom 5% of funds are removed from the peer bands for reporting purposes only (but not for calculation purposes) as they are considered outliers. When ranked based on performance, the best performing funds appear in the top quartile. When ranked based on expense ratio and risk, the funds with the lowest relative (fees and risk) values would appear in the top quartile. If a fund has a rank of 95, it can be seen as if there are 95% other funds that are superior to it for the specified analytic.

Peer Expense Rank, Expense Rank, or Expense Ratio Rank – is assigned to each fund by MPI based on the fund's net prospectus expense ratio. Funds with the lowest expenses appear in the top quartile.

Peer Median Net Expense Ratio – is the median expense ratio of the peer group category (See Expense Ratio and Peer Group).

Peer Group Median - is intended to depict the midpoint value within a peer group. The 50th percentile indicates the middle number in a sorted list of peer results. The median is sometimes used as opposed to the mean when there are outliers in the sequence that might skew the average of the values as the median of a sequence can be less affected by outliers than the mean.

Peer Return Rank – is owned and calculated by MPI. The peer return rank is designed to provide a rank of performance returns for each fund among its peer group universe and is based on 3-month, year-to-date, one, three, five, seven, and ten year annualized periods. MPI ranks each fund based on average annual total returns assuming reinvestment of dividends and capital gains, distributions, at net asset value and the deduction of all fund expenses. Peer return ranks do not include the effect of fund sales charges. Ranking results would have been different and can have been less favorable had sales charges been included. A high rank does not necessarily imply that a fund achieved positive results for the period. Excess returns do not necessarily imply positive results. Past performance is no guarantee of future results. The quartile rank graphs illustrate which quartile the fund is in relative to the assigned peer group (see Peer Group Ranks). The best performing funds are found in the top quartile.

MPI uses a fund's Morningstar categories (or an alternate category established by UBS) to calculate the ranks. The number of funds in each category is provided with the associated funds.

Peer Risk Rank or Risk Rank or Standard Deviation Rank - The Risk Rank calculation is based on three, five, and ten year annualized periods. With 1 being the highest percentile and 100 being the lowest, compared to peers. The risk rank uses standard deviation for each fund for the share class identified among its peer group universe. The quartile rank graphs illustrate which quartile the fund is in relative to the assigned peer group (see Peer Group Ranks). Funds with the lowest risk appear in the top quartile.

Peer Risk Adj (Sharpe Ratio) Rank - Is based on a 3 month, year-to-date, one, three, five, seven, and ten year annualized periods. The peer return rank is designed to provide a rank of Sharpe Ratio for each fund among its peer group universe (see Peer Group Rank). 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.

Peer Target Date Asset Allocation Rank or Target Date Allocation Rank (Equity Glide Path versus Peer Group) – The target date asset allocation table ranks the asset breakdown of the Target Date Fund family relative to its peers. The asset breakdown is based on a "look through" of the underlying holdings which are classified by Morningstar and grouped into four general investment groups: Cash, Equities (US and Non-US Equities), Bonds (US and Non-US Bonds) and Other. Each column in the table ranks a specified target date fund in the series against its corresponding Morningstar Target Date peer group. For example, the "2040" column compares the Target Date 2040 fund against the Morningstar Target Date 2040 peer group. The quartile rank graphs illustrate which quartile the fund is in relative to the assigned peer group (see Peer Group Ranks). The fund with the highest holdings-based exposure to equities will be in the top quartile.

Performance - expressed in percentage terms, Morningstar's calculation of total return is determined each month by taking the change in monthly net asset value (NAV), reinvesting all income and capital-gains distributions earned over that month, and then dividing this total by the starting NAV. Reinvestments are made using the actual reinvestment NAV, and daily payoffs are reinvested monthly. Unless otherwise noted, Morningstar does not adjust total returns for sales charges (such as front-end loads, deferred loads and redemption fees), preferring to give a clearer picture of a fund's performance. The total returns do account for management, administrative, 12b-1 fees and other costs taken out of fund assets. Total returns for periods longer than one year are expressed in terms of compounded average annual returns (also known as geometric total returns), affording a more meaningful picture of fund performance than non-annualized figures.

Price/Earnings Ratio (P/E Ratio) - is a stock's current price divided by the company's trailing 12-month earnings per share from continuous operations. A fund's price/earnings ratio can act as a gauge of the fund's investment strategy in the current market climate, and whether it has a value or growth orientation. A high P/E usually indicates that the market will pay more to obtain the company's earnings because it believes in the firm's ability to increase its earnings. Companies in industries enjoying a surge of popularity (e.g.: telecommunications, biotechnology) tend to have high P/E ratios, reflecting a growth orientation. (P/Es can also be artificially inflated if a company has very weak trailing earnings, and thus a very small number in this equation's denominator.) A low P/E indicates the market has less confidence that the company's earnings will increase; however, a fund manager or an individual with a 'value investing' approach could believe such stocks have an overlooked or undervalued potential for appreciation. More staid industries, such as utilities and mining, tend to have low P/E ratios, reflecting a value orientation.

Prospectus Benchmark - an investment's primary benchmark as stated in the prospectus. If a primary benchmark is not given by a fund, this field will be blank.

Prospectus Objective - indicates a particular fund's investment goals, based on the wording in a fund's prospectus.

Returns-Based Style Analysis/Exposure - was developed by Nobel Laureate William F. Sharpe as an alternative method for determining a fund's style without requiring any information about the individual securities held in the investment's portfolio. The underlying principle behind this analysis is that the style of a fund can be determined by analyzing the total return pattern of the fund's portfolio. For example, if a fund's return pattern were identical to the return pattern of a Small Cap Growth benchmark, the fund could be viewed as a Small Cap Growth fund. Based on a mathematical formula which considers the performance benchmarks that are most highly correlated with the total returns of the portfolio, returns-based style analysis will be used to assess a fund's true investment style. Returns-based style analysis compares an investment's returns to the returns of certain indices. These comparisons imply which index each investment is most similar to, and which characteristics that investment is most likely to exhibit. The "Manager Style (36-Month Moving Windows, Computed Monthly)" chart includes points of varying sizes, where a smaller point represents an earlier moving window. The Russell Generic Corners include the following indices: Russell 1000 Value, the Russell 1000 Growth, Russell 2000 Value, and Russell 2000 Value. The style analysis included in this report can assist in evaluating the actual style and performance of various fund choices in the plan.

Rolling time periods - Rolling time periods are typically used to measure consistency of data for a given criterion; the start date and end date both move forward together. The length of time periods are set and sometimes referred to as the window (for example – trailing 3 months, 12 months, or 5 years) and the increment of measurement is also set (for example – monthly, quarterly, or annually). Each datapoint can be plotted on a graph or all data points can be averaged to create a final average value. A fund's final average value can also be ranked relative to it's respective category's final average value.

As an illustration, for a 5-year rolling performance average, a rolling period is calculated each month. Each data point then calculates an Annualized return (Geometric Average) for the previous 60 months. There is a current maximum of 96 data points which are averaged at the end to create an end value. The funds are then ranked based on this final average value.

Sectors – are depicted using one of two methodologies: the Morningstar methodology or the GICS methodology. "Sectors" generally refer to Morningstar Sectors, unless otherwise indicated

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.

Since Inception (SI) - reflects the fund's performance from the inception date for the share class (see fund inception date). See Pre-Inception Returns for additional information.

Sortino Ratio - a variation of the Sharpe ratio that differentiates harmful volatility from general volatility by replacing standard deviation with downside deviation. The Sortino ratio is the excess return over the risk-free rate divided by downside semi-variance, and so it measures the return of an investment per unit of "bad" risk. (Volatility caused by negative returns is considered bad or undesirable by an investor, while volatility caused by positive returns is good or acceptable.) In this way, the Sortino ratio can help an investor assess risk.

Standard Deviation (StdDev) - measures 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.

Standard Deviation Rank – See Peer Risk Rank

Style Exposures - are the output from Returns Based Style Analysis. Expressed in percentage terms, they show a fund's exposure (weight) to a specific set of factors.

Style Drift - measures the variability of style over time. A Style Drift of 0 indicates perfect style consistency and is equivalent to buying and rebalancing the indices that constitute the style basis each period. Style drift is designed to measure style inconsistency. A style drift of 100 indicates very little if any consistency in style.

Style Map - plots the historical exposures of a fund's style across appropriate dimensions, such as growth vs. value for equity funds and credit quality for fixed income funds.

Style R-Squared - resembles the Benchmark R-Squared Calculation except that market volatility is defined by the style portfolio and not the benchmark. The style portfolio is a custom benchmark created by weighting a set of indices through returns-based style analysis that reflect the style of the fund.

Target Date Asset Allocation – shows the asset breakdown of the Target Date Fund family based on a "look through" of the underlying holdings which are classified by Morningstar and groups them into four general investment groups: Cash, Equities (US and Non-US Equities), Bonds (US and Non-US Bonds) and Other. Other includes preferred stocks (equity securities that pay dividends at a specific rate) as well as convertible bonds and convertible preferred, which are corporate securities that are exchangeable for a set amount of another form of security (usually common shares) at a pre-stated price. Other also denotes all those not-so-neatly categorized securities, such as warrants and options. The Target Asset Allocation breakdown is calculated using rescaled long-only holdings.

Top Ten Holdings - a fund's ten largest individual security holdings and their percentage share of the total fund's market value.

Tracking Error (Excess Standard Deviation)/PEER - a measure of how closely an investment's returns track the returns of the Market Index. It is the annualized Standard Deviation of the differences between the investment's and the associated index's returns. If an investment tracks its index closely, then Tracking Error will be low. If an investment tracks its index perfectly, then Tracking Error will be zero. Within the report, a fund's Tracking Error to the benchmark is also compared to the Tracking Error of all funds in the same peer group and assigned a percentile rank. The value for the Median Peer's Tracking Error is also provided for comparison purposes.



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Turnover Ratio - a measure of the fund's trading activity, which is computed by taking the lesser of purchases or sales (excluding all securities with maturities of less than one year) and dividing by average monthly net assets. A turnover ratio of 100% or more does not necessarily suggest that all securities in the portfolio have been traded. In practical terms, the resulting percentage loosely represents the percentage of the portfolio's holdings that have changed over the past year. A low turnover figure (20% to 30%) would indicate a buy-and-hold strategy. High turnover (more than 100%) would indicate an investment strategy involving considerable buying and selling of securities. The figure is culled directly from the financial highlights of the fund's annual report.

Up-Down Capture Ratio – compares an investment's performance when its asset category benchmark returns are positive relative to an investment's performance when the asset category benchmark returns are negative by measuring the difference between the Up Market Capture Ratio and the Down Market Capture Ratio via the subtraction method. The greater the Up-Down Capture Ratio, the more the investment participated in up markets and protected in down markets.

Up Market (Mkt) Capture Ratio - is a measure of a product's performance in up markets relative to the performance of the product's asset category benchmark. An up market is one in which the market's (benchmark) return is greater than or equal to zero. The higher the investment's Up Market Capture Ratio, the better the investment performed in a rising market environment.

Up Market Average Return- represents average monthly returns over a stated time period in which the market (benchmark earned a positive return).

YTD - Year to Date.

BENCHMARK DEFINITIONS

Barclays Govt/Corp 1 Yr Duration TR USD - measures the performance of investment grade, U.S. denominated, fixed-rate securities excluding STRIPS, TIPS and floaters. Its minimum index rating is A3 and the max maturity is 5 years.

BBgBarc EM Local Currency Govt TR USD - is a country-constrained, more liquid version of the flagship Emerging Markets Local Currency Government Index, which is designed to provide a broad measure of the performance of local currency Emerging Markets (EM) debt.

BBgBarc Municipal TR USD - measures the performance of the Bloomberg Barclays U.S. Municipal bond, which covers the USD-denominated Long-Term tax exempt bond market with four main sectors: state and local general obligation bonds, revenue bonds, insured bonds and prerefunded bonds.

BBgBarc US Agg Bond TR USD - measures the performance of investment grade, U.S. dollar-denominated, fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM passthroughs), ABS, and CMBS. It rolls up into other Barclays flagship indices, such as the multi-currency Global Aggregate Index and the U.S. Universal Index, which includes high yield and emerging markets debt.

BBgBarc US Corp Bond TR USD - measures the performance of the investment grade, U.S. dollar-denominated, fixed-rate, taxable corporate bond market. It includes USD-denominated securities publicly issued by U.S. and non-U.S. industrial, utility, and financial issuers that meet specified maturity, liquidity, and quality requirements.

BBgBarc US Government Long TR USD - measures the performance of the U.S. Treasury and U.S. Agency Indices with maturities of 10 years and greater, including Treasuries and U.S. agency debentures. It is a component of the U.S. Government/Credit Index and the U.S. Aggregate Index.

BBgBarc US Govt 1-3 Yr TR USD - measures the performance of the U.S. Treasury and U.S. Agency Indices with maturities of 1-3 years, including Treasuries and U.S. agency debentures. It is a component of the U.S. Government/Credit Index and the U.S. Aggregate Index.

BBgBarc US Govt Interim TR USD - measures the performance of the U.S. Treasury and U.S. Agency debentures with maturities of 1-10 years. It is a component of the U.S. Government/Credit Index and the U.S. Aggregate Index.

BBgBarc US Govt/Credit 1-3 Yr TR USD - index measures the performance of non-securitized component of the U.S. Aggregate Index with maturities of 1-3 years, including Treasuries, government-related issues and corporates. It is a subset of the U.S. Aggregate Index.

BBgBarc US Treasury US TIPS TR USD - measures the performance of rules-based, market value-weighted, inflation-protected securities issued by the U.S. Treasury. It is a subset of the Global Inflation-Linked Index (Series-L).

Bloomberg Commodity TR USD - measures the performance of future contracts on physical commodities which traded on US exchanges and London Metal Exchange. The commodity weightings are based on production and liquidity, subject to weighting restrictions applied annually.

CBOE S&P 500 BuyWrite BXM - measures the performance of a portfolio that engages in a buy-write strategy using S&P 500 index call options. It is a passive total return index based on selling the near-term, near-the-money S&P 500 Index (SPX) call option against the S&P 500 stock index portfolio each month. The SPX call that is sold (or written) will have approximately one month remaining to expiration, with an exercise price just above the prevailing index level (i.e., slightly out of the money). The premium collected from the sale of the call is added to the portfolio's total value. The SPX call is held until its expiration, at which time a new one-month, near-the-money call is written. The expired option, if exercised, is settled in cash.

Credit Suisse Mgd Futures Liquid TR USD - seeks to gain broad exposure to the Managed Futures strategy using a pre-defined quantitative methodology to invest in a range of asset classes including: equities, fixed income, commodities and currencies.

DJ Brookfld Global Infra TR USD - measures the stock performance of pure-infrastructure companies domiciled globally. The index covers all sectors of the infrastructure market. It is weighted by float-adjusted market capitalization.

DJ US Moderate TR USD - measures the performance of returns on its total portfolios with a target risk level of a Moderate-investor willing to take 60% of all stock portfolio risk. It is made up of composite indices representing the three major asset classes: stocks, bonds and cash. The weightings are rebalanced monthly to maintain the target level. The index is a subset of US series of Dow Jones Relative Risk Indices.

DJ US Technology TR USD - measures the performance of all US stocks in the Dow Jones US Index classified into technology sector. The sector classifications is defined by the proprietary classification system which used by S&P Dow Jones. It is a free-float weighted index.

FTSE EPRA/NAREIT Global NR USD - measures the performance of listed real estate companies and REITs in both developed and emerging markets. It includes a range of regional and country indices, capped indices, Dividend+ indices, Global Sectors, Investment Focused and REITs and Non-REITs series.

FTSE NAREIT Equity REITs TR USD - measures the performance of REIT performance indexes that spans the commercial real estate space across the US economy. It contains all Equity REITs not designated as Timber REITs or Infrastructure REITs. The index is market-capitalization weighted.

FTSE WGBI NonUSD Hdg USD - measures the performance of fixed-rate, local currency, investment-grade sovereign bonds of all WGBI countries except the United States and is stated in US dollar terms. It is a subset of FTSE World Government Bond Index (WGBI).

FTSE WGBI NonUSD USD - measures the performance of fixed-rate, local currency, investment-grade sovereign bonds of all WGBI countries except the United States and is stated in US dollar terms. It is a subset of FTSE World Government Bond Index (WGBI).

ICE BofAML Fxd Rate Pref TR USD - measures the performance of fixed rate US dollar denominated preferred securities issued in the US domestic market. Qualifying securities must have an investment grade rating and must have an investment grade rated country of risk.

ICE BofAML US 3M Trsy Bill TR USD - measures the performance of a single issue of outstanding treasury bill which matures closest to, but not beyond, three months from the rebalancing date. The issue is purchased at the beginning of the month and held for a full month; at the end of the month that issue is sold and rolled into a newly selected issue.

ICE BofAML US Convrt Bonds TR USD - measures the performance of USD-denominated convertibles that are sold in the US market and publicly traded in the US including coupon bonds, OIDs, and zeros. Qualifying securities must have at least \$50mn in market value. Qualifying companies must have a significant revenue footprint in the US. It is capitalization-weighted.

ICE BofAML US High Yield TR USD - measures the performance of short-term US dollar denominated below investment grade corporate debt publicly issued in the US domestic market. Qualifying securities must have at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum amount outstanding of \$100 million. It is capitalization-weighted.

ICE BofAML USD 3M Dep OR CM TR USD - measures the performance of a synthetic asset paying Libor to a stated maturity. It is based on the assumed purchase at par of a synthetic instrument having exactly its stated maturity and with a coupon equal to that days fixing rate. That issue is assumed to be sold the following business day (priced at a yield equal to the current day fixing rate) and rolled into a new instrument.

JPM EMBI Global TR USD - measures the performance of fix-rate for external-currency denominated debt instruments including brady bonds, loans, Eurobonds in emerging markets. Countries covered are Argentina, Brazil, Bulgaria, Mexico, Morocco, Nigeria, the Philippines, Poland, Russia, and South Africa. It covers more of the eligible instruments than the EMBI+ by relaxing somewhat the strict EMBI+ limits on secondary market trading liquidity.

Morningstar Gbl Lng/Shrt Curr TR USD - measures the performance of global highly liquid exchange listed futures contracts in currencies. It has the ability to go both long and short, providing greater flexibility and the potential to capture both upward and downward movements in price.

Morningstar MLP Composite TR USD - measures the performance of US publicly trading energy master limited partnerships. It is a diversified, distribution-dollar weighted index that targets the top 97% of investable universe by float market capitalization.

Morningstar Mod Tgt Risk TR USD - The Morningstar Target Risk Index family is designed to meet the needs of investors who would like to maintain a target level of equity exposure through a portfolio diversified across equities, bonds and inflation-hedged instruments. The Morningstar Moderate Target Risk Index seeks approximately 60% exposure to global equity markets.

Morningstar US Market TR USD - measures the performance of US securities and targets 97% market capitalization coverage of the investable universe. It is a diversified broad market index.

MSCI AC Far East ex Japan NR USD - measures the performance of the large and mid-cap segments of the Far East region, excluding Japan equity securities, including developed and emerging market. It is free float-adjusted market-capitalization weighted.

MSCI ACWI ex USA Growth NR USD - measures the performance of the growth large and mid-cap segments of the particular regions, excluding USA equity securities, including developed and emerging market. It is free float-adjusted market-capitalization weighted.

MSCI ACWI ex USA NR USD - measures the performance of the large and mid-cap segments of the particular regions, excluding USA equity securities, including developed and emerging market. It is free float-adjusted market-capitalization weighted.

MSCI ACWI ex USA Value NR USD - measures the performance of the value large and mid-cap segments of the particular regions, excluding USA equity securities, including developed and emerging market. It is free float-adjusted market-capitalization weighted.

MSCI AC World Large Cap Growth Index – measures the performance of large cap securities exhibiting overall growth style characteristics across particular developed and emerging markets countries. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate, long-term historical EPS growth trend and long-term historical sales per share growth trend. It is free float-adjusted market capitalization weighted.

MSCI AC World Large Cap Index - measures the performance of large cap representation across particular developed and emerging markets countries. It is free float-adjusted market capitalization weighted.

MSCI AC World Large Cap Value Index – measures the performance of large cap securities exhibiting overall value style characteristics across particular developed and emerging markets countries. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. It is free float-adjusted market capitalization weighted.

MSCI AC World SMID Cap Index - measures mid and small cap representation across particular developed and emerging markets countries. It is free float-adjusted market capitalization weighted.

MSCI China NR USD - measures the performance of the large and mid-cap segments of emerging China equity securities. It is free float-adjusted market-capitalization weighted.

MSCI EM (Emerging Markets) NR USD - measures the performance of the large and mid-cap segments of emerging market equity securities. It is free float-adjusted market-capitalization weighted.

MSCI EM Latin America NR USD - measures the performance of the large and mid-cap segments of emerging Latin America equity securities. It is free float-adjusted market-capitalization weighted.

MSCI Europe NR USD - measures the performance of the large and mid-cap segments of developed Europe equity securities. It is free float-adjusted market-capitalization weighted.

MSCI India NR USD - measures the performance of the large and mid-cap segments of India equity securities. It is free float-adjusted market-capitalization weighted.

MSCI Japan NR USD - measures the performance of the large and mid-cap segments of Japan equity securities. It is free float-adjusted market-capitalization weighted.

MSCI Pacific NR USD - measures the performance of the large and mid-cap segments of the developed Pacific region equity securities. It is free float-adjusted market-capitalization weighted.

MSCI World ex USA SMID Cap NR USD - measures the performance of small and mid-segment of World excluding USA equity securities. It captures mid and small representation across 22 of 23 developed market countries and 21 emerging markets countries and it covers approximately 28% of the free float-adjusted market capitalization in each country. The index is free float-adjusted market capitalization weighted.

MSCI World/Metals & Mining NR USD - measures the performance of the large and mid-cap metals and mining (industry) segments of world equity securities. It is constructed using GICS-Global Industry Classification Standard. The index is free float-adjusted market-capitalization weighted.

Russell 1000 Growth TR USD - measures the performance of the large-cap growth segment of the US equity securities. It includes the Russell 1000 index companies with higher price-to-book ratios and higher forecasted growth values. It is market-capitalization weighted.

Russell 1000 TR USD - measures the performance of the large-cap segment of the US equity securities. 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.

Russell 1000 Value TR USD - measures the performance of the large-cap value segment of the US equity securities. It includes the Russell 1000 index companies with lower price-to-book ratios and lower expected growth values. It is market-capitalization weighted.

Russell 2000 Growth TR USD - measures the performance of small-cap growth segment of the US equity universe. It includes those Russell 2000 companies with higher price-to-value ratios and higher forecasted growth values. It is market-capitalization weighted.



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Russell 2000 TR USD - measures the performance of the small-cap segment of the US equity universe. It is a subset of the Russell 3000 and includes approximately 2000 of the smallest securities based on a combination of their market cap and current index membership.

Russell 2000 Value TR USD - measures the performance of small-cap value segment of the US equity universe. It includes those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values. It is market-capitalization weighted.

Russell Mid Cap Growth TR USD - measures the performance of the mid-cap growth segment of the US equity universe. It includes Russell midcap index companies with higher price-to-book ratios and higher forecasted growth values. It is market-capitalization weighted.

Russell Mid Cap TR USD - measures the performance of the mid-cap segment of the US equity universe. It is a subset of Russell 1000 index and includes approximately 800 of the smallest securities based on a combination of their market cap and current index membership. The index represents approximately 31% of the total market capitalization of the Russell 1000 companies.

Russell Mid Cap Value TR USD - measures the performance of the mid-cap value segment of the US equity universe. It includes Russell midcap index companies with lower price-to-book ratios and lower forecasted growth values. It is market-capitalization weighted.

S&P 1500 Cons Discretionary TR - measures the performance of consumer discretionary (sector) segment of US equity securities. It comprises those companies included in the S&P Composite 1500 that are classified as members of the Global Industry Classification Standard (GICS) Consumer Discretionary (sector).

S&P 1500 Cons Staples TR - measures the performance of consumer staples (sector) segment of US equity securities. It comprises those companies included in the S&P Composite 1500 that are classified as members of the Global Industry Classification Standard (GICS) Consumer Staples (sector).

S&P 1500 Energy TR - measures the performance of energy (sector) segment of US equity securities. It comprises those companies included in the S&P Composite 1500 that are classified as members of the Global Industry Classification Standard (GICS) Energy (sector).

S&P 1500 Financials TR - measures the performance of Financials (sector) segment of US equity securities. It comprises those companies included in the S&P Composite 1500 that are classified as members of the Global Industry Classification Standard (GICS) Financials (sector).

S&P 1500 Health Care TR - measures the performance of health care (sector) segment of US equity securities. It comprises those companies included in the S&P Composite 1500 that are classified as members of the Global Industry Classification Standard (GICS) Health Care (sector).

S&P 1500 Industrials TR - measures the performance of industrials (sector) segment of US equity securities. It comprises those companies included in the S&P Composite 1500 that are classified as members of the Global Industry Classification Standard (GICS) Industrials (sector).

S&P 1500 Telecom Services TR - measures the performance of Telecom Services (sector) segment of US equity securities. It comprises those companies included in the S&P Composite 1500 that are classified as members of the Global Industry Classification Standard (GICS) Telecom Services (sector).

S&P 1500 Utilities TR - measures the performance of Utilities (sector) segment of US equity securities. It comprises those companies included in the S&P Composite 1500 that are classified as members of the Global Industry Classification Standard (GICS) Utilities (sector).

S&P 500 TR USD - measures the performance of 500 widely held stocks in US equity market. Standard and Poor's chooses member companies for the index based on market size, liquidity and industry group representation. Included are the stocks of industrial, financial, utility, and transportation companies. Since mid-1989, this composition has been more flexible and the number of issues in each sector has varied. It is market capitalization-weighted.

S&P 500 VIX Short Term Futures TR USD - measures the performance of return from a daily rolling long position in the first and second month VIX futures contracts. It is S&P 500 VIX Futures Index Series which seeks to model the outcome of holding long and/or short positions in VIX futures contracts or other VIX indices.

S&P North American Natural Resources TR - measures the performance of US traded securities that are classified under the Global Industry Classification Standard (GICS) energy and materials (sector) excluding the chemicals (industry) and steel (sub-industry).

S&P/LSTA Leveraged Loan TR - measures the performance of 100 loan facilities drawn from the S&P/LSTA (Loan Syndications and Trading Association) Leveraged Loan Index (LLI). Standard & Poor's chooses these based on market weightings, spreads, and interest payments of the largest facilities in the leveraged loan market.

S&P Target Date Series TR USD - Comprises twelve multi-asset class indices, each corresponding to a particular target retirement date. The asset allocation for each index in the series is determined once a year through survey of large fund management companies that offer target date products. Each index is fully investable, with varying levels of exposure to equities, fixed income and commodities.

Cobb County

Important Information About This Report

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Performance data quoted in this report represents past performance that does not guarantee future results. Current performance is likely to be lower or higher than the performance data quoted. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, could be worth more or less than their original cost. Unless explicitly stated otherwise, the performance data shown is for the plan's specific fund share class. Information in this report is not for use in brokerage accounts. Product and performance data, provided by Morningstar and MPI, is as of the date stated, unless otherwise specifically noted. You can obtain the most current performance data by contacting your financial advisor or the fund company at the website shown in the "Fund Facts Sheets" section of this document or by visiting <http://advisor.morningstar.com/familyinfo.asp>.

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Fund Information: The fund information contained in this report has been obtained from a variety of sources that are believed to be reliable, but have not been independently verified by UBS.

Mutual Funds are sold by prospectus. You should consider the fund's investment objectives, risk, charges and expenses carefully before you invest. This and other information about the fund can be found in the prospectus. Please read it carefully before investing. The fund's prospectus can be obtained by contacting your financial advisor or the fund company at the website found in the "Fund Fact Sheets" section of this report. If there is any discrepancy between the fund prospectus and the information in this document, you should rely upon the prospectus. There is no guarantee that the fund will be able to successfully implement its investment strategy or realize its investment objective.

Investment Eligibility: UBS only provides advisory services on investments (other than the investments mentioned below) within the RPCS Program. However, it will only recommend investments that have been reviewed by UBS and which are available on your plan's recordkeeper platform ("Program Investments").

Please contact your UBS Consultant for information on Program Investments.

If a plan sponsor elects to include investment options within the plan investment menu that are, individual securities (unmanaged investments), employer securities, self-directed brokerage windows, certain insurance accounts, or similar investments, UBS's services will not include a review of their investment performance or recommendations regarding whether a plan should offer or continue to offer any such investments. UBS does not include any such investment performance information in this report or include the value of any such investments when calculating its fees. Neither UBS nor your UBS Consultant will act as your investment adviser with respect to assets that are not Eligible Investments.

Non-Program Investments Displayed Within the Plan Report: Investment options that are not Program Investments, as well as investment options recently removed from the UBS list of Program Investments are specifically noted in the "Executive Summary" section. These investments are included at your request and such inclusion does not constitute an endorsement that the Plan continue to hold those funds.

Investment Performance Results: performance displayed in this report assumes the reinvestment of dividends and capital gains and the deduction of manager fees and other internal expenses associated with the investment. The performance does not reflect the deduction of the sales load that is typically applicable when mutual fund shares are purchased or other transaction fees or the impact of taxes, where applicable. Had the sales load, transaction fees or taxes been included, the results used in this document would have been reduced. Information shown is current as of the most recent quarter-end.

Impact of UBS Consulting Fees over time: The performance displayed in this report does not account for the deduction of investment advisory or consulting fees for the UBS Retirement Plan Consulting Services Program. The payment of these fees will reduce your performance and will have a cumulative effect over time. The net effect of the deduction of advisory fees on annualized performance, and the compounded or cumulative effect over time, is determined by the amount of the fee and the plan's investment performance. For example, for a plan in the RPCS Program that experiences an annual gross performance of 10% but incurs a 2% annual fee that is deducted quarterly on a prorated basis, the plan will experience net annual performance of 7.98%, a reduction of 2.02% per year. Compounding will similarly affect the plan's overall performance on a cumulative basis. Actual performance will likely be lower or higher than the results shown.



Cobb County

Important Information About This Report

Pre-inception Returns: The analysis in this report, if necessary, will be based, in part, on adjusted historical returns for periods prior to the actual inception of a specific fund share class. In such instances, the fund's performance will include pre-inception returns based on historical returns for other fund share classes. While all of the share classes of a particular fund invest in the same securities, the fees and expenses of each share class differ. This causes each share class to reflect different performance.

Pre-inception performance is calculated in one of two ways:

- I. Where the new share class has higher fees: the historical monthly returns of the oldest share class are adjusted to reflect the increase in fees and expenses of the new share class.
- II. Where the new share class has lower fees: the historical monthly returns of the older share class reflect that class' higher fees and expenses. As of the inception date of the new share class, that class' lower fees and expenses are reflected.

While the inclusion of pre-inception data can provide 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 structure and corresponding performance 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 which reduce overall performance. The operating expenses and sales charges of a fund, broken down by share class, are detailed in the fund's prospectus. Investors should understand that the adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar and MPI Stylus software could differ from those applied by other entities, including the fund itself.

Investment Monitoring: UBS or any of its employees will track or monitor specific investments the Plan makes to determine whether they complement the Plan's Investment Policy. Until such time as an IPS or other investment guideline document is developed and/or provided to the Firm, the Firm will use the initial UBS performance report provided to you as the Plan's review criteria. For all eligible investments within the RPCS Program, UBS monitors the investments to determine whether they are performing at a satisfactory level. As part of its ongoing monitoring, UBS could identify a potential aspect or development with a fund that merits further evaluation which could result in a fund being described as "On Watch". Funds "On Watch" will be monitored for a period of time depending on the length of time needed for UBS to conduct its evaluation and for the fund to address any concerns. The "On Watch" status will not affect the fund's standing on the plan investment menu. If any concerns associated with a fund rise to a level that UBS believes that the fund should be removed or replaced from the investment menu, UBS will recommend removal or replacement. A fund's status, as displayed in this report, will change to "to be replaced" only when the fund is scheduled to be removed from the investment menu. The views expressed by your Consultant or in this report can differ or be contrary to the opinions and views expressed by other business areas or divisions of UBS as a result of using different assumptions and/or criteria. At any time, the advice you receive could differ from or be contrary to the opinions expressed in other UBS research publications.

Custody of Investments Within this Plan Report: The investments in this report are held at other financial institutions. UBS does not custody the plan's assets and will not execute transactions for the Plan. Information in this report regarding the Plan's holdings and values are based on data provided by your Plan's custodian. UBS has not verified, and is not responsible for, the accuracy or completeness of information regarding assets held at other financial institutions. You should review the account statements and other documentation provided by other financial institutions for 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. Those documents also serve as a reference should questions arise regarding the accuracy of the information in this report. UBS Financial Services Inc. SIPC coverage does not apply to assets held at other institutions. 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.

Benchmarks and Benchmark Selection: 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. Index results reflect the reinvestment of income but do not take into account advisory or transaction fees, the deduction of which would reduce the results shown. Past performance does not guarantee or indicate future results.

A description of the indices included in this document is available in the Definitions section. Morningstar assigns each fund to a particular asset category and assigns a benchmark index for each of those asset categories. Funds are benchmarked to the index that corresponds to the asset category that they belong to. Funds will be benchmarked based on their assigned Morningstar asset category unless UBS determines that it is appropriate to re-categorize a fund after an assessment of the fund's investment style. In such instances, funds will be benchmarked to the index that corresponds with the asset category selected by UBS. Secondary benchmarks can be displayed in addition to the default benchmarks based on your individual circumstances and preferences. UBS assigns category classifications based on our understanding of the investment's allocation, strategy, investment style and our research. Unless passive scoring is turned on (see *Fund Scoring Process*, below), alpha, beta, R-squared and all other risk and return metrics will be calculated based on the fund's asset category benchmark. When passive scoring is turned on (see *Fund Scoring Process*, below), alpha, beta, R-squared and tracking error metrics will be calculated based on a passive fund's prospectus benchmark rather than the asset category benchmark. Depending upon your investment objectives and other factors, the indexes used in this report could be an appropriate measure for comparison purposes, and as such, are represented for illustration only. Your Plan holdings and performance can vary significantly from the index. Your financial advisor can provide additional information about how benchmarks within this report were selected.

UBS considers a variety of fund benchmarks when evaluating a fund's performance, which will include benchmarks identified by the fund, benchmarks identified by Morningstar for the fund's asset category or peer group, or benchmarks identified by UBS Financial Services for various asset categories and could consider benchmarks in addition to or in place of the benchmarks displayed within this report.

Fund Score and Fund Scoring – This report does not present the UBS Fund Score, which has been retired. The Fund Scores illustrated in this report are based on investment monitoring criteria selected by the Plan Sponsor. The Plan Sponsor can also select the weighting for each of the criteria used in the fund score. If specific weightings are not selected, all criteria will be weighted equally. In addition, the Plan Sponsor can, but is not required to, set the number of criteria needed for an investment to "pass" for the quarter. If the Plan Sponsor does not set a "passing" score, the report will still



UBS

identify criteria that were met within the report, as a score for the quarter. All references to a "score" within the report refer to this scoring process, which is set by the Plan Sponsor. **Lack of data for a criteria will cause it to not pass.** To set or change weightings or "passing" scores for future quarters, please reach out to your UBS Consultant.

UBS does not set the criteria that creates the scoring provided and makes no representations regarding the scores presented. These scores are intended to assist Plan Sponsors and retirement plan fiduciaries in evaluating investment options and easily reviewing fund's performance against the criteria set by the Plan Sponsor. These scores do not constitute fiduciary investment advice alone and should not be used in place of the retirement Plan fiduciaries' prudent review of the investment options or discussion of investment options with your UBS Consultant. The criteria set by the Plan Sponsor and used to generate the scores should not be the only factors considered when choosing to add, remove or maintain an investment option in the plan. See the Definitions section for a description of the Morningstar Ratings contained in the Fund Fact Sheets section of this document.

The Fund Scoring Process – There are three types of fund evaluation methods available: Active, Passive, and Target Date. Active is the default fund scoring option and is available to be utilized for all funds. Passively managed funds, as identified by Morningstar, and/or Target Date Funds can have their own separate scoring and evaluation criteria set by the Plan Sponsor.

The definitions of the criteria available for each type of fund scoring method, and their associated options are contained in the Definitions Section. A list of the criteria utilized by the Plan is listed in the Executive Summary. Each evaluation criteria has a quantitative threshold that determines whether or not that evaluation criteria is met for the fund, based on fund data as of the most current calendar quarter. For example, if the "Manager Tenure is greater than 10 years" criteria is selected, then this evaluation criteria for a fund will meet requirements for the quarter as long as the current fund manager has managed the fund for longer than 10 years. If manager tenure data is 10 or less years or data is missing, then the criteria does not pass. The plan sponsor can also choose to use weightings for the different evaluation criteria.

Target Date Fund Scoring Option - Target Date Fund Scoring can be based on a weighted rank scoring method if the Plan Sponsor determines that is appropriate and adopts Importance Factors and a Scoring Threshold, as described below. When this option is utilized, the score for a target date fund is calculated based on its composite weighted ranking within its peer group.

- Importance Factors are Target Date criteria selected by the Plan Sponsor to be weighted by importance on a 100-point scale. Any single criteria selected can be weighted from 1 to 100 but the total for all weighted criteria must equal 100. A weighted composite ranking within each Target Date Asset Category (e.g. Target Date 2020, or Target Date 2030) is created based on the Importance Factors selected. A weighted ranking means that each Importance Factor is ranked against each fund in its peer group, then weighted according to the Importance Factor weighting selected by the Plan Sponsor, then the weighted rankings are combined to create a single composite fund ranking or fund score. The weighted score, or weighted ranking of each target date fund evaluated, is then adjusted to fit the chosen Scoring Scale and compared to the Scoring Threshold.
- The Scoring Scale will adjust the original weighted composite ranking to fit the Scoring Scale established by the Plan Sponsor. For example, if a calculated weighted composite ranking of a fund was 50 out of the 100 possible score, and the designated scoring scale was 12, the fund would then show a score of 6 in the report ($50/100 \times 12$).
- The Scoring Threshold defines what score is required for a fund to "Pass" for the quarter. For example, if the Scoring Scale was 12 and the Scoring Threshold was 7, a fund that scored a 7 or above would pass.

Asset Allocation Section – The Asset Allocation Section lists each fund held by the Plan and is organized by Morningstar asset category. Other categories that are not Morningstar asset categories include:

- Core Holdings: Plan assets that do not fall into a Morningstar asset category because the investment is not a mutual fund or is not tracked by Morningstar. Examples of the types of items that can be included in this category include stable value funds, assets held within a brokerage windows, and company stock.
- Non-Core Holdings: Plan assets that are not investments. Most frequently this category is utilized for in-Plan loans.

The pie chart labeled "% of Assets" represents the composite of the underlying holdings of all funds in the Plan. Definitions of the pie chart components:

- Cash: Cash and fixed-income securities with maturities of less than a year.
- U.S. Stocks: Common equity shares of companies domiciled in the United States.
- Non-U.S. Stocks: Common equity shares of companies domiciled outside of the United States.
- U.S. Bonds: Fixed-income securities issued by companies domiciled in the United States and U.S. governmental bodies (federal, state, and municipal).
- Non-U.S. Bonds: Fixed-income securities issued by companies domiciled outside of the United States and foreign governmental bodies.
- Other: Includes preferred stocks (equity securities that pay dividends at a specific rate) as well as convertible bonds and convertible preferreds (corporate securities that are exchangeable for a set amount of another security, usually common shares, at a pre-stated price). "Other" also includes securities such as warrants and options.
- Unidentified: Includes funds in which the fund itself or the allocation data was not available from Morningstar.



Investment Fee Analysis Section – provides information regarding the internal fund expenses for certain investments within the Plan, as stated in each fund's prospectus or otherwise.

- **Core Assets** – represents asset values of plan investments for which the expense analysis is performed. The Investment Fee Analysis Section provides a net expense ratio for Core Assets which is the weighted average of each investment's expense ratio within Core Assets (excluding custom fund assets).
- **Other Core Assets (Custom funds)** - represents asset values of plan investments for which there is no expense ratio available for expense analysis purposes
- **Non-Core Assets** – represents asset values for certain plan investments that are excluded from the expense calculations such as employer stock, brokerage window assets, loans, etc.

Portfolio Style Section - The Portfolio Style Section provides a series of grids that represent a graphical representation of the "investment style" of Plan investments and include fund name, assets, and the fund score for the most recent period.

- The equity style grid classifies securities according to market capitalization (the vertical axis) and growth and value factors (the horizontal axis).
- The fixed income grid classifies investments according to credit quality (the vertical axis) and sensitivity to changes in interest rates as measured by a bond's duration (the horizontal axis).
- Target Date Funds, Asset Allocation, and Specialty fund types have been placed in separate style categories to distinguish funds assigned to them, as these funds often contain both equity and fixed income holdings.
 - The "Target Date Funds" category contains the assets held in the Plan's target date funds, which are classified in Morningstar's target date asset categories (e.g. Target-Date 2025). The funds are combined and described as the target date series and the total combined assets are listed.
 - The "Asset Allocation" style category includes funds that comprise both equity and fixed income holdings, and contains funds in the following categories: Allocation--15% to 30% Equity, Allocation--30% to 50% Equity, Allocation--50% to 70% Equity, Allocation--70% to 85% Equity, Allocation--85%+ Equity, Convertibles, World Allocation, Tactical Allocation.
 - The "Specialty" style category contains the following Morningstar categories: Communications, consumer cyclical, consumer defensive, energy limited partnership, equity energy, equity precious metals, financial, global real estate, health, industrials, infrastructure, miscellaneous sector, natural resources, real estate, technology, utilities.

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 could lose value.

Offshore Funds: Offshore mutual funds are not registered with the Securities and Exchange Commission and cannot be sold to any person who is a citizen or resident of the United States.

Target Date Funds: Target date funds are funds where the target date is the approximate date when investors plan to start withdrawing their money. Generally, the asset allocation of each fund will change on an annual basis, with the asset allocation becoming more conservative as the fund nears the target retirement date. The principal value of the fund(s) is not guaranteed at any time, including at the target date. Investors should consider factors in addition to age or retirement date, including risk tolerance, personal circumstances, and complete financial situation, prior to investing in a target date fund.

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), can involve complex structures and strategies, and possibly are not easily valued. The risks of alternative investments should be carefully considered in light of an investor's investment objectives, risk tolerance and financial circumstances. Alternative investments are speculative and entail substantial risks, which can place investor capital at risk. It is possible that alternative investments have not been registered with the Securities and Exchange Commission or under any state securities laws. The market for such investments could be highly illiquid and subjectively valued, and these reports provide values for informational purposes only. Accuracy is not guaranteed. These values could differ substantially from prices, if any, at which a unit could 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 can also be calculated based on different information from what is used by third parties to derive their estimated values.

Money Market Funds: An investment in a money market fund is not insured or guaranteed by the FDIC or any other government agency. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investment in the fund.

Stable Value Funds: There is no guarantee a stable value portfolio will achieve its investment objectives. Stable value portfolios are not guaranteed by the US government, the Federal Deposit Insurance Corporation (FDIC), the fund company or any other entity. Unit price, yield, duration and return will vary. Although stable value investment contracts seek to reduce the risk of principal loss, investing in a stable value portfolio involves risk, including credit risk, management risk and loss of principal. These risks could result in a decline in the portfolio's value or cause a withdrawal or transfer from a portfolio to occur at less than a participant's invested value. Stable value investment contracts involve several unique risks, which include but are not limited to: a stable value investment contract issuer could default, become insolvent, file for bankruptcy protection, or otherwise be deemed by the Plan's auditor to no longer be financially responsible; an event or condition outside the normal operation of the Plan could occur (including but not limited to Plan changes, employer bankruptcy, significant layoffs, Plant closings, corporate spin-offs, divestitures, or restructurings); some portfolio securities could become



impaired or default; certain communications from the Plan or the Plan's agents could cause an investment contract to not pay benefits at contract value; or there could be a change in tax law or accounting rules. Any of these risks, if realized, could cause a write-down in the value of a portfolio and a risk of loss of all or a part of a participant's invested value in a portfolio.

Fixed Income: Investing in the fixed income market is subject to risks including market, interest rate, issuer, credit, default and inflation risk. An investment in a portfolio could be worth more or less than its original cost when redeemed. Derivatives often involve certain costs and risks such as liquidity, interest rate, market, credit, management, default risk, and the risk that the position could not be closed when most advantageous. Investing in derivatives could lose more than the amount invested.

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 subaccounts' investment objectives, risk, charges and expenses. Please read the prospectus and offering documents carefully before you invest. Your UBS Consultant 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 taken by a participant prior to age 59 1/2, will likely be subject to an additional 10% federal income tax penalty. Withdrawals could 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.

Scope of our Services

UBS makes various interactive tools, worksheets, white papers, guidebooks, newsletters, research, reports, portfolio analyses and financial Plans and other marketing and disclosure materials (collectively "Materials") available to its Financial Advisors, clients and prospective clients. These Materials are generally provided free of charge.

The Materials are intended to aid in providing you with information and advice about your Plan. Therefore, the Materials should only be considered in conjunction with the actual advice of UBS, our standard account documents, agreements and disclosures and the additional factors that warrant consideration for your particular Plan, including costs.

If this output is provided as part of a proposal, it is marketing material. You must make independent decisions with respect to any proposals contained within this report. In making those decisions you have reviewed the terms of any Plan with respect to which you are a fiduciary and your obligations to any such Plan under ERISA. This report should be used solely for the purposes of discussion with your prospective UBS Consultant and your independent consideration. UBS does not intend this to be fiduciary or best interest investment advice or a recommendation that you take a particular course of action. If you would like more details about any of the information provided, or personalized recommendations or advice, please contact your UBS Financial Advisor.

Conflicts of Interest. UBS Financial Services Inc. is in the business of establishing and maintaining investment accounts and we will receive compensation from you in connection with investments that you make, as well as additional compensation from third parties whose investments we distribute. This presents a conflict of interest when we recommend that you move your assets to UBS from another financial institution, and also when we make investment recommendations for assets you hold at, or purchase through, UBS. For more information on how we are compensated by clients and third parties, conflicts of interest and investments available at UBS please refer to the 'Your relationship with UBS' booklet provided at ubs.com/relationshipwithubs, or ask your UBS Financial Advisor for a copy.

Important information about advisory and brokerage services

As a firm providing wealth management services to clients, UBS Financial Services Inc. offers investment advisory services in its capacity as an SEC-registered investment adviser and brokerage services in its capacity as an SEC-registered broker-dealer. Investment advisory services and brokerage services are separate and distinct, differ in material ways and are governed by different laws and separate arrangements. It is important that clients understand the ways in which we conduct business, that they carefully read the agreements and disclosures that we provide to them about the products or services we offer. For more information, please review client relationship summary provided at ubs.com/relationshipsummary.

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.

All trademarks, service marks, tradenames, product names and logos are property of their respective owners.

UBS Financial Services Inc. Member SIPC.

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FUNDS IN ANALYSIS (Mutual Funds)

Review Period = 12/31/2023

INVESTMENT	EXPENSE RATIO	STATUS	RATIONALE	ACTION
American Funds Washington Mutual R6 - RWMGX	0.26	●	Lowest share class	No action required
Vanguard Institutional Index Instl Pl - VIIIX	0.02	●	Lowest share class	No action required
JPMorgan Large Cap Growth R6 - JLGMX	0.44	●	Lowest share class	No action required
Victory Sycamore Established Value R6 - VEVRX	0.54	●	Lowest share class	No action required
Delaware Ivy Mid Cap Growth R6 - IGRFX	0.68	●	Lowest share class	No action required
ClearBridge Small Cap I - LMNSX	0.85	●	Lowest cost share class net of revenue sharing	Document decision
Nuveen Real Estate Securities R6 - FREGX	0.84	●	Lowest share class	No action required
MFS Intl Diversification R6 - MDIZX	0.73	●	Lowest share class	No action required
American Funds Europacific Growth R6 - RERGX	0.47	●	Lowest share class	No action required
American Funds New Perspective R6 - RNPGX	0.42	●	Lowest share class	No action required
Western Asset Core Plus Bond IS - WAPSX	0.42	●	Lowest share class	No action required
PGIM High Yield R6 - PHYQX	0.38	●	Lowest share class	No action required
Vanguard Treasury Money Market Investor - VUSXX	0.09	●	Lowest share class	No action required
American Funds 2010 Trgt Date Retire R6 - RFTTX	0.29	●	Lowest share class	No action required
American Funds 2015 Trgt Date Retire R6 - RFJTX	0.30	●	Lowest share class	No action required
American Funds 2020 Trgt Date Retire R6 - RRCTX	0.31	●	Lowest share class	No action required
American Funds 2025 Trgt Date Retire R6 - RFDTX	0.32	●	Lowest share class	No action required
American Funds 2030 Trgt Date Retire R6 - RFETX	0.33	●	Lowest share class	No action required
American Funds 2035 Trgt Date Retire R6 - RFFTX	0.35	●	Lowest share class	No action required
American Funds 2040 Trgt Date Retire R6 - RFGTX	0.37	●	Lowest share class	No action required

Status: ● = Acceptable Share Class ▲ = Action Required

*Acceptable Share Class = Client decision to maintain share class, subject to action above noted

*Action Required = Share class change advised

This report is only applicable to investments in mutual funds. The share class analysis is performed annually. The review and expense ratio are effective as of the date in the review period above noted. Expense Ratio is subject to change.

UBS always recommends the lowest cost share class available at your Recordkeeper. Consistent with your fiduciary duty, you, and not UBS, are responsible for share class selection. UBS recommends that a decision to select an alternate share class be reviewed with counsel.



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FUNDS IN ANALYSIS (Mutual Funds)

Review Period = 12/31/2023

INVESTMENT	EXPENSE RATIO	STATUS	RATIONALE	ACTION
American Funds 2045 Trgt Date Retire R6 - RFHTX	0.37	●	Lowest share class	No action required
American Funds 2050 Trgt Date Retire R6 - RFITX	0.38	●	Lowest share class	No action required
American Funds 2055 Trgt Date Retire R6 - RFKTX	0.38	●	Lowest share class	No action required
American Funds 2060 Trgt Date Retire R6 - RFUTX	0.39	●	Lowest share class	No action required
American Funds 2065 Trgt Date Retire R6 - RFVTX	0.39	●	Lowest share class	No action required

Status: ● = Acceptable Share Class ▲ = Action Required

*Acceptable Share Class = Client decision to maintain share class, subject to action above noted

*Action Required = Share class change advised

This report is only applicable to investments in mutual funds. The share class analysis is performed annually. The review and expense ratio are effective as of the date in the review period above noted. Expense Ratio is subject to change.

UBS always recommends the lowest cost share class available at your Recordkeeper. Consistent with your fiduciary duty, you, and not UBS, are responsible for share class selection. UBS recommends that a decision to select an alternate share class be reviewed with counsel.



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as of 09/30/2024

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Cobb County Government Employees' Pension Plan

Investment Policy Statement

December 2024

Revision Dates of Previous Investment Policy

May 2024
December 2017
September 2017
May2016
November 2013
September 2012
November 2010
June 2010
November 2009
September 2007
April 1995

Introduction & Purpose

The Cobb County Government Employees' Pension Plan (the "Plan") is a defined benefit plan which was established by the Board of Commissioners on January 1, 1971 to provide retirement benefits for current and former employees in accordance with the benefit structure adopted by the Board of Trustees (the "Trustees"). The Plan is maintained to invest contributions and reinvest income investment proceeds for the exclusive benefit of plan participants and beneficiaries.

This policy statement is issued for the guidance of fiduciaries, including investment managers and the Trustees, in course of investing the retirement funds of Cobb County and is consistent with the Prudent Investor Rule and any other applicable statute.

Policy guidelines will be amended from time to time by the Trustees both upon its own initiative and upon consideration of the advice and recommendations of the investment managers and Plan professionals, including the Plan's investment consultant.

The purpose of this Statement is to clearly articulate the Trustees' view on the Fund's investment objectives and risk tolerance. This statement will establish a target asset allocation and benchmarks that will be used to monitor performance.

Investment Objectives

The objectives of the Fund have been established after a comprehensive review of current and projected financial requirements, market returns and risks and any special requirements of the "Plan". The Trustees' will address these objectives in periodic reviews of the Fund's performance; the frequency will be negotiated between the investment manager and the Trustees.

Fund objectives:

- The long-term objective of the Fund is the growth of capital.
- Diversification will be employed to reduce risk.
- Generate a return in excess of the passive portfolio benchmark for each asset class.
- Exceed the 25th percentile return of a universe comprised of funds or managers with similar objectives and/or styles over a 5-7 year time frame.

Volatility

Consistent with the diversification objectives of the portfolio, the Investment Policy is based on the assumption that the volatility of the portfolio will be similar to that of the target policy.

The volatility of the total portfolio, in aggregate, should be reasonably close to the volatility of a weighted composite of market indices of the target policy, which is 45% Russell 3000, 25% BarCap US Agg, 10% HFRX Global Hedged, and 20% MSCI ACWI ex US net.

Asset Allocation

The asset allocation target ranges set forth below represent a long-term view. Short-term market volatility may cause the asset mix to fall outside the targeted range.

Target Asset Allocation Table

<i>Asset Class</i>	<i>Min Weight</i>	<i>Target Weight</i>	<i>Max Weight</i>	<i>Benchmark Index</i>
<i>Domestic Equities:</i>	<i>35%</i>	<i>45%</i>	<i>50%</i>	<i>Russell 3000</i>
<i>Large Cap</i>		<i>33%</i>		<i>Russell 1000, 1000G, JO00V</i>
<i>MidCap</i>		<i>6%</i>		<i>Russell 2500, 2500G, 2500V</i>
<i>Small Cap</i>		<i>6%</i>		<i>Russell 2000, 2000G, 2000V</i>
<i>Domestic Bonds (Investment Grade)</i>	<i>25%</i>	<i>25%</i>	<i>35%</i>	<i>BarCap US Agg Or appropriate Fixed Income Index</i>
<u><i>Global Allocation</i></u>	<u><i>0%</i></u>	<u><i>10%</i></u>	<u><i>15%</i></u>	<i>HFRX Global Hedged MSCI ACWI ex US net</i>
<i>International Equity</i>	<i>10%</i>	<i>20%</i>	<i>30%</i>	<i>Or appropriate Index</i>

Approved investment managers are expected to be at least 90% invested, unless extreme market conditions dictate otherwise or explicit consent has been received from the Trustees.

Rebalancing

Given the volatility of the capital markets, strategic adjustments in various asset classes may be required to rebalance asset allocation back to its target policy. Such adjustments should be executed so as to minimize excessive turnover and transaction costs.

Securities Guidelines

The following securities and transactions are not permitted for the Fund without prior Trustee approval:

1. Letter stock and other unregistered; commodities or other commodity contracts; short sales or margin transactions; uncovered and covered options.
2. Investments for the purpose of exercising control of management.
3. Investments in companies that have filed a petition for bankruptcy.

Within the above guidelines, the "Plan" gives investment managers full responsibility for security selection, diversification, turnover and allocation of holdings among selected securities and industry groups. The following are guidelines to be followed by investment managers; but may be superseded by Georgia Regulatory Statutes:

Domestic Equities

1. Equity holdings may be selected from the New York, American and Regional Stock Exchanges, or the NASDAQ markets.

2. For the large cap portfolios these holdings must represent companies meeting a minimum capitalization requirement of \$250 million on the date of purchase. For the small/mid cap portfolios, these holdings must represent companies meeting a minimum capitalization requirement of \$100 million on the date of purchase.
3. Individual securities in a portfolio must not exceed 10% of the market value of that portfolio.
4. The market value of the holdings of any one market sector may not exceed the greater of 25% or more than twice that sector's weighting in the investment manager's selected benchmark. Managers will supply sector breakouts of portfolio holdings using sector classifications from a recognized source such as Wilshire, Russell or S&P.
5. The investment manager is prohibited from investing in private placements, letter stock and unrestricted securities and from speculating in futures, derivatives or options.
6. Managers must acknowledge that they have reviewed and will comply with the State of Georgia requirement for public plans within Title 47.

Domestic Fixed Income - Investment Grade

1. No issues may be purchased with a longer maturity than the maximum maturity of the applicable benchmark index. Duration should be managed to remain within $\pm 30\%$ of the applicable benchmark index.
2. Investments in securities of a single issuer in a portfolio (with the exception of the U.S. Government and its agencies) must not exceed 5% of the market value of that portfolio.
3. Only corporate or tax exempt debt issues that meet or exceed a credit rating of Baa3 from Moody's, BBB- from Standard & Poor's or BBB- from Fitch's may be purchased.
4. The investment manager is prohibited from speculating in fixed income or interest rate futures or derivatives.
5. Fixed Income securities include U.S. Government and Agency obligations, investment grade corporate bonds and debentures.
6. Commercial Mortgage Backed Securities (CMBS) are fine provided the issuer meets the criteria of 47-20-83 (including all applicable subsections) of this code.
7. Collateralized Mortgage Obligations (CMO) that are listed as investment grade (whether agency or private label) should qualify under 47-20-83 (including all applicable subsections) of this code.
8. Asset Backed Securities (ABS) are permitted provided the issuer meets the criteria listed in the state code 47-20-83 (including all applicable subsections) of this code. Individual ABS securities must not exceed 2.5% of the market value of that portfolio.
9. No structured products that contain leverage.
10. To the extent that the plan qualifies as a large retirement system under OCGA 47-20-84, any contracts, agreements, and other instruments designed to manage risk exposure, including, but not limited to, taxable municipal bonds of any state in the US, any local municipality, and any backed by revenue streams, provided that the bonds meet or exceed a credit rating of Baa3 from Moody's, BBB- from Standard and Poor's or BBB- from Fitch's at time of purchase.
11. Managers must acknowledge that they have reviewed and will comply with the State of Georgia requirement for public plans within Title 47.

Global Balanced

Global Balanced managers have flexibility to allocate their portfolios across several asset classes, including domestic equities, domestic fixed income, international equities,

international fixed income, commodities, foreign currencies, precious metals and cash. Managers may also use derivative contracts to hedge market risk, increase exposure to certain markets and manage exposure to foreign currencies or precious metals.

The general objective for Global Balanced managers is to seek a high total investment return through the combination of top-down macroeconomic research and bottom-up security analysis.

All Global Balanced managers employed in this asset class must be registered under the SEC Investment Company Act of 1940 and offer adequate transparency, liquidity and communication.

International Equities

1. Holdings in any one company in a portfolio shall not exceed more than 5% of that portfolio.
2. Allocations to any sector, region or country should not be excessive relative to the benchmark.
3. The investment manager may enter into foreign exchange contracts provided that the use of such contracts is limited to hedging currency exposure existing within the portfolio. Direct speculation on currency movements is prohibited.

Cash and Equivalents

Investment managers may invest in commercial paper, bankers' acceptances, repurchase agreements, Treasury Bills, certificates of deposit, and money market funds to provide income, liquidity for expense payments, and preservation of the portfolio's principal value. All such assets must represent maturities of one year or less at the time of purchase. Commercial paper must be rated A-1 or P-J by Standard & Poor's and Moody's, respectively. Bankers' acceptances and certificates of deposit should only be purchased from larger, well-capitalized domestic and foreign banks with a minimum of an A rating from one of the major rating agencies. Uninvested cash reserves should be kept to minimum levels.

Other Restrictions

Investment managers will not purchase assets other than those mentioned above without the written consent of the Trustees.

Voting of Proxies

Investment managers shall vote any and all proxies solicited in connection with securities held by the Fund. Managers shall produce a written proxy voting policy statement, and shall keep records with respect to its voting decisions and submit the report to the Trustees summarizing votes cast upon request.

Communications

Investment managers must promptly provide to the Trustees and Investment Consultant information about changes in the manager's investment philosophy management, ownership and key personnel in a timely fashion, which is not to exceed one month from

the change. Investment managers are required to give the Trustees and any consultant delegated by the Trustees a quarterly portfolio review detailing investment performance (time-weighted), strategy, and portfolio value.

Investment managers shall be required to participate in meetings to discuss:

1. The manager's investment performance and risk levels in light of the stated policies and objectives.
2. The manager's views on important developments within the economy and securities markets, and their potential effect on the investment strategy, asset allocation, and portfolio performance.
3. The effects of changes within the manager's organization on investment philosophy, strategy, and performance.
4. Proposed amendments to the policies and objectives presented in this statement.

Meetings

The investment managers are expected to meet with the Trustees upon request to review the portfolio and to discuss the investment environment, outlook and results within the context of these objectives and policies.

Adoption

The foregoing investment Policy Statement was unanimously adopted by the Trustees of the Cobb County Employee's Government Pension Plan on the 15 day of May, 2024, and replaces the previous Investment Policy dated December, 2017.

Cobb County Government Employees' Pension Plan

X

Trustee

Cobb County Government Employees' Other Post Employment Benefit (OPEB) Plan

Investment Policy Statement

December 2024

Previous Version

May 2024

December 2017

Introduction & Purpose

The Cobb County Government Employees' Other Post Employment Benefit (OPEB) Plan (the "Plan") plan which was established by the Board of Commissioners on August 8, 2008 to provide funding for other post employment benefits other than pensions for current and former employees in accordance with the benefit structure adopted by the Board of Commissioners who have established a trust for funding purposes to be managed by the Cobb County Government Board of Trustees (the "Trustees"). The Plan is maintained to invest contributions and reinvest income investment proceeds for the exclusive benefit of plan participants and beneficiaries.

This policy statement is issued for the guidance of the fiduciaries, including investment managers and the Trustees, in the course of investing OPEB funds of Cobb County and is consistent with the Prudent Investor Rule and any other applicable statute.

Policy guidelines will be amended from time to time by the Trustees both upon its own initiative and upon consideration of the advice and recommendations of the investment managers and Plan professionals, including the Plan's investment consultant.

The purpose of this statement is to clearly articulate the Trustees' view on the Fund's investment objectives and risk tolerance. This statement will establish a target asset allocation and benchmarks that will be used to monitor performance.

Investment Objectives

The objectives of the Fund have been established after a comprehensive review of current and projected financial requirements, market returns and risks and any special requirements of the "Plan". The Trustees' will address these objectives in periodic reviews of the Fund's performance; the frequency will be negotiated between the investment manager and the Trustees.

Fund objectives:

- The long-term objective of the Fund is the growth of capital.
- Diversification will be employed to reduce risk.
- Generate a return in excess of the passive portfolio benchmark for each asset class.
- Exceed the 25th percentile return of a universe comprised of funds or managers with similar objectives and/or styles over a 5-7 year time frame.

Volatility

Consistent with the diversification objectives of the portfolio, the Investment Policy is based on the assumption that the volatility of the portfolio will be similar to that of the target policy.

The volatility of the total portfolio, in aggregate, should be reasonably close to the volatility of a weighted composite of market indices of the target policy, which is 45% Russell 3000, 25% BarCap US Agg, 10% HRFX Global Hedged, and 20% MSCI ACWI ex US net.

Asset Allocation

The asset allocation target ranges set forth below represent a long-term view. Short-term market volatility may cause the asset mix to fall outside the targeted range.

Target Asset Allocation Table

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Adoption

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Cobb County Government Employees' Other Post Employment Benefit (OPEB) Plan

X

Trustee



Fundamental improvement

House View presentation

Jason Draho, Ph.D.

Brian Rose, Ph.D.

Paul Hsiao

Michael Gourd

Danny Kessler

November 1, 2024

**This report has been prepared by UBS Financial Services Inc.
Please see important disclaimers and disclosures at the end of this document.**



Executive summary: Positioning for more rate cuts

Macro Macroeconomic outlook

- **Base case:** A soft landing is even more likely relative to last month based on good data, while recession risk declined further. The soft landing is premised on consumer spending and the labor market continuing to cool, but not crack.
- **Growth:** Recent revisions to the data suggest that the trend growth rate is higher than previously estimated. Income growth has been revised higher, helping to explain why consumer spending has been so resilient despite high interest rates.
- **Inflation:** The disinflation trend should continue, as a cooling labor market and consumers pushing back against price increases should lead to further slowing in core inflation. The trend of falling shelter inflation will help.
- **Rates:** The Fed cut rates by 50 bps on 18 September. We expect another 50bps by year-end and an additional 100bps in 2025. Further weakness in the labor market could trigger more aggressive easing.

Markets Market overview

- **Risk-positive “landing” scenario:** Following the Fed’s decision to kick off the easing cycle, US economic data have continually surprised to the upside. Payrolls have grown well above consensus expectations, while retail sales illustrates a resilient consumer. With a backdrop of strong labor markets supporting ongoing consumption, there is a strong possibility that the economy continues to grow at a 5% nominal rate versus the 4% of the 2010s.
- **More to go in equities:** With a strong economic backdrop and the Fed embarking on its rate-cutting cycle, we believe the macro environment is supportive for risk assets, particularly equities. We see the largest growth drivers tied to innovations in artificial intelligence. Additionally, equities have historically performed well in the months following the presidential election.
- **Return to all-time highs:** The S&P 500 has continued to set new all-time highs amid a Fed rate cut and encouraging economic data releases, as momentum continues to drive US stocks higher. Valuations are high in absolute terms, but not stretched reasonable when considering strong earnings growth and the macro environment. Historically, when the Fed is cutting rates in the context of a soft landing, equities tend to perform well in 12 months before and after the first Fed rate cut.

Investment Investment outlook

- **A positive bias toward risk assets favoring equities, which we upgraded to Attractive this month.**
 - Moderating but solid growth, disinflation continuing, and lower rates are all supportive for our Attractive asset classes.
- **Preferences:** We expect positive returns across all asset classes over the next six to 12 months but see particular value in equities and US equities specifically, which we upgrade to Attractive.
- **Equities:** Tech stocks are most attractive because the AI tailwind has room to run.
- **Credit:** Absolute yields are elevated, while spreads are vulnerable to widening in our downside scenario, favoring high quality bonds (i.e., IG, MBS).
- **Commodities:** Gold is attractive due to secular central bank demand and expectations for rate cuts.

Markets rewind: An annotated display of the S&P 500

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



Source: Bloomberg, UBS, as of 24 October 2024

Asset class performance: Large rate moves drove market performance

	1 month	YTD	3Q24	1 year
Cash	0.4%	4.4%	1.4%	5.4%
US Gov't FI (short)	-0.7%	3.5%	2.9%	5.7%
US Gov't FI (intermediate)	-2.5%	1.9%	4.7%	7.6%
US Gov't FI (long)	-6.4%	-4.1%	8.0%	13.5%
US TIPS	-2.1%	2.7%	4.1%	7.9%
US Municipal FI	-1.3%	0.9%	2.7%	9.8%
US IG Corp FI	-2.5%	2.8%	5.7%	12.8%
US HY Corp FI	-0.4%	7.6%	5.3%	17.0%
EM FI (Hard)	-1.6%	6.8%	6.2%	18.6%
EM FI (Local)	-4.7%	0.2%	9.0%	9.0%
US All-cap	1.6%	22.1%	6.2%	43.2%
US Large cap growth	2.6%	27.2%	3.2%	50.0%
US Large cap value	0.6%	17.0%	9.4%	35.4%
US Mid cap	1.1%	15.7%	9.2%	39.3%
US Small cap	1.0%	11.9%	9.3%	39.1%
Int'l Developed Markets	-5.5%	8.5%	7.3%	25.0%
Emerging Markets	-3.2%	13.5%	8.7%	26.7%
Preferreds	-1.5%	11.9%	8.3%	26.9%
MLPs	-0.7%	17.4%	0.7%	23.9%
US Real Estate	-0.2%	14.9%	16.1%	42.8%
Senior loans	1.0%	7.1%	1.9%	10.5%

Source: Bloomberg, UBS, as of 28 October 2024

Macro recap: Consumer leads resurgence in stronger growth data

Recent data has been mixed, though mostly surprising to the upside. Growth has been led by consumer spending. Revised estimates show that this spending is well supported by rising disposable income.

- **US Macro data has surprised to the upside.** Latest readings and revisions show a robust household sector that is still spending above-trend.
 - **Labor market back in balance.** The extreme tightness following the pandemic has eased and labor market conditions are in the range of pre-pandemic levels.
 - **Spending holding up.** Revised data shows that consumer spending is backed by robust real income growth, and household balance sheets are still strong.
 - **Inflation continues to moderate.** Price data has shown broad disinflation in recent months, with lower gas prices helping to bring inflation down close to the Fed's 2% target.
 - **Housing market shows broad weakness.** High mortgage rates continue to weigh on housing activity, freezing transactions.
 - **Soft data still show "vibecession."** Small business and consumer sentiment data are still gloomy, showing the persistence of recent inflation and high interest rates.

Bloomberg's ECO surprise index back in positive territory

Z-score



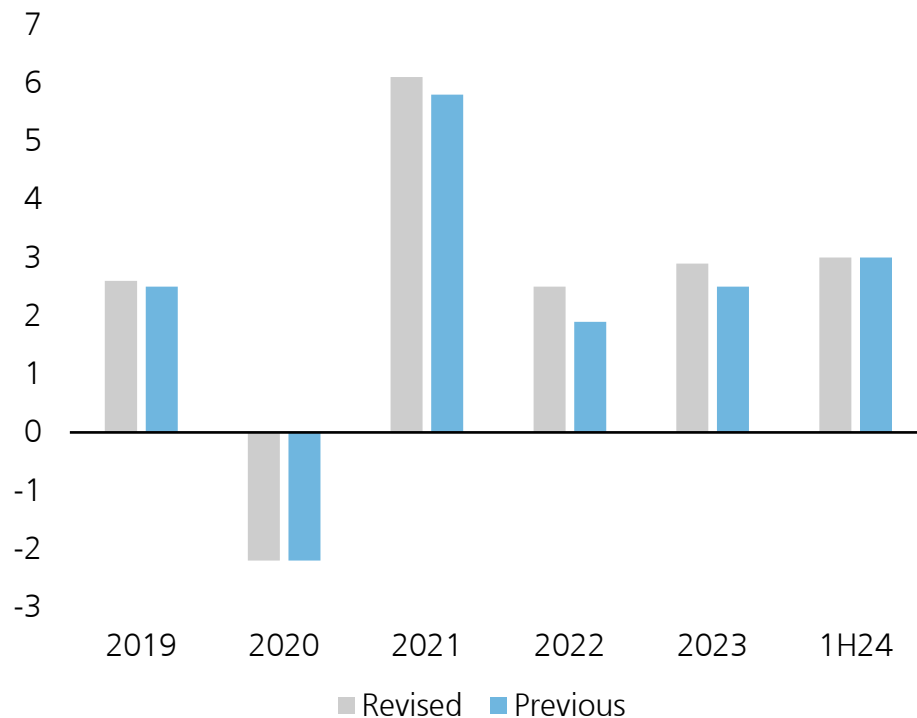
Source: Bloomberg, Macrobond, UBS, as of 30 October 2024

Growth: GDP over the past five years revised higher

Government estimates now suggest that higher growth rates can be sustained without inflation, making it easier for the Fed to cut rates without waiting for a period of slow growth.

GDP growth from 2019 onward averaging 2.5%

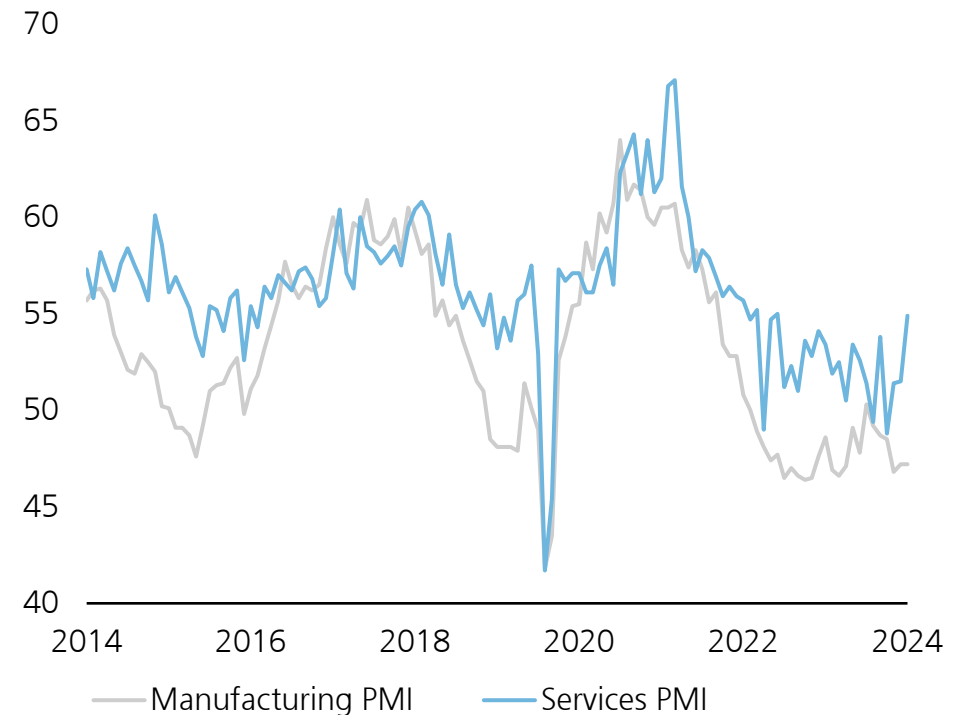
Annual real GDP, y/y change, in %



Source: BEA, UBS, as of 30 September 2024

Survey data is weaker than hard data such as GDP growth

ISM Purchasing Manager Indexes, 50 = neutral



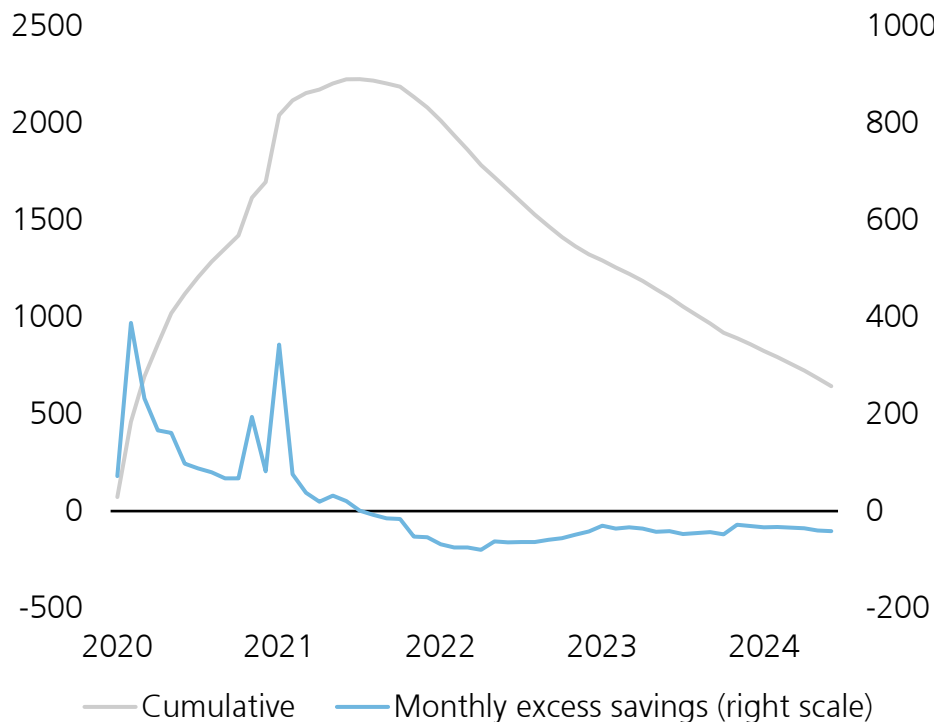
Source: Bloomberg, UBS, as of 25 October 2024

Growth: Consumption growth appears more sustainable

Revised data suggests real income has been growing faster than previously estimated and household balance sheets are strong, making robust consumption growth appear more sustainable.

Still some excess savings left from pandemic

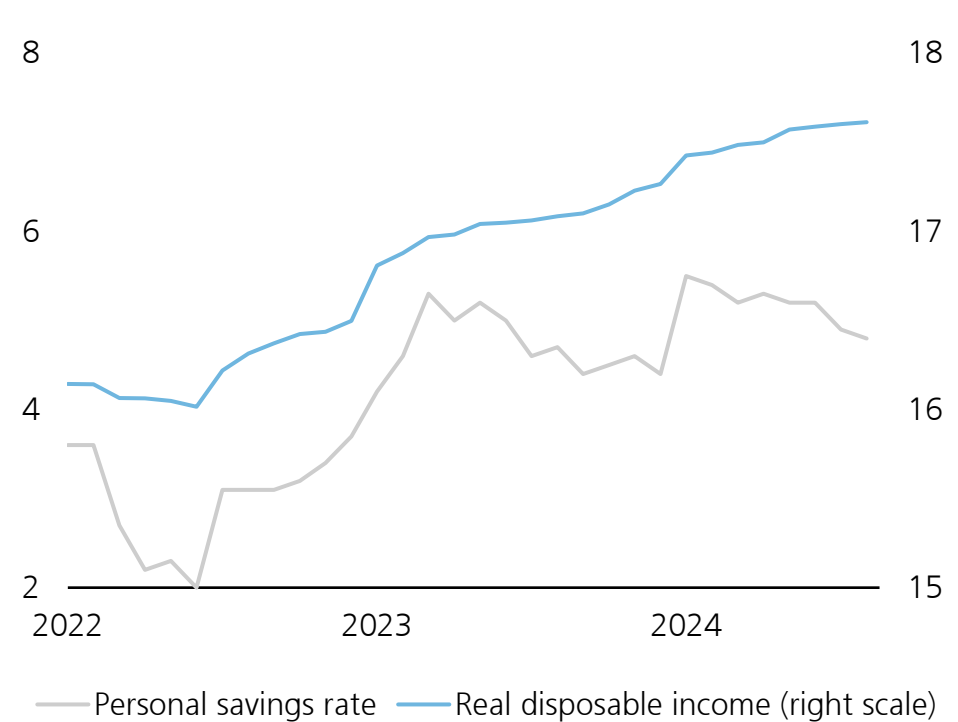
Excess savings, monthly and cumulative, in USD bn



Source: Bloomberg, UBS, as of 25 October 2024
Note: Excess savings based on UBS estimates

Real income is rising, savings rate stable near 5%

Personal savings rate in %, real disposable income in USD tr



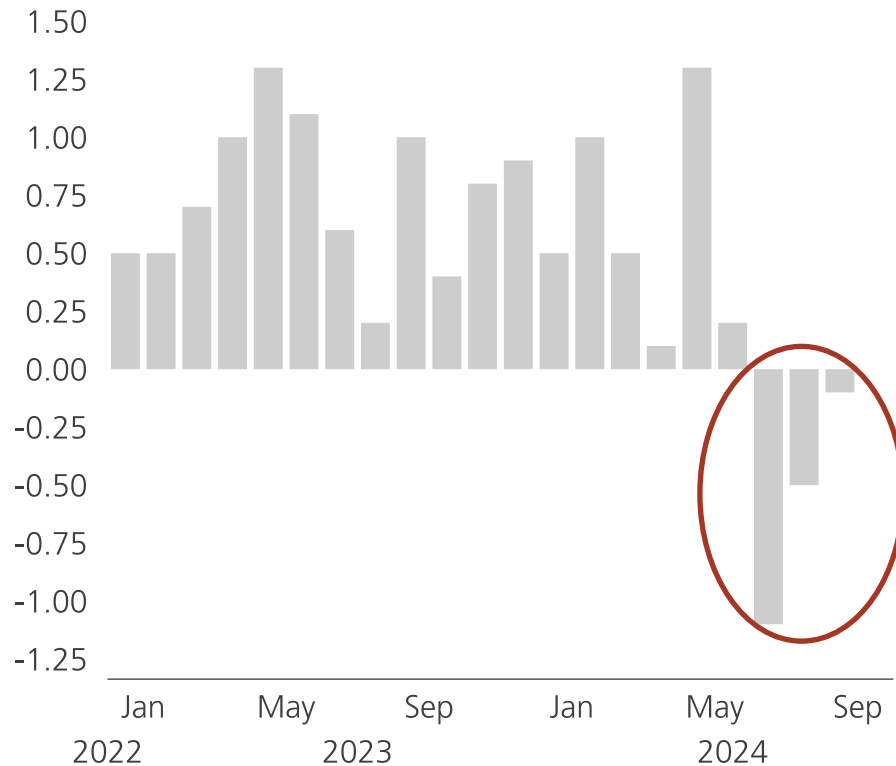
Source: Bloomberg, UBS, as of 25 October 2024

Growth: High borrowing costs weighing on investment

High borrowing costs are weighing on investment, but AI is providing a tailwind. Fiscal policy is supporting investment through the Inflation Reduction Act, CHIPS Act, and infrastructure spending.

Construction spending has slowed

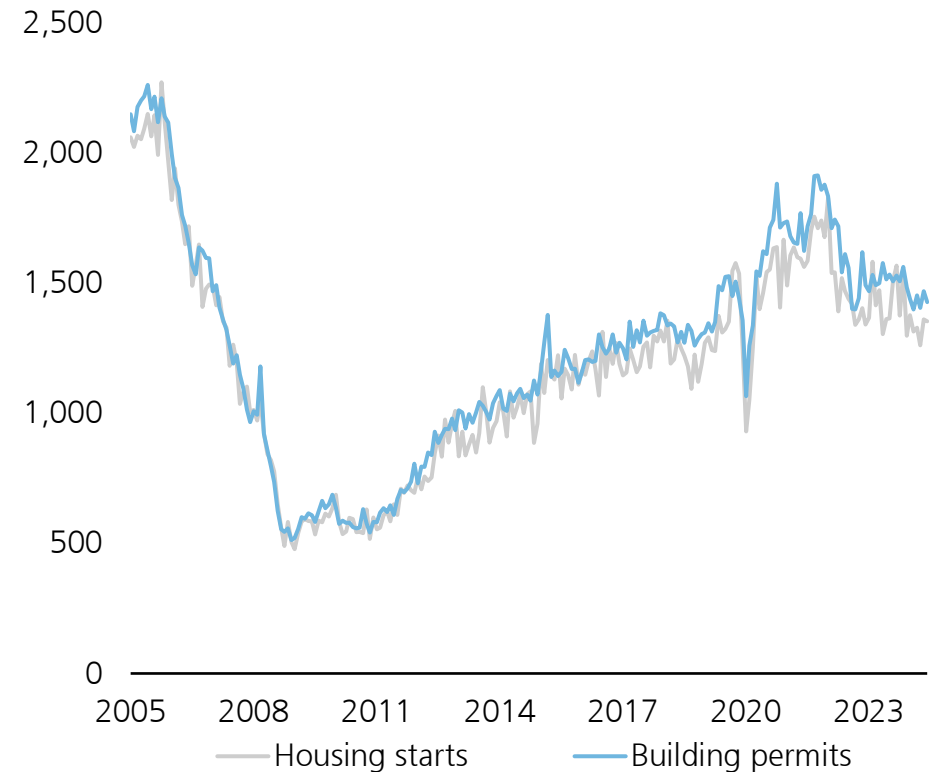
m/m, SAAR, %



Source: Bloomberg, Macrobond, UBS, as of 25 October 2024

High interest rates are weighing on housing

Housing starts and building permits, annualized rate in thousands



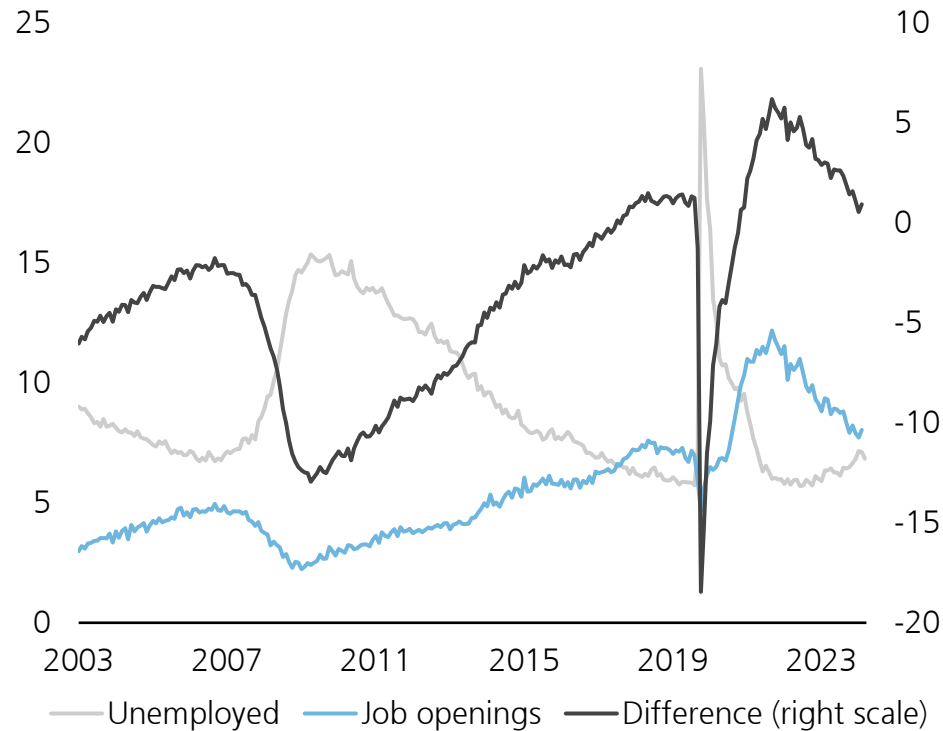
Source: Bloomberg, UBS, as of 25 October 2024

Labor: The labor market is strong but no longer overheated

Labor market tightness peaked two years ago and has been getting back into balance since then. Fed Chair Powell said he does not want to see further softening.

Better balance between job openings and unemployed

In millions



Source: Bloomberg, UBS, as of 25 October 2024

Wage growth has moderated but still solid

Average hourly earnings, y/y change in %



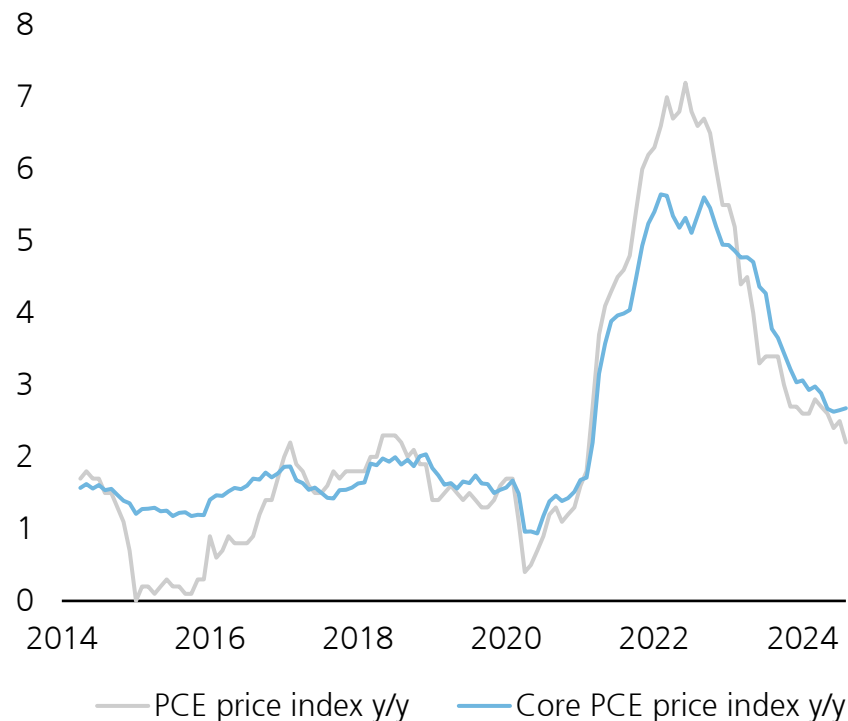
Source: Bloomberg, UBS, as of 25 October 2024

Inflation: Inflationary pressure has eased

Monthly inflation data showed acceleration in 1Q24, but the more recent data shows broad disinflation, with previously sticky services slowing. Shelter remains the biggest driver of overall inflation.

PCE inflation is near the Fed's 2% target, core a bit higher

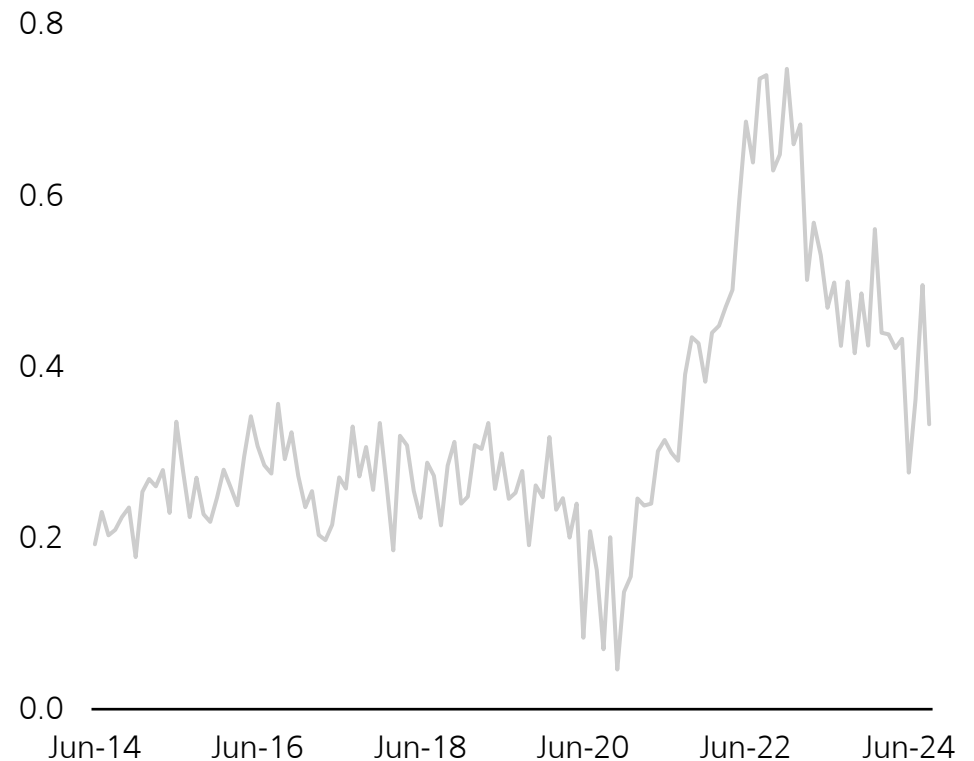
PCE and core PCE price indexes, year-over-year change in %



Source: Bloomberg, UBS, as of 25 October 2024

Rent inflation finally appears to be moderating

Owners' equivalent rent, month-over-month change in %



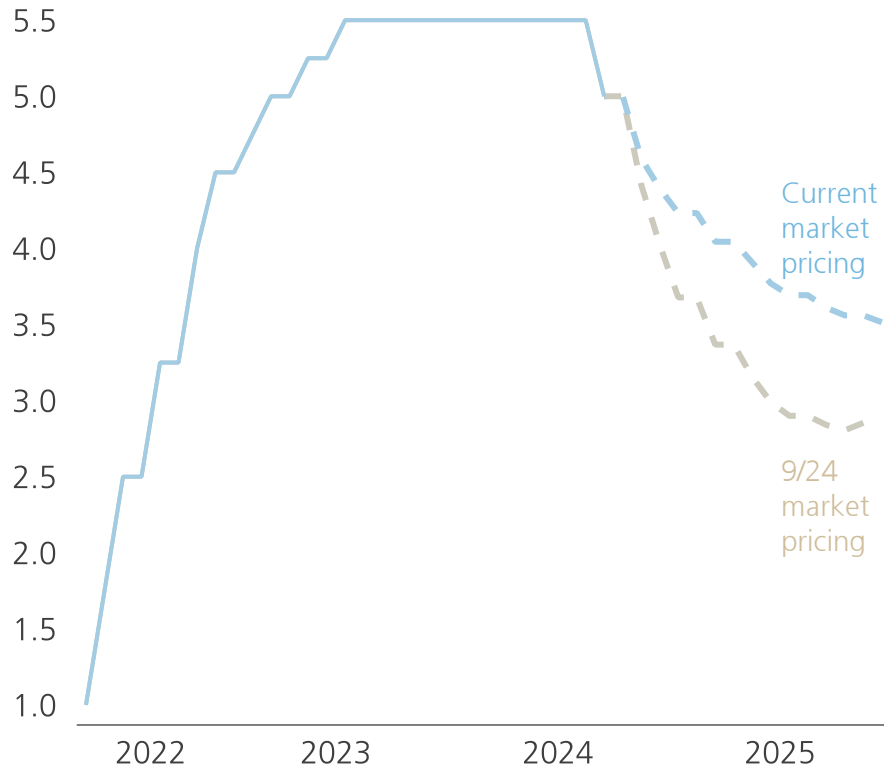
Source: Bloomberg, UBS, as of 25 October 2024

Rates: Fed has joined other central banks in cutting rates

The Fed joined other major central banks in cutting rates with an aggressive 50bp first cut, but there is little pressure to keep cutting rapidly given upward surprises in the recent data.

Markets have pared back expectations for rate cuts

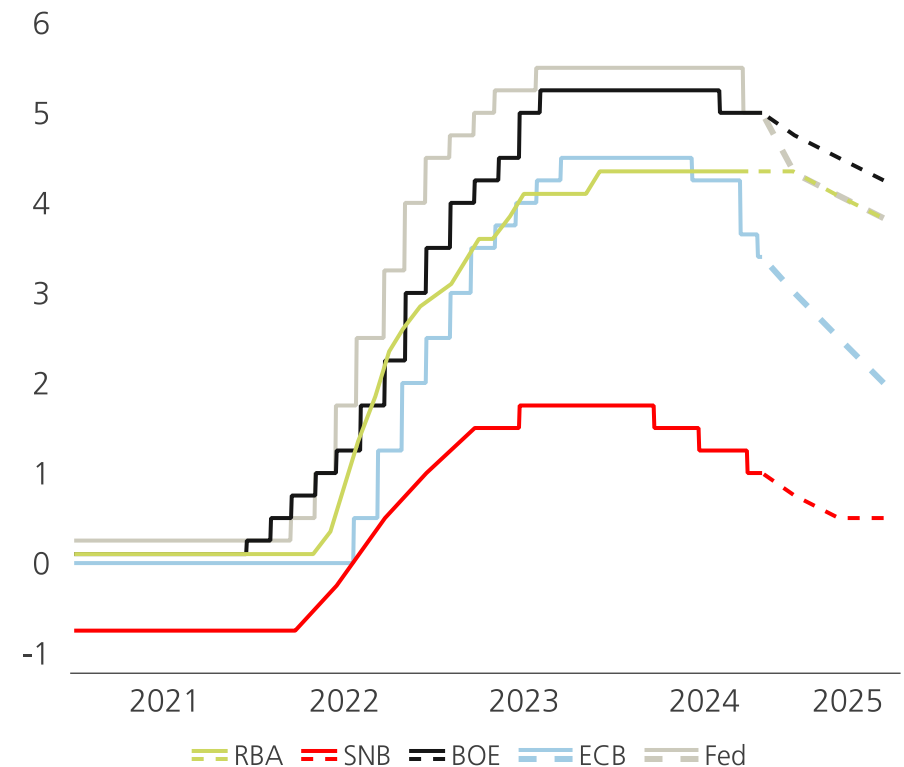
Policy rate, with forecast through end of year, %



Source: Bloomberg, UBS, as of 25 October 2024

A September cut let the Fed join its already-cutting DM peers

Policy rate, with forecast through March 2025, %



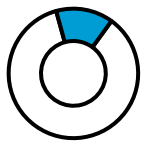
Source: Bloomberg, UBS, as of 25 October 2024

Politics: Investors are awaiting the outcome of the US election

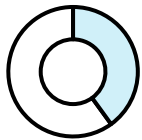
The dynamics of the election have shifted significantly in recent months. Trump built a strong lead over Biden, but the introduction of Harris evened the odds. Trump has retaken the lead in the final weeks.

Four plausible scenarios, but two are most likely

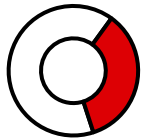
UBS CIO US election scenario probabilities



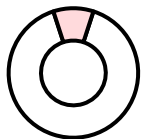
- Blue sweep (5%)



- Harris with split congress (45%)



- Red sweep (35%)

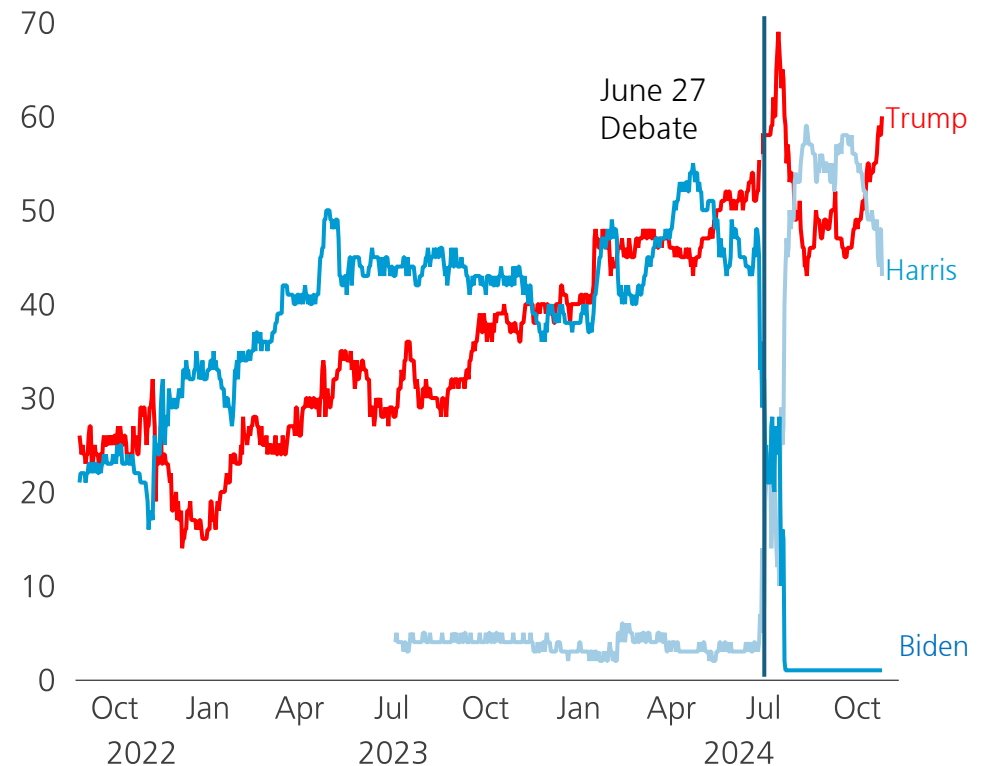


- Trump with split congress (15%)

Source: UBS, as of 28 October 2024

Trump has overtaken Harris in the final weeks before the election

Probability to win the election, in %



Source: PredictIt, UBS, as of 25 October 2024

Market review: Election likely to be a “risk-clearing” event

September saw the S&P 500 return to setting new all-time highs after a growth scare in August. Investors are waiting for election results to clarify on market direction, with rates rising rapidly in recent weeks.

- **What the markets are pricing:** Markets have returned to pricing a good outcome for the economy and AI spending on the back of an aggressive Fed rate cut and encouraging economic data releases. The S&P 500 is back to near all-time highs.
- **Investors concerns were assuaged with encouraging economic data.** Solid retail sales, a benign inflation report, and relatively low initial jobless claims have all led to a rapid rebound in US equities as investor hopes are renewed for the Fed to navigate to a soft landing.
- **Election uncertainty:** Equity performance has slowed following the sharp rebound in September, as tepid investors appear to be waiting for the election. Treasury rates have spiked in the weeks leading up to the election, likely on the possibility of increased inflation due to Trump tariffs.
- **Momentum:** The momentum factor has been a strong tailwind to US equity strength this year and looks set to continue driving returns through the end of the year following the election.

US large-cap equities have been among the best performers

Asset class total returns

	1 week	1 month	3 month	6 month	12 month
Cash	0.1%	0.4%	1.3%	2.7%	5.4%
US government	-0.4%	-2.6%	0.9%	4.7%	8.0%
US TIPS	-0.5%	-2.1%	1.0%	4.4%	7.9%
US municipals	-0.8%	-1.3%	0.5%	2.6%	9.8%
US IG credit	-0.3%	-2.5%	1.7%	5.8%	12.8%
US high yield	-0.1%	-0.4%	3.1%	7.1%	17.0%
Int'l dev FI	-0.7%	-4.2%	1.7%	4.7%	8.4%
EM USD FI	-0.3%	-1.3%	3.1%	7.0%	17.1%
EM LC FI	-0.7%	-3.3%	2.4%	4.8%	10.4%
Global Equity	-0.7%	-0.5%	5.9%	12.1%	36.8%
US All-cap	-0.4%	1.6%	6.7%	14.6%	43.2%
US large-cap	-0.5%	1.6%	7.1%	14.7%	43.4%
US large-cap growth	-0.2%	2.6%	8.8%	17.3%	50.0%
US large-cap value	-0.8%	0.6%	5.2%	11.1%	35.4%
US mid-cap	-0.3%	1.1%	6.2%	11.4%	39.3%
US small-cap	0.2%	1.0%	-0.4%	12.9%	39.1%
Int'l dev equity	-0.9%	-5.5%	1.9%	5.6%	25.0%
Int'l dev value	-1.0%	-4.9%	1.8%	6.7%	24.0%
EM equity	-1.0%	-3.2%	6.5%	10.9%	26.7%
Preferreds	-0.4%	-1.2%	4.5%	7.6%	21.4%
US Real Estate	0.7%	-0.2%	9.0%	23.1%	42.8%
Senior loans	0.1%	1.0%	2.2%	4.5%	10.5%
Broad Commodities	-0.4%	-1.6%	3.7%	-2.0%	-1.9%
Brent Crude	-3.9%	-0.2%	-9.6%	-15.4%	-13.9%
Gold	0.8%	3.2%	14.9%	17.3%	36.7%
Broad Industrial Metals	0.3%	-2.6%	9.3%	-2.3%	14.3%

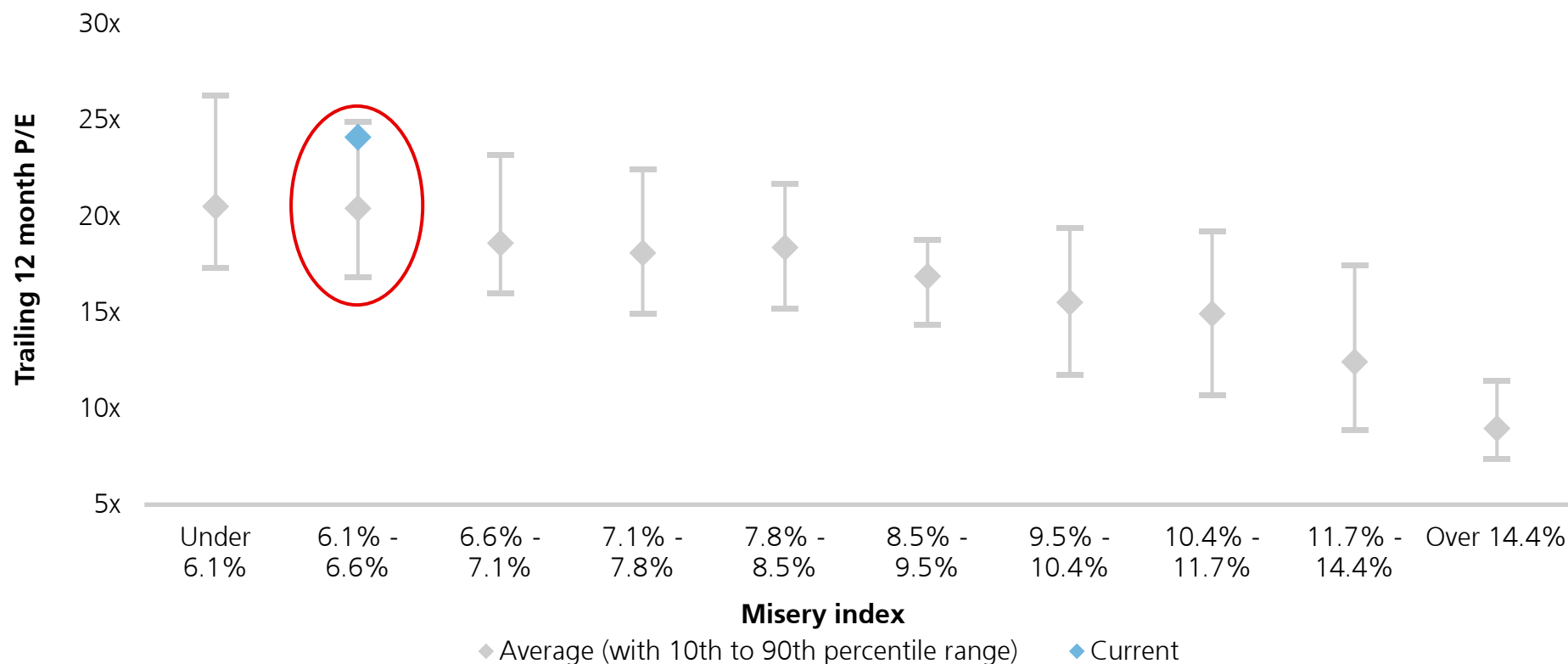
Source: Bloomberg, UBS, as of 28 October 2024

Valuations: Ratios are stretched, but in-line with macro conditions

Valuations across equities are at elevated but not unreasonable levels, anticipating easier monetary conditions ahead as earnings come in strong.

Valuations are slightly elevated relative to macro conditions

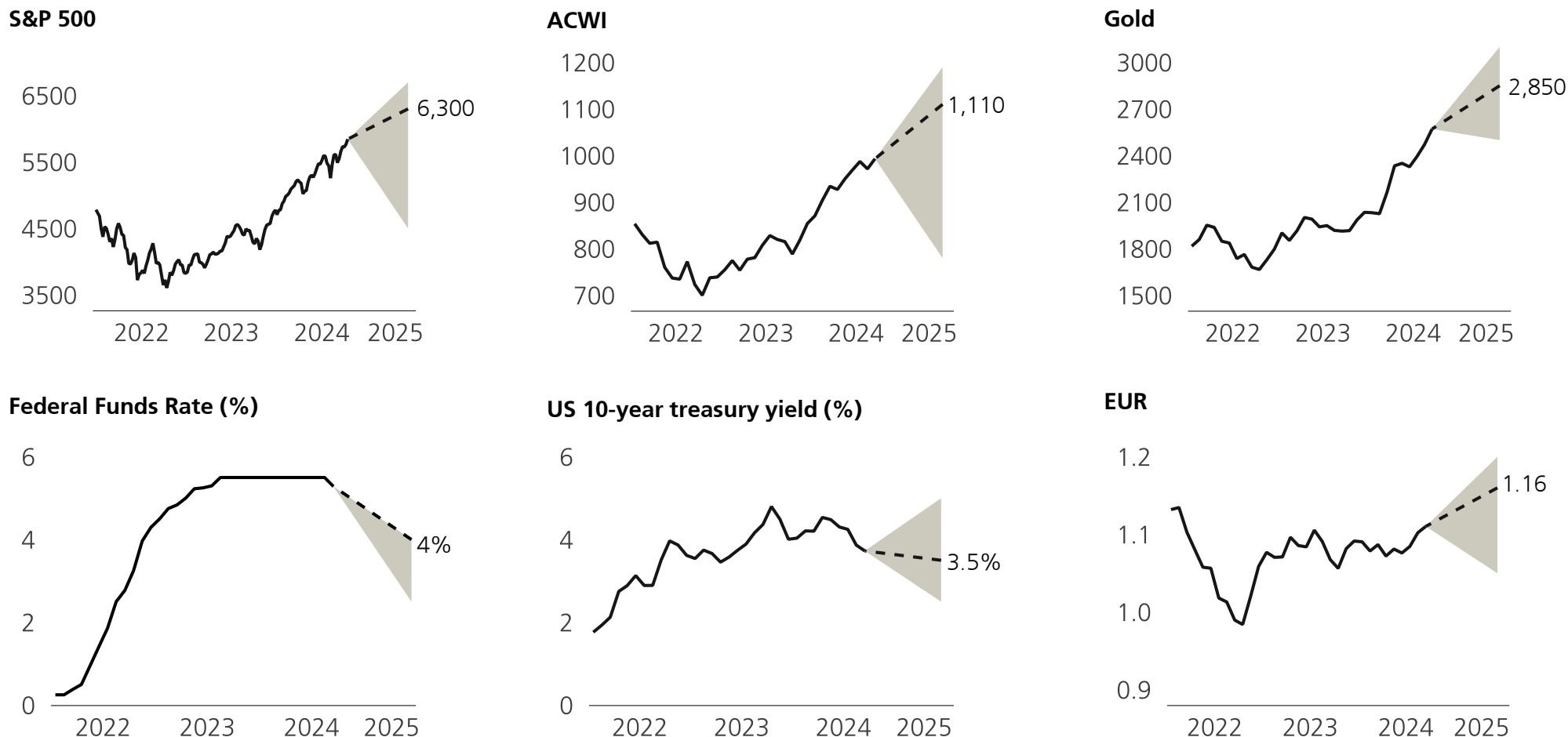
Trailing 12 Month P/E vs Misery index



Source: FactSet, UBS, as of 18 October 2024

Price targets: Return outlook remains positive amid soft landing hopes

Risk/return looks more attractive after revised economic data. Lower rates benefit high quality fixed income, offsetting potential spread widening. June 2025 targets



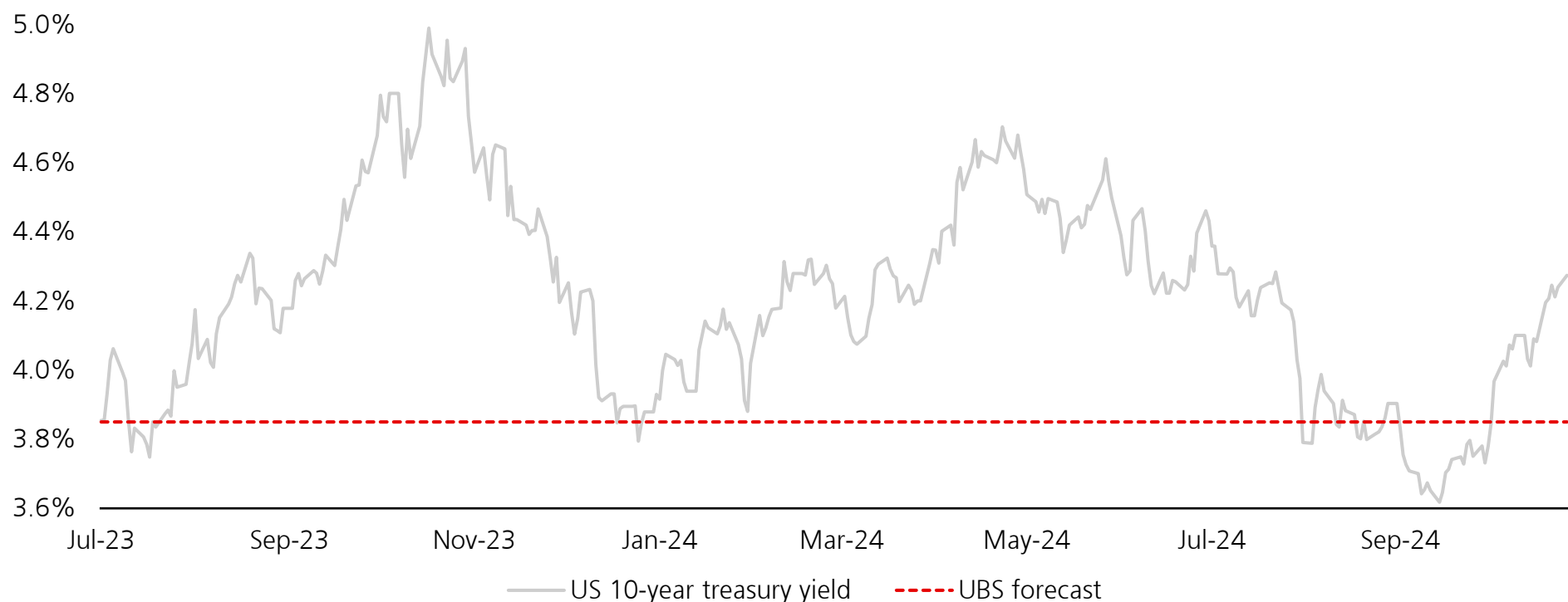
Source: Bloomberg, UBS forecasts, as of 24 October 2024

Yields: The 10-year treasury yield spiked in October

10-year treasury yields have risen well back above our year-end target as a stronger economy and possible “no landing,” along with inflationary pressure in the scenario of a Trump victory, have been priced in.

10-year Treasury yields rose well above our year-end target of 3.85%

US 10-year treasury yield with UBS year-end forecast, in %



Source: Bloomberg, UBS, as of 28 October 2024

Appendix

Statement of Risk

Equities - Stock market returns are difficult to forecast because of fluctuations in the economy, investor psychology, geopolitical conditions and other important variables.

Fixed income - 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-US tax consequences of owning any securities referenced in this report.

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Municipal bonds - 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.

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Our preferences does not assure profits or prevent against losses from an investment portfolio or accounts in a declining 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. CIO GWM 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, CIO GWM 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.

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.

Nontraditional Assets

Nontraditional 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-US 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 notice, 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 US dollars, changes in the exchange rate between the US 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 US investor.

Appendix

Global Investment Process and Committee Description

The UBS investment process is designed to achieve replicable, high-quality results through applying intellectual rigor, strong process governance, clear responsibility and a culture of challenge.

Based on the analyses and assessments conducted and vetted throughout the investment process, the Chief Investment Officer (CIO) formulates the UBS Wealth Management Investment House View preferences at the Global Investment Committee (GIC). Senior investment professionals from UBS, complemented by selected external experts, debate and rigorously challenge the investment strategy to ensure consistency and risk control.

Global Investment Committee Composition

The GIC comprises top market and investment expertise from UBS:

• Mark Haefele (Chair)	• Solita Marcelli	• Tan Min Lin	• Themis Themistocleous
• Paul Donovan	• Bruno Marxer(*)	• Adrian Zuercher	• Mark Anderson

(*) Business area distinct from Chief Investment Office Global Wealth Management

US Investment Strategy Committee description

We recognize that a globally derived house view is most effective when complemented by local perspective and application. As such, UBS has formed a Global Wealth Management US Investment Strategy Committee.

US Investment Strategy Committee Composition

• Solita Marcelli	• Jason Draho (chair)	• Leslie Falconio
• David Lefkowitz	• Brian Rose	• Daniel Scansaroli

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- **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.
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- **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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Version D/2023. CIO82652744

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UBS House View

Monthly Extended **December 2024**

Chief Investment Office GWM
Investment Research

Please Note:

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Published: 21 November 2024

This report was prepared by UBS AG London Branch, UBS Switzerland AG, UBS AG Hong Kong Branch, UBS AG Singapore Branch and UBS Financial Services Inc. Please see the important disclaimer at the end of the document.

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Section 1

Investment views

Section 1.1

Asset class outlook

Asset class outlook

Summary of views

We keep global equities at Attractive.

In bonds, we like investment grade and US government bonds, whereas emerging market, and high yield remain Neutral.

In commodities, we hold a preference for both oil and gold.

In foreign exchange, we like the CHF, EUR, GBP and AUD, while the CNY remains Unattractive.



Equities

We keep global equities at Attractive. Tariff threats prompted us to trim our ex-US forecasts but should not derail the positive overall outlook.

Economic growth has been resilient and central banks have been proactive, giving us confidence that equities have further room to run in this supportive backdrop.

We expect earnings to grow in the high-single digits this year and next. Contributions should broaden, but the tech sector is expected to remain the main engine of growth thanks to robust AI investments.

Among the various regions, we prefer the US and Asia ex-Japan. We also recommend taking exposure to AI beneficiaries.



Bonds

We currently have a Neutral asset class recommendation on fixed income.

Within the asset class, we are upgrading US government bonds to Attractive from Neutral given the cheapening over the last month. The asset class offers an appealing risk-return profile, in our view, particularly in a scenario where economic growth could weaken further.

We maintain investment grade at Attractive and high yield and emerging market credit at Neutral.

The trajectory of yields going forward should remain a function of Fed rate cuts, as well as much of Trump's policy proposals are implemented by his administration and passed by Congress, which the Republicans will soon control.



Foreign exchange

The re-election of Donald Trump has led to a strong rebound for the USD in recent weeks. With Trump in office, we expect less USD weakness in 2025 than previously expected.

However, we retain our view that the USD's broad overvaluation should moderate in 2025. We expect the CHF, EUR, AUD, and GBP to strengthen versus the dollar.

Investors are advised to use the recent USD strength to curb or hedge long dollar exposure. We keep the CNY at Unattractive, as China will most likely be the main target of Trump's tariff plans.



Commodities

With an expected total return of around 10% for broad commodities and a volatility of around 15%, we retain a Neutral outlook for the asset class.

Most of the gains are expected to materialize in two sectors: energy and industrial metals.

We like gold, as we see even higher prices over the next six to 12 months. Our positive view is driven by our expectation of greater investment demand as US real rates drop and on strong ongoing central bank purchases. But because of its low share in the commodity sector, gold has a limited impact on the broad index.

With inventories set to keep falling, we expect Brent to move back to USD 80/bbl.

Section 1.2

Risk scenarios

Key scenarios for 2025

	Bull case: Growth surge	Base case: Growth despite tariffs	Bear case: Tariff shock / US stagflation	Bear case: Hard landing
Probability	25%	50%	15%	10%
Market path	Bonds flat, equities up Equity markets rally amid strong US growth, accelerating consumption, and optimism about the impact of AI on earnings. Bond yields trend slightly up.	Bonds slightly up, equities up Equities rise owing to a stable and positive outlook for GDP and earnings growth. Bond yields fall slightly over the course of next year.	Bonds down slightly, equities down Equities and bonds suffer a correction due to fears of economic stagnation, a rising US fiscal deficit, and a longer period of tighter monetary policy.	Bonds up, equities sharply down Global equities post double-digit losses, credit spreads widen. Valuations in AI stocks drop substantially. Assets considered safer havens, such as high-quality bonds, gold, the US dollar, the Swiss franc, and Japanese yen, appreciate.
Economic growth	The US economy continues to surprise positively, aided by policy support from deregulation and lower taxes. China's economy turns the corner, as policy stimulus proves more effective than expected and a US trade deal is reached quickly. European growth is lifted by improving global demand.	The US economy continues to grow at a stable pace of around 2.0-2.5% over the next 12 months. Other Western economies experience weaker but positive growth in line with market expectations. Policy stimulus in China helps to stabilize economic activity.	The disruption to global trade leads to lower US domestic demand and much weaker global economic growth, though likely falling short of a US or global recession.	Global growth falls over the next 12 months owing to weakness in consumer spending and labor markets and/or a fall in AI-related investments. GDP contracts for one or more quarters in the US and the Eurozone. Policy stimulus in China fails to stabilize the economy.
Inflation	Continues to fall in Europe but stabilizes above target in the US as fiscal stimulus lifts consumption.	Continues to fall gradually in the US and in Europe, normalizing in 1H25.	Remains elevated in the US as each subsequent round of tariffs puts additional upward pressure on prices. Inflation in targeted countries normalizes less quickly as currencies weaken to offset the tariff impact.	Falls as demand for goods and services collapses.
Central banks	The Fed pauses later in 2025 as inflation normalization stalls. Other central banks cut rates in line with expectations as inflation continues to normalize despite stronger-than-expected economic activity.	All major central banks ease policy by mid-2025 with the exception of the Bank of Japan. The Fed cuts rates by another 100bps in 2025. The ECB cuts rates by 25bps every meeting until mid-2025.	Central banks adopt a more cautious approach to monetary easing for fear of a longer period of above-target inflation and disanchoring inflation expectations. The Fed cuts rates by 50bps in 2025.	Major central banks cut rates swiftly at first signs of an economic downturn, bringing monetary policy back into accommodative territory. The Fed lowers its policy rate by at least 250bps over the next 12 months.
US politics / Geopolitics	US corporate tax cut to 20% or lower. A quick trade deal happens between the US and its main trading partners. Potential de-escalation of the Middle East crisis and/or the Russia-Ukraine war.	President Trump extends the time frame of temporary tax relief policies in the US but stops short of lowering US corporate taxes. Selective tariffs are implemented on US imports, mainly targeting China, with some tariff retaliation by other countries. The Middle East crisis remains geographically contained. The Russia-Ukraine war continues.	The Trump administration imposes large, blanket tariffs on imports from multiple countries, with proportionate retaliation by targeted trading partners. Tensions in the Middle East escalate to a regional war with potential for significant disruption to oil supply. Russia advances further into Ukraine.	

Note: Each scenario narrative represents a non-exhaustive list of events that could lead to a market path outlined in our scenario targets. The probabilities represent CIO's view on the overall probability of reaching the market targets for the given scenario, rather than the probability of a single event or chain of events materializing.

Asset class targets: December 2025

Key targets for December 2025	spot*	Bull case: Growth surge	Base case: Growth despite tariffs	Bear case: Tariff shock	Bear case: Hard landing
MSCI AC World	1,031	1,240 (+20%)	1,140 (+11%)	890 (-14%)	800 (-22%)
S&P 500	5,917	7,000 (+18%)	6,600 (+12%)	5,100 (-14%)	4,500 (-24%)
EuroStoxx 50	4,730	5,900 (+25%)	4,900 (+4%)	4,000 (-15%)	3,800 (-20%)
SMI	11,540	14,200 (+23%)	12,200 (+6%)	10,500 (-9%)	10,200 (-12%)
MSCI EM	1,094	1,350 (+23%)	1,220 (+12%)	920 (-16%)	950 (-13%)
Fed funds rate (upper bound)	4.75	4.00	3.50	4.00	1.00
US 10y Treasury yield (%)	4.41	4.50	4.00	5.00	2.50
US high yield spread**	267bps	250bps	300bps	450bps	700bps
Euro high yield spread**	320bps	300bps	340bps	500bps	700bps
US IG spread**	68bps	55bps	70bps	120bps	180bps
Euro IG spread**	103bps	90bps	105bps	160bps	200bps
EURUSD	1.05	1.15 (+9%)	1.12 (+6%)	1.00 (-5%)	1.05 (-0%)
Gold***	USD 2,652/oz	USD 2,600/oz (-2%)	USD 2,900/oz (+9%)	USD 3,100/oz (+17%)	USD 3,200/oz (+21%)

* Spot prices as of market close of 20 Nov 2024. Developed market constituents of the MSCI All Country (AC) World index display in the local currency. The MSCI EM index displays in US dollar. Values in brackets are expected percentage changes from the quoted spot levels. Dividends, share buybacks and other sources of carry are not included.

** During periods of market stress, credit bid-offer spreads tend to widen and result in larger ranges.

*** Gold is a safe-haven asset whose price tends to rise when risk assets, such as equities, fall, and vice versa.

Note: asset class targets above refer to the respective macro scenarios. Individual asset prices can be influenced by factors not reflected in the macro scenarios.

Section 1.3

Asset class preferences

Global asset class preferences (1/2)

	Unattractive	Neutral	Attractive
Equities			+
Regions			
United States			+
Europe		=	
Eurozone		=	
Switzerland		=	
United Kingdom		=	
Asia ex Japan			+
Mainland China		=	
India			+
Taiwan			+
Japan		=	
Transformational ideas			
AI			+
Power and resources			+
Tactical ideas			
Reshoring & infrastructure			+
Quality			+
Small and mid caps (EMU)			+

	Unattractive	Neutral	Attractive
Sectors			
Comm Services (US)			+
Cons Discretionary (US)			+
Technology (US, Eur)			+
Utilities (US, Eur)			+
Financials (US)			+
Consumer staples (Eur)			+

The asset class preferences provide high-level guidance to make investment decisions. The preferences reflect the collective judgement of the members of the House View meeting, primarily based on assessments of expected total returns on liquid, commonly known indexes, House View scenarios, and analyst convictions over the next 12 months. Note that the tactical asset allocation (TAA) positioning of our different investment strategies may differ from these views due to factors including portfolio construction, concentration, and borrowing constraints.

- Attractive:** We consider this asset class to be attractive. Consider opportunities in this asset class.
- Neutral:** We do not expect outsized returns or losses. Hold longer-term exposure.
- Unattractive:** We consider this asset class to be unattractive. Consider alternative opportunities.

Note: For equities, we have collapsed “Most Attractive” with “Attractive” and “Least Attractive” with “Unattractive” from the five-tier rating system that is found in the Equity Compass into 3 tiers.

Global asset class preferences (2/2)

	Unattractive	Neutral	Attractive
Bonds		=	
High grade		= → +	+
Investment grade			+
High yield		=	
Emerging markets		=	
Commodities		=	
Oil			+
Gold			+
Foreign exchange			
USD	− →	=	
EUR			+
JPY		=	
GBP			+
CHF			+
AUD			+
CNY	−		

The asset class preferences provide high-level guidance to make investment decisions. The preferences reflect the collective judgement of the members of the House View meeting, primarily based on assessments of expected total returns on liquid, commonly known indexes, House View scenarios, and analyst convictions over the next 12 months. Note that the tactical asset allocation (TAA) positioning of our different investment strategies may differ from these views due to factors including portfolio construction, concentration, and borrowing constraints.

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- Neutral:** We do not expect outsized returns or losses. Hold longer-term exposure.
- Unattractive:** We consider this asset class to be unattractive. Consider alternative opportunities.

US asset class preferences

	Unattractive	Neutral	Attractive
Cash		=	
Fixed Income		=	
US Gov't FI		=	
US Gov't Short		=	
US Gov't Int.		= →	+
US Gov't Long		=	
TIPS		=	
US Agency MBS			+
US CMBS		=	
US Municipal		=	
US IG Corp FI			+
US HY Corp FI		=	
Senior Loans		=	
Preferreds		=	
EM Hard Currency FI		=	
EM Local Currency FI		=	
Commodities		=	
Gold			+
Oil			+

	Unattractive	Neutral	Attractive
Equity			+
US Equity			+
US Large Cap			+
Comm Services			+
Cons Discretionary			+
Cons Staples		=	
Energy		=	
Financials			+
Health Care		=	
Industrials		=	
Info Technology			+
Materials		=	
Real Estate		=	
Utilities			+
US Growth Equity			+
US Value Equity			+
US Mid Cap		=	
US Small Cap		=	
Int'l Developed Markets		=	
Emerging Markets		=	

The asset class preferences provide high-level guidance to make investment decisions. The preferences reflect the collective judgement of the members of the House View meeting, primarily based on assessments of expected total returns, House View scenarios, and analyst convictions over the next 12 months. Note that the tactical asset allocation (TAA) positioning of our different investment strategies may differ from these views due to factors including portfolio construction, concentration, and borrowing constraints.

Attractive: We consider this asset class to be attractive. Consider opportunities in this asset class.

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Note: For equities, we have collapsed "Most Attractive" with "Attractive" and "Least Attractive" with "Unattractive" from the five-tier rating system that is found in the Equity Compass into three tiers. These ratings are primarily on commonly known indexes.

Messages in Focus



Position for lower rates

We expect central banks to cut interest rates further in the year ahead, reducing cash returns. We believe investment grade bonds offer attractive yields and expect mid-single-digit returns in US dollar terms. Diversified fixed income strategies and equity income strategies can also help investors sustain portfolio income.

- *High grade and investment grade bonds*
- *Diversified fixed income strategies*
- *Equity income strategies*

Source of funds

- Cash
- Money market funds
- Expiring fixed-term deposits



Seize the AI opportunity

We believe artificial intelligence will prove to be one of the biggest investment opportunities of the decade. We expect high rates of investment to soon be followed by growth in applications, and we expect companies across the AI value chain to generate more than USD 1.1 trillion in revenue by 2027. Investors should focus on both listed megacaps and innovative private companies to capitalize.

- *AI-linked semiconductors*
- *Megacap tech*

Source of funds

- Cash
- Money market funds
- Correcting concentrated stock exposure



More to go in stocks

We expect the S&P 500 to reach 6,600 by the end of 2025, around 10% higher than today's levels. Tariffs could contribute to volatility for European and Chinese markets. But we see value in maintaining diversified exposure to Asia ex-Japan. In Europe, we like EMU small- and mid-cap stocks and Swiss high-quality dividends.

- *US incl financials, IT, utilities, infrastructure*
- *Asia incl India, Taiwan*
- *Europe: Eurozone small- and mid-caps and Swiss high-quality dividends*

Source of funds

- Cash
- Money market funds
- Correcting home bias



Invest in power and resources

In recent years, the mixture of rising electricity consumption, decarbonization, and tech advancements has boosted electricity demand. We believe the investment opportunity in power and resources is set to grow in the years ahead.

- *Power equipment manufacturers*
- *Regulated and deregulated utilities*
- *Infrastructure facilitators*
- *Storage and copper*

Source of funds

- Cash
- Money market funds
- Correcting concentrated stock exposure

Messages in Focus



Sell further dollar strength

While the US dollar may stay well bid in the near term, we believe its valuation may now be overstretched. We recommend investors use periods of strength to reduce US dollar exposure through strategies such as hedging dollar assets, switching USD cash and fixed income exposure to other currencies, and through options.

- *USD: Sell on strength*
- *EUR: Low expectations*
- *CHF: Rate cuts almost complete*
- *GBP and AUD: Preferred developed market carry currencies*
- *JPY and CNY: Strength for yen, weakness for yuan*

Source of funds

- Excess US-dollar-denominated assets



Time for real estate

We think the outlook for global residential and commercial real estate investments is bright. With constrained supply and rising demand, we see opportunities in sectors including logistics, data centers, and multifamily housing. Investors should focus on quality assets and strategic diversification to capitalize on these favorable market dynamics.

- *Commercial (US and Europe): Logistics, data centers, telecoms*
- *Residential (broad exposure)*
- *APAC REITs*
- *Core-plus real estate managers*
- *Real estate debt*
- *Direct real estate (Canada, US, Continental Europe)*

Source of funds

- Cash
- Money market funds



Go for gold

We expect gold to build on its gains in 2025. Lower interest rates, persistent geopolitical risks, and US government debt concerns are contributing to robust central bank and investor buying. We also see long-term opportunities in copper and in other transition metals as demand increases alongside rising investment in power generation, storage, and electric transport. Separately, we expect moderately higher crude oil prices in 2025.

- *Gold*
- *Copper*
- *Oil*

Source of funds

- Cash
- Money market funds

Strategic Messages in Focus

Put cash to work

Stocks have beaten cash in 86% and 100% of all 10- and 20-year holding periods, respectively, and by more than 200x overall since 1945. With falling rates, we recommend moving cash into high-quality fixed income or equity income strategies to secure more durable income. Annuities can also enhance income durability and stability.

- *Fixed income portfolios*
- *Equity income portfolios*
- *Annuities*

Source of funds

- Cash
- Money market funds
- Expiring fixed-term deposits

Diversify with alternatives

Risk-tolerant investors can boost growth potential through private equity, debt, infrastructure, and real estate. Consider replacing 20-40% of public equity exposure with private markets and using hedge funds to manage volatility. In private markets, we like private credit, value-oriented buyout, and secondaries, including infrastructure; and thematically, we favor software, health, and climate. In hedge funds, we favor low net equity long/short strategies, macro, multi-strategy, and select alternative credit.

- *Private markets: private credit, value-oriented buyout, secondaries including infra, and thematically software, health, and climate*
- *Hedge funds: Low net equity lls, macro, and multi-strategy, select alternative credit*

Source of funds

- Cash
- Overexposure to stocks
- Overexposure to bonds

Strengthen your core

We recommend implementing a "core" component in a wealth management strategy, to ensure investors don't lose sight of their main goals during market volatility. This core should be a well-diversified portfolio across asset classes, geographies, and sectors, designed to grow wealth steadily over the long term. A core, diversified portfolio can help investors grow wealth and stay on course with their goals, freeing time, energy, and capital for other satellite opportunities or passions.

- *Diversified portfolios*

Source of funds

- Cash
- Correcting home bias
- Overexposure to specific asset classes
- Traditional assets

Optimize your leverage

Proactive, prudent, and strategic borrowing can enhance an investor's financial plan, especially as interest rates fall. Managed correctly, borrowing can reduce the need for excess cash holdings by providing flexible credit access, enable rapid diversification, and help manage exchange rate risks. For investors with a high-risk tolerance, borrowing can also boost returns if expected gains exceed costs. Borrowing is risky and investors should carefully analyze their capacity and willingness to take on leverage.

- *Managing liquidity (credit lines)*
- *Borrowing to invest in less-correlated assets*
- *Currency management*
- *Boosting return potential*

Source of funds

- Existing assets

Strategic Messages in Focus

Be active

Mixing index-tracking and more active approaches may help balance costs, access less liquid markets, and potentially generate alpha in a risk-controlled way. Active investing also allows investors to capitalize on equity volatility. In bonds, active management provides superior risk management for complexities like duration and credit risk. For alternatives, returns can vary significantly among managers, making it important to seek the right ones.

- *Actively managed equity approaches*
- *Actively managed FI approaches*
- *Alternatives*

Source of funds

- Cash
- Money market funds
- Expiring fixed-term deposits

Go sustainable

Sustainable options are available across all major asset classes, including equities, bonds, hedge funds, and private markets, offering similar risk and return profiles to traditional investments. Private market strategies target sectors like renewable energy for potentially positive outcomes.

- *ESG equities (leaders, improvers, engagement)*
- *ESG fixed income (MDBs, green bonds, engagement, high yield)*
- *Sustainable hedge funds*
- *Private market impact*

Source of funds

- Cash
- Correcting home bias
- Overexposure to specific asset classes
- Traditional assets

Longer-term Investment Themes: **Top five** favorite themes (1/2)

These are the top LTIs that we believe offer compelling entry points for theme-oriented investors. We rank the themes by combining these quantitative indicators with qualitative screening.

Consumer experience

Investment case: Younger generations are digital natives and show consumption patterns that are different from those of their parents, while also affecting their parents' behavior. Consumer decisions are being influenced by more touchpoints than in the past thanks to digitalization, which is rewriting the playbook for online businesses. For young people, sharing or spending on experiences tends to be more important than owning things. Technology is revolutionizing every aspect of our lives, enabling new experiences. Social media networks are growing vibrantly, as people want to be part of a community and share their experiences. Traditional areas (travel and leisure), in combination with emerging virtual segments (metaverse, games, e-sports, online events around art, sports, culture, and entertainment, and social media), are the key investment opportunities in this theme.

Why invest now: Our Consumer experience theme ranks first in our top five this month thanks to its high ranking on quality metrics, as the theme is exposed to companies with strong balance sheets and high returns on invested capital. However, it comes with a relatively high valuation. The theme has also strong momentum thanks to its exposure to AI trends, where we see revenues growing strongly this year..

Energy transition(s)

Investment case: The energy transition requires an enormous amount of investment. According to BloombergNEF, global energy transition investment reached USD 1.77tr in 2023, representing 17% year-over-year growth and a record high. To meet growing energy demand and decarbonization, this level of investment is set to accelerate in the years ahead. Our analysis suggests cumulative investments in energy and energy transition could exceed USD 100tr by 2050. The substantial investment in energy transitions over the next decade will create opportunities for investors, in our view.

Why invest now: The Energy transition(s) theme remains in our top five for the third consecutive month. We have integrated our Clean air and carbon reduction theme into the Energy transition(s). The theme screens well from a valuation perspective and aligns with our CIO House View, as we rate the utilities sector as Attractive in the US and Europe.

Longer-term Investment Themes: **Top five** favorite themes (2/2)

Aging in comfort

Investment case: A growing share of the population is living in retirement for ever-longer lengths of time, a development that presents specific market opportunities. Sustaining a high quality of life for as long as possible is likely to be the central demand motive for those entering their proverbial golden years. We see opportunities in three different areas: (1) Wealth planning: Prudent financial planning can enable individuals to fund a comfortable retirement. It offers a solution to the problem of the looming age-related fiscal cliffs facing governments. (2) Staying healthy: Consumer companies with a focus both on healthy nutrition and on the personal care needs of aging consumers should help people to live better. The elderly should also benefit from the innovations we see in healthtech and medical devices. And (3) housing in old age: Demand for housing is changing, as life expectancy is increasing, albeit often alongside chronic health conditions. Shifting housing needs should be supportive for home health-care services, homebuilders, and retirement homes.

Why invest now: The Aging in comfort theme enters our top five themes. Our theme is geared toward financials, which have particularly appealing valuations and should benefit from the rates environment. Momentum also remains solid for the sector. Moreover, the other sub-themes such as health care should provide some downside protections.

Space economy

Investment case: The space economy is benefiting from the confluence of several key drivers. Stronger private-sector funding, major advances in satellite technology, strong growth in new space applications, and significantly lower launch costs are key catalysts to unlock value in the space economy. Significant technological progress has opened more opportunities to commercialize space, and the potential use cases for satellite data are expanding, fueled by AI's capability to process it quickly and efficiently. We believe the space economy is reaching an inflection point and expect these catalysts to drive further growth in the years ahead. While much of the space economy is well established, many end markets are still nascent, and the risks are material. Uncertainty surrounding safety, technology, costs, space junk, and commercial viability remain high.

Why invest now: The Space economy theme remains in the top five owing to its momentum score, one of the best among all themes. The theme also aligns well with our positive view on aerospace and defense more specifically. Space-based assets and defense technologies are increasingly front and center for governments, as rising geopolitical tensions underline the relationship between the space economy and security. In addition, the rapid rise of AI opens new opportunities for tapping into space-based infrastructure, with the ability to synthesize vast amounts of satellite data.

Fintech

Investment case: The fintech industry is poised for robust growth, with revenues expected to rise from USD 285bn in 2022 to USD 680bn by 2030, driven by urbanization, regulatory support, and demand from younger generations. Consequently, the fintech industry should outgrow the broader financial services industry by a factor of more than 3x over the same period. We particularly like leading payment players, platform companies, and disruptors in emerging technologies like distributed ledgers, cloud, and artificial intelligence.

Why invest now: The Fintech theme remains in the top five this month owing to its improving momentum. After two difficult years with massive drops in valuations and multiples following years of growth at all costs, fintech firms have restructured and refocused on business fundamentals with the aim of profitable growth. Furthermore, the sector is benefiting from AI advancements, a heightened focus by banking regulators on technological capabilities, and the start of a lower-rate cycle, which supports economic growth.

Short-term themes

Equities

- **Diabetes and obesity**

Innovative new obesity treatments are spurring opportunities in the healthcare sector and broadening the opportunity set for investors.

- **ESG matters in emerging markets**

Incorporating environmental, social, and corporate governance considerations into emerging market equity investment decisions may provide a competitive edge.

- **Housing recovery**

The Federal Reserve cut rates for the first time this cycle in September. This should help improve housing affordability, unlock additional supply of existing homes for sale, and reduce the pressure on homebuilders to offer incentives, such as mortgage buydowns. This theme captures the opportunity set inherent in the housing recovery.

- **Infrastructure and reshoring**

Through three major acts since 2021, the US government has earmarked nearly USD 2tr in funding and incentives to upgrade US infrastructure and boost domestic manufacturing of critical resources. We believe companies with exposure to infrastructure, energy efficiency, reshoring, and cybersecurity initiatives stand to benefit.

- **Investing in self-help**

We believe companies with self-help measures to enhance profitability and increase margins are likely to be rewarded by investors.

- **Time for quality**

We view high-quality companies as important ballast in a portfolio. These types of companies tend to perform well in most market environments and particularly well when the yield curve is inverted or the economy is in recession. We identify high-quality companies that have strong returns on invested capital, relatively stable operating margins, and healthy free cash flow yields.

Bonds

- **Top Emerging Market picks for US domestic investors in 2025**

We believe that our selected basket of emerging market bonds offers US investors the opportunity to enhance total returns in exchange for a modest increase in risk.

Alternatives

- **Opportunities in dislocated credit markets**

Stress in the credit market has expanded the opportunity for hedge fund and private managers to deploy capital toward dislocations.

Highlighted global themes

Equities

- **Artificial intelligence**

We believe we are in the early innings of the AI growth story. Despite the solid recent gains, we continue to see broad-based investment opportunities across the three AI layers—enabling, intelligence, and application—with strong tactical drivers over the next 12-18 months around robust capex growth trends and improving monetization.

- **30 for 30**

This stock list seeks exposure to secular growth companies in the greentech, 5G+, fintech, and healthtech spaces. We believe they are disruptors in sectors undergoing technological transformation.

- **Greentech goes global**

We bring together our best investment ideas from several CIO regional greentech themes offering a highly diversified selection of global “green technology” stock ideas.

- **Power and resources**

This theme focuses on opportunities related to power infrastructure and industrial technology—parts of the value chain that are essential to facilitate the energy transition, develop AI, expand energy infrastructure, and satisfy rising electricity demand. We see the best investment prospects at present in the electrification value chain, which is supported by growth in electricity demand, data center capex, and vital investment in aging power grids.

Section 2

Macroeconomic outlook

Global economy: Assessing future risks

Base case (60%)

Growth

Consumers continue to provide a solid foundation for growth in developed economies. Rising real incomes alongside relative job security keeps consumption growth at a reasonable pace. Under the base case scenario the new US administration introduces limited tariff increases, which serve as a basis for negotiation and have a relatively limited impact on global growth. The tariffs create an opportunity for China to implement fiscal stimulus directed at domestic consumers (although the spillover of this growth to other economies is relatively limited).

Inflation

Disinflation forces remain strong across most advanced economies. US inflation has disinflation forces from the housing measure owners' equivalent rent (which does not help real world spending power) and may benefit from lower oil prices. Tariffs and potential second round effects add some inflation pressures in the US. Elsewhere, retaliatory tariffs will raise prices, but by definition are less broadly applied than are US tariffs.

Positive case (20%)

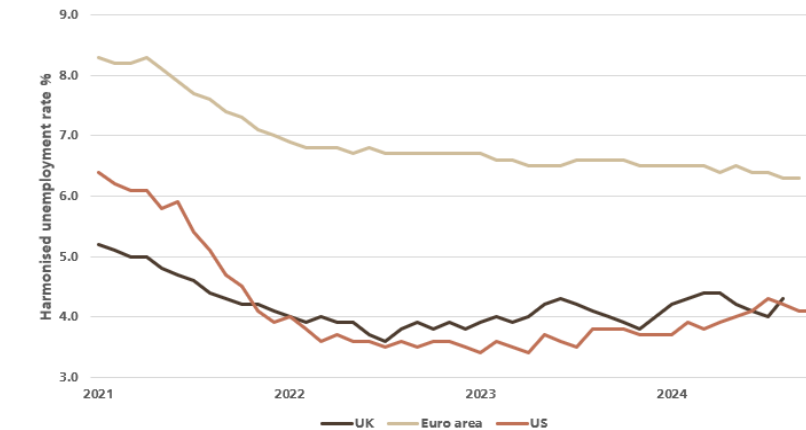
Real wage growth remains positive for consumers, and encourages a stronger pace of growth. Unemployment remains low, and changing immigration policies are limited in scope (avoiding labor market bottlenecks which might limit production). US tariffs are used primarily as bargaining tools and tend to be of short duration with limited disruption. Investment spending continues to grow with a focus on technology.

Negative case (20%)

Global trade is more significantly disruptive by tariffs, which are pursued not as bargaining chips but as desirable policies. The increase in inflation weakens US consumer real income. Job insecurity increases as labor market bottlenecks emerge, leading to job losses in different parts of the supply chain. This pushes consumer spending lower. Weaker export growth hurts overall economic growth in Europe and China, and retaliatory tariffs slow real income growth in those economies.

Job security supports consumers

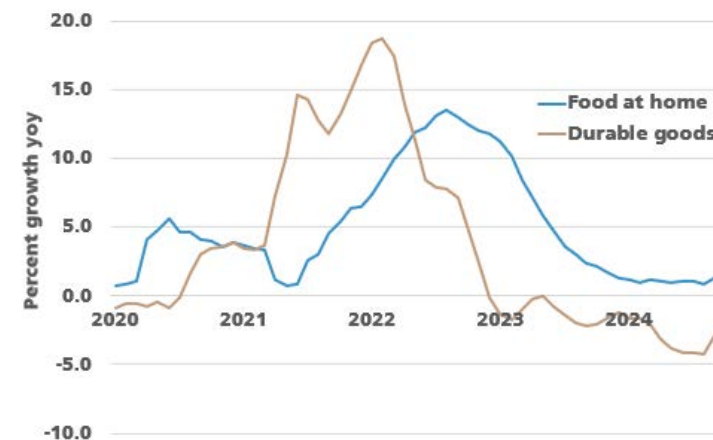
Selected OECD unemployment rates (harmonized measure)



Source: OECD, Haver, as of 18 November 2024

Durable goods price deflation has driven inflation lower

Durable goods prices are more vulnerable to rising trade tariffs



Source: UBS, Haver, as of 18 November 2024

US economy: Rate cuts will help sustain the recovery

Base case (60%)

Growth

Recent data shows the economy continuing to expand at a robust pace, led by consumer spending. We expect near-trend growth in the quarters ahead, although much depends on the policy choices of the incoming Trump administration. With the budget deficit already very large and public debt levels high, we are skeptical that large-scale fiscal easing will be implemented. We also anticipate only a limited impact from tariff hikes and immigration policy changes. We expect the Fed to cut rates by 125 basis points through the end of 2025, bringing its policy stance back to neutral.

Inflation

Headline inflation has slowed sharply, helped by lower energy prices, but core inflation is still a bit too high for the Fed's liking. Shelter remains the biggest driver of inflation, and rent increases should ease over the course of 2025, helping to bring overall inflation down to levels that allow the Fed to keep cutting rates. In our view, the labor market will not be a source of significant inflationary pressure.

Positive case (20%)

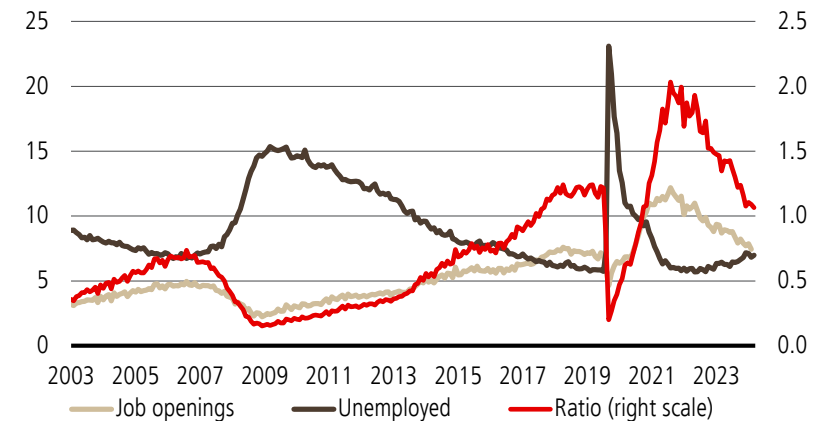
Strong productivity growth, driven by AI and other technology advancements, allows the economy to expand at a robust pace without overheating that reignites inflation. Consumer spending remains robust, encouraging businesses to keep investing in new capacity and to continue hiring more workers. The Fed can continue on a path toward neutral monetary policy even as the unemployment rate remains low.

Negative case (20%)

The incoming administration implements universal tariffs and aggressively deports immigrants, resulting in supply-side shocks that push the economy into recession. Consumers pull back on their spending, but bottlenecks keep inflation elevated even as demand weakens. Inflation also leaves the Fed with limited space to cut rates.

Labor market is no longer overheated

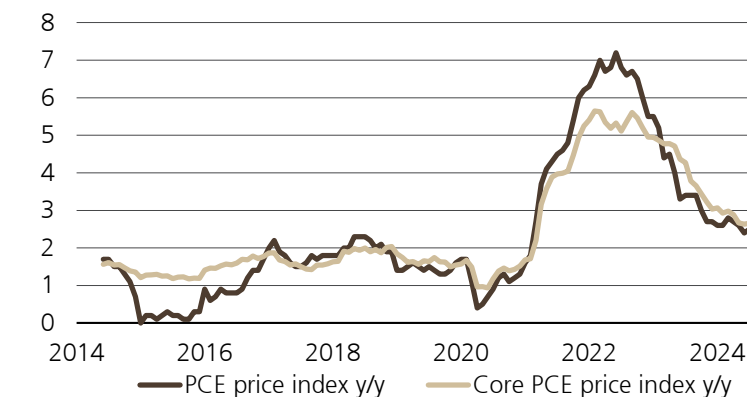
Job openings and unemployed workers, in millions



Source: Bloomberg, UBS, as of 18 November 2024

Headline inflation near the Fed's 2% target

PCE and core PCE price indexes, year-over-year change, in %



Source: Bloomberg, UBS, as of 18 November 2024

Eurozone economy: Encouraging 3Q, but with lingering growth concerns

Base case (60%)

Growth

Third quarter GDP growth surprised to the upside at 0.4% q/q, supported by a bounce in consumption. We look for the economy to approach trend growth (c.1% y/y) as consumer spending continues to recover, driven by improving real incomes and falling savings rates, which are at historically high levels. Investment and manufacturing activity remain in a slump but should see at least some mild improvement over time as interest rates fall and global trade rebounds.

Inflation

We expect inflation to fall back to target over the coming quarters, but at a gradual pace given the stickiness in services prices. Some modest volatility in inflation could persist as governments phase out remaining fiscal support measures and the disinflationary impulse from energy base effects fades. Still, with forward-looking indicators pointing to a moderation in wage growth and measures of underlying inflation running from 2-3%, confidence in disinflation is rising.

With concerns about inflation fading, we see sequential rate cuts from the ECB ahead.

Positive case (20%)

Economic activity normalizes sooner, supported by a faster-than-expected fall in inflation, a pickup in consumer sentiment, and ongoing labor market strength.

Stimulus measures in China and a more favorable outlook for the US economy boost exports further, supporting manufacturing and investment.

Negative case (20%)

Consumption remains muted as households save their incomes amid low confidence in the economic outlook and a weaker labor market.

Fiscal consolidation proceeds more forcefully next year as governments feel pressure to abide by fiscal rules.

Geopolitical tensions push energy prices much higher, leading to renewed inflation.

The US implements a high level of blanket tariffs on imports from the EU, weighing on demand and investment.

Momentum in consumer spending has picked up again on the back of real income gains and high savings

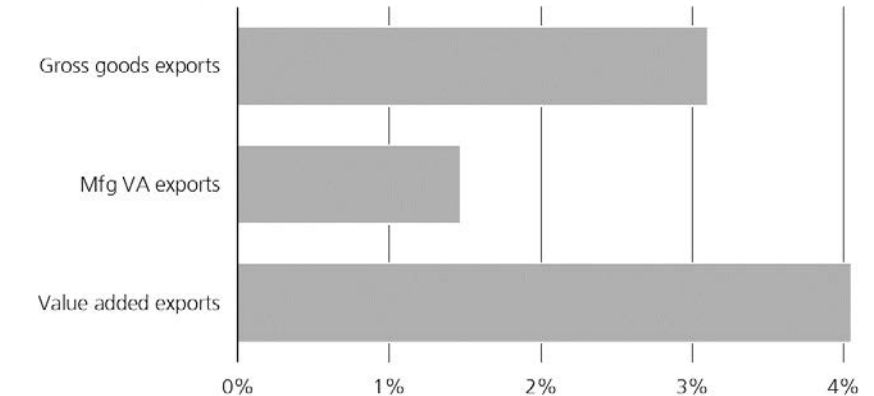
EA20: Retail sales volume (2021=100)



Source: Haver Analytics, UBS, as of 19 November 2024

About 4% of Eurozone GDP is consumed in the US, but the share is smaller for goods only (which are vulnerable to tariffs).

EA20: Trade exposure to the US, % of GDP



Source: Haver Analytics, UBS, as of 19 November 2024

Swiss economy: Back to trend in 2025

Base case (60%)

Growth

Swiss manufacturing suffered in the first half of the year from weak foreign demand. However, in the third quarter, the manufacturing Purchasing Managers' Index (PMI) has approached the growth threshold. An economic upturn in the US, China, and the Eurozone could provide manufacturing with the necessary impetus for a rebound next year. According to UBS compensation survey, domestic demand is set to be supported by an increase in real wages in 2025. A slight uptick in unemployment may be a drag.

We anticipate that the Swiss economy will grow by 1.5% next year, adjusted for sports events, returning to trend growth.

Inflation

Inflation fell by 0.2 percentage points to 0.6% in October reaching its lowest level since June 2021.

In 2025, inflation is expected to remain below 1% owing to a reduction in electricity prices and a decrease in the reference interest rate. We foresee an average inflation rate of 1.1% this year, dropping to 0.7% next year.

Positive case (20%)

Better global growth momentum:

US growth continues to surprise positively and re-accelerates, while European growth benefit from stronger global demand. Chinese authorities are able to shore up their economy. Central banks continue to cut rates. Switzerland benefits from this stronger global backdrop and from a weaker Swiss franc on the back of risk-on sentiment.

Negative case (20%)

Eurozone activity deteriorates:

If the European recovery does not materialize, Switzerland would suffer from a slump in European export demand and from a strong appreciation of the Swiss franc. If the new US government pursues an aggressive trade policy against European exporters, this could hurt Swiss activity as well.

Swiss economic data

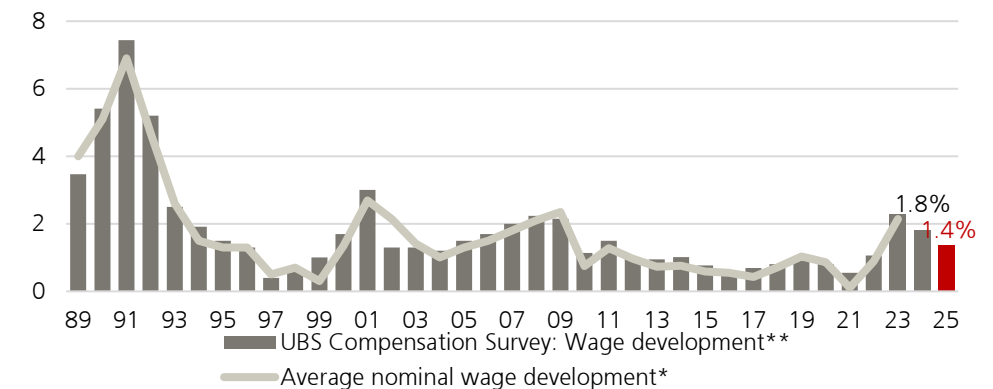
In %, including UBS forecasts (*)



Source: Macrobond, UBS, as of 12 November 2024

Slightly lower wage growth

Nominal wage development since 1989, in %



Sources: UBS Compensation Survey 1989 to 2025, Swiss Federal Statistical Office (FSO)

* Value recorded after the wage negotiations (except 2025)

**FSO nominal wage index & CLA

Chinese economy: Holding stimulus “Trump cards”

Base case (70%)

Growth

October activity data showed positive impact from recent stimulus. Retail sales rebounded to 4.8% y/y thanks to consumer goods trade-in subsidies and earlier “double 11” online promotion. Investment stabilized at 3.4% y/y ytd with property drag partly offset by resilient manufacturing and improving infrastructure. Export bounced to 12.7% y/y on reversal of typhoon disruptions.

Fiscal remains the key for a sustainable recovery. China is holding onto most of its stimulus cards for tariff clarity, including higher central deficit & debt, property destocking, social welfare support and bank capital supplement.

We expect US tariffs on Chinese goods to be gradually hiked to 30% in effective term¹ by mid-2025, leading to an annual GDP drag of 70-100bps. If growth comes well below 5%, we expect stronger and faster stimulus package to mitigate tariff impact and stabilize growth.

Inflation

CPI stayed soft at 0.3% y/y in October and will likely average ~0.4% this year. PPI deflation deepened to -2.9% y/y and may only turn positive by 1H25.

Positive case (15%)

Stronger fiscal stimulus boost market confidence

Property market stabilizes

The US imposes targeted and smaller-than-threatened tariffs with continued negotiations

The US economy achieves a soft landing

Negative case (15%)

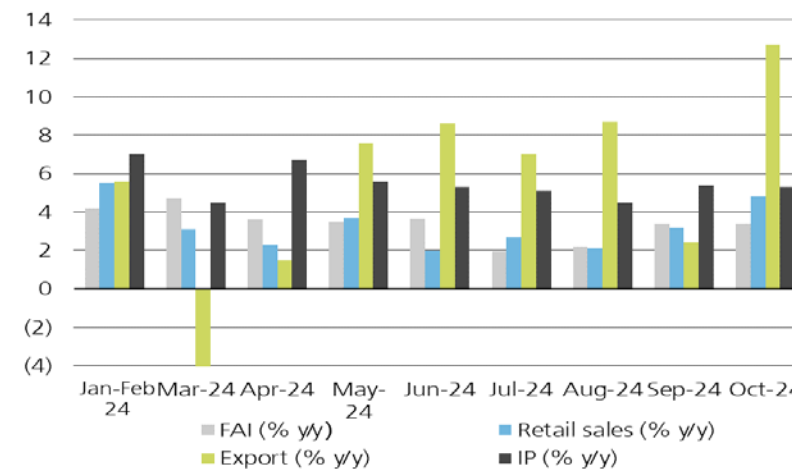
Additional fiscal stimulus is limited

The US falls into a deep recession owing to the lagged effect of high rates

The US imposes 60% blanket tariffs on China and much stricter restrictions on China’s tech sectors

Early green shoots in October data

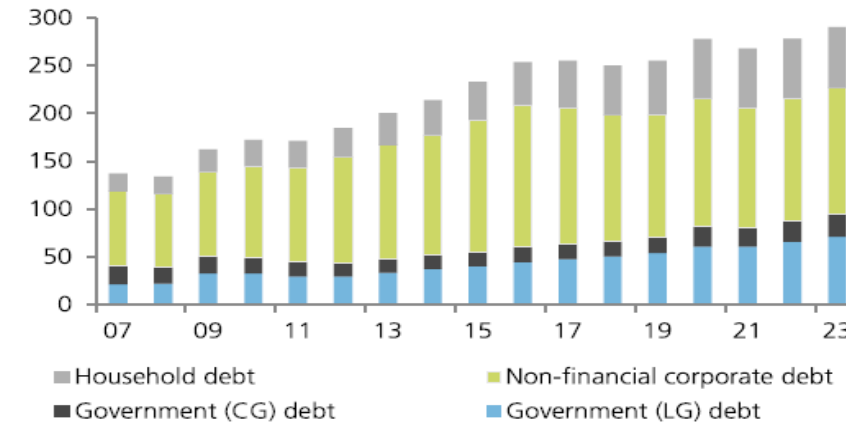
Monthly key activity data



Source: NBS, CEIC, UBS, as of November 2024

Central government has ample room to leverage up

Debt % of GDP



Source: CEIC, PBoC, UBS, as of November 2024

Section 3

Asset class views

Section 3.1

Summary of major asset classes

Global Equities

Central scenario

MSCI AC World December 2025 target: 1,140

Global equities edged slightly lower in October, as investors derisked ahead of the US presidential election and yields rose sharply. However, gains resumed in November as the election outcome was uncontested and markets started to price some deregulation as well as tax cuts in the US. The likely imposition of selective tariffs has prompted us to lower our ex-US targets, but should not derail the broadly constructive picture for global equities, in our view. Economic growth is resilient, central banks are cutting rates, and earnings growth is robust, not least because of large AI investments.

Resilient economic growth: Albeit slowing from elevated levels, US economic growth is showing remarkable resilience and should remain near trend levels in 2025. Amid robust labor markets and normalizing inflation, real wages have been rising, which should support consumption and, ultimately, earnings. Elsewhere, growth may be weaker but appears to be bottoming out, while fiscal stimulus measures materializing in China would provide another tailwind.

Central bank cuts: We are confident this positive backdrop is here to stay as most major central banks are embarking on a rate-cutting cycle. While the impact of monetary policy easing usually comes with some lag, the start of a rate-cutting cycle has historically been a catalyst for equity markets over the subsequent six to 12 months. This time, the Federal Reserve has ample room to ease and has shown a willingness to be proactive by already cutting 75bps despite markets being close to all-time highs.

Robust earnings growth: From a bottom-up perspective, earnings should benefit from the resilient economic backdrop. We expect MSCI AC World's EPS to grow in the high-single digits both this year and next. We anticipate some broadening, with all sectors expected to contribute positively. That said, leadership should remain with sectors benefiting from strong secular trends, including technology and health care.

AI is transformational: We believe AI represents a major investment opportunity. The adoption rate is unprecedented and is already spreading across industries. Moreover, capex is showing no sign of slowing and large technology companies have made clear the risk of underinvesting is far greater than the risk of overinvesting. This trend should benefit the enabling layer particularly, within our tactical horizon.

Valuations high but not extreme: Global equities currently trade about 1.5 standard deviations above their 10-year average. While still some distance from extreme levels, that's still on the high side, which limits the potential for rerating. We do not see significant valuation expansion and expect most of the expected upside to come from earnings growth.

Watch rising yields: While our base case suggests we are near peak interest rate levels, we are closely monitoring the risk of further upside in yields. We find that equities tend to perform well when real yields rise slowly, but face headwinds when real yields rise too fast. On average, downside pressure intensifies when the

monthly change in 10-year real yields exceeds 40bps.

US and Asia ex-Japan are our preferred regions: We believe the US exceptionalism has more room to run. Economic growth should outpace that of other developed markets by some margin, the Fed is ahead of the curve, and the country is most exposed to AI, which is the secular trend we currently prefer. We also like Asia ex-Japan. The region offers exposure to secular trends in a structurally higher growth environment, which should outweigh the impact of selective tariffs in our base case. While we refrain from specifically adding exposure to China for now, potential large fiscal stimulus could have positive ripple effects throughout the region.

Global Equities

Upside scenario

MSCI ACWI December 2025 target: 1,240

Quick AI adoption: Investment in AI continues to surprise positively and lead to earlier and larger-than-expected productivity gains.

Economic growth re-accelerates: Solid economic growth keeps consumption at elevated levels and drives a sharp improvement in corporate profits. A trade deal and/or large fiscal stimulus in China could be catalysts.

Inflation cools quickly: Inflationary pressures dissipate quicker than expected, allowing central banks to cut rates even in a robust growth environment.

Downside scenario

MSCI ACWI December 2025 target: 800

Sharply rising yields: Larger-than-expected tariffs and rising fiscal deficit could both lead to higher inflation and yields, which may put the central bank easing bias at risk.

Hard landing: Economic growth falls sharply over the next 12 months owing to further weakness in consumer spending and labor markets. Large blanket tariffs would add to economic challenges, particularly for Europe and Asia.

Tech disappointment: Global indices have a high concentration in technology sectors, for which expectations are high. Slower-than-expected earnings delivery could trigger a pullback.

US Equities

Central scenario

S&P 500 December 2025 target: 6,600

The S&P 500 has notched a series of all-time highs on the heels of the Fed's larger-than-normal 50-basis-point cut in September and an additional 25-basis-point cut in November. The outcome of the US election and a good third-quarter earnings season have been additional catalysts. Although the policies of the new administration should be supportive, tariffs are an uncertainty. We still believe the Fed will cut rates even though recent inflation readings have been a bit firm. While stocks have performed well, we believe US equities will continue to move higher driven by: (1) healthy earnings growth, (2) improving inflation, (3) Fed rate cuts, and (4) AI investment.

Healthy labor market dynamics should continue to support further gains in consumer spending. Initial jobless claims for unemployment insurance remain low, there are more job openings than the number of unemployed, and real wages are rising. Job growth in the more cyclical industries (ex: construction)—which tend to be leading indicators for overall job growth—are not flashing warning signs. Solid retail sales data and above trend GDP growth suggest the economy remains healthy.

Despite inflation running a bit hotter recently and uncertainty about its path under the incoming administration, the Fed will likely continue to cut interest rates because the current policy setting is still restrictive. Lower short-term rates should ease pressures on consumers that carry credit card balances, could spur a pickup in corporate borrowing (which has been very tepid), and prompt a pickup in housing activity as well as automobile purchases. Thus, we believe the US economy is still headed for a soft landing.

The third-quarter earnings season is winding down and earnings growth remains healthy overall. Consumer spending remains durable and consistent with normal economic growth, but there are always pockets of strength and weakness. Spending on services, such as travel, entertainment, and at restaurants, remains strong. In contrast, the recent backup in interest rates has put a damper on housing activity, and goods spending remains mixed. AI spending remains robust and adoption is progressing. Across the cyclical end markets within tech, PC demand has been mixed while the recovery in smartphones is taking a bit longer. S&P 500 EPS growth is coming in at 7% and guidance has been in line with historical patterns.

In summary, we believe the environment remains constructive for US equities. Earnings growth is broadening out. We continue to expect 11% S&P 500 EPS growth (to USD 250) this year and 8% growth (to USD 270) in 2025. Valuations are high in absolute terms, but we think they are reasonable in light of the macro environment. Historically, when the Fed is cutting rates in the context of a soft landing, equities rise 18% on average in the 12 months after the first Fed rate cut. While government policy uncertainty could widen the range of outcomes, we believe the fundamental backdrop remains favorable for stocks. Our June 2025 S&P 500 price target is 6,300 and our December 2025 target is 6,600.

US Equities

Upside scenario

S&P 500 December 2025 target: 7,000

Artificial intelligence is a game-changer: The impact of artificial intelligence on productivity and earnings growth is larger and comes sooner than investors expect.

Stronger-than-expected economic growth: High wages attract even more workers into the labor force, and demand for labor stays strong. Real incomes continue to grow, and household cash cushions remain.

Inflation cools quickly: Lingerin inflationary pressures dissipate quickly, and the Fed cuts rates more than we expect, lifting estimates for economic growth and corporate earnings..

Downside scenario

S&P 500 December 2025 target: 4,500

Hard landing: Economic growth falls sharply over the next 12 months owing to weakness in consumer spending and labor markets, as well as a fall in AI-related investments. GDP contracts for at least two consecutive quarters.

Tariff shock: The imposition of large, blanket tariffs on imports from multiple countries and retaliation from trading partners triggers higher US inflation. Retailers, auto manufacturers, tech hardware, semis, and parts of industrials may be the most at risk.

Geopolitical turmoil: Escalation in geopolitical tensions—including the Israel-Hamas war potentially turning into a regional conflict, the war in Ukraine, or heightened US-China tensions—leads to a risk-off environment and flight to quality.

Sector preferences

Most Attractive

Information technology: AI investment spending remains robust and key components will likely remain supply constrained into next year. The sector should benefit from improving PC and smartphone end markets. We expect investors to continue to gravitate to high-quality companies that have good secular growth.

Attractive

Communication services: Consumer internet companies that dominate the sector should benefit from AI adoption.

Consumer discretionary: Beneficiary of Fed rate cuts which will likely drive an improvement in housing and automotive segments as well as a better tone to overall consumer spending. AI adoption is also a key driver for two of the biggest companies in the sector.

Financials: As the Fed cuts rates, lower funding costs should benefit the sector. Cooling regulatory pressures, continued gains in capital markets activity from depressed levels, and a potential pickup in loan growth would all be supportive.

Utilities: The sector's defensive characteristics should offer ballast in a portfolio in the event economic growth concerns arise. We continue to have a favorable view on AI trends and roughly 20-25% of the sector has material exposure.

US fixed income recommendations

Sector Taxable	Comment	Implementation
Agency debt	We do not see value in agency debt versus other higher-quality sectors such as Treasuries or agency MBS. Those that want to lock in higher yields should allocate to agency MBS. For investors looking for a higher yield with a high-quality rating, agency MBS is cheap to agency debt and IG corporates. We remain Neutral on agency debt given the compressed spreads and value in other sectors.	Individual securities or mutual funds
US dollar emerging markets (EM)	We are Neutral on emerging market credit. Bond valuations look historically tight, making the asset class vulnerable to possible setbacks. However, in our soft-landing base case, we expect bond spreads to trend sideways to slightly tighter over the next six to 12 months, offering investors an appealing interest rate carry. Key risks include renewed concerns about a US recession, deepening economic woes in China, resurging inflation fears, and an escalation of trade and/or geopolitical tensions.	For individual bond recommendations, contact your Financial Advisor
High yield corporates (HY)	We have a Neutral view on high yield. We believe total returns are set to remain respectable in our base case, given the elevated level of outright yields and expected low credit losses. We view the risk of a sharp rise in defaults as low. Since the last major credit cycle, we have not seen the classic buildup of financial excess or leverage as in previous cycles. However, with credit spreads close to historical lows, we see limited scope for significant spread compression from here.	For individual corporate bond recommendations, contact your Financial Advisor
Investment grade corporates (IG)	We hold an Attractive view on investment grade (IG) bonds. We still find the outright level of yields (5.2%) appealing and believe investors with excess cash holdings should look to lock in these yields in IG bonds. Fundamentals generally remain solid, and we expect limited credit quality deterioration in our base case. Resilient fundamentals and yield-driven demand are supportive factors for our view of range-bound credit spreads.	For individual corporate bond recommendations, contact your Financial Advisor
Mortgage-backed securities (MBS)	Agency MBS remains an Attractive allocation. While the market will remain challenging as policy is clarified other factors are supportive. These include the liquidity, 5.8% yield earned for current coupon MBS, the cash currently on the sidelines, and the tailwind from lower supply ahead, as mortgage rates will likely stay elevated (~7%).	Individual securities, mutual funds, or ETFs
Preferred securities	While the recent backup in Treasury rates has led to marginal losses, preferred securities remain a top performer this year, with year-to-date returns of roughly 11% through 31 October. However, the sector's resilience in the face of higher interest rates means that valuations have diminished. The factors that have driven the sector's strong performance over the past year are less likely to provide the same level of support from here and we expect more monthly return volatility in the months ahead. However, the rate backdrop should generally remain supportive, as should fundamentals and technicals.	For individual preferred securities, see the <i>Preferred Securities Overview & Preferences Report</i>
Treasury Inflation-Protected Securities (TIPS)	Ongoing geopolitical uncertainty, its impact on oil prices, and concerns around stickier inflation since the election have caused five-year breakevens to rise to 2.4%, near their six-month highs. While we believe TIPS (up to the five-year area) are cheaper, we remain Neutral as we wait for stabilization in the oil markets and clarity around future policy.	Individual securities, mutual funds, or ETFs
Municipal bonds (Muni)		
Tax exempt	We remain Neutral on tax-exempt munis. We prefer 12-22 years on the curve and higher credit quality. Tax-exempt muni yields are attractive, especially so on a tax-equivalent basis for high earners in high tax states. While the federal tax exemption on certain types of muni bonds may be reduced or eliminated, we don't expect widespread changes. Even if there is a broader impact, we expect tax exemption on existing bonds to be grandfathered, increasing their scarcity value. We expect strong supply to resume next year. However, we also expect demand and flows to remain strong, supporting the market.	For individual municipal bond recommendations, contact your Financial Advisor
Taxable municipal bonds	We remain neutral on taxable munis. Year to date, the taxable muni index has outperformed the US aggregate index but underperformed IG corporates. The taxable muni index yield of 5.2% is attractive for long-term buyers. However, the spread to the US Aggregate index of 27bps is tight relative to the five-year average of 60bps. We also remain a bit cautious given the longer duration of taxable munis. Taxable muni issuance may increase next year, especially if the tax exemption for some types of tax-exempt muni bonds gets eliminated or reduced.	For individual taxable municipal bond recommendations, contact your Financial Advisor

FX

Former US President Donald Trump was re-elected a few weeks ago, with the US dollar rallying almost 7% over the past six weeks in the leadup to and aftermath of his victory. This is because markets expect the Trump administration to impose tariffs on imported goods and lower corporate taxes in the US. After the recent rally, we believe the air is getting thinner and expect a weaker dollar in 2025.

In recent months, we have called for a weaker US dollar, as we expected two years of US exceptionalism to come to an end. US economic data have come to a point where a strongly restrictive monetary policy no longer appears justified. The labor market has started to loosen and is unlikely to exert material inflationary pressure and inflation has returned to target. At the last Federal Reserve meeting, Chair Jerome Powell reiterated again that the fed funds rate remains in restrictive territory and that it will need to be lowered further to ensure a soft landing of the US economy. High rates have been an important driver of the USD in recent years and falling rates will likely hurt the currency.

However, one could argue that with the election of Donald Trump, the outlook is much brighter now. We tend to disagree, as Trump 2.0 will set off from a different starting point compared to Trump 1.0. The debt-to-GDP level in 2017 stood at 60%, compared to above 120% currently, with debt financing rates being around 1.5% in 2017, compared to 4.5% now. This should limit Trump's leeway in implementing expansionary fiscal policy. Adding to that, the rest of the world is better prepared for a potential Trump-induced trade war than during his first presidency. During his first term, the USD's valuation was fair, compared to its current overvaluation. Furthermore, the Fed was in a hiking cycle in 2017, compared to an easing cycle currently. We believe that the recent almost 7% rise in the USD is overdone, and we expect it to weaken in 2025.

The euro has been weighed down disproportionately in recent years by several crises. The restrictions during the COVID-19 pandemic have been more detrimental to the Eurozone economy than many other regions. The energy crisis in the wake of Russia's invasion of Ukraine affected Europe the most. And even the recent rapid rise in interest rates has hurt the European economy more than the US, for example. So, there have been plenty of reasons why the euro has traded at a discount in recent years. However, moving into 2025, we expect those negative base effects to fade and for lower energy prices, combined with lower interest rates, to boost both the European economy and the euro. We therefore continue to see EURUSD moving back to the top of its recent trading range at 1.12.

As for potential alternatives for a weakening dollar, the Swiss franc, the pound, and the Australian dollar continue to stand out, in our view. In the UK and in Australia, rates are likely to stay higher than in the US over the coming quarters, as both central banks face a stronger mix of inflation and growth dynamics. We therefore expect GBP and AUD yields to keep both currencies in high demand. Furthermore, the UK and Australia aren't likely to be the main targets of President-elect Trump's trade war, despite Australia being indirectly affected by further US tariffs on China. However, with the recent drop from 0.695 to 0.645 against the USD, the AUD already incorporates a decent amount of this risk. We expect the AUDUSD to move back to 0.68 and GBPUSD to move back to 1.35. The CHF is likely to benefit from the fact that in a global easing cycle, the Swiss National Bank has the smallest distance left to go, which speaks for falling yield differentials that support the franc against the dollar. We expect USDCHF to decline to 0.84 in 2025.

We stay Neutral on the Japanese yen. Near term, a further rise in USDJPY toward 158-160 cannot be ruled out, especially if US bond

yields rise by another 30-40 basis points. But over the medium term, we expect the USDJPY to fall to 145 by end-2025. First, the pair has risen above yield differentials, which does not tend to sustain. Second, we expect US-Japan yield differentials to narrow in 2025, as the Fed cuts rates while the Bank of Japan hikes. Third, from a political perspective, we note that President-elect Trump has previously criticized the yen for being too weak, while Japanese policymakers also do not desire yen weakness beyond 160 against the dollar. Mutual US-Japanese interests could be well be served by a stronger yen.

Lastly, we keep our Unattractive view on the yuan. We expect the USDCNY to rise toward 7.50 by end-2025. Like in 2018-19, we expect the pair to rise and the trade tensions with the US to intensify, even as the People's Bank of China leans against CNY weakening by stabilizing its daily USDCNY fixing rate. Risks for stronger yuan depreciation abound, not least in view of the likely appointment of Robert Lighthizer as US Trade Representative, as he has strongly hawkish views on US trade policies with China.

Emerging market currencies in Latin America and CEEMEA weakened in response to Donald Trump's victory last month. The potential expansion of tariffs, the new US administration's impact on geopolitics, and the move up in US yields can pose important obstacles to emerging market currencies. Much will depend on the policies that are ultimately implemented, and with uncertainty high, emerging market currencies will likely remain on the back foot in the coming months. That said, we think the Fed will continue to cut its policy rate, and some emerging market currencies still offer appealing yields. The South African rand should receive some support over the medium term from an improving domestic outlook given the reform-minded government. Trade and immigration under Trump, as well as the Mexican government's reform agenda, will likely keep the Mexican peso

FX

under pressure. Eventually, we expect it to partially recover though, as we believe the fundamentals of the bilateral relationship with the US, especially in trade, will remain strong. Central and Eastern European currencies are exposed to potential tariffs on Europe and an overall worse outlook for global trade.

The risks to our outlook and forecasts come from macroeconomics and politics. If US economic growth stays buoyant amid weakness elsewhere, the USD is likely to stay well-bid for longer. More attractive returns for US assets would give investors no incentive to reduce or hedge their dollar asset exposure. Escalating geopolitical developments could boost the USD in a flight-to-safety rush. The incoming Trump administration and news flow on potential policies could lead to greater uncertainty and potentially a larger-scale trade war. A full-out trade war could be harmful for the US economy.

Commodities

We maintain a Neutral view on commodities overall, and rate crude oil and gold as Attractive.

Crude oil: We continue to believe that oil market participants are pricing in a too pessimistic outlook for 2025, expecting strong supply growth next year that results in a very oversupplied market. This year also started with elevated supply growth forecasts, but they were reduced in the months that followed. We think this could happen next year as well, especially since OPEC+ is unlikely to unwind cuts if the market cannot absorb the supply. We continue to hold a constructive outlook and still recommend risk-seeking investors to sell crude oil's downside price risks.

Gold: Gold reached new record highs, with the price topping USD 2,790/oz—a year-to-date gain of 35% to 30 October 2024. Since Election Day, the metal has faced modest setbacks, as investors have focused on the decisive nature of Trump's victory and the potential benefits of Trump's policies on US stocks. We expect the de-dollarization trend among central banks and private asset managers to continue. We estimate central banks bought around 900 metric tons of gold in 2024, and we think these volumes can be sustained well above the prior decade's average of around 325 metric tons a year. Additionally, we see other traditional drivers of gold like lower real interest rates, fading dollar strength, and rising geopolitical uncertainties reasserting themselves in the year ahead. We maintain our target of USD 2,900/oz by end-2025 and continue to recommend around a 5% allocation to gold in a USD balanced portfolio as a diversifier.

Base Metals: Industrial metals have been on a rollercoaster ride in 2024. The election of Donald Trump and the immediate read-through to climate-related policies as well as China stimulus disappointments have outweighed longer-term supply-side concerns. However, in 2025, we believe tightening fundamentals will again support metal prices as the global energy transition continues and the number of new mining projects disappoints. For example, we see copper prices reaching a near-record USD 11,000 per metric ton by end-2025. We also see opportunities in more niche minerals like manganese, rare earths, and lithium. Owing to the complexities of attaining direct exposure, we prefer buying select miners and processors that have exposure to these metals.

Agriculture: Soft commodities continued their outperformance versus grains as weather-related risks in Latin America eased and the US election results all but guaranteed a step up in trade tensions between the US and China. Remarkably, China remains one of the US's biggest agricultural trading partners despite cuts to imports as Beijing imposed tariffs of up to 25% on soybeans, beef, pork, wheat, corn, and sorghum, which was in retaliation to Trump's tariffs on Chinese goods in 2018. We expect elevated price volatility in grains to continue into early 2025, albeit prices remain at/near all-in production costs. Rising geopolitical tensions between Russia and the West have also reemerged in recent days, with wheat prices making the strongest gains. Fundamentals in soft commodities remain tight, particularly in sugar and coffee. We expect price risks of these two remain skewed upward while we anticipate some modest improvement in cocoa stocks in the year ahead. Reduced female cattle slaughter and rising replacement animal prices signal a turnaround in the cattle cycle in Brazil and the US, which should translate into higher live cattle prices in 1H25. Hogs, on the other hand, face greater Trump trade-related risks and as such could face downside risks in the short term.

Where to invest

Market neutral and active strategies pay off

We like to generate yield via a long position in a second-generation commodity index, while being short a first-generation commodity index. This strategy aims to also provide investors diversification benefits with little sensitivity to individual commodity spot moves. Moreover, our actively managed commodity strategy continues to deliver solid alpha return over the comparable passive indexes.

Gold remains a good hedge.

We continue to recommend gold as a hedge, with an Attractive stance in our global asset strategy. Within a balanced USD portfolio, analysis shows allocating around 5% to gold is optimal.

Volatility-selling strategies.

On an individual commodity level, we see opportunities to engage in selling downside in crude oil and platinum.

Section 4

Appendix

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Statement of Risk

Equities: Stock market returns are difficult to forecast because of fluctuations in the economy, investor psychology, geopolitical conditions and other important variables.

Fixed income: 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-US tax consequences of owning any securities referenced in this report.

Preferred securities: Prospective investors should consult their tax advisors concerning the federal, state, local, and non-US 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.

Municipal bonds: 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.

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Explanations about asset classes

Our preferences represent the longer-term allocation of assets that is deemed suitable for a particular investor and were developed and approved by the US Investment Strategy Committee. Our preferences are provided for illustrative purposes only and will differ among investors according to their individual circumstances, risk tolerance, return objectives and time horizon. Therefore, our preferences in this publication may not be suitable for all investors or investment goals and should not be used as the sole basis of any investment decision. Minimum net worth requirements may apply to allocations to non-traditional assets. As always, please consult your UBS Financial Advisor to see how our preferences should be applied or modified according to your individual profile and investment goals.

Our preferences does not assure profits or prevent against losses from an investment portfolio or accounts in a declining 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. CIO GWM 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, CIO GWM 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.

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.

Nontraditional Assets

Nontraditional 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-US 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 notice, 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 US dollars, changes in the exchange rate between the US 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 US investor.

Appendix

Global Investment Process and Committee Description

The UBS investment process is designed to achieve replicable, high-quality results through applying intellectual rigor, strong process governance, clear responsibility and a culture of challenge.

Based on the analyses and assessments conducted and vetted throughout the investment process, the Chief Investment Officer (CIO) formulates the UBS Wealth Management Investment House View preferences at the Global Investment Committee (GIC). Senior investment professionals from UBS, complemented by selected external experts, debate and rigorously challenge the investment strategy to ensure consistency and risk control.

Global Investment Committee Composition

The GIC comprises top market and investment expertise from UBS:

- Mark Haefele (Chair)
- Solita Marcelli
- Tan Min Lin
- Themis Themistocleous
- Paul Donovan
- Bruno Marxer(*)
- Adrian Zuercher
- Mark Andersen

(*) Business area distinct from Chief Investment Office Global Wealth Management

US Investment Strategy Committee description

We recognize that a globally derived house view is most effective when complemented by local perspective and application. As such, UBS has formed a Global Wealth Management US Investment Strategy Committee.

US Investment Strategy Committee Composition

- Solita Marcelli
- Jason Draho (chair)
- Leslie Falconio
- David Lefkowitz
- Brian Rose
- Daniel Scansaroli

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This report contains statements that constitute “forward-looking statements”, including but not limited to statements relating to the current and expected state of the securities market and capital market assumptions. While these forward-looking statements represent our judgments and future expectations concerning the matters discussed in this document, a number of risks, uncertainties, changes in the market, and other important factors could cause actual developments and results to differ materially from our expectations. These factors include, but are not limited to (1) the extent and nature of future developments in the US market and in other market segments; (2) other market and macro-economic developments, including movements in local and international securities markets, credit spreads, currency exchange rates and interest rates, whether or not arising directly or indirectly from the current market crisis; (3) the impact of these developments on other markets and asset classes. UBS is not under any obligation to (and expressly disclaims any such obligation to) update or alter its forward-looking statements whether as a result of new information, future events, or otherwise.

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Version C/2024. CIO82652744

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