

Due to the termination of the statewide COVID-19 State of Emergency by the Governor of California, effective March 1, 2023, all meetings of the Oakland Police & Fire Retirement System Board and its Committees will be conducted in person.

Meetings are held in wheelchair accessible facilities.

The Board may take action on items not on the agenda only if findings pursuant to the Sunshine Ordinance and Brown Act are made that the matter is urgent or an emergency.

For additional information, contact the Retirement Unit by calling (510) 238-7295. or send an email to mvisaya@oaklandca.gov



Retirement Unit
150 Frank H. Ogawa Plaza
Oakland, CA 94612

AGENDA

AUDIT COMMITTEE MEMBERS

John C. Speakman
Chairperson

R. Steven Wilkinson
Member

Martin J. Melia
Member

**In the event a quorum of the Board participates in the Committee meeting, the meeting is noticed as a Special Meeting of the Board; however, no final Board action can be taken. In the event that the Audit Committee does not reach quorum, this meeting is noticed as an informational meeting between staff and the Chair of the Audit Committee.*

MEETING of the AUDIT & OPERATIONS COMMITTEE of the OAKLAND POLICE AND FIRE RETIREMENT SYSTEM (“PFRS”)

WEDNESDAY, AUGUST 30, 2023

10:00 AM

ONE FRANK H. OGAWA PLAZA, HEARING ROOM 1
OAKLAND, CA 94612

OBSERVE

- To observe the meeting by video conference, please click on this link: <https://us02web.zoom.us/j/82880493983> at the noticed meeting time.
- To listen to the meeting by phone, please call the numbers below at the noticed meeting time:
Dial (for higher quality, dial a number based on your current location):
- iPhone one-tap: US: +16699006833, 82880493983# or +13462487799, 82880493983#
- US: +1 669 900 6833 or +1 346 248 7799 or +1 253 215 8782 or +1 301 715 8592 or +1 312 626 6799 or +1 929 205 6099
- International numbers available: <https://us02web.zoom.us/j/82880493983>
- Webinar ID: 828 8049 3983.
If asked for a participant ID or code, press #.

PUBLIC COMMENTS

There are two ways to submit public comments:

- **Speaker Card:** All persons wishing to address the Board must complete a speaker’s card, stating their name and the agenda item they wish to address, including “Open Forum”.
- **eComment:** To send your comment directly to staff BEFORE the meeting starts, please email to mvisaya@oaklandca.gov with “PFRS Board Meeting Public Comment” in the subject line for the corresponding meeting. Please note that eComment submission **closes two (2) hours before posted meeting time.**

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
AUDIT & OPERATIONS COMMITTEE MEETING
AUGUST 30, 2023**

If you have any questions, please email Maxine Visaya, Administrative Assistant II at mvisaya@oaklandca.gov

ORDER OF BUSINESS

1. **Subject:** OAKLAND POLICE AND FIRE RETIREMENT SYSTEM (“PFRS”) AUDIT & OPERATIONS COMMITTEE MEETING MINUTES
From: Staff of the PFRS Board

Recommendation: **APPROVE** the June 28, 2023 Audit & Operations Committee Meeting Minutes

2. **Subject:** ADMINISTRATIVE EXPENSES REPORT
From: Staff of the PFRS Board

Recommendation: **ACCEPT** informational report regarding PFRS administrative expenses as of June 30, 2023

3. **Subject:** ELECTION OF A 5-YEAR RETIRED POLICE REPRESENTATIVE BOARD POSITION
From: Staff of the PFRS Board

Recommendation: **ACCEPT** an informational report regarding nominations for the 5-Year Retired Police Representative Board Position

4. **Subject:** PFRS MEMBER VERIFICATION 2023
From: Staff of the PFRS Board

Recommendation: **ACCEPT** an informational report regarding the status of the 2023 PFRS Member Verification project

5. **Subject:** REIMBURSEMENT OF PENSION PAYMENTS NOT RECEIVED BY PFRS MEMBER DUE TO FRAUD
From: Staff of the PFRS Board

Recommendation: **ACCEPT** an informational report regarding pension payments not received by a PFRS Member due to fraud and **RECOMMEND BOARD APPROVAL** to reimburse the affected PFRS member for the fraudulently diverted funds

6. REVIEW OF PENDING AUDIT COMMITTEE MEETING AGENDA ITEMS
7. OPEN FORUM
8. FUTURE SCHEDULING
9. ADJOURNMENT

A MEETING OF THE AUDIT & OPERATIONS COMMITTEE of the Oakland Police and Fire Retirement System (“PFRS”) was held Wednesday, June 28, 2023, at One Frank Ogawa Plaza, Hearing Room 1, Oakland, California.

Committee Members	▪ John C. Speakman	Chairperson
	▪ Martin J. Melia	Member
	▪ R. Steven Wilkinson	Member
Additional Attendees	▪ David Jones	PFRS Secretary & Plan Administrator (Excused)
	▪ Téir Jenkins	PFRS Investment & Operations Manager
	▪ Maxine Visaya	PFRS Staff Member
	▪ Selia Warren	PFRS Legal Counsel

The meeting was called to order at 10:11 a.m. Pacific

- 1. PFRS AUDIT & OPERATIONS COMMITTEE MEETING MINUTES** – Member Melia made a motion to approve the May 31, 2023, Audit & Operations Committee Meeting minutes, second by Member Wilkinson. Motion passed.

[SPEAKMAN – Y / MELIA – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 0)

- 2. SCOPE OF SERVICES AND INITIATION OF THE FINANCIAL AUDIT OF THE PFRS FUND FOR FISCAL YEAR ENDING JUNE 30, 2023** – Craig Harder of Macias Gini & O’Connell, LLP presented the scope of services and timeline of the Financial Audit of the PFRS Fund for fiscal year ending June 30, 2023. PFRS Investment & Operations Manager Jenkins noted Craig Harder provided the Board with an updated memo today which the information remained unchanged except the addition of proposed timelines.

MOTION: Member Wilkinson made a motion to recommend Board approval of the scope of services and initiation of the Financial Audit of the PFRS Fund for fiscal year ending June 30, 2023, second by Member Melia. Motion passed.

[SPEAKMAN – Y / MELIA – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 0)

- 3. ADMINISTRATIVE EXPENSES REPORT** – PFRS Investment & Operations Manager Jenkins presented an informational report regarding PFRS’ administrative expenditures as of April 30, 2023. PFRS has an approved annual budget of approximately \$3.6 million and have expensed approximately \$1.8 million to date for fiscal year 2022/2023. Membership consisted of 662 retired members and beneficiaries, which included 409 Police Members and 253 Fire Members.

MOTION: Chairperson Speakman made a motion to accept the administrative expenses report as of April 30, 2023, and forward to the Board, second by Member Melia. Motion passed.

[SPEAKMAN – Y / MELIA – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 0)

4. **RESOLUTION NO. 8081** – Resolution approving request of Oakland Police and Fire Retirement System Board Member R. Steven Wilkinson to travel and attend the National Association of Securities Professionals (NASP) 34th Annual Financial Services Conference from July 24, 2023, through July 26, 2023, in Philadelphia, Pennsylvania and authorizing reimbursement of registration fees and travel-related expenses in an amount not to exceed three thousand dollars (\$3,000.00)

MOTION: Chairperson Speakman made a motion to recommend Board approval of Resolution 8081, second by Member Melia. Motion passed.

[SPEAKMAN – Y / MELIA – Y / WILKINSON – ABSTAIN]
(AYES: 2 / NOES: 0 / ABSTAIN: 1 / ABSENT: 0 / EXCUSED: 0)

5. **REVIEW OF PENDING AUDIT COMMITTEE MEETING AGENDA ITEMS** – PFRS Investment & Operations Manager Téir Jenkins reported on the two (2) items on the Audit and Operations Committee Agenda pending list. Item 1) Status Report of the Ad Hoc Committee regarding the Actuarial Funding Date of July 1, 2026: The Committee was scheduled to meet June 26, 2023; however, the meeting will be rescheduled to occur next week. Item 2) Monitor & Update PFRS Board of Upcoming City Council Agendas Regarding Discussion of the 2026 Actuarial Funding Date: T. Jenkins advised Cheiron presented the Actuary Report and & Meketa presented the PFRS Quarterly Performance Report to the City Finance & Management Committee on June 27, 2023 and noted nothing substantial came out of that meeting. Legal Counsel Warren advised there are no updates at this time.

6. **OPEN FORUM** – No Report.

7. **FUTURE SCHEDULING** – The next Audit & Operations Committee Meeting will be held in-person and is tentatively scheduled to occur July 26, 2023.

8. **ADJOURNMENT** – Chairperson Speakman made a motion to adjourn, second by Member Wilkinson. Motion passed.

[SPEAKMAN – Y / MELIA – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 0)

The meeting adjourned at 10:20 a.m. Pacific

JOHN C. SPEAKMAN
COMMITTEE CHAIRPERSON

DATE

Table 1

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Administrative Budget Spent to Date (Preliminary)

As of June 30, 2023

	Approved Budget		June 2023		FYTD		Remaining		Percent Remaining	
Internal Administrative Costs										
PFRS Staff Salaries	\$	1,330,000	\$	107,328	\$	1,184,789	\$	145,211		10.9%
Board Travel Expenditures		52,500		2,240		6,758		45,742		87.1%
Staff Training		20,000		-		-		20,000		100.0%
Staff Training - Tuition Reimbursement		7,500		-		-		7,500		100.0%
Board Hospitality		3,600		1,396		1,636		1,964		54.5%
Payroll Processing Fees		40,000		40,000		40,000		-		0.0%
Miscellaneous Expenditures		45,000		2,242		32,286		12,714		28.3%
Internal Service Fees (ISF)		88,000		-		48,686		39,314		44.7%
Contract Services Contingency		50,000		-		1,500		48,500		97.0%
Internal Administrative Costs Subtotal :	\$	1,636,600	\$	153,207	\$	1,315,656	\$	320,944		19.6%
Actuary and Accounting Services										
Audit	\$	50,500	\$	-	\$	52,600	\$	(2,100)		-4.2%
Actuary		47,900		19,045		43,454		4,446		9.3%
Actuary and Accounting Subtotal:	\$	98,400	\$	19,045	\$	96,054	\$	2,346		2.4%
Legal Services										
City Attorney Salaries	\$	194,000	\$	-	\$	28	\$	193,972		100.0%
Legal Contingency		150,000		-		-		150,000		100.0%
Legal Services Subtotal:	\$	344,000	\$	-	\$	28	\$	343,972		100.0%
Investment Services										
Money Manager Fees	\$	1,353,000	\$	302,139	\$	1,138,923	\$	214,077		15.8%
Custodial Fee		124,000		62,250		122,500		1,500		1.2%
Investment Consultant		100,000		25,000		100,000		-		0.0%
Investment Subtotal:	\$	1,577,000	\$	389,389	\$	1,361,423	\$	215,577		13.7%
Total Operating Budget	\$	3,656,000	\$	561,641	\$	2,773,161	\$	882,839		24.15%

Table 2

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Cash in Treasury (Fund 7100) - Preliminary

As of June 30, 2023

	June 2023
Beginning Cash as of 6/1/2023	\$ 9,393,770
Additions:	
City Pension Contribution - June	\$ 2,726,000
Investment Draw	\$ 2,000,000
Misc. Receipts	10,040
Total Additions:	\$ 4,736,040
Deductions:	
Pension Payment (May Pension Paid on 6/1/2023)	(4,156,448)
Expenditures Paid	(234,593)
Total Deductions	\$ (4,391,042)
 Ending Cash Balance as of 6/30/2023*	 \$ 9,738,769

* On 7/1/2023, June pension payment of appx \$4,132,000 will be made leaving a cash balance of \$5,607,000.

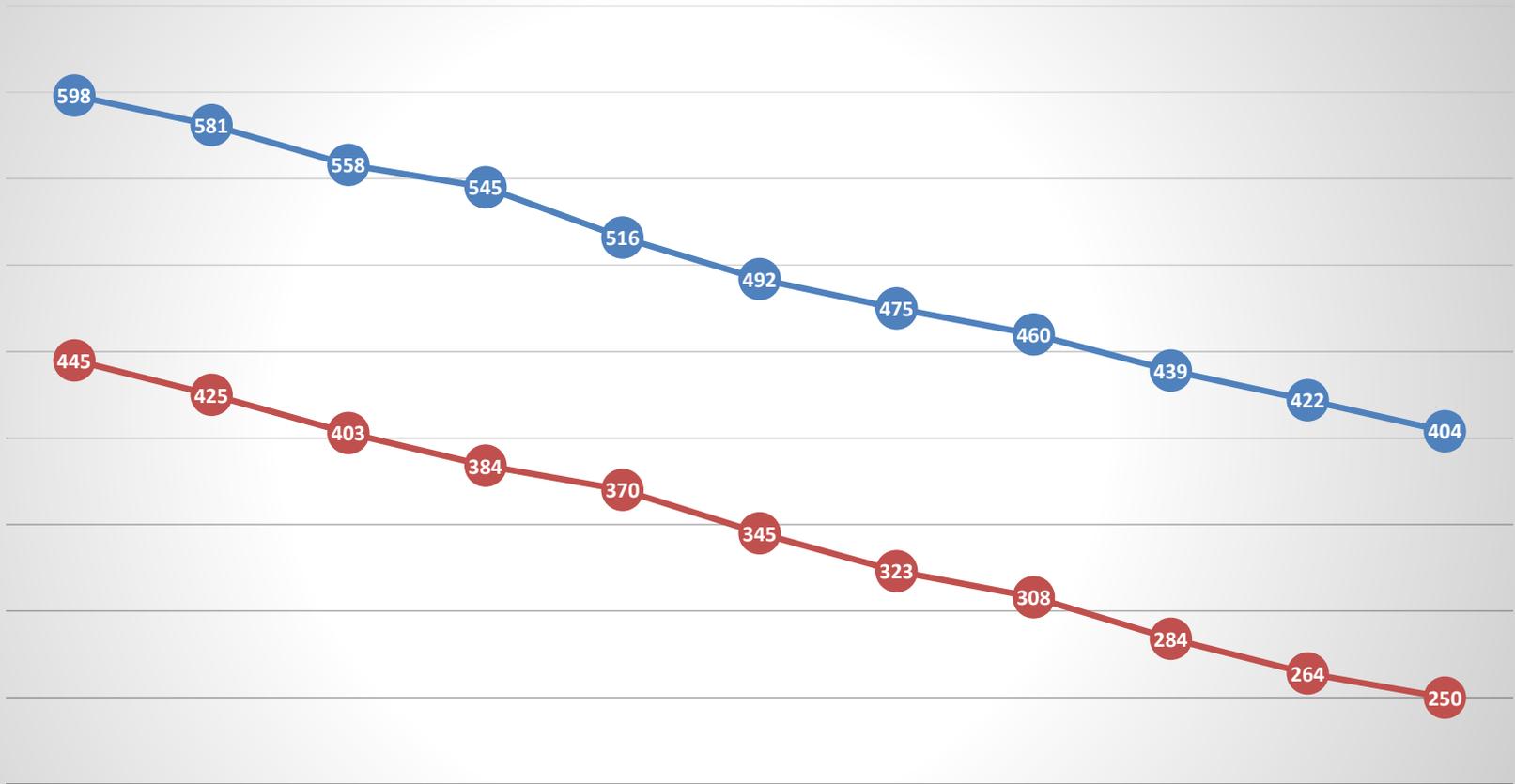
Table 3
CITY OF OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Census
As of June 30, 2023

COMPOSITION	POLICE	FIRE	TOTAL
Retired Member:			
Retiree	277	159	436
Beneficiary	127	91	218
<i>Total Retired Members</i>	404	250	654
<i>Total Membership:</i>	404	250	654

COMPOSITION	POLICE	FIRE	TOTAL
Retired Member:			
Service Retirement	270	121	391
Disability Retirement	125	118	243
Death Allowance	9	11	20
<i>Total Retired Members:</i>	404	250	654
<i>Total Membership as of June 30, 2023:</i>	404	250	654
<i>Total Membership as of June 30, 2022:</i>	422	264	686
<i>Annual Difference:</i>	-18	-14	-32

Oakland Police and Fire Retirement System Pension Plan Membership Count As of June 30, 2023 (FY 2013 - FY 2023)

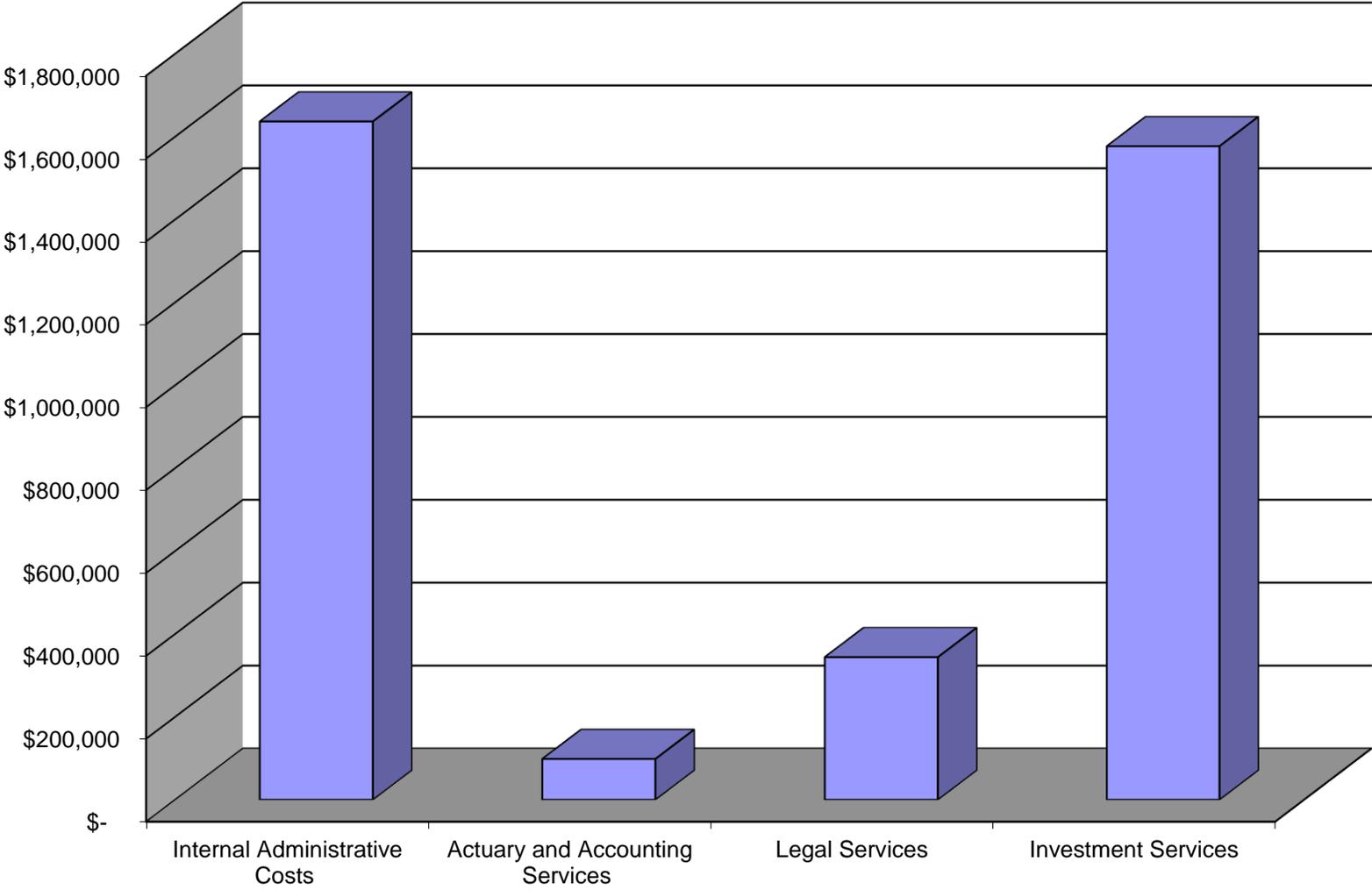


	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023 FYTD
Police	598	581	558	545	516	492	475	460	439	422	404
Fire	445	425	403	384	370	345	323	308	284	264	250
Total	1043	1006	961	929	886	837	798	768	723	686	654

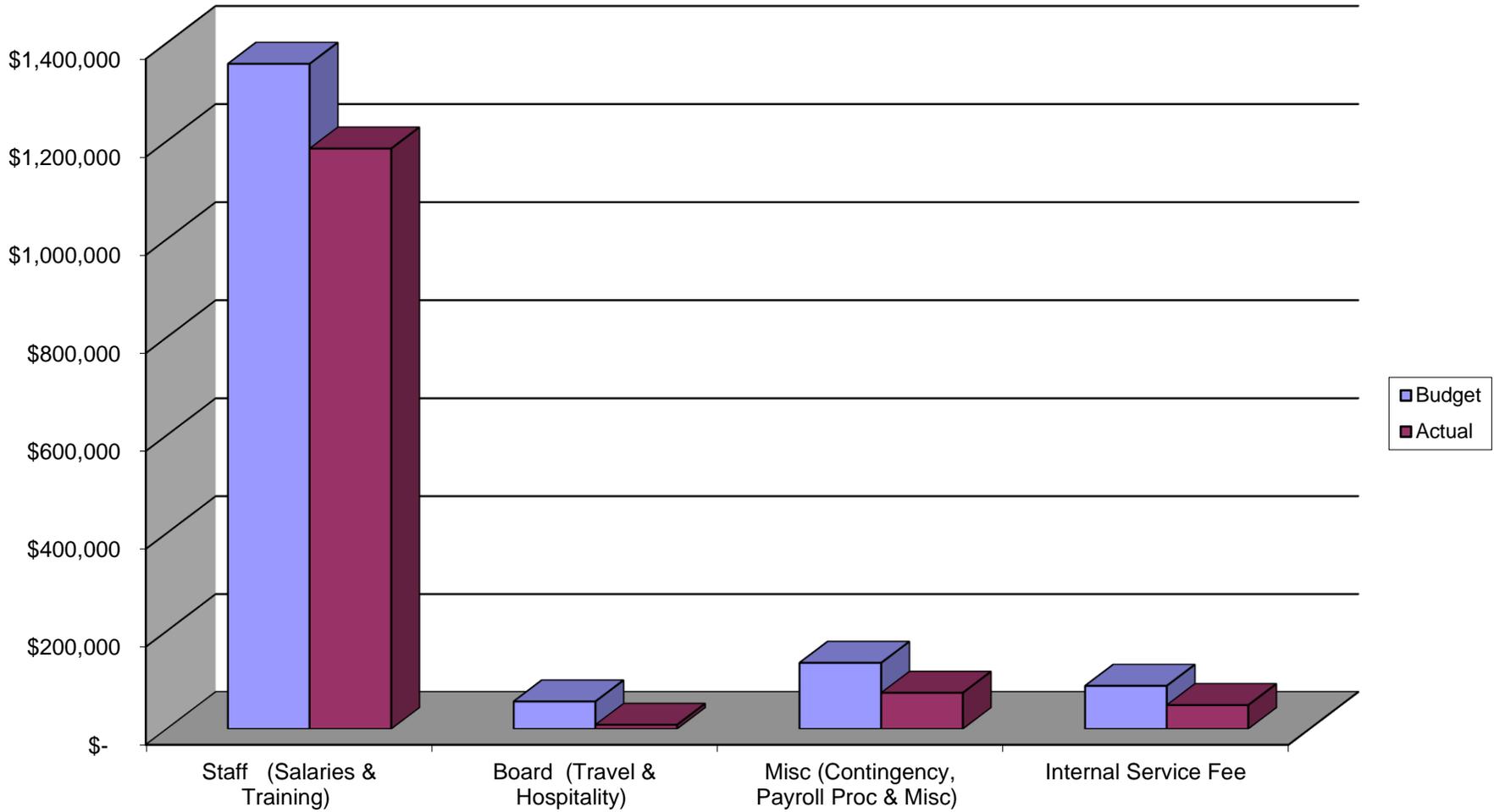
OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Approved Budget

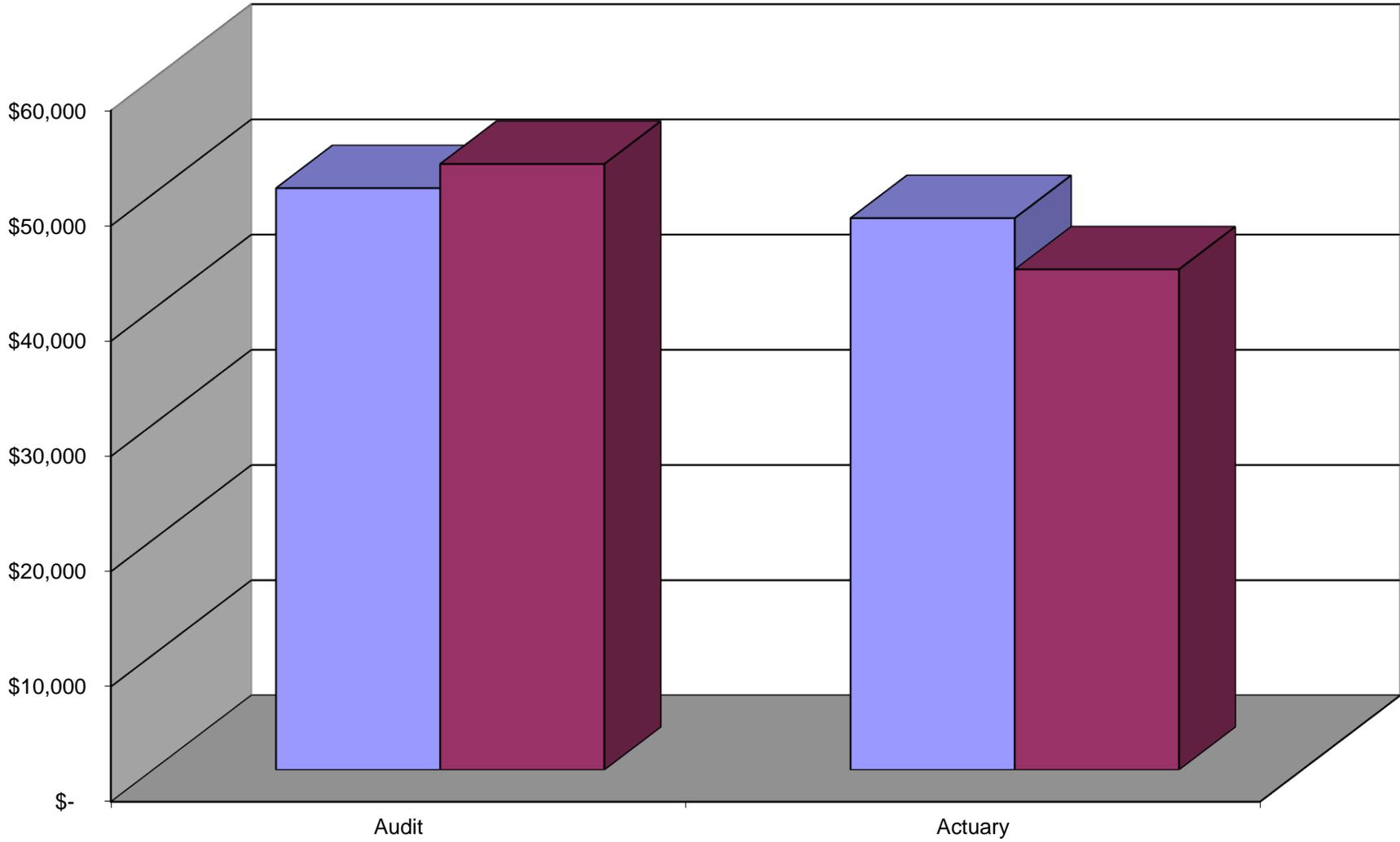
FY 2022-2023



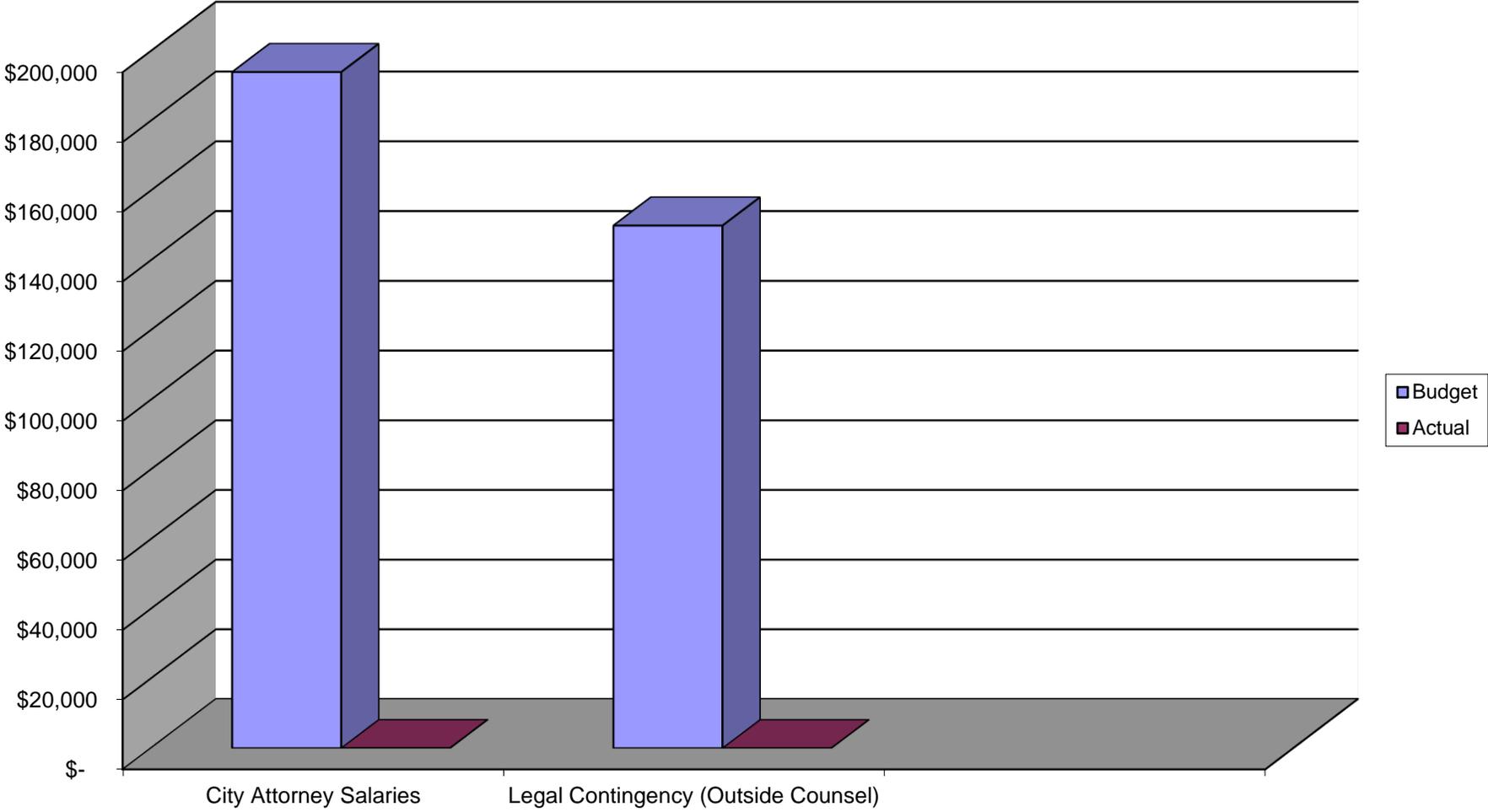
OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Budget vs Actual as of June 30, 2023
Internal Administrative Costs



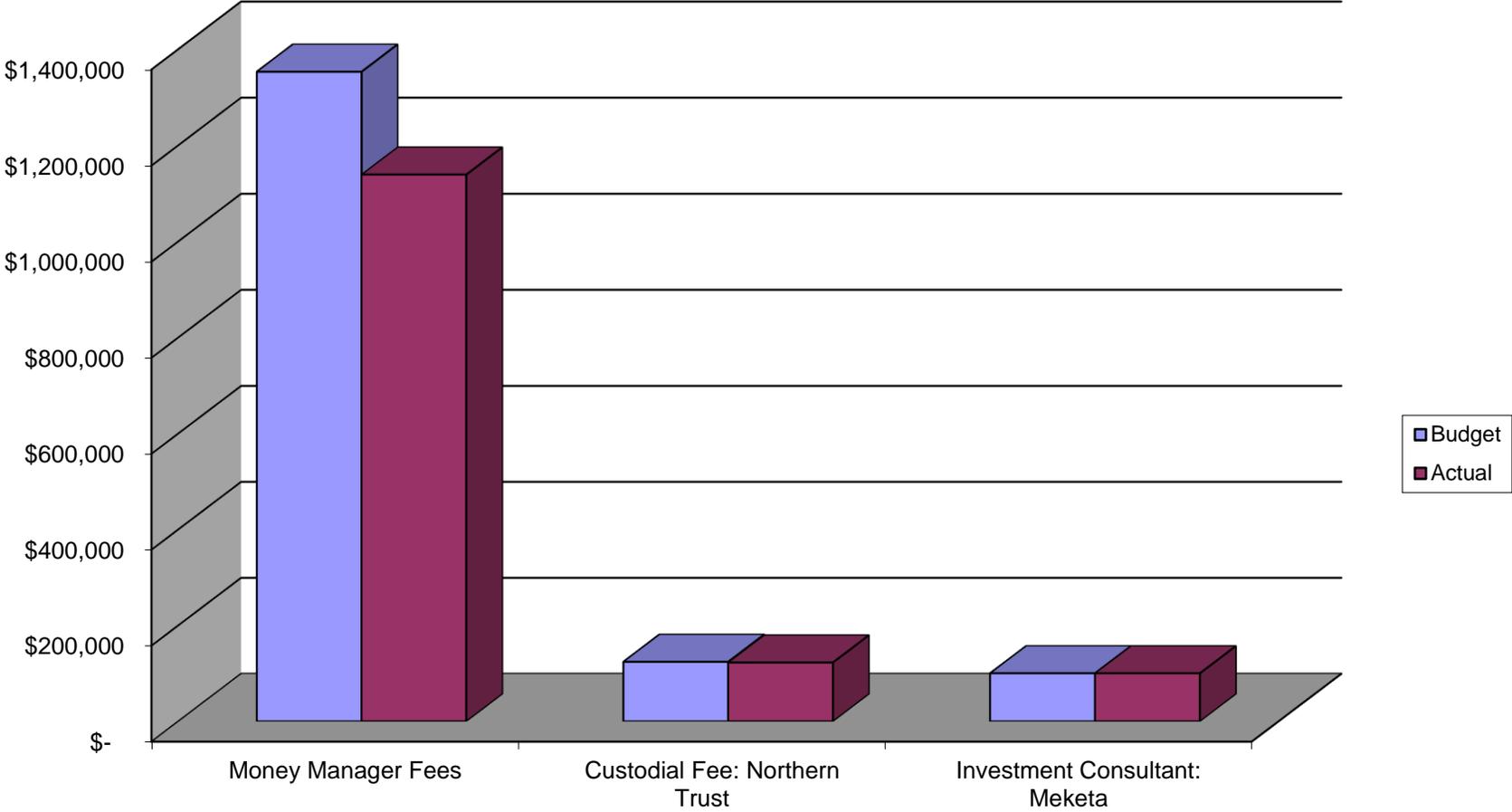
OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Budget vs. Actual as of June 30, 2023
Actuary and Accounting Services



OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Budget vs. Actual as of June 30, 2023
Legal Services



OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Budget vs. Actual as of June 30, 2023
Investment Services





AGENDA REPORT

TO: Oakland Police and Fire Retirement System Board (PFRS) **FROM:** Téir Jenkins
Investment & Operations Manager

SUBJECT: Election of 5-Year Police Department Representative Board Position **DATE:** August 30, 2023

SUMMARY

The 5-year elected police member board seat currently held by Robert W. Nichelini is set to expire August 31, 2023. Pursuant to the PFRS election guidelines outlined in Article 11 of the PFRS Rules and Regulations (**ATTACHMENT 1**), an election for this board seat was conducted by the Staff of the PFRS board with the assistance of the City Clerk's office.

BACKGROUND

Robert J. Muzar previously held the seat of the elected 5-year police representative with a set term from September 1, 2018 through August 31, 2023, and resigned from the seat effective January 22, 2020. A special election was held and Robert W. Nichelini, a retired PFRS Police member, was elected to complete the remainder of the term for the seat vacated by Robert J. Muzar. Member Nichelini's board seat is set to expire August 31, 2023 and a 5-year police member needed to be elected to this seat from the retired police membership.

Following the PFRS Rules & Regulations Article 11, Section 11.2 (**ATTACHMENT 1**), the PFRS staff informed the City Clerk's Office and the Retired Oakland Police Officers Association (ROPOA) of the board vacancy and delivered to them the election schedules and nomination forms.

The City Clerk's Office certified no more than one (1) nomination form was received by the nomination form submission deadline of 5 pm, July 19, 2023. Pursuant to PFRS Rules & Regulations Article 11, Section 11.6 (**ATTACHMENT 1**), the single nominee, Robert W. Nichelini, was declared the winner and will be automatically elected to the nominated position and will begin the new term of the 5-Year Police Department Representative Board Position effective September 1, 2023 through August 31, 2028.

Respectfully submitted,

Téir Jenkins
Investment & Operations Manager Oakland
Police and Fire Retirement System

Attachment (1): *Rules & Regulations - Excerpt of Election: Article 11*

Agenda Item D2
PFRS Board Meeting
August 30, 2023

ATTACHMENT 1

*Oakland Police & Fire Retirement System
Rules & Regulations
Excerpt of Election Article 11*

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

RULES AND REGULATIONS

Article 11: ELECTION OF MEMBERS OF THE BOARD REPRESENTING RETIRED MEMBERS OF THE RETIREMENT SYSTEM

Section 11.1: Day for Counting of Ballots

The fourth Wednesday in August of the year in which such election is required to be held is hereby the day for counting of ballots.

In the event of a vacancy of one or more of the elected PFRS Retirement Board seats before the completion of the full term, the day for counting ballots for the election to fill the vacant PFRS Retirement Board seat shall be the fourth Wednesday of the month that follows 90 days after the date of being informed of the vacancy.

Section 11.2: Notice of Nomination

On or before the first business day in June of each year in which an election is required, the office of the Police and Fire Retirement Board shall send a notice stating that nomination papers may be obtained at the office of said Police and Fire Retirement Board, the place where nomination papers shall be filed and the final date of filing thereof, the date when ballots will be counted and such other information as may be appropriate to the following organizations:

- Retired Oakland Police Officers' Association (ROPOA)
- International Association of Fire Fighters, Local 55 (IAFF Local 55)

In the event of a vacancy of one of the elected PFRS Retirement Board seats before the completion of the full term, the office of the Police and Fire Retirement Board shall send notice as stated above no later than ten (10) calendar days after the date of being informed of the vacancy.

Section 11.3: Nomination for Membership

Nomination for membership on the Police and Fire Retirement Board from the retired membership of the Police and Fire Department shall be in writing on forms supplied by the office of said Police and Fire Retirement Board upon request. Nomination papers shall be substantially in the form shown in Appendix A. Nomination papers shall be signed by at least ten retired members of the Police or Fire Department, as the case may be, who are members of the POLICE AND FIRE RETIREMENT SYSTEM, other than the person nominated. Each signatory of a nominating paper shall write the date of his/her signature at the end of the line opposite his/her signature. Beneficiaries of deceased members are not eligible to vote in elections.

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

RULES AND REGULATIONS

Section 11.4: Date of Filing Nomination Papers

Nominating papers shall be filed in the Office of the Oakland City Clerk, Room 306 of the Oakland City Hall, not less than thirty-five days before the day of counting ballots. If said date falls on a non-business day for the City of Oakland, it shall be filed on the next business day.

Section 11.5: Determination of Sufficiency of Nominating Papers

The City Clerk of the City of Oakland will determine when a member is nominated and for this purpose shall have access to the records of the Police and Fire Retirement Board the names of those retired members of the respective departments determined by him to have been nominated.

Section 11.6: Winner by Default

In the event that only one person is nominated in accordance with this Article 11 as a member of the Board, that person shall be declared a winner.

Section 11.7: Mailing of Ballots

Not less than fifteen days before the day for the counting of the ballots that shall be prepared by and mailed for the office of the Police and Fire Retirement Board to each retired member of the Police Department of Fire Department who is a member of the Police and Fire Retirement System a ballot addressed to his or her address as shown by the records of the Police and Fire Retirement Board. The Ballots shall contain the names in alphabetical order of the candidates certified by the City Clerk as nominated. Such ballot, sealed in a blank envelope provided for this purpose, which shall be enclosed in another envelope, also provided for such purpose, upon which the voter shall place his or her name, may be returned to the City Clerk not later than 10:00 a.m. of the day for the counting of ballots.

Section 11.8: Roster of Eligible Voters

There shall be prepared in the office of the Police and Fire Retirement Board a roster of eligible voters which shall contain the names of the retired members of the Police or Fire Department who are members of the Police and Fire Retirement System, excluding beneficiaries of deceased members. Such roster of eligible voters shall be delivered to the City Clerk not less than fifteen days before the day for the counting of ballots and shall be in such form as to permit appropriate asking thereon by the City Clerk to indicate that an eligible member has voted.

Section 11.9: Counting of Ballots

On the day for the counting of ballots at the hour of 10:00 A.M. thereof, the ballot box shall be opened and no ballot received after said hour shall be counted. The ballots will be counted under the

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

RULES AND REGULATIONS

supervision and control of the City Clerk in such manner that the identity of the individual casting any ballot will not be disclosed. No ballot shall be counted unless it is enclosed in an envelope bearing the name of the voter. No ballot shall be counted which contains a vote for a person not nominated in accordance with Article 12. Upon the conclusion of the counting of the ballots, the City Clerk will certify the count and the candidate elected and notify each candidate thereof by mail.

Section 11.10: Vote Necessary for Election

The candidate receiving the highest number of eligible votes shall be declared elected.

Section 11.11: Disposition of Ballots after Counting

Upon conclusion of the counting of the ballots they shall be kept by the City Clerk in the manner and for the period the ballots of municipal elections are kept.

Section 11.12: Procedure to Fill Vacancy of Elected Members

In the event a vacancy occurs before the end of a full term in any of the three (3) elected offices of the Board which are filled by retired members of the Retirement System, a successor shall be elected for the unexpired portion of the term vacated. The successor shall be elected from the same department of the member who is vacating the seat for the remainder of said unexpired three (3) year, or five (5) year, term. The election shall be governed by Article 11.



AGENDA REPORT

TO: Oakland Police and Fire Retirement System Board (PFRS) **FROM:** Téir Jenkins
Investment & Operations Manager

SUBJECT: PFRS Member Verification 2023 **DATE:** August 30, 2023

SUMMARY

The 2023 PFRS Member Verification Form serves to confirm an accurate record of current member information. Staff is in the process of mailing requests to all PFRS Members to confirm and/or update the information of record with a response due date of September 29, 2023.

PFRS Staff will reach out to both the Police and Fire Retiree Representatives to inform them the task is underway, so they may help advise members to be on the lookout for the mailing from our office.

Respectfully submitted,

Téir Jenkins
Investment & Operations Manager
Oakland Police and Fire Retirement System



AGENDA REPORT

TO: Oakland Police and Fire Retirement System (PFRS)
Board of Administration

FROM: Téir Jenkins
Investment & Operations Manager

SUBJECT: Reimbursement of pension payments not received by PFRS Member due to fraud

DATE: August 30, 2023

BACKGROUND

Earlier this year, through the criminal acts of a third party, a retired Police and Fire Retirement System (PFRS) beneficiary was a victim of identity fraud, which resulted in the loss of \$12,093.66 in fraudulently diverted pension payments. Once discovered, staff alerted the member and corrected the issue. Subsequently, staff completed the process to attempt to retrieve the fraudulently diverted pension payments from the receiving financial institution, however, staff's efforts to recover the funds were not successful and their request was denied.

SUMMARY

Between February and May 2023, an unknown third party committed identity theft and bank fraud causing a PFRS member's monthly pension checks to be diverted to a fraudulent bank account for a period of three months, from March to May 2023. The Retirement Unit confirmed that the member did not receive a monthly pension payment for March 1, 2023, April 1, 2023, and May 1, 2023, for a total net amount of \$12,093.66. Staff conducted extensive research into the matter to obtain additional information regarding the fraud, including working closely with the Oakland Police Department; the City Attorney's Office; the City of Oakland financial institution and the financial institution that received the fraudulently diverted funds. Staff also worked closely with the impacted PFRS member, who filed a police report with their local police agency. Staff followed the financial institution's process to attempt to recover the illegally diverted funds by submitting a request that the funds be returned to the City of Oakland PFRS System due to fraud and provided supporting documentation of the fraudulent incident. However, the receiving financial institution ultimately denied staff's request and staff was not able to recover the fraudulently diverted pension payments. As a result of this incident, staff has strengthened the internal controls to address evolving and escalating fraud threats and to better protect PFRS members going forward.

The impacted PFRS member has requested reimbursement of the three fraudulently diverted pension payments for a total of \$12,093.66. Based on the unique facts and circumstances in which this incident occurred, Staff believes reimbursement is a fair and equitable outcome and seeks authority from the PFRS Board to reimburse the PFRS member for the fraudulently diverted funds.

RECOMMENDATION

We request that the PFRS Board approve the reissuance of the total net amount of \$12,093.66, \$4,031.22 for each monthly pension payment not received to the PFRS member, which were originally due on March 1, 2023, April 1, 2023, and May 1, 2023.

Respectfully submitted,



Téir Jenkins
Investment & Operations Manager
Oakland Police & Fire Retirement Systems



AGENDA REPORT

TO: Oakland Police and Fire
Retirement System Audit &
Operations Committee

FROM: Téir Jenkins
Investment & Operations Manager

SUBJECT: Audit Committee Agenda
Pending List

DATE: August 30, 2023

	SUBJECT	TENTATIVE SCHEDULED MTG DATE	STATUS
1	Status Report of the Ad Hoc Committee regarding Actuarial Funding date of July 1, 2026	TBD	Meeting pending outside counsel
2	Monitor & Update PFRS Board of Upcoming City Council Agendas Regarding Discussion of the July 1, 2026 Actuarial Funding Date	Ongoing	Ongoing

Respectfully submitted,

Téir Jenkins
Investment & Operations Manager Oakland
Police & Fire Retirement Systems

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Retirement Unit
150 Frank H. Ogawa Plaza
Oakland, California 94612

AGENDA

INVESTMENT COMMITTEE MEMBERS

Jaime T. Godfrey
Chairperson

R. Steven Wilkinson
Member

Robert W. Nichelini
Member

**In the event a quorum of the Board participates in the Committee meeting, the meeting is noticed as a Special Meeting of the Board; however, no final Board action can be taken. In the event that the Investment Committee does not reach quorum, this meeting is noticed as an informational meeting between staff and the Chair of the Investment Committee.*

MEETING of the INVESTMENT AND FINANCIAL MATTERS COMMITTEE of the OAKLAND POLICE AND FIRE RETIREMENT SYSTEM (“PFRS”)

WEDNESDAY, AUGUST 30, 2023

10:30 AM

ONE FRANK H. OGAWA PLAZA, HEARING ROOM 1
OAKLAND, CA 94612

OBSERVE

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- iPhone one-tap: US: +16699006833, 82880493983# or +13462487799, 82880493983#
- US: +1 669 900 6833 or +1 346 248 7799 or +1 253 215 8782 or +1 301 715 8592 or +1 312 626 6799 or +1 929 205 6099
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- Webinar ID: 828 8049 3983.
- If asked for a participant ID or code, press #.

PUBLIC COMMENTS

There are two ways to submit public comments.

- Speaker Card: All persons wishing to address the Board must complete a speaker’s card, stating their name and the agenda item they wish to address, including “Open Forum”.
- eComment: To send your comment directly to staff BEFORE the meeting starts, please email to mvisaya@oaklandca.gov with “PFRS Board Meeting Public Comment” in the subject line for the corresponding meeting. Please note that eComment submission **closes two (2) hours before posted meeting time**.

If you have any questions, please email Maxine Visaya, Administrative Assistant II at mvisaya@oaklandca.gov

ORDER OF BUSINESS

1. **Subject:** POLICE AND FIRE RETIREMENT SYSTEM (“PFRS”) INVESTMENT AND FINANCIAL MATTERS COMMITTEE MEETING MINUTES

From: Staff of the PFRS Board

Recommendation: **APPROVE** the June 28, 2023 Investment and Financial Matters Committee Meeting Minutes

2. **Subject:** POLICE AND FIRE RETIREMENT SYSTEM (“PFRS”) INVESTMENT AND FINANCIAL MATTERS COMMITTEE MEETING MINUTES

From: Staff of the PFRS Board

Recommendation: **APPROVE** the July 26, 2023 Investment and Financial Matters Committee Meeting Minutes

3. **Subject:** INVESTMENT MANAGER PERFORMANCE UPDATE: WELLINGTON MANAGEMENT

From: Wellington Management

Recommendation: **ACCEPT** informational report regarding a firm overview and managerial assessment; diversity and inclusion policy and practices; and investment strategy and portfolio performance of PFRS’ Defensive Equity Investment Strategy Manager Wellington Management

4. **Subject:** INVESTMENT MANAGER PERFORMANCE REVIEW: WELLINGTON MANAGEMENT

From: Meketa Investment Group

Recommendation: **ACCEPT** Meketa Investment Group’s review and evaluation regarding a firm overview and managerial assessment; peer ranking; and investment portfolio performance of PFRS’ Defensive Equity Investment Strategy Manager Wellington Management

5. **Subject:** ECONOMIC AND INVESTMENT MARKET OVERVIEW AS OF JULY 31, 2023

From: Meketa Investment Group

Recommendation: **ACCEPT** informational report regarding the Global Investment Markets as of July 31, 2023

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
INVESTMENT & FINANCIAL MATTERS COMMITTEE MEETING
AUGUST 30, 2023**

6. **Subject:** PRELIMINARY INVESTMENT FUND PERFORMANCE UPDATE
AS OF JULY 31, 2023
From: Meketa Investment Group

Recommendation: **ACCEPT** informational report regarding the Preliminary Investment Fund Performance Update as of July 31, 2023
7. **Subject:** INVESTMENT FUND QUARTERLY PERFORMANCE UPDATE
AS OF JUNE 30, 2023
From: Meketa Investment Group

Recommendation: **ACCEPT** the Investment Fund Quarterly Performance Update as of June 30, 2023
8. **Subject:** PROPOSAL TO PERFORM AN ASSET-LIABILITY STUDY OF THE
PFRS FUND AT AN ESTIMATED COST OF \$40,000
From: Meketa Investment Group

Recommendation: **RECOMMEND BOARD APPROVAL** of proposal to perform an Asset-Liability Study of the PFRS Fund at an estimated cost of \$40,000
9. **SCHEDULE OF PENDING INVESTMENT COMMITTEE MEETING AGENDA ITEMS**
10. **OPEN FORUM**
11. **FUTURE SCHEDULING**
12. **ADJOURNMENT**

A MEETING OF THE INVESTMENT AND FINANCIAL MATTERS COMMITTEE of the Oakland Police and Fire Retirement System (“PFRS”) was held Wednesday, June 28, 2023, at One Frank H. Ogawa Plaza, Hearing Room 1, Oakland, CA.

Committee Members	<ul style="list-style-type: none"> ▪ Jaime T. Godfrey ▪ Robert W. Nichelini ▪ R. Steven Wilkinson 	<ul style="list-style-type: none"> Chairperson (Excused) Member Member & Acting Chairperson
Additional Attendees	<ul style="list-style-type: none"> ▪ David F. Jones ▪ Téir Jenkins ▪ Maxine Visaya ▪ Selia Warren ▪ David Sancewich ▪ Paola Nealon ▪ Kosta Stathopoulos ▪ David Schuster 	<ul style="list-style-type: none"> PFRS Secretary & Plan Administrator (Excused) PFRS Investment & Operations Manager PFRS Staff Member PFRS Legal Counsel Meketa Investment Group Meketa Investment Group Brown Advisory, LLC Brown Advisory, LLC

The meeting was called to order at 10:42 a.m. Pacific

1. **APPROVAL OF INVESTMENT & FINANCIAL MATTERS COMMITTEE MEETING MINUTES –** Member Nichelini made a motion to approve the May 31, 2023, Investment & Financial Matters Committee Meeting Minutes, as written, second by Acting Chairperson Wilkinson. Motion Passed.

[GODFREY – EXCUSED / NICHELINI – Y / WILKINSON – Y]
 (AYES: 2 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 1)

2. **INVESTMENT MANAGER PERFORMANCE UPDATE: BROWN ADVISORY, LLC –** Kosta Stathopoulos and David Schuster of Brown Advisory presented an informational report regarding a firm overview and managerial assessment; diversity and inclusion policy and practices; local brokerage usage; and investment strategy and portfolio performance of PFRS’ Active Domestic Equity Small-Cap Fundamental Value Investment Strategy.

Acting Chairperson Wilkinson and Investment and Operations Manager Jenkins made inquiries to further the discussion regarding the following topics: organizational structure; firm culture; fluctuations of the client base; and investment strategy.

MOTION: Member Nichelini made a motion to accept the informational report from Brown Advisory, LLC and forward to the Board, second by Acting Chairperson Wilkinson. Motion passed.

[GODFREY – EXCUSED / NICHELINI – Y / WILKINSON – Y]
 (AYES: 2 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 1)

3. **INVESTMENT MANAGER PERFORMANCE REVIEW: BROWN ADVISORY, LLC** – Paola Nealon of Meketa Investment Group (“Meketa”) presented an overview memo regarding a firm overview and managerial assessment; peer ranking; and investment portfolio performance of Brown Advisory, LLC, a PFRS Active Domestic Equity Small-Cap Fundamental Value Investment Strategy Manager. P. Nealon advised Meketa has no concerns from an organizational standpoint or regarding performance with Brown Advisory, LLC, and continue to consider the firm to be a high conviction manager.

MOTION: Member Nichelini made a motion to accept Meketa’s evaluation of Brown Advisory, LLC and forward to the Board for approval, second by Acting Chairperson Wilkinson. Motion passed.

[GODFREY – EXCUSED / NICHELINI – Y / WILKINSON – Y]
(AYES: 2 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 1)

4. **ECONOMIC AND INVESTMENT MARKET OVERVIEW AS OF MAY 31, 2023** – Paola Nealon of Meketa presented an informational report regarding the Economic and Investment Market Overview as of May 31, 2023, and highlighted Index Returns, Domestic Equity Returns, Foreign Equity Returns, and Ten-Year Breakeven Inflation and CPI and current factors impacting outcomes.

MOTION: Member Nichelini made a motion to accept the informational report presented by Meketa regarding the Economic and Investment Market Overview as of May 31, 2023, and forward to the Board, second by Acting Chairperson Wilkinson. Motion passed.

[GODFREY – EXCUSED / NICHELINI – Y / WILKINSON – Y]
(AYES: 2 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 1)

5. **PRELIMINARY INVESTMENT PERFORMANCE UPDATE AS OF MAY 31, 2023** – David Sancewich of Meketa presented an informational report regarding the Preliminary Investment Performance Update as of May 31, 2023. D. Sancewich highlighted Allocation vs. Targets and Policy and the Asset Class Performance Summary and current factors impacting outcomes.

MOTION: Acting Chairperson Wilkinson made a motion to accept the informational report presented by Meketa regarding the Preliminary Investment Performance Update as of May 31, 2023, and forward to the Board, second by Member Nichelini. Motion passed.

[GODFREY – EXCUSED / NICHELINI – Y / WILKINSON – Y]
(AYES: 2 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 1)

6. **\$13.2 MILLION DRAWDOWN FOR MEMBER RETIREMENT ALLOWANCES (FISCAL YEAR 2023/2024; QUARTER ENDING SEPTEMBER 30, 2023)** – David Sancewich of Meketa presented an informational report and recommendation for a \$13.2 million drawdown, which included a \$10.2 Million contribution from the City of Oakland and a \$3.0 Million contribution from the PFRS Investment Fund, to be used to pay Member Retirement Allowances from July 1, 2023, through September 30, 2023 and for funds to be drawn from the SGA Portfolio. T. Jenkins noted the quarterly drawdown amount is intentionally being lowered to reduce internal cash balances because overall benefit payment amounts have decreased which effectively increased internal cash balances.

MOTION: Member Nichelini made a motion to accept the informational report and recommend Board approval of Meketa’s recommendation regarding the \$13.2 million drawdown to pay for pay Member Retirement Allowances from July 1, 2023, through September 30, 2023, second by Acting Chairperson Wilkinson. Motion passed.

[GODFREY – EXCUSED / NICHELINI – Y / WILKINSON – Y]
(AYES: 2 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 1)

7. **SCHEDULE OF PENDING INVESTMENT COMMITTEE MEETING AGENDA ITEMS** – David Sancewich of Meketa presented the 2023 Strategic Investment Agenda Plan for discussion and noted Meketa plans to add an education item in the coming months. No changes or additions were proposed.
8. **OPEN FORUM** – No Report
9. **FUTURE SCHEDULING** – The next Investment Committee Meeting will be held in-person and is tentatively scheduled to occur July 26, 2023.
10. **ADJOURNMENT** – Member Nichelini made a motion to adjourn, second by Acting Chairperson Wilkinson. Motion passed.

[GODFREY – EXCUSED / NICHELINI – Y / WILKINSON – Y]
(AYES: 2 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 1)

The meeting adjourned at 11:29 a.m. Pacific

R. STEVEN WILKINSON
ACTING COMMITTEE CHAIRPERSON

DATE

A MEETING OF THE INVESTMENT AND FINANCIAL MATTERS COMMITTEE of the Oakland Police and Fire Retirement System (“PFRS”) was held Wednesday, July 26, 2023, at One Frank H. Ogawa Plaza, Hearing Room 1, Oakland, CA.

Committee Members	<ul style="list-style-type: none"> ▪ Jaime T. Godfrey ▪ Robert W. Nichelini ▪ R. Steven Wilkinson 	<ul style="list-style-type: none"> Chairperson Member Member (Excused)
Additional Attendees	<ul style="list-style-type: none"> ▪ David F. Jones ▪ Téir Jenkins ▪ Maxine Visaya ▪ Selia Warren ▪ David Sancewich ▪ Rodolfo Martell ▪ Kirstin Scherer 	<ul style="list-style-type: none"> PFRS Secretary & Plan Administrator (Excused) PFRS Investment & Operations Manager PFRS Staff Member PFRS Legal Counsel Meketa Investment Group Kepos Capital, LP Kepos Capital, LP

The meeting was called to order at 10:30 a.m. Pacific

Due to technical difficulties audio recording of the meeting did not begin until 10:50 am

1. APPROVAL OF INVESTMENT & FINANCIAL MATTERS COMMITTEE MEETING MINUTES

Chairperson Godfrey made a motion to table the June 28, 2023 Investment & Financial Matters Committee Meeting Minutes due to lack of quorum of members present at the June 28, 2023 meeting, second by Member Nichelini. Motion Passed.

[GODFREY – Y / NICHELINI – Y / WILKINSON – EXCUSED]
 (AYES: 2 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 1)

2. INVESTMENT MANAGER PERFORMANCE UPDATE: KEPOS CAPITAL, LP

Rodolfo Martell and Kirstin Scherer of Kepos Capital, LP (Kepos) presented an informational report regarding a firm overview and managerial assessment; diversity and inclusion policy and practices; and investment strategy and portfolio performance of PFRS’ Alternative Risk Premia Investment Strategy.

Chairperson Godfrey and Investment and Operations Manager Jenkins made inquiries to further the discussion regarding the following topics: the firm’s diversity and inclusion policy and practices and investment strategy.

MOTION: Member Nichelini made a motion to accept the informational report from Kepos and forward to the Board, second by Chairperson Godfrey. Motion passed.

[GODFREY – Y / NICHELINI – Y / WILKINSON – EXCUSED]
 (AYES: 2 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 1)

3. INVESTMENT MANAGER PERFORMANCE REVIEW: KEPOS CAPITAL, LP

David Sancewich of Meketa Investment Group (“Meketa”) presented an overview memo regarding a firm overview and managerial assessment; peer ranking; and investment portfolio performance of Kepos, PFRS Alternative Risk Premia Investment Strategy Manager. D. Sancewich advised Meketa has no concerns with Kepos regarding organizational structure or portfolio performance. Meketa will follow-up with Kepos to ensure they understand the questions put forth regarding their diversity policy and will monitor the firm’s efforts.

MOTION: Member Nichelini made a motion to accept Meketa’s evaluation of Kepos and forward to the Board, second by Chairperson Godfrey. Motion passed.

[GODFREY – Y / NICHELINI – Y / WILKINSON – EXCUSED]
(AYES: 2 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 1)

4. ECONOMIC AND INVESTMENT MARKET OVERVIEW AS OF JUNE 30, 2023

David Sancewich of Meketa presented an informational report regarding the Economic and Investment Market Overview as of June 30, 2023, and highlighted Index Returns, Domestic Equity Returns, Foreign Equity Returns, and Fixed Income Returns and current factors impacting outcomes.

MOTION: Member Nichelini made a motion to accept the informational report presented by Meketa regarding the Economic and Investment Market Overview as of June 30, 2023, and forward to the Board, second by Chairperson Godfrey. Motion passed.

[GODFREY – Y / NICHELINI – Y / WILKINSON – EXCUSED]
(AYES: 2 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 1)

5. PRELIMINARY INVESTMENT PERFORMANCE UPDATE AS OF JUNE 30, 2023

David Sancewich of Meketa presented an informational report regarding the Preliminary Investment Performance Update as of June 30, 2023 and highlighted Allocation vs. Targets and Policy and the Asset Class Performance Summary and current factors impacting outcomes. D. Sancewich noted the strategic agenda has an upcoming proposal to conduct an Asset Liability Study intended to readjust policy targets based on liabilities moving forward.

MOTION: Chairperson Godfrey made a motion to accept the informational report presented by Meketa regarding the Preliminary Investment Performance Update as of June 30, 2023, and forward to the Board, second by Member Nichelini. Motion passed.

[GODFREY – Y / NICHELINI – Y / WILKINSON – EXCUSED]
(AYES: 2 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 1)

6. SCHEDULE OF PENDING INVESTMENT COMMITTEE MEETING AGENDA ITEMS

David Sancewich of Meketa presented the 2023 Strategic Investment Agenda Plan for discussion and noted Meketa plans to bring forward a proposal perform an Asset Liability Study at the August meeting. No changes or additions were proposed.

7. OPEN FORUM – No Report

8. FUTURE SCHEDULING

The next Investment Committee Meeting will be held in-person and is tentatively scheduled to occur August 30, 2023.

9. ADJOURNMENT

Member Nichelini made a motion to adjourn, second by Chairperson Godfrey. Motion passed.

[GODFREY – Y / NICHELINI – Y / WILKINSON – EXCUSED]
(AYES: 2 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 1)

The meeting adjourned at 11:09 a.m. Pacific

JAIM T. GODFREY
COMMITTEE CHAIRPERSON

DATE



AGENDA REPORT

TO: Oakland Police and Fire Retirement System Board (PFRS) **FROM:** Téir Jenkins
Investment & Operations Manager

SUBJECT: Request to Remove/Omit Vendor Agenda Information from Website **DATE:** August 30, 2023

By request of Wellington Management, the electronic version of this agenda item in the agenda packages for the PFRS Investment Committee and Regular Board meetings scheduled for Wednesday, August 31, 2023 has been removed/omitted.

Members of the public may obtain a copy of this presentation material by submitting a request via email at mvisaya@oaklandca.gov following the August 30, 2023 meeting.

Respectfully submitted,

Téir Jenkins
Investment & Operations Manager
Oakland Police and Fire Retirement System

MEMORANDUM

TO: Oakland Police and Fire Retirement System (OPFRS)
FROM: Meketa Investment Group (Meketa)
DATE: August 30, 2023
RE: Wellington Select Quality Equity—Manager Update

Manager: Wellington Capital Management

Inception Date:	May 2022	OPFRS AUM (7/31/2023):	\$23.5 million
Strategy:	Select Quality Equity	Strategy AUM (6/30/2023):	\$5.6 billion
Benchmark:	Russell 1000 Index	Firm-wide AUM (6/30/2023):	\$1.2 trillion
Peer Group:	US Large Cap Core Equity (Net)	Recommended Action:	None

Summary

Wellington has managed a part of OPFRS’s domestic equity portfolio since May 2022. As of July 31, 2023, the portfolio is approximately \$23.5 million or about 5.5% of OPFRS’s total plan. While the strategy has underperformed during this period, it ought not to be overly scrutinized as a recently incepted investment account with only 14 months of history. No major organizational changes or personnel turnover in the portfolio management team have been observed since the account’s initial funding in May 2022. **Therefore, Meketa does not have any major concerns with Wellington and the strategy.**

Investment Performance¹ Review

As of 7/31/2023, Wellington Select Quality Equity strategy has underperformed the Russell 1000 Index over all the trailing time periods measured. Since inception in May 2022, the strategy has generated an annualized net-of-fees investment return of 5.4%. In comparison with the other US large cap core managers, the portfolio ranks below average for all periods measured.

As of 7/31/2023	Market Value (\$000)	YTD	1 YR	3 YR	5 YR	Since Inception	Since Inception Risk
Wellington Select Quality (Net)	23,507	5.9	8.0	--	--	5.4	16.2
<i>Russell 1000 Index</i>	---	<i>20.7</i>	<i>12.9</i>	--	--	<i>10.2</i>	<i>19.8</i>
Excess Return (Net)	---	-14.8	-4.9	--	--	-4.8	--
Peer Group Median	---	15.7	11.0	--	--	8.8	19.7
Peer Group Ranking	---	92	74	--	--	79	--

The strategy was selected as a defensive equity for the portfolio. Risk level, as measured by standard deviation, of Wellington Select Quality Equity since inception is 16.2, while those of Russell 1000 and the median peer fund are 19.8 and 19.7 respectively for the same period.

¹ Performance is annualized for periods longer than one year.

Product and Organization Review Summary

Wellington Capital Management		Areas of Potential Impact			
	Level of Concern	Investment Process (Client Portfolio)	Investment Team	Performance Track Record	Team/ Firm Culture
Product					
Key people changes	None				
Changes to team structure/individuals' roles	None				
Product client gain/losses	None				
Changes to the investment process	None				
Personnel turnover	None				
Organization					
Ownership changes	None				
Key people changes	None				
Firm wide client gain/losses	None				
Recommended Action	None - X		Watch Status	Termination	

A review of Wellington Capital Management and the Select Quality Equity strategy revealed no concerning organizational issues or changes since the account's initial funding in May 2022.

Investment Summary²

The investment philosophy of the Select Quality Equity approach is based on the premise that investing in a select number of high quality, large capitalization, attractively valued companies with superior prospects for dividend growth can provide superior long-term returns.

The Select Quality Equity investment process is driven by fundamental, bottom-up research. Portfolio Manager Don Kilbride is ultimately responsible for buy and sell decisions, portfolio construction, and for coordinating the research effort for the portfolio. The portfolio management team have a wealth of experienced investment resources at the firm to leverage research and investment ideas, including global industry analysts, ESG analysts, traders, macro strategists, and other portfolio managers and analysts who support various investment approaches.

The investment process is based on the belief that above-average growth in dividends is an effective and often overlooked indicator of high quality, shareholder-oriented companies that produce consistent, above-average returns over time with lower volatility than the broad market. The team believes that a portfolio of high-quality stocks with superior prospects for dividend growth, selling at reasonable valuation levels, can produce superior total returns over time.

DS/PN/JLC/mn

² Source: manager. Abridged.



Disclosure

WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM," "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

Economic and Market Update

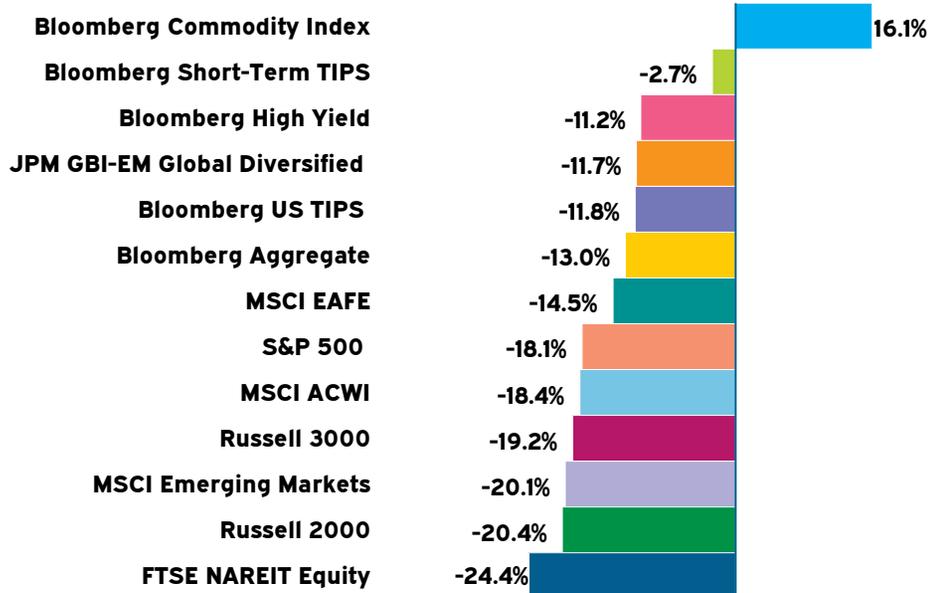
July 2023 Report

Commentary

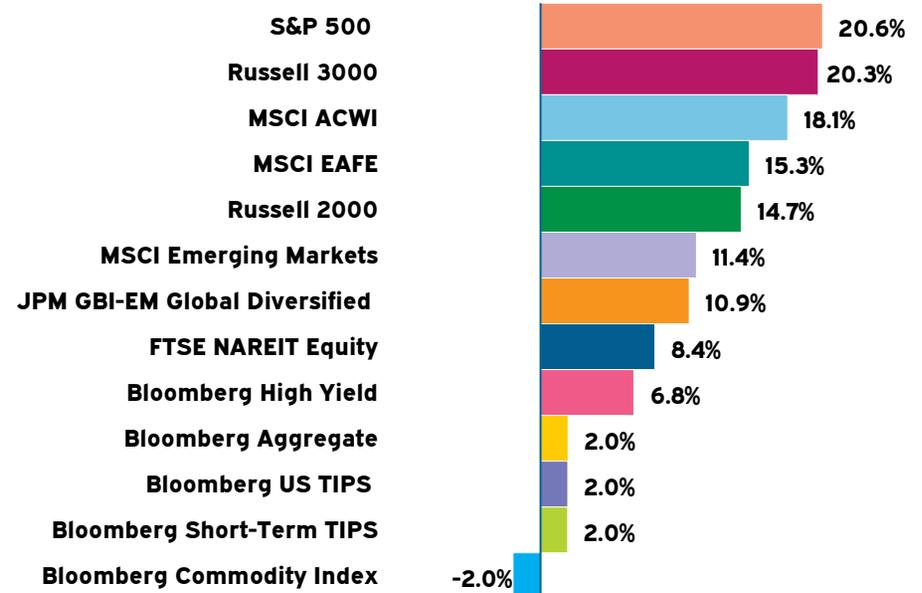
- Riskier assets continued to gain in July as economic data remained resilient while inflation receded. Except for commodities, most public market asset classes remained positive for the year, with US equities leading the way.
- After a pause in June, the Federal Reserve increased interest rates in July by 0.25% to a range of 5.25% - 5.5%, the highest level in over two decades. Markets are largely expecting that this will be the Fed's final rate increase.
 - US equity markets (Russell 3000 index) continued to rise in July (+3.8%), bringing the year-to-date gains to 20.3%. The technology sector remains the key driver of results this year, helped by artificial intelligence optimism.
 - Non-US developed equity markets also rose in July (MSCI EAFE +3.2%), but they continue to trail US markets year-to-date (15.3% versus 20.3%).
 - Emerging market equities had the strongest results in July, gaining 6.2%, driven by optimism over additional policy support in China. They continue to trail developed market equities year-to-date though, returning 11.4%, due partly to China's weak results for the period.
 - Generally, corporate bonds outperformed government bonds for the month on continued risk appetite. Overall, interest rates increased slightly in July, leading to a small decline in the broad US bond market (-0.1%). The index remains positive (+2.0%) year-to-date on declining inflation and expectations for the Fed to end their rate hikes soon.
- This year, the paths of inflation and monetary policy, slowing global growth, and the war in Ukraine will all be key.

Index Returns¹

2022



YTD



→ After a particularly difficult 2022, most public market assets are up thus far in 2023, led by developed market equities.

→ Risk sentiment has been supported by expectations that policy tightening could be ending soon, as inflation continues to fall, while growth has remained relatively resilient.

¹ Source: Bloomberg. Data is as of July 31, 2023.

Domestic Equity Returns¹

Domestic Equity	July (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
S&P 500	3.2	8.7	20.6	13.0	13.7	12.2	12.7
Russell 3000	3.6	8.4	20.3	12.6	13.1	11.4	12.1
Russell 1000	3.4	8.6	20.7	12.9	13.2	11.9	12.4
Russell 1000 Growth	3.4	12.8	33.4	17.3	12.2	15.2	15.5
Russell 1000 Value	3.5	4.1	8.8	8.3	14.1	8.0	9.0
Russell MidCap	4.0	4.8	13.3	8.7	11.8	8.8	10.1
Russell MidCap Growth	3.0	6.2	19.4	13.0	6.0	9.9	11.2
Russell MidCap Value	4.4	3.9	9.8	6.2	14.9	7.2	8.9
Russell 2000	6.1	5.2	14.7	7.9	12.0	5.1	8.2
Russell 2000 Growth	4.7	7.1	18.9	11.6	6.5	4.8	8.5
Russell 2000 Value	7.5	3.2	10.2	3.9	17.5	4.7	7.4

US Equities: Russell 3000 Index rose 3.6% in July and 20.3% YTD.

- Equity investors continue to express optimism that the Federal Reserve’s monetary tightening will not have serious impacts on earnings. Though corporate profits were down compared to a year ago, approximately 80% of S&P 500 companies that reported second quarter results in July exceeded earnings expectations.
- In contrast to the year-to-date trend, value stocks outperformed growth stocks in July, particularly in small cap, driven by outperformance in financials and energy. So far in 2023, growth has significantly outperformed value driven by optimism over artificial intelligence.
- Small cap stocks outperformed large cap stocks in July, but trail for the full year, again due to the strength of the technology sector. The July dynamic was driven partially by the outperformance of small cap banks after regulators announced higher capital requirements for larger banks.

¹ Source: Bloomberg. Data is as of July 31, 2023.

Foreign Equity Returns¹

Foreign Equity	July (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI ex. US	4.1	2.4	13.9	13.4	7.1	3.9	4.7
MSCI EAFE	3.2	3.0	15.3	16.8	9.3	4.5	5.2
MSCI EAFE (Local Currency)	1.7	4.3	14.0	13.6	13.0	6.2	7.4
MSCI EAFE Small Cap	4.4	0.6	10.2	7.9	6.1	2.1	6.0
MSCI Emerging Markets	6.2	0.9	11.4	8.3	1.5	1.7	3.5
MSCI Emerging Markets (Local Currency)	5.3	1.7	11.1	8.6	3.0	3.7	6.1
MSCI China	10.8	-9.7	4.7	1.8	-9.9	-2.8	3.7

Foreign Equity: Developed international equities (MSCI EAFE) rose 3.2% in July bringing the YTD gains to 15.3%. Emerging market equities (MSCI EM) rose 6.2% in July, rising 11.4% YTD.

- International equities also had strong results in July, led by China and emerging markets more broadly.
- Japanese equities continued their steady rise, especially in the mid- and small-cap sectors. Eurozone and UK equities were broadly supported by falling inflation and solid corporate fundamentals.
- After a disappointing reopening of the economy, China’s government announced additional support to stimulate consumption and bolster the real estate sector, leading to double-digit gains for the month (10.8%). India underperformed as higher food costs kept inflation elevated.

¹ Source: Bloomberg. Data is as of July 31, 2023.

Fixed Income Returns¹

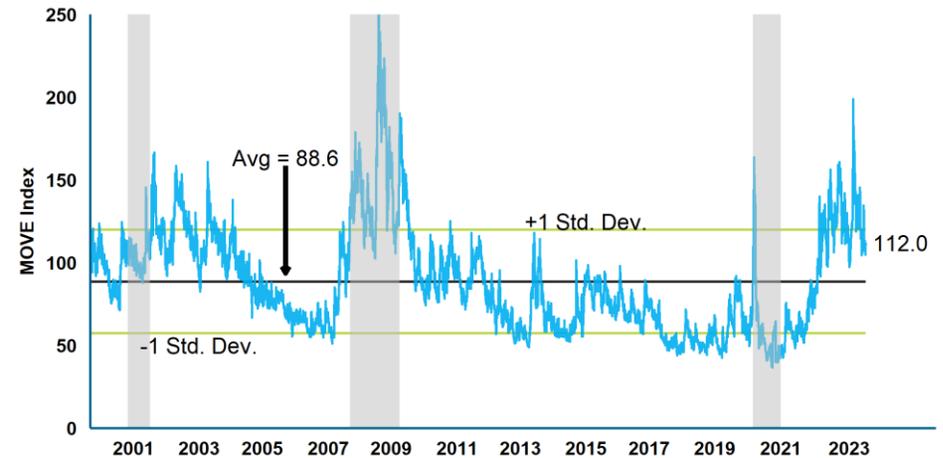
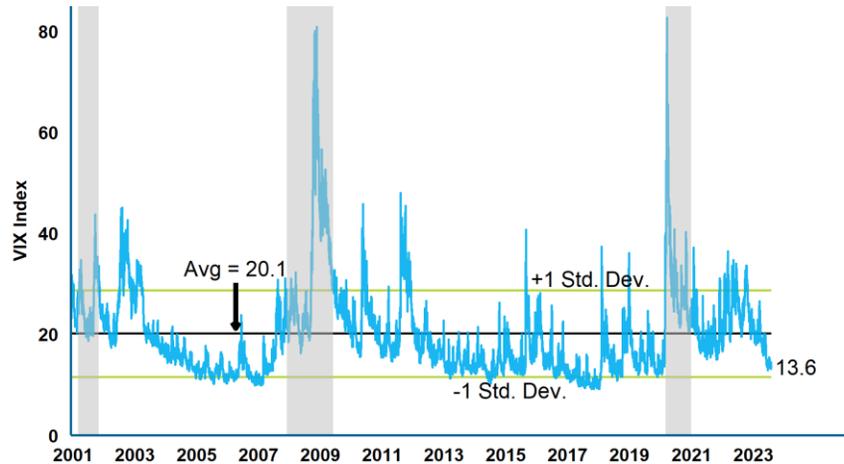
Fixed Income	July (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Current Yield (%)	Duration (Years)
Bloomberg Universal	0.1	-0.6	2.4	-2.4	-4.0	1.0	1.8	5.2	6.2
Bloomberg Aggregate	-0.1	-0.8	2.0	-3.4	-4.5	0.7	1.5	4.9	6.5
Bloomberg US TIPS	0.1	-1.4	2.0	-5.4	-0.8	2.6	2.0	4.6	6.9
Bloomberg Short-term TIPS	0.5	-0.7	2.0	-1.2	2.3	2.9	1.7	5.3	2.7
Bloomberg High Yield	1.4	1.7	6.8	4.4	2.0	3.4	4.4	8.3	4.0
JPM GBI-EM Global Diversified (USD)	2.9	2.5	10.9	14.3	-1.5	0.5	-0.2	6.5	5.0

Fixed Income: The Bloomberg Universal rose 0.1% in July remaining positive YTD (+2.4%), as inflation continues to decline, and yields remain high.

- In July, riskier bonds continued to outperform government bonds on optimism over a potential soft landing of the economy.
- The broad US bond market (Bloomberg Aggregate) declined slightly for the month (-0.1%) while the TIPS index, and the short-term TIPS index both posted small gains. All three indexes now have the same results so far in 2023.
- In the risk-on environment, high yield bonds rose 1.4% for the month, while emerging market bonds were the top performer, up 2.9%. The two asset classes remain the top performers for the year.

¹ Source: Bloomberg. JPM GBI-EM data is from InvestorForce. Data is as of July 31, 2023. The yield and duration data from Bloomberg is defined as the index's yield to worst and modified duration respectively.

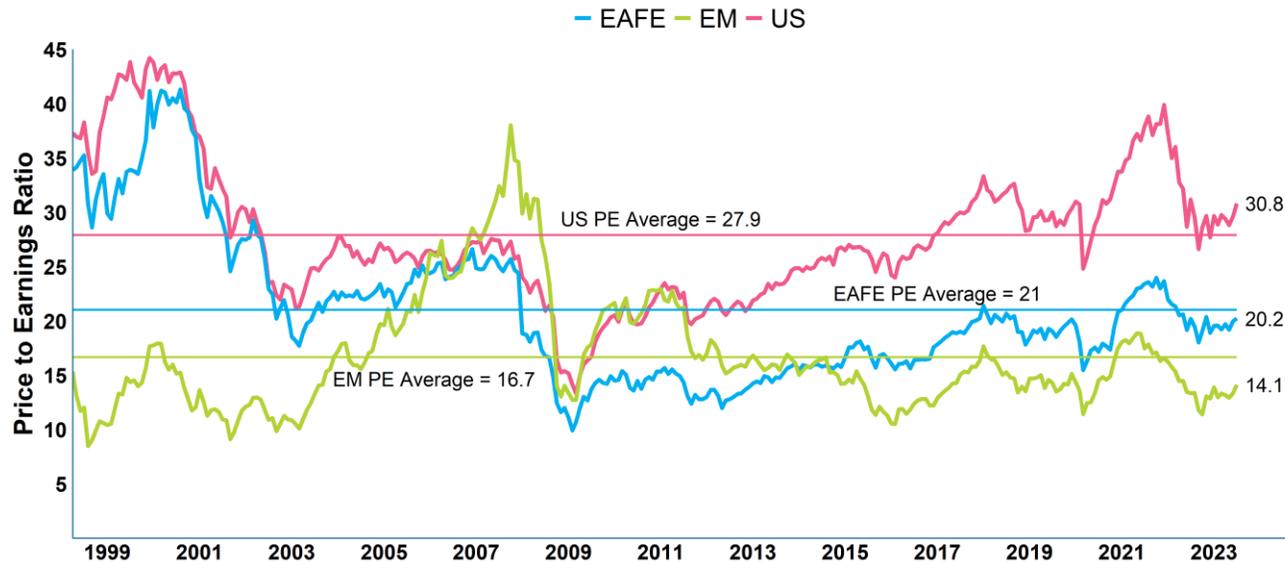
Equity and Fixed Income Volatility¹



- Volatility in equities (VIX) remains well below the historical average as investors continue to anticipate the end of the Fed's policy tightening.
- The bond market continues to be volatile after last year's historic losses and due to policy uncertainty and previous issues in the banking sector. The MOVE (fixed income volatility) remains well above (112.0) its long-run average (88.6), but off its recent peak during the heart of the banking crisis.

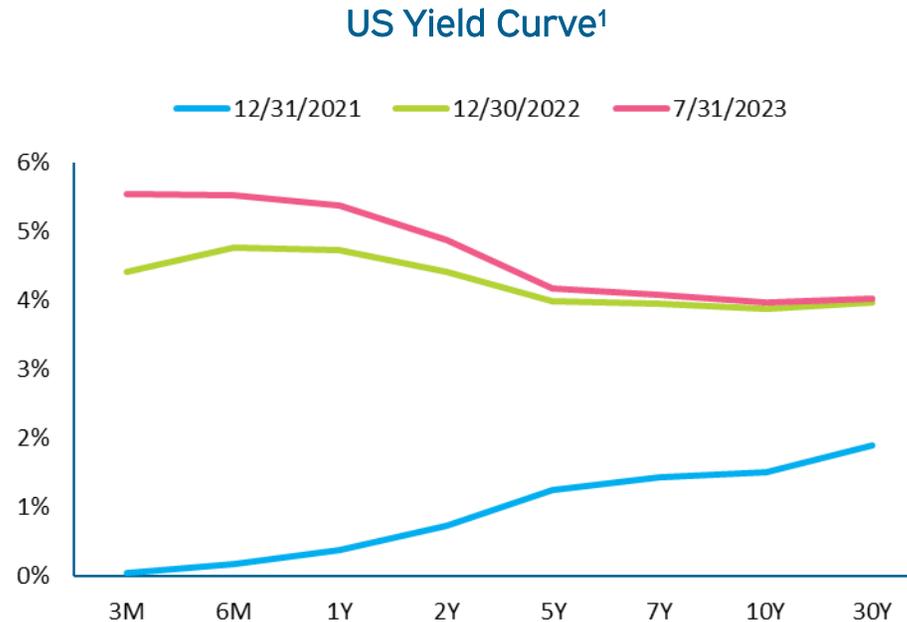
¹ Equity and Fixed Income Volatility – Source: Bloomberg. Implied volatility as measured using VIX Index for equity markets and the MOVE Index to measure interest rate volatility for fixed income markets. Data is as of July 2023. The average line indicated is the average of the VIX and MOVE values between January 2000 and July 2023.

Equity Cyclically Adjusted P/E Ratios¹



- Given the strong technology-driven rally this year, the US equity price-to-earnings ratio increased above its long-run (21st century) average.
- International developed market valuations are below their own long-term average, with those for emerging markets the lowest and well under the long-term average.

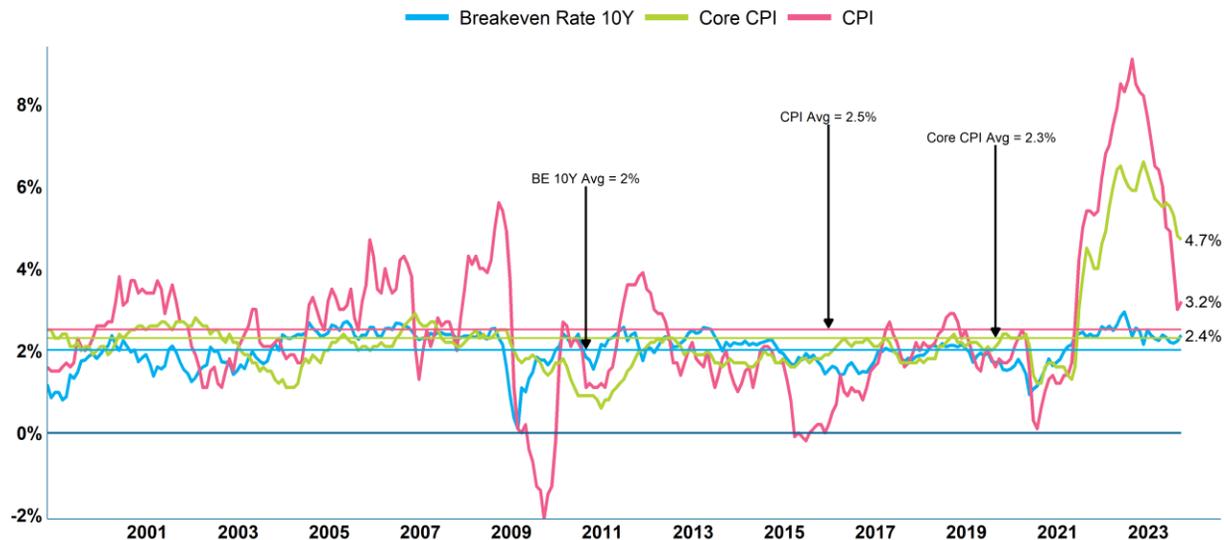
¹ US Equity Cyclically Adjusted P/E on S&P 500 Index. Source: Robert Shiller, Yale University, and Meketa Investment Group. Developed and Emerging Market Equity (MSCI EAFE and EM Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years. Data is as of July 2023. The average line is the long-term average of the US, EM, and EAFE PE values from December 1999 to the recent month-end respectively.



- In July, very short-term interest rates (6-months or less) fell as it appears interest rate hikes might be coming to an end. Longer dated maturities continued to drift higher, as economic data remains resilient. So far in 2023, rates overall remain higher, particularly the policy sensitive front-end of the yield curve.
- The yield curve remains inverted with the spread between two-year and ten-year Treasuries finishing the month at -0.91%. The more closely watched measure (by the Fed) of the three-month and ten-year Treasuries spread also remained inverted at -1.60%. Inversions in the yield curve have often preceded recessions.

¹ Source: Bloomberg. Data is as of July 31, 2023.

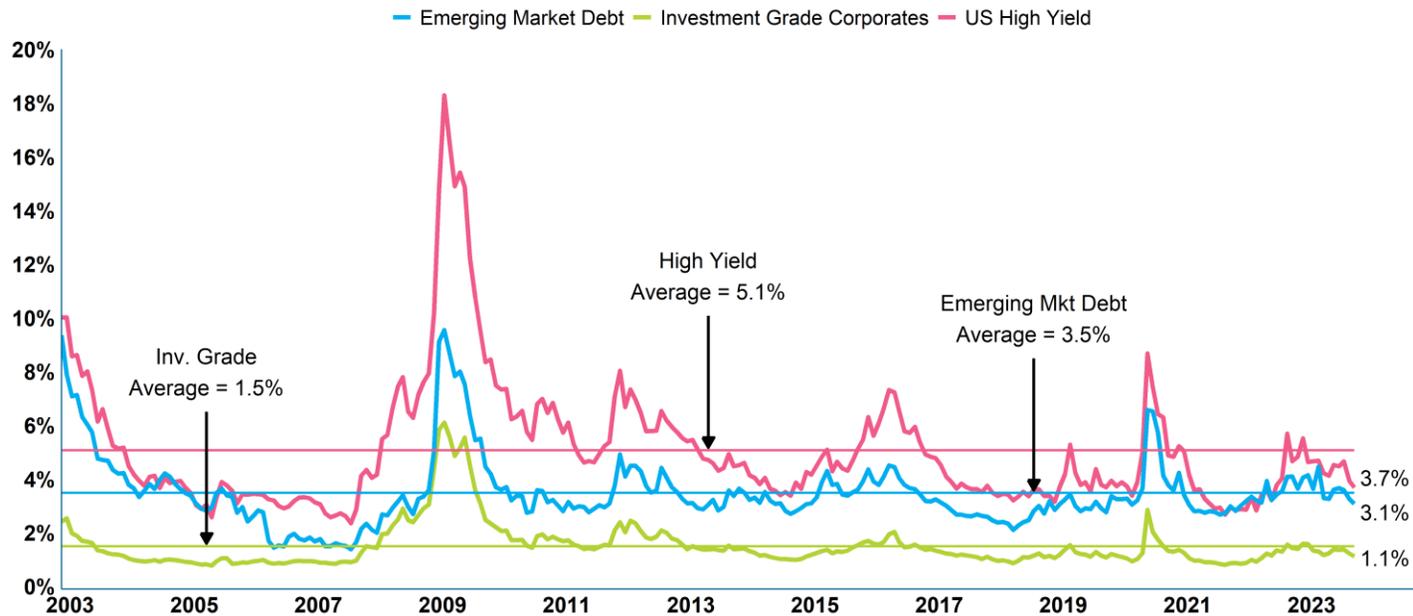
Ten-Year Breakeven Inflation and CPI¹



- Declines in inflation while other economic data remains strong has led to optimism over the Federal Reserve potentially achieving a rarely observed soft landing for the economy.
- Year-over-year headline inflation rose slightly in July (3.0% to 3.2%) but came in below expectations. The trend of lower month-over-month price increases continued with the rate staying steady at 0.2%.
- Core inflation – excluding food and energy - fell (4.8% to 4.7%) year-over-year. It remains stubbornly high though driven by shelter costs (+7.7%), particularly owners equivalent rent, and transportation services (+9.0%).
- Inflation expectations (breakevens) remain well below current inflation as investors continue to expect inflation to track back toward the Fed’s 2% average target.

¹ Source: Bloomberg. Data is as July 31, 2023. The CPI and 10 Year Breakeven average lines denote the average values from August 1998 to the present month-end, respectively. Breakeven values represent month-end values for comparative purposes.

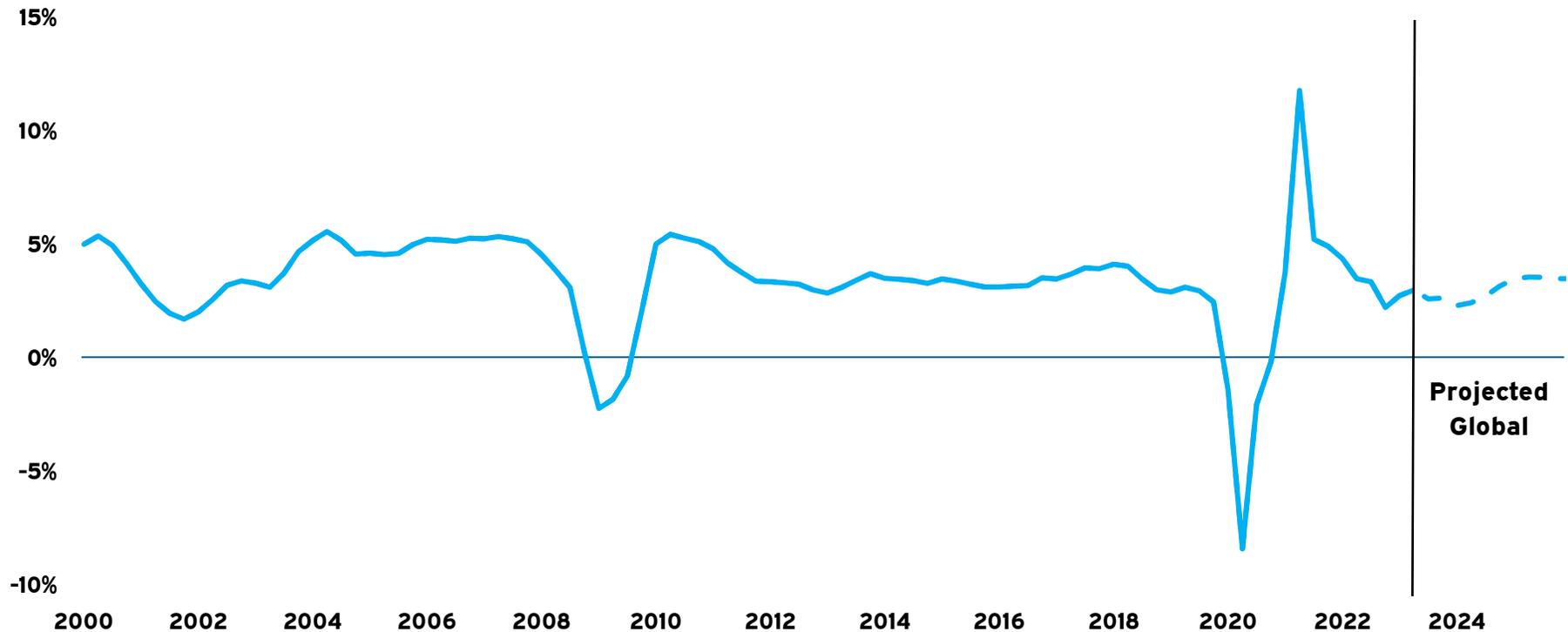
Credit Spreads vs. US Treasury Bonds¹



- Credit markets outperformed government bonds for the month with spreads (the added yield above a comparable maturity Treasury) declining. Risk appetite was strong as growth remains resilient, while inflation continues to decline.
- High yield spreads remain well below the long-term average. Investment grade and emerging market spreads are also below their respective long-term averages, but by smaller margins.

¹ Sources: Bloomberg. Data is as of July 31, 2023. Average lines denote the average of the investment grade, high yield, and emerging market spread values from August 2000 to the recent month-end, respectively.

Global Real Gross Domestic Product (GDP) Growth¹

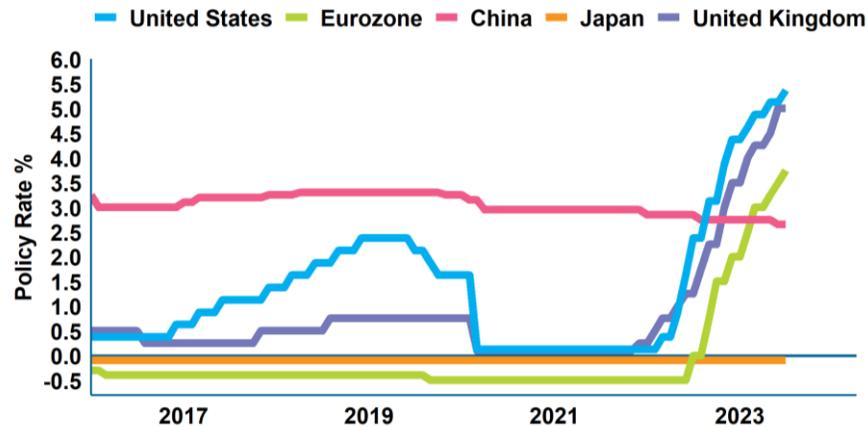


- Global economies are expected to slow this year compared to 2022. The risk of recession remains given policymakers' aggressive tightening, but optimism has started to grow over some central banks potentially navigating a soft landing.
- The delicate balancing act of central banks trying to reduce inflation without dramatically depressing growth will remain key.

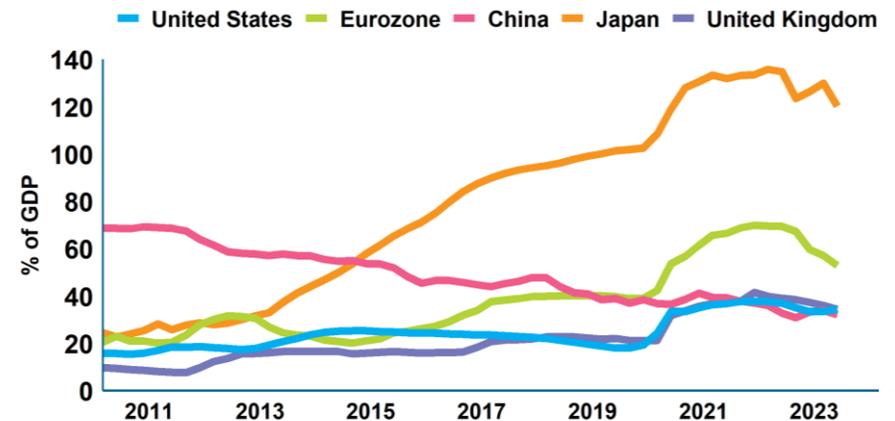
¹ Source: Oxford Economics (World GDP, US\$ prices & PPP exchange rate, real, % change YoY). Updated July 2023.

Central Bank Response¹

Policy Rates



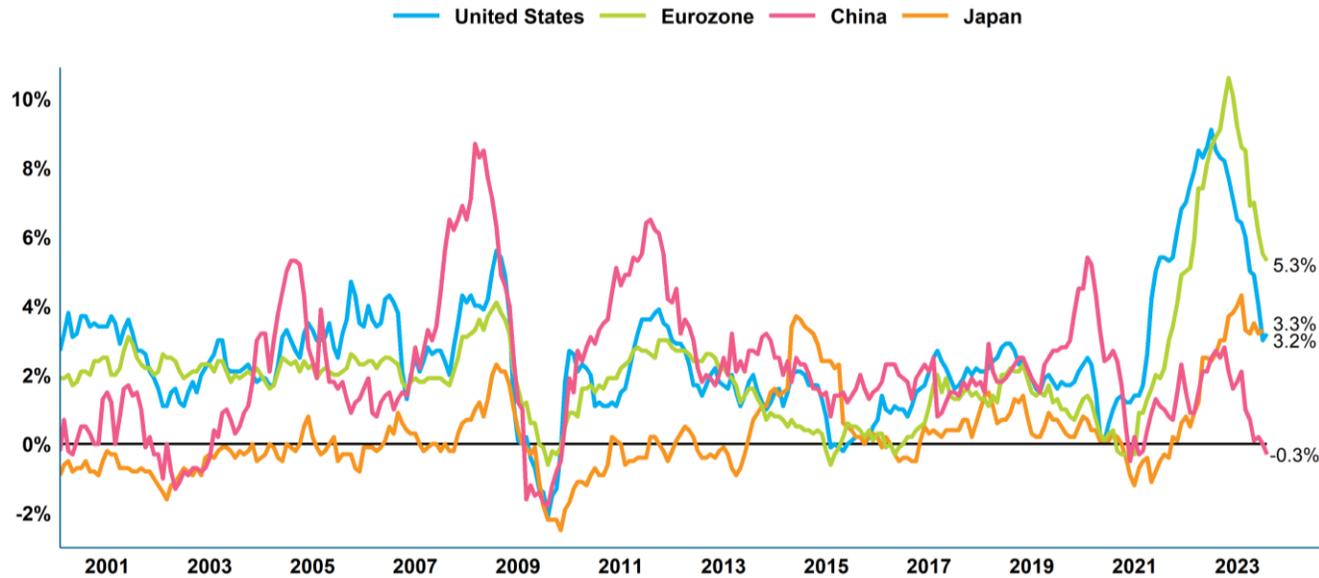
Balance Sheet as % of GDP



- Slowing inflation and growth have led to expectations for a reduction in the pace of aggressive policy tightening.
- In July the Fed raised rates another 25 basis points to a range of 5.25% to 5.50% with markets largely expecting this to be the last rate increase. After month-end, the FOMC paused its tightening campaign.
- The European Central Bank also increased rates in July, but they remain lower than in the US. In Japan the BOJ surprised markets by announcing they would be more flexible on their 10-year interest rate target.
- The central bank in China has continued to cut interest rates and inject liquidity into the banking system, as weaker than expected economic data appears to indicate a widespread slowdown.
- Looking ahead, risks remain for a policy error as central banks attempt to balance multiple goals, bringing down inflation, maintaining financial stability, and supporting growth.

¹ Source: Bloomberg. Policy rate data is as of July 31, 2023. China policy rate is defined as the medium-term lending facility 1 year interest rate. Balance sheet as % of GDP is based on quarterly data and is as of June 30, 2023.

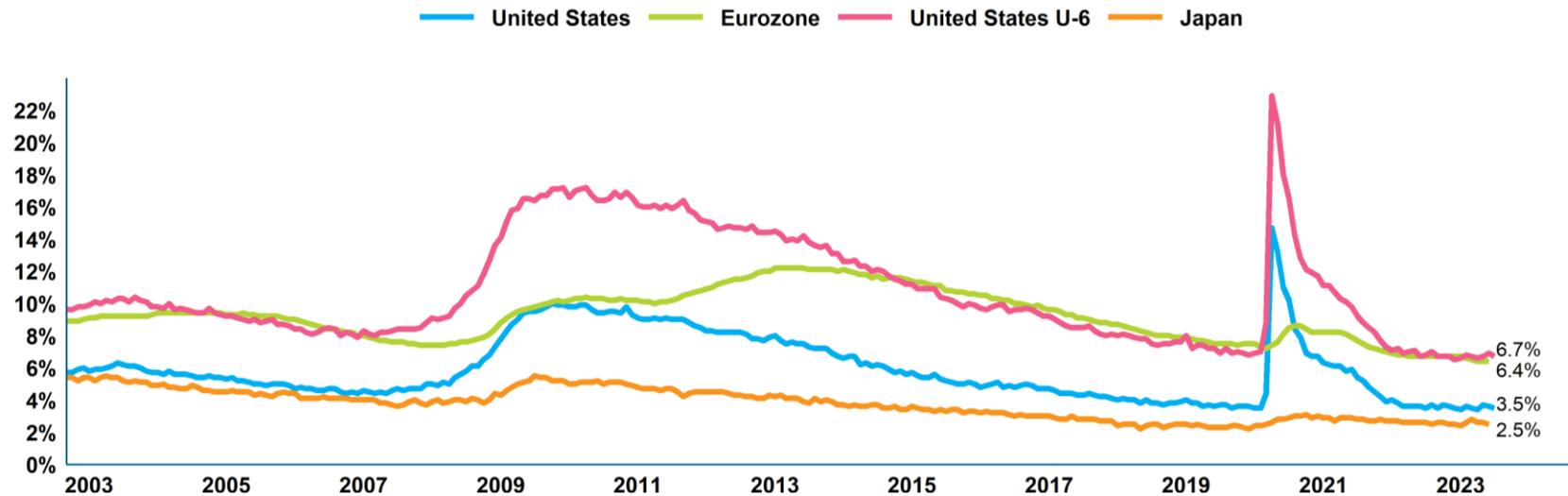
Inflation (CPI Trailing Twelve Months)¹



- The inflation picture remains mixed across the major economies.
- In the US, inflation rose slightly in July (3.0% to 3.2%), while eurozone inflation continued to fall (5.5% to 5.3%) a level well off its peak. Despite 2023's significant declines in the US and Europe, inflation levels remain elevated compared to central bank targets.
- Inflation in Japan remains elevated at levels not seen in almost a decade largely driven by food and home related items. In China, deflationary pressures emerged in July due to falling food prices, but this is expected to be temporary as high base effects from last year work their way through.

¹ Source: Bloomberg. Data is as July 31, 2023. The most recent Japanese inflation data is as of June 2023.

Unemployment¹



- Despite slowing growth and relatively high inflation, the US labor market continues to show signs of resilience (3.5%). Unemployment in the US, which experienced the steepest rise, recently returned to pre-pandemic levels. Broader measures of unemployment (U-6) remain higher at 6.7% but also declined dramatically from their peak.
- The strong labor market and higher wages, although beneficial for workers, motivates the Fed's efforts to fight inflation, potentially leading to higher unemployment.
- Unemployment in Europe has also declined but remains higher than the US, while levels in Japan have been flat through the pandemic given less layoffs.

¹ Source: Bloomberg. Data is as July 31, 2023, for the US. The most recent data for Eurozone and Japanese unemployment is as of June 2023.

US Dollar versus Broad Currencies¹



- The dollar finished 2022 much higher than it started, due to the increased pace of policy tightening, stronger relative growth, and safe-haven flows.
- Late last year and into early this year, the dollar declined, as weaker economic data and lower inflation led to investors anticipating the end of Fed tightening. Since then, the dollar has largely been range-bound due to competing forces of safe-haven flows and monetary policy expectations.
- For the rest of this year, the track of inflation across economies and the corresponding monetary policies will be key drivers of currency moves.

¹ Source: Bloomberg. Data as of July 31, 2023.

Summary

Key Trends:

- The impact of inflation still above policy targets will remain key, with bond market volatility likely to stay high.
- Global monetary policies could diverge in 2023. The risk of policy errors remains elevated as central banks try to reduce persistent inflation while not tipping their economies into recession.
- Growth is expected to slow globally this year, with many economies forecasted to tip into recession. Optimism has been building though that some economies could experience a soft landing. Inflation, monetary policy, and the war will all be key.
- In the US, consumers could feel pressure as certain components of inflation remain high (e.g., shelter), borrowing cost are elevated, and the job market may weaken.
- The key for US equities going forward will be whether earnings can remain resilient if growth continues to slow. Also, the future path of the large technology companies that have driven market gains will be important.
- Equity valuations remain lower in emerging and developed markets, but risks remain, including potential for renewed strength in the US dollar, higher inflation weighing particularly on Europe, and China's sluggish economic reopening and on-going weakness in the real estate sector. Japan's recent hint at potentially tightening monetary policy along with changes in corporate governance in the country could influence relative results.

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SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

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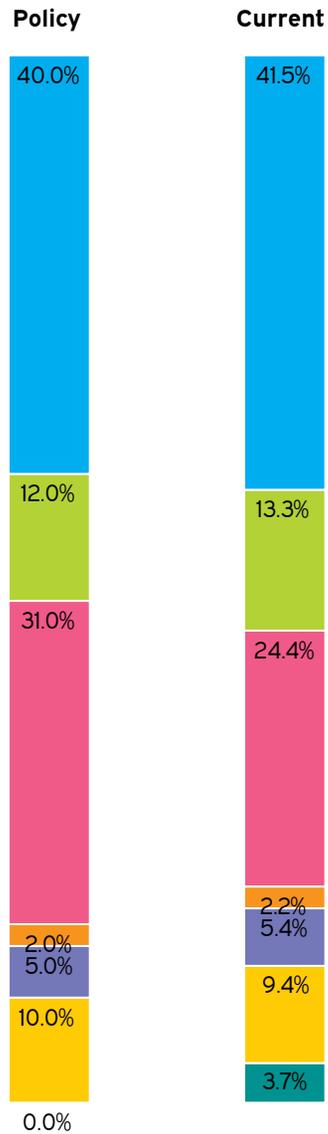
PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

Oakland Police and Fire Retirement System

July 26, 2023

June Flash Report

As of July 31, 2023



Allocation vs. Targets and Policy						
	Current Balance (\$)	Current (%)	Policy (%)	Difference (%)	Policy Range (%)	Within IPS Range?
Domestic Equity	177,309,264	41.5	40.0	1.5	30.0 - 50.0	Yes
International Equity	56,966,764	13.3	12.0	1.3	8.0 - 14.0	Yes
Fixed Income	104,393,988	24.4	31.0	-6.6	25.0 - 40.0	No
Credit	9,349,083	2.2	2.0	0.2	1.0 - 3.0	Yes
Covered Calls	22,982,542	5.4	5.0	0.4	5.0 - 10.0	Yes
Crisis Risk Offset	40,068,784	9.4	10.0	-0.6	5.0 - 15.0	Yes
Cash	15,918,372	3.7	0.0	3.7	0.0 - 5.0	Yes
Total	426,988,797	100.0	100.0	0.0		

Asset Class Performance Summary										
	Market Value (\$)	% of Portfolio	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
OPFRS Total Plan	426,988,797	100.0	1.6	9.6	5.0	5.6	5.2	6.9	6.6	Dec-88
<i>OPFRS Policy Benchmark</i>			<i>1.9</i>	<i>11.2</i>	<i>7.0</i>	<i>5.6</i>	<i>5.4</i>	<i>7.0</i>	<i>7.9</i>	
Excess Return			-0.3	-1.6	-2.0	0.0	-0.2	-0.1	-1.3	
Domestic Equity	177,309,264	41.5	3.1	14.8	8.7	11.9	9.7	11.4	8.9	Jun-97
<i>Russell 3000 (Blend)</i>			<i>3.6</i>	<i>20.3</i>	<i>12.6</i>	<i>13.1</i>	<i>11.4</i>	<i>12.1</i>	<i>9.2</i>	
Excess Return			-0.5	-5.5	-3.9	-1.2	-1.7	-0.7	-0.3	
International Equity	56,966,764	13.3	2.0	14.0	13.0	7.3	4.1	5.5	5.3	Jan-98
<i>MSCI ACWI ex US (Blend)</i>			<i>4.1</i>	<i>13.9</i>	<i>13.4</i>	<i>7.1</i>	<i>3.9</i>	<i>4.7</i>	<i>5.2</i>	
Excess Return			-2.1	0.1	-0.4	0.2	0.2	0.8	0.1	
Fixed Income	104,393,988	24.4	-0.1	2.7	-2.3	-3.5	1.0	1.9	4.5	Jan-94
<i>Bloomberg Universal (Blend)</i>			<i>0.1</i>	<i>2.4</i>	<i>-2.4</i>	<i>-4.0</i>	<i>1.0</i>	<i>1.8</i>	<i>4.5</i>	
Excess Return			-0.2	0.3	0.1	0.5	0.0	0.1	0.0	
Credit	9,349,083	2.2	1.6	8.7	7.4	6.5	3.4	--	4.7	Feb-15
<i>Blmbg. U.S. Corp: High Yield Index</i>			<i>1.4</i>	<i>6.8</i>	<i>4.4</i>	<i>2.0</i>	<i>3.4</i>	<i>4.4</i>	<i>4.3</i>	
Excess Return			0.2	1.9	3.0	4.5	0.0	--	0.4	
Covered Calls	22,982,542	5.4	1.9	16.1	11.0	12.5	9.4	--	9.1	Apr-14
<i>CBOE S&P 500 Buy Write Index</i>			<i>1.4</i>	<i>12.1</i>	<i>6.4</i>	<i>9.7</i>	<i>4.3</i>	<i>6.4</i>	<i>5.8</i>	
Excess Return			0.5	4.0	4.6	2.8	5.1	--	3.3	
Crisis Risk Offset	40,068,784	9.4	-0.1	1.8	-1.7	-8.2	-8.1	--	-8.1	Aug-18
<i>Crisis Risk Offset Benchmark</i>			<i>-1.4</i>	<i>1.4</i>	<i>5.0</i>	<i>3.6</i>	<i>-0.2</i>	<i>--</i>	<i>-0.2</i>	
Excess Return			1.3	0.4	-6.7	-11.8	-7.9	--	-7.9	

Performance shown is net of fees, except for Total Plan, Domestic Equity, and International Equity composites which have a mix of gross and net of fees performance. Please see the Addendum for more details. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

Asset Class & Manager Performance | As of July 31, 2023

	Market Value (\$)	% of Portfolio	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
OPFRS Total Plan	426,988,797	100.0	1.6	9.6	5.0	5.6	5.2	6.9	6.6	Dec-88
<i>OPFRS Policy Benchmark</i>			<i>1.9</i>	<i>11.2</i>	<i>7.0</i>	<i>5.6</i>	<i>5.4</i>	<i>7.0</i>	<i>7.9</i>	
Excess Return			-0.3	-1.6	-2.0	0.0	-0.2	-0.1	-1.3	
Domestic Equity	177,309,264	41.5	3.1	14.8	8.7	11.9	9.7	11.4	8.9	Jun-97
<i>Russell 3000 (Blend)</i>			<i>3.6</i>	<i>20.3</i>	<i>12.6</i>	<i>13.1</i>	<i>11.4</i>	<i>12.1</i>	<i>9.2</i>	
Excess Return			-0.5	-5.5	-3.9	-1.2	-1.7	-0.7	-0.3	
Northern Trust Russell 1000	84,160,873	19.7	3.4	20.7	12.9	13.1	11.8	12.3	13.5	Jun-10
<i>Russell 1000 Index</i>			<i>3.4</i>	<i>20.7</i>	<i>12.9</i>	<i>13.2</i>	<i>11.9</i>	<i>12.4</i>	<i>13.6</i>	
Excess Return			0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	
EARNEST Partners	42,499,305	10.0	2.9	11.6	3.8	12.4	10.5	11.9	9.4	Apr-06
<i>Russell Midcap Index</i>			<i>4.0</i>	<i>13.3</i>	<i>8.7</i>	<i>11.8</i>	<i>8.8</i>	<i>10.1</i>	<i>8.8</i>	
Excess Return			-1.1	-1.7	-4.9	0.6	1.7	1.8	0.6	
Wellington Select Quality Equity	23,507,008	5.5	0.6	5.9	8.0	--	--	--	5.4	May-22
<i>Russell 1000 Index</i>			<i>3.4</i>	<i>20.7</i>	<i>12.9</i>	<i>13.2</i>	<i>11.9</i>	<i>12.4</i>	<i>10.2</i>	
Excess Return			-2.8	-14.8	-4.9	--	--	--	-4.8	
Brown Fundamental Small Cap Value	12,001,225	2.8	6.4	9.9	9.5	--	--	--	4.8	Apr-21
<i>Russell 2000 Value Index</i>			<i>7.5</i>	<i>10.2</i>	<i>3.9</i>	<i>17.5</i>	<i>4.7</i>	<i>7.4</i>	<i>-0.1</i>	
Excess Return			-1.1	-0.3	5.6	--	--	--	4.9	
Rice Hall James	15,140,852	3.5	3.2	13.2	2.9	5.6	3.0	--	7.0	Aug-17
<i>Russell 2000 Growth Index</i>			<i>4.7</i>	<i>18.9</i>	<i>11.6</i>	<i>6.5</i>	<i>4.8</i>	<i>8.5</i>	<i>7.6</i>	
Excess Return			-1.5	-5.7	-8.7	-0.9	-1.8	--	-0.6	

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Asset Class & Manager Performance | As of July 31, 2023

	Market Value (\$)	% of Portfolio	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
International Equity	56,966,764	13.3	2.0	14.0	13.0	7.3	4.1	5.5	5.3	Jan-98
<i>MSCI ACWI ex US (Blend)</i>			4.1	13.9	13.4	7.1	3.9	4.7	5.2	
Excess Return			-2.1	0.1	-0.4	0.2	0.2	0.8	0.1	
Vanguard Developed Markets ETF	15,949,620	3.7	3.1	13.9	12.9	9.0	--	--	7.4	Sep-19
<i>FTSE Developed All Cap ex-U.S. Index</i>			3.6	15.1	15.2	9.5	4.9	5.7	7.9	
Excess Return			-0.5	-1.2	-2.3	-0.5	--	--	-0.5	
SGA ACWI ex-U.S. Equity	41,017,144	9.6	1.5	14.0	13.0	6.6	--	--	3.4	Dec-19
<i>MSCI AC World ex USA (Net)</i>			4.1	13.9	13.4	7.1	3.9	4.7	4.9	
Excess Return			-2.6	0.1	-0.4	-0.5	--	--	-1.5	
Fixed Income	104,393,988	24.4	-0.1	2.7	-2.3	-3.5	1.0	1.9	4.5	Jan-94
<i>Bloomberg Universal (Blend)</i>			0.1	2.4	-2.4	-4.0	1.0	1.8	4.5	
Excess Return			-0.2	0.3	0.1	0.5	0.0	0.1	0.0	
Ramirez	70,759,121	16.6	-0.2	2.4	-2.5	-3.6	1.0	--	1.2	Feb-17
<i>Blmbg. U.S. Aggregate Index</i>			-0.1	2.0	-3.4	-4.5	0.7	1.5	0.8	
Excess Return			-0.1	0.4	0.9	0.9	0.3	--	0.4	
Wellington Core Bond	6,727,417	1.6	0.0	3.0	-2.8	--	--	--	-4.6	Apr-21
<i>Blmbg. U.S. Aggregate Index</i>			-0.1	2.0	-3.4	-4.5	0.7	1.5	-4.2	
Excess Return			0.1	1.0	0.6	--	--	--	-0.4	
Reams	26,907,450	6.3	0.2	3.4	-1.9	-3.1	3.5	2.9	4.9	Feb-98
<i>Bloomberg Universal (Blend)</i>			0.1	2.4	-2.4	-4.0	1.0	1.8	4.1	
Excess Return			0.1	1.0	0.5	0.9	2.5	1.1	0.8	

Performance shown is net of fees, except for International Equity composite which has a mix of gross and net of fees performance. Please see the Addendum for more details. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see the Benchmark History for custom benchmark compositions.

Asset Class & Manager Performance | As of July 31, 2023

	Market Value (\$)	% of Portfolio	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
Credit	9,349,083	2.2	1.6	8.7	7.4	6.5	3.4	--	4.7	Feb-15
<i>Blmbg. U.S. Corp: High Yield Index</i>			<i>1.4</i>	<i>6.8</i>	<i>4.4</i>	<i>2.0</i>	<i>3.4</i>	<i>4.4</i>	<i>4.3</i>	
Excess Return			0.2	1.9	3.0	4.5	0.0	--	0.4	
Polen Capital	9,349,083	2.2	1.6	8.7	7.4	6.5	3.4	--	4.7	Feb-15
<i>ICE BofA High Yield Master II</i>			<i>1.4</i>	<i>6.9</i>	<i>4.1</i>	<i>2.1</i>	<i>3.2</i>	<i>4.3</i>	<i>4.2</i>	
Excess Return			0.2	1.8	3.3	4.4	0.2	--	0.5	
Covered Calls	22,982,542	5.4	1.9	16.1	11.0	12.5	9.4	--	9.1	Apr-14
<i>CBOE S&P 500 Buy Write Index</i>			<i>1.4</i>	<i>12.1</i>	<i>6.4</i>	<i>9.7</i>	<i>4.3</i>	<i>6.4</i>	<i>5.8</i>	
Excess Return			0.5	4.0	4.6	2.8	5.1	--	3.3	
Parametric BXM	11,379,679	2.7	1.5	13.1	8.9	10.3	6.8	--	7.2	Apr-14
<i>CBOE S&P 500 Buy Write Index</i>			<i>1.4</i>	<i>12.1</i>	<i>6.4</i>	<i>9.7</i>	<i>4.3</i>	<i>6.4</i>	<i>5.8</i>	
Excess Return			0.1	1.0	2.5	0.6	2.5	--	1.4	
Parametric DeltaShift	11,602,863	2.7	2.3	19.1	13.0	14.2	11.6	--	11.1	Apr-14
<i>CBOE S&P 500 Buy Write Index</i>			<i>1.4</i>	<i>12.1</i>	<i>6.4</i>	<i>9.7</i>	<i>4.3</i>	<i>6.4</i>	<i>5.8</i>	
Excess Return			0.9	7.0	6.6	4.5	7.3	--	5.3	

Performance shown is net of fees. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see the Benchmark History for custom benchmark compositions.

Asset Class & Manager Performance | As of July 31, 2023

	Market Value (\$)	% of Portfolio	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
Crisis Risk Offset	40,068,784	9.4	-0.1	1.8	-1.7	-8.2	-8.1	--	-8.1	Aug-18
<i>Crisis Risk Offset Benchmark</i>			<i>-1.4</i>	<i>1.4</i>	<i>5.0</i>	<i>3.6</i>	<i>-0.2</i>	<i>--</i>	<i>-0.2</i>	
Excess Return			1.3	0.4	-6.7	-11.8	-7.9	--	-7.9	
Kepos Alternative Risk Premia	10,737,026	2.5	2.5	9.1	13.3	--	--	--	4.9	Feb-22
<i>SG Multi Alternative Risk Premia Index</i>			<i>-0.3</i>	<i>3.3</i>	<i>7.0</i>	<i>4.2</i>	<i>0.2</i>	<i>--</i>	<i>4.8</i>	
Excess Return			2.8	5.8	6.3	--	--	--	0.1	
Versor Trend Following	15,551,785	3.6	0.0	-2.6	-0.6	--	--	--	2.7	Apr-22
<i>SG Trend Index</i>			<i>-1.6</i>	<i>-1.5</i>	<i>1.8</i>	<i>12.5</i>	<i>9.2</i>	<i>5.6</i>	<i>4.9</i>	
Excess Return			1.6	-1.1	-2.4	--	--	--	-2.2	
Vanguard Long-Term Treasury ETF	13,779,972	3.2	-2.2	1.6	-11.7	-14.1	--	--	-4.5	Jul-19
<i>Blmbg. U.S. Gov Long Index</i>			<i>-2.2</i>	<i>1.5</i>	<i>-11.2</i>	<i>-13.8</i>	<i>-1.0</i>	<i>1.8</i>	<i>-4.3</i>	
Excess Return			0.0	0.1	-0.5	-0.3	--	--	-0.2	
Cash	15,918,372	3.7	--	--	--	--	--	--	--	Mar-11

Performance shown is net of fees. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see the Benchmark History for custom benchmark compositions.

Cash Flow Summary

	Beginning Market Value	Net Cash Flow	Net Investment Change	Ending Market Value
Northern Trust Russell 1000	81,367,541	-	2,793,332	84,160,873
EARNEST Partners	43,238,606	-2,000,000	1,260,700	42,499,305
Wellington Select Quality Equity	23,373,498	-	133,510	23,507,008
Brown Fundamental Small Cap Value	11,278,982	-	722,243	12,001,225
Rice Hall James	14,666,153	-	474,700	15,140,852
Vanguard Developed Markets ETF	15,464,066	-	485,554	15,949,620
SGA ACWI ex-U.S. Equity	40,377,022	-	640,123	41,017,144
Ramirez	70,891,932	-	-132,811	70,759,121
Wellington Core Bond	6,726,320	-	1,096	6,727,417
Reams	26,844,017	-	63,433	26,907,450
Polen Capital	9,200,988	-	148,095	9,349,083
Parametric BXM	11,207,891	-	171,789	11,379,679
Parametric DeltaShift	11,340,209	-	262,653	11,602,863
Kepos Alternative Risk Premia	10,476,679	-	260,348	10,737,026
Versor Trend Following	15,551,785	-	-	15,551,785
Vanguard Long-Term Treasury ETF	14,131,423	-	-351,450	13,779,972
Cash - Money Market	4,357,977	1,080,395	-	5,438,372
Cash - Treasury	9,675,000	805,000	-	10,480,000
Securities Lending Northern Trust	-	-12,559	12,559	-
OPFRS Total Plan	420,170,089	-127,165	6,945,873	426,988,797

Benchmark History		
From Date	To Date	Benchmark
OPFRS Total Plan		
06/01/2022	Present	40.0% Russell 3000 Index, 12.0% MSCI AC World ex USA (Net), 31.0% Blmbg. U.S. Universal Index, 2.0% Blmbg. U.S. Corp: High Yield Index, 5.0% CBOE S&P 500 Buy Write Index, 10.0% Crisis Risk Offset Benchmark
01/01/2019	06/01/2022	40.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 31.0% Blmbg. U.S. Universal Index, 5.0% CBOE S&P 500 Buy Write Index, 2.0% Blmbg. U.S. Treasury: Long, 10.0% Crisis Risk Offset Benchmark
05/01/2016	01/01/2019	48.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 20.0% Blmbg. U.S. Universal Index, 20.0% CBOE BXM
10/01/2015	05/01/2016	43.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 20.0% Blmbg. U.S. Universal Index, 15.0% CBOE BXM, 10.0% CPI - All Urban Consumers (unadjusted) +3%
01/01/2014	10/01/2015	48.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 20.0% Blmbg. U.S. Universal Index, 10.0% CBOE BXM, 10.0% CPI - All Urban Consumers (unadjusted) +3%
03/01/2013	01/01/2014	40.0% Russell 3000 Index, 10.0% MSCI AC World ex USA index, 17.0% Blmbg. U.S. Universal Index, 33.0% ICE BofA 3 Month U.S. T-Bill
08/01/2012	03/01/2013	20.0% Russell 3000 Index, 7.0% MSCI AC World ex USA index, 18.0% Blmbg. U.S. Universal Index, 55.0% ICE BofA 3 Month U.S. T-Bill
10/01/2007	08/01/2012	53.0% Russell 3000 Index, 17.0% MSCI AC World ex USA index, 30.0% Blmbg. U.S. Universal Index
04/01/2006	10/01/2007	35.0% Russell 3000 Index, 15.0% MSCI AC World ex USA index, 50.0% Blmbg. U.S. Universal Index
01/01/2005	04/01/2006	35.0% Russell 3000 Index, 50.0% Blmbg. U.S. Aggregate Index, 15.0% MSCI AC World ex USA index
04/01/1998	01/01/2005	20.0% Russell 1000 Value Index, 10.0% Russell 1000 Index, 5.0% Russell Midcap Index, 50.0% Blmbg. U.S. Aggregate Index, 15.0% MSCI EAFE (Net)
09/01/1988	04/01/1998	40.0% S&P 500 Index, 55.0% Blmbg. U.S. Aggregate Index, 5.0% FTSE 3 Month T-Bill

Benchmark History

From Date	To Date	Benchmark
Domestic Equity		
01/01/2005	Present	100.0% Russell 3000 Index
04/01/1998	01/01/2005	57.1% Russell 1000 Value Index, 28.6% Russell 1000 Index, 14.3% Russell Midcap Index
09/01/1988	04/01/1998	100.0% S&P 500 Index
International Equity		
01/01/2005	Present	100.0% MSCI AC World ex USA (Net)
01/01/1998	01/01/2005	100.0% MSCI EAFE Index
Fixed Income		
04/01/2006	Present	100.0% Blmbg. U.S. Universal Index
01/01/1976	04/01/2006	100.0% Blmbg. U.S. Aggregate Index
Covered Calls		
03/01/2014	Present	CBOE S&P 500 Buy Write Index
Crisis Risk Offset		
01/01/2023	Present	33.3% SG Trend Index, 33.3% SG Multi Alternative Risk Premia Index, 33.3% Blmbg. U.S. Government: Long Term Bond Index
08/01/2018	01/01/2023	100.0% SG Multi Alternative Risk Premia Index
Cash		
03/01/2011	Present	FTSE 3 Month T-Bill

Additional Information

Performance Return Types: Performance shown is net of fees, except for OPFRS Total Plan, Domestic Equity, and International Equity Composites, which have a mix of gross and net of fees performance. Performance shown for OPFRS Total Plan and International Equity composite is gross of fees prior to January 2016. Performance shown for Domestic Equity composite is gross of fees prior to January 2017.

Inception Date: Since inception date and performance begin in the month following an investments initial funding.

Fiscal Year: Fiscal year begins on July 1.

Fair Value Pricing Methodology: Though Vanguard Developed Markets ETF is a passive strategy, short-term performance may appear to diverge from the index it tracks more than would be expected. This is due to Fair Value Pricing (FVP) adjustments that address the pricing discrepancies that may arise from time-zone differences among global securities markets. The resulting temporary divergence is expected to correct itself when the foreign markets reopen.

WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM," "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

Oakland Police and Fire Retirement System

Quarterly Performance Report
as of June 30, 2023

Agenda

1. Executive Summary
2. Economic and Market Update as of June 30, 2023
3. Quarterly Performance as of June 30, 2023
4. Manager Monitoring / Probation Status
5. Disclaimer, Glossary, and Notes

Executive Summary

Total Portfolio Review

The Oakland Police and Fire Retirement System (OPFRS) finished the quarter with a market value of \$420.2 million.

→ This represents a \$13.6 million in investment gains after \$4.6 million in net outflows over the quarter.

→ Over the past 12 months, the Total Portfolio appreciated by \$33.9 million, after withdrawals totaling \$20.0 million for net outflows including benefit payments.

→ As of 06/30/2023, most asset classes were within acceptable allocation ranges relative to policy targets except for Fixed Income, which was marginally out of the policy range.¹

Investment Performance

→ During the quarter, the OPFRS portfolio generated an absolute return of 3.3%, net of fees, underperforming its policy benchmark² by -0.7%. The portfolio underperformed the benchmark over the trailing 1- and 5-year periods while outperforming the latter over the 3-year period.

- The quarterly underperformance was primarily driven by the Domestic Equity segment's performance.

	QTD	YTD	FYTD ³ / 1 Year	3 Year	5 Year
Total Portfolio (Gross)	3.4	8.0	8.8	6.6	5.6
Total Portfolio (Net)	3.3	7.9	8.5	6.3	5.3
Policy Benchmark	4.0	9.1	10.4	6.2	5.5
Excess Return (Net)	-0.7	-1.3	-1.9	0.1	-0.2
Peer Group Median Fund ³	3.1	7.3	8.5	7.5	6.3
vs. Peer Median	0.1	0.6	0.0	-1.2	-1.0

¹ Target weightings reflect the interim phase (where Crisis Risk Offset component is set to 10%) of the Plan's previously approved asset allocation (effective 5/31/2017).

² Evolving Policy Benchmark consists of 40% Russell 3000, 12% MSCI ACWI ex U.S., 33% Bloomberg Universal, 5% CBOE BXM, 6.7% SG Multi Asset Risk Premia, 3.3% Bloomberg Long Treasury from 1/1/2019 through 5/31/2022; and 40% Russell 3000 / 12% MSCI ACWI ex USA / 31% Bloomberg US Universal TR / 5% CBOE BXM / 10% Crisis Risk Offset Benchmark / 2% Bloomberg US High Yield thereafter.

³ Fiscal year begins on July 01. Peer group is Investment Metrics peer universe of Public Defined Benefit plans with \$250 million to \$1 billion in assets. The number of peers is about 80 portfolios in each time period.

Asset Class & Manager Highlights

- **Domestic equity** underperformed the Russell 3000 Index over all trailing periods.
 - All the active managers, except **Brown Fundamental Small Cap Value**, underperformed their respective benchmarks in the quarter, year-to-date, and 1-year time periods.
- **International equity** outperformed the MSCI ACWI ex US Index for all time periods measured.
 - The active **SGA MSCI ACWI ex US** outperformed its benchmark over all time periods except since inception.
 - The passive **Vanguard** posted some variation¹ from the tracked benchmark over the periods measured.
- **Fixed income** outperformed or matched its benchmark across all time periods. The underlying managers also outperformed their respective benchmarks across almost all time periods measured.
- The **Credit** segment, with **Polen Capital** as its only manager, outperformed the asset class's benchmark, Bloomberg US High Yield Index, for all time periods except in the 1- and 5-year trailing periods.
- **Covered Calls**, as well as both the passive BXM and the active DeltaShift strategies outperformed the CBOE S&P 500 Buy-Write Index across all periods measured.
- The **Crisis Risk Offset** segment trailed its custom benchmark across all time periods measured.
 - With the Committee's approval in the May meeting, this segment's benchmark has been updated effective 01/01/2023 to better reflect its underlying components and their respective targets.

¹ Due to Vanguard's fair-value pricing methodology and timing of the international markets, the strategy's returns may deviate from its tracked index in the short-term that are expected to equalize over the longer term.

Economic and Market Update

Data as of June 30, 2023

Commentary

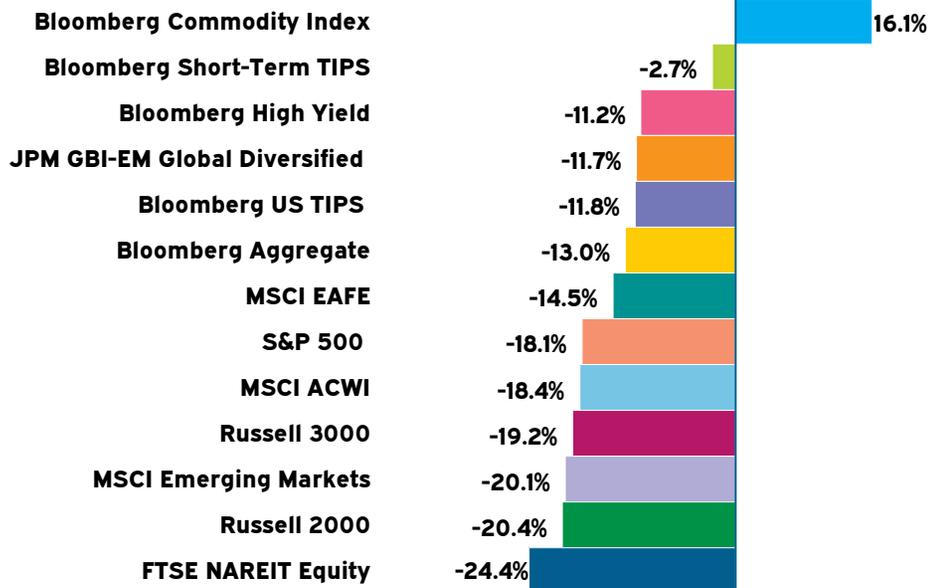
→ Asset returns were positive in June with US and Non-US equities posting gains, while most fixed income sectors sold-off on expectations for further interest rate hikes later this year. Except for commodities, most public market asset classes remain up for the year.

- Although the Fed skipped a rate-hike in June, Fed comments signaled further rate hikes in the 2H 2023; the US economy appears to be resilient supporting domestic demand and low unemployment.
- US equity markets (Russell 3000) rose in June (+6.8%) adding to YTD gains (+16.2%). Some of the largest technology names drove positive results. Growth stocks continued to outpace value stocks, particularly in the large cap space.
- Non-US developed equity markets rose in June (MSCI EAFE 4.6%) falling behind US equities in 2023 (+16.2% versus +11.7%). A strengthening US dollar weighed on returns.
- Emerging market equities rose in June (+3.8%) supported by positive returns in China (+4.0%). They significantly trail developed market equities YTD returning +4.9%, due partly to higher US-China tensions.
- Rates generally rose in June leading to bond markets declining, with the broad US bond market (Bloomberg Aggregate) falling 0.4% for the month. It remains positive (+2.1%) year-to-date, though, on declining inflation and expectations for the Fed to end their rate hikes soon.

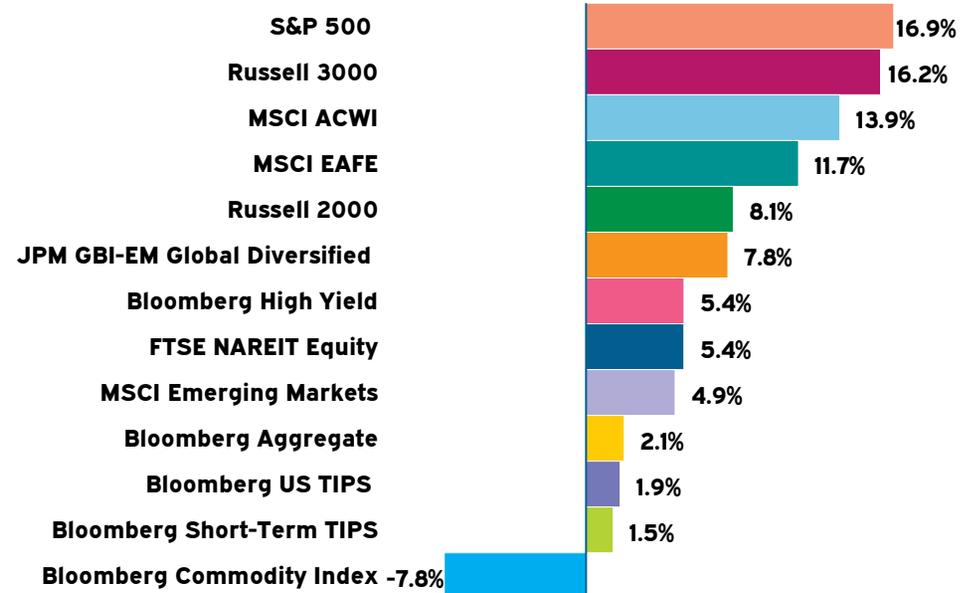
→ This year, the paths of inflation and monetary policy, slowing global growth and the war in Ukraine will all be key.

Index Returns¹

2022



YTD



→ After a particularly difficult 2022, most public market assets are up thus far in 2023, building on gains from the fourth quarter of last year.

→ Risk sentiment has been supported by expectations that policy tightening could be ending soon, as inflation continues to fall, and growth has slowed.

¹ Source: Bloomberg and FactSet. Data is as of June 30, 2023.

Domestic Equity Returns¹

Domestic Equity	June (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
S&P 500	6.6	8.7	16.9	19.6	14.6	12.3	12.8
Russell 3000	6.8	8.4	16.2	19.0	13.9	11.4	12.3
Russell 1000	6.8	8.6	16.7	19.4	14.1	11.9	12.6
Russell 1000 Growth	6.8	12.8	29.0	27.1	13.7	15.1	15.7
Russell 1000 Value	6.6	4.1	5.1	11.5	14.3	8.1	9.2
Russell MidCap	8.3	4.8	9.0	14.9	12.5	8.4	10.3
Russell MidCap Growth	7.7	6.2	15.9	23.1	7.6	9.7	11.5
Russell MidCap Value	8.7	3.9	5.2	10.5	15.0	6.8	9.0
Russell 2000	8.1	5.2	8.1	12.3	10.8	4.2	8.2
Russell 2000 Growth	8.3	7.1	13.6	18.5	6.1	4.2	8.8
Russell 2000 Value	7.9	3.2	2.5	6.0	15.4	3.5	7.3

US Equities: Russell 3000 Index rose 8.4% in the second quarter and 16.2% YTD.

- US stocks rose sharply in the second quarter of 2023. Most of the gains came in the month of June when the Fed kept its target rate unchanged for the first time since early 2022. Investors are expressing optimism that the Fed can tame inflation without widespread disruptions to the equity markets.
- With the exception of energy and utilities, each sector of the Russell 3000 index appreciated during the second quarter. Technology led all sectors and was driven by enthusiasm for growth stocks, particularly those with exposure to artificial intelligence (e.g., NVIDIA).
- Large cap stocks continue to outperform small cap stocks, driven by technology and the underperformance of small cap biotechnology stocks. Growth stocks continue to broadly outperform value stocks.

¹ Source: Bloomberg. Data is as of June 30, 2023.

Foreign Equity Returns¹

Foreign Equity	June (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI ex. US	4.5	2.4	9.5	12.7	7.2	3.5	4.7
MSCI EAFE	4.6	3.0	11.7	18.8	8.9	4.4	5.4
MSCI EAFE (Local Currency)	3.6	4.3	12.1	17.5	11.7	6.4	7.7
MSCI EAFE Small Cap	2.9	0.6	5.5	10.2	5.7	1.3	6.2
MSCI Emerging Markets	3.8	0.9	4.9	1.8	2.3	0.9	2.9
MSCI Emerging Markets (Local Currency)	3.4	1.7	5.6	3.3	3.9	3.0	5.7
MSCI China	4.0	-9.7	-5.5	-16.8	-10.3	-5.3	3.0

Foreign Equity: Developed international equities (MSCI EAFE) rose 3.0% in the second quarter bringing the YTD results to +11.7%. Emerging market equities (MSCI EM) rose 0.9% in the quarter, rising 4.9% YTD.

- Eurozone and Japan markets continued their strength in June, wrapping up a strong second quarter. In Europe, financials and IT led returns whereas energy and communication services lagged. Enthusiasm for AI helped company fundamentals and prices for semiconductor stocks. Headline inflation was down in June, although core inflation was up slightly month over month. Energy and materials were the main drivers for falling UK equities, along with Bank of England rate hikes. Optimism continues to build for Japanese investors, while the Yen remains weak and Bank of Japan remains dovish.
- Emerging markets were laggards as China equities struggled from weak export demands and rising negative sentiments. Brazil, India and Taiwan are bright spots in EM, the former due to good earnings and macro, the latter from AI and IT strength.

¹ Source: Bloomberg. Data is as of June 30, 2023.

Fixed Income Returns¹

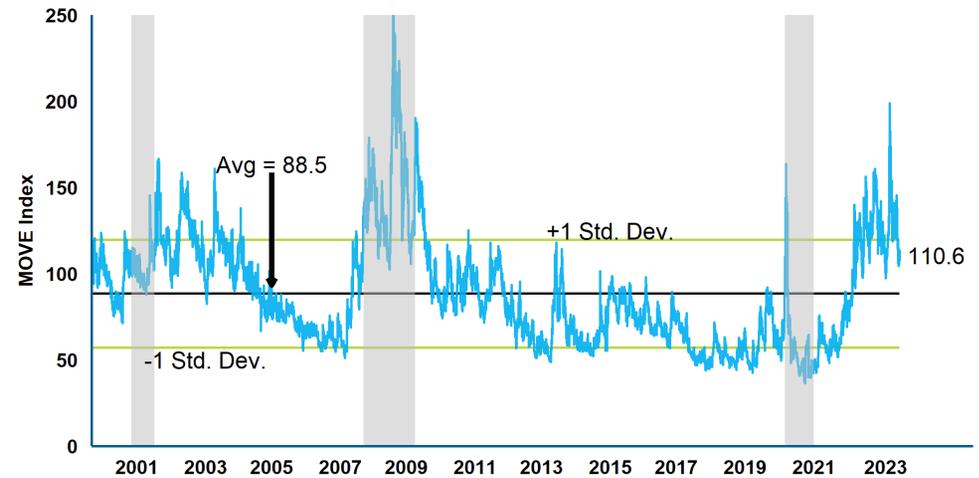
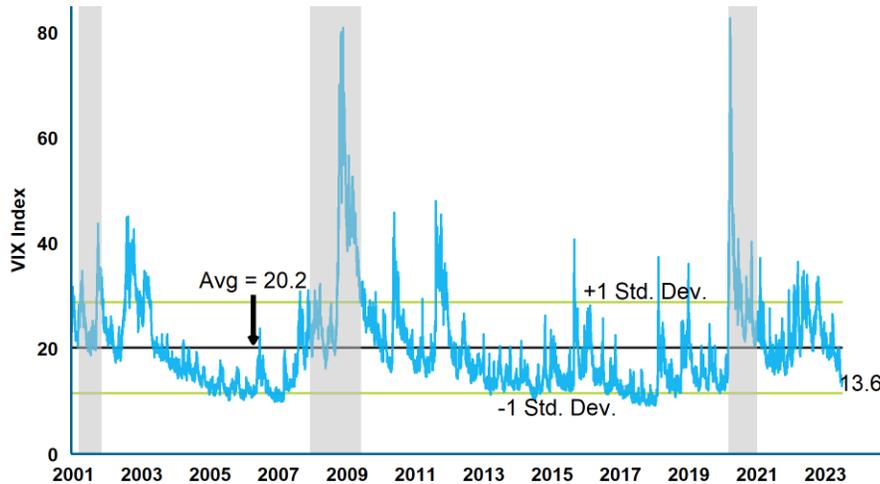
Fixed Income	June (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Current Yield (%)	Duration (Years)
Bloomberg Universal	-0.2	-0.6	2.3	0.0	-3.4	1.0	1.8	5.2	6.3
Bloomberg Aggregate	-0.4	-0.8	2.1	-0.9	-4.0	0.8	1.5	4.8	6.5
Bloomberg US TIPS	-0.3	-1.4	1.9	-1.4	-0.1	2.5	2.1	4.6	6.8
Bloomberg Short-term TIPS	-0.2	-0.7	1.5	0.1	2.3	2.7	1.7	5.3	2.5
Bloomberg High Yield	1.7	1.7	5.4	9.1	3.1	3.4	4.4	8.5	4.1
JPM GBI-EM Global Diversified (USD)	3.3	2.5	7.8	11.4	-1.4	0.3	-0.6	6.6	5.0

Fixed Income: The Bloomberg Universal declined 0.6% in the second quarter as global sovereign debt yields generally rose. Bonds retained a positive start to the year (+2.3% YTD) though as inflation continues to decline.

- US Treasury yields generally rose over the month, with 1-year to 10-year maturity sector rising the most due to higher policy expectations.
- The TIPS index and the short-term TIPS index posted negative returns for the month as inflation concerns continued to ease.
- Continued risk appetite drove high yield bond performance (1.7%) and outperformance versus the broad US bond market (Bloomberg Aggregate). Emerging market bonds (3.3%) also performed well on investor risk sentiment.

¹ Source: Bloomberg. JPM GBI-EM data is from InvestorForce. Data is as of June 30, 2023. The yield and duration data from Bloomberg is defined as the index's yield to worst and modified duration respectively.

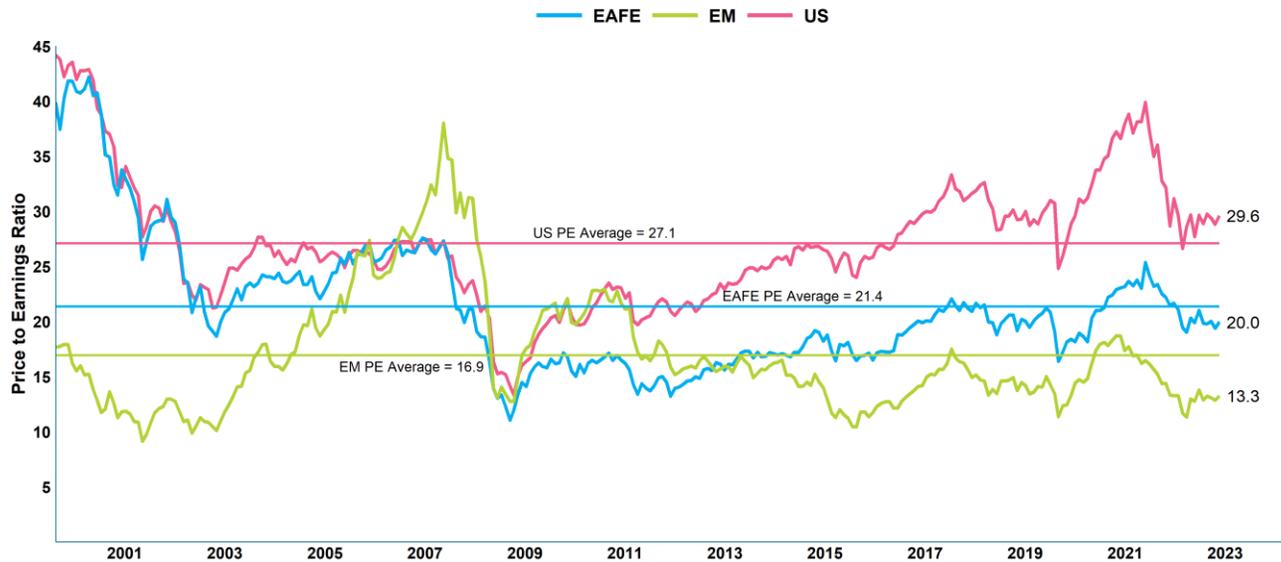
Equity and Fixed Income Volatility¹



- Volatility in equities (VIX) declined in June and remains low as investors continue to anticipate the end of the Fed's policy tightening.
- In comparison, the bond market remains on edge after last year's historic losses and continued volatility in interest rates this year due to policy uncertainty and issues in the banking sector. The MOVE (fixed income volatility) remains well above (110.6) its long-run average (88.4), but off its recent peak during the heart of the banking crisis.

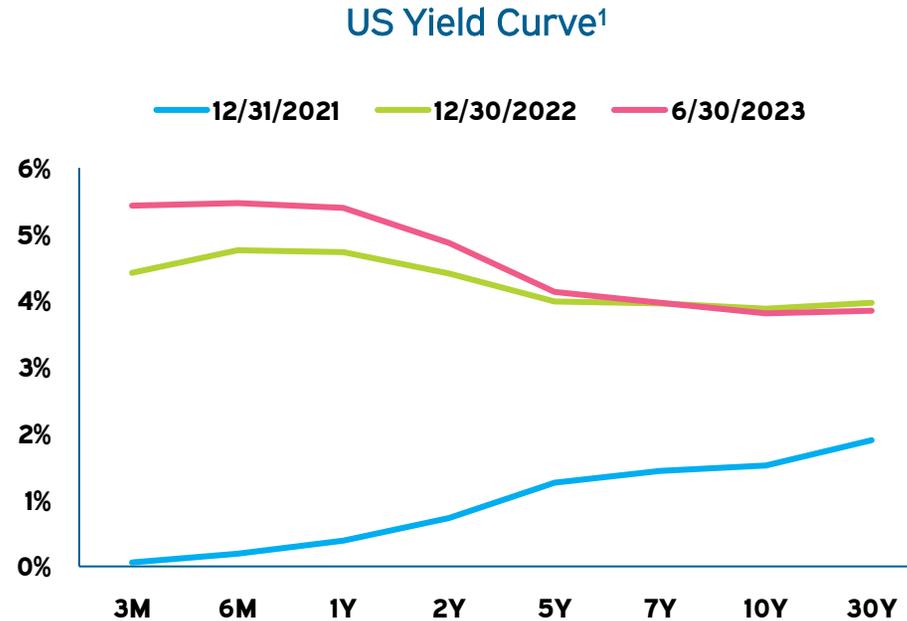
¹ Equity and Fixed Income Volatility – Source: Bloomberg. Implied volatility as measured using VIX Index for equity markets and the MOVE Index to measure interest rate volatility for fixed income markets. Data is as of June 2023. The average line indicated is the average of the VIX and MOVE values between January 2000 and June 2023.

Equity Cyclically Adjusted P/E Ratios¹



- After its dramatic decline last year the US equity price-to-earnings ratio remains above its long-run (21st century) average.
- International developed market valuations are below their own long-term average, with those for emerging markets the lowest and well under the long-term average.

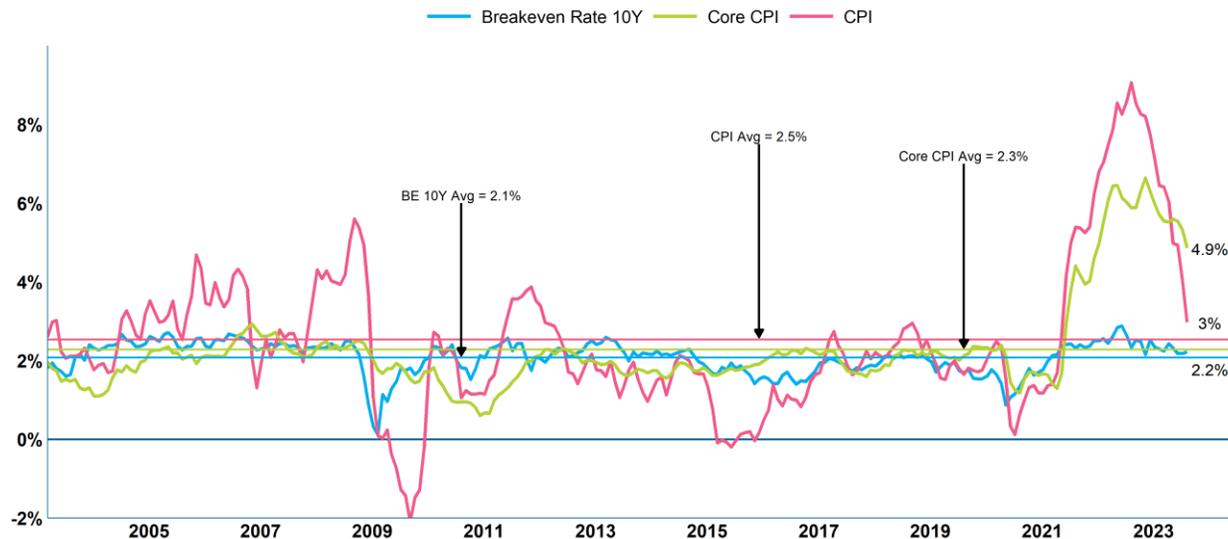
¹ US Equity Cyclically Adjusted P/E on S&P 500 Index. Source: Robert Shiller, Yale University, and Meketa Investment Group. Developed and Emerging Market Equity (MSCI EAFE and EM Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years. Data is as of June 2023. The average line is the long-term average of the US, EM, and EAFE PE values from December 1999 to the recent month-end respectively.



- Interest rates have started rising again across the curve given policy maker guidance that policy rates are likely to rise further and potentially stay longer at the terminal rate than market participants expect. The rise in rates was particularly acute at the very front-end (< 1 year). Maturities from two years out also drifted higher as market participants considered the possibility of additional policy rate increases as economic data (mainly inflation and labor markets) remains strong.
- The yield curve remains inverted with the spread between two-year and ten-year Treasuries finishing the month at -1.06%. The more closely watched measure (by the Fed) of the three-month and ten-year Treasuries spread also remained inverted at -1.62%. Inversions in the yield curve have often preceded recessions.

¹ Source: Bloomberg. Data is as of June 30, 2023.

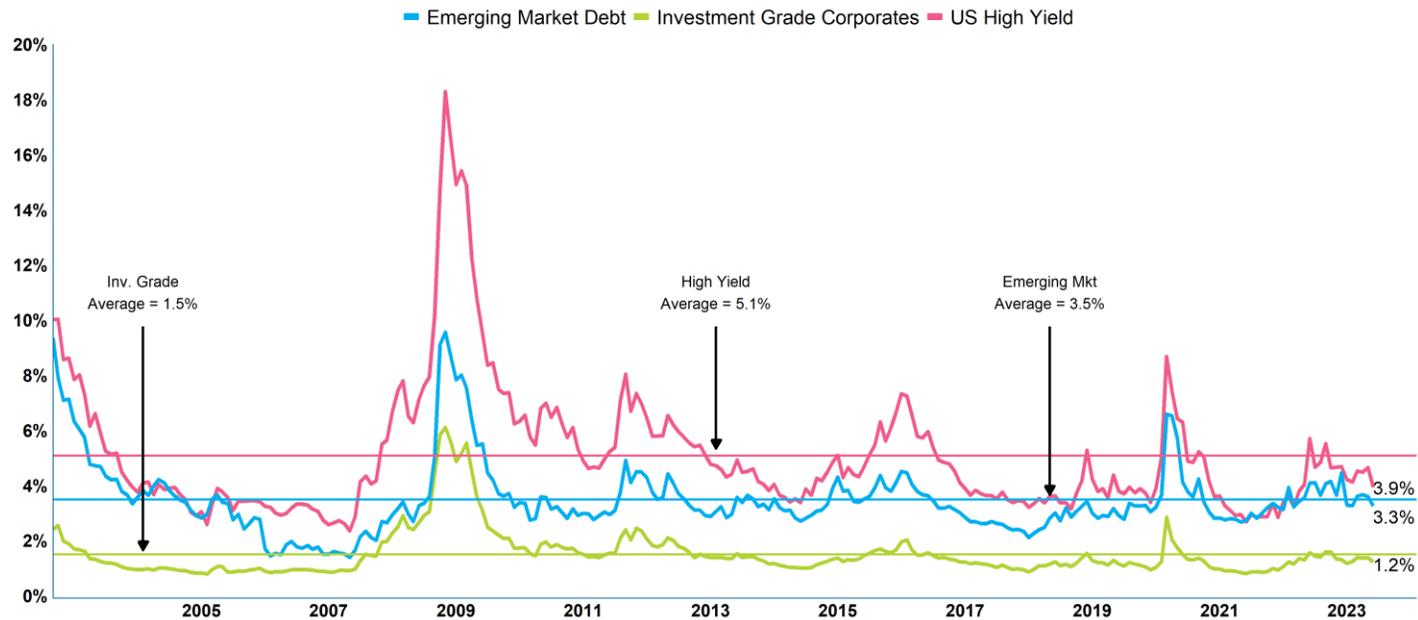
Ten-Year Breakeven Inflation and CPI¹



- Headline inflation continued to decline in June, with the year-over-year reading falling from 4.0% to 3.0% and coming in slightly below estimates. The month-over-month rate of price increases rose slightly (0.2% versus 0.1%), with food prices ticking up slightly (0.1%) and energy prices rose (0.6%).
- Core inflation – excluding food and energy - fell (5.3% to 4.9%), coming in slightly above forecasts. It remains stubbornly high driven by shelter costs.
- Inflation expectations (breakevens) remain well below current inflation as investors continue to expect inflation to track back toward the Fed’s 2% average target.

¹ Source: Bloomberg. Data is as June 30, 2023. The CPI and 10 Year Breakeven average lines denote the average values from August 1998 to the present month-end, respectively. Breakeven values represent month-end values for comparative purposes.

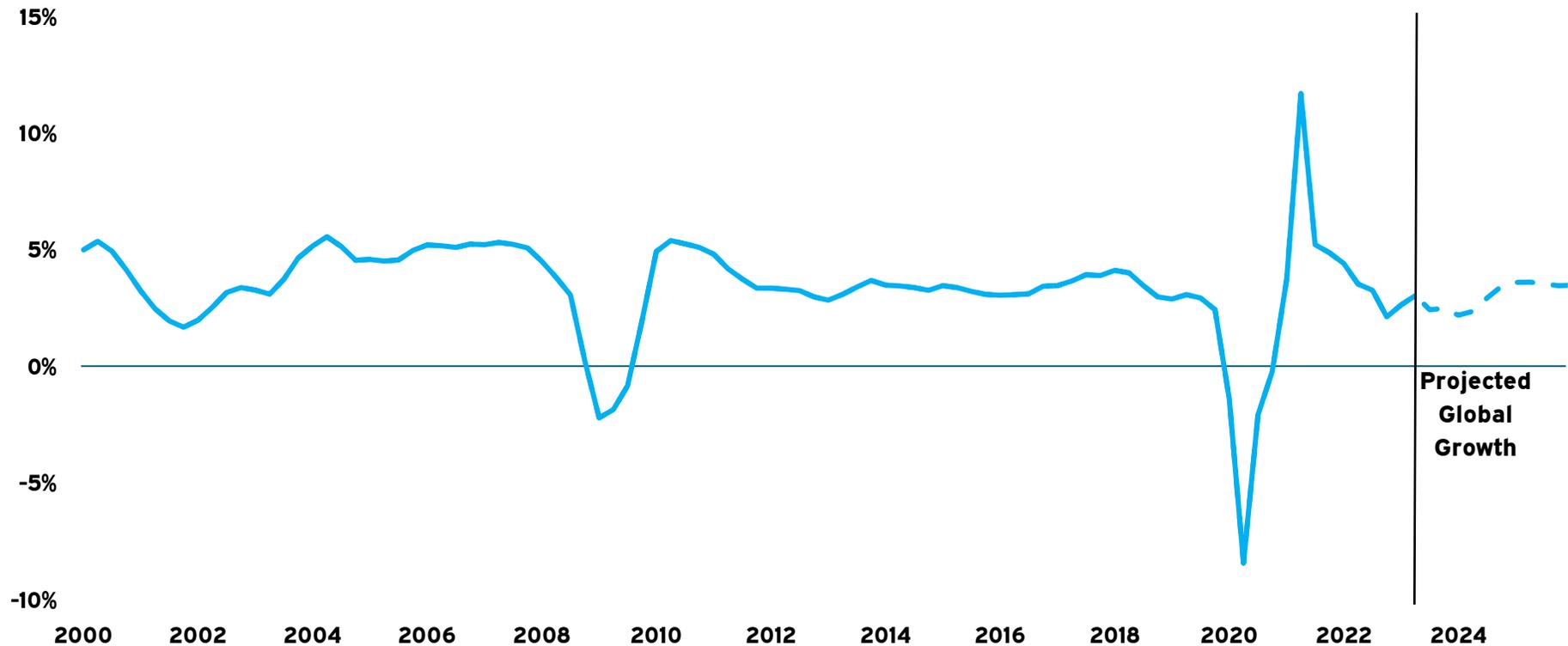
Credit Spreads vs. US Treasury Bonds¹



- Spreads (the added yield above a comparable maturity Treasury) declined in June as risk appetite remained robust for respective credit exposures.
- High yield spreads remain below their long-term average. Investment grade spreads and emerging market spreads are narrower than high yield spreads and close to their respective long-term averages.

¹ Sources: Bloomberg. Data is as of June 30, 2023. Average lines denote the average of the investment grade, high yield, and emerging market spread values from August 2000 to the recent month-end, respectively.

Global Real Gross Domestic Product (GDP) Growth¹

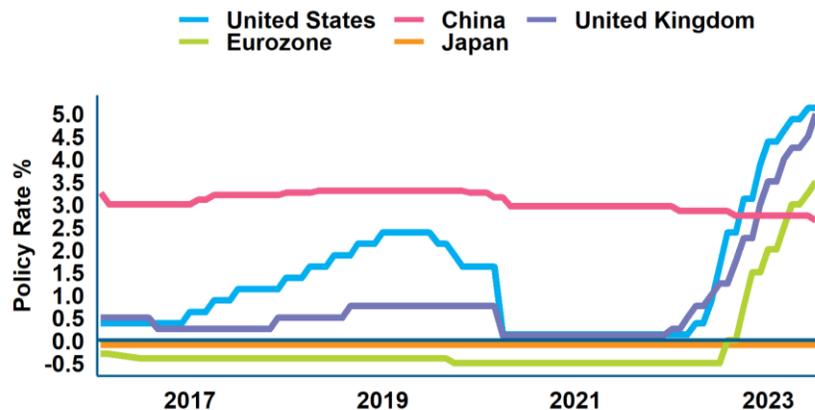


- Global economies are expected to slow this year compared to 2022, with risks of recession as the impacts of policymakers' aggressive tightening to fight inflation flow through economies.
- The delicate balancing act of central banks trying to reduce inflation without dramatically depressing growth will remain key.

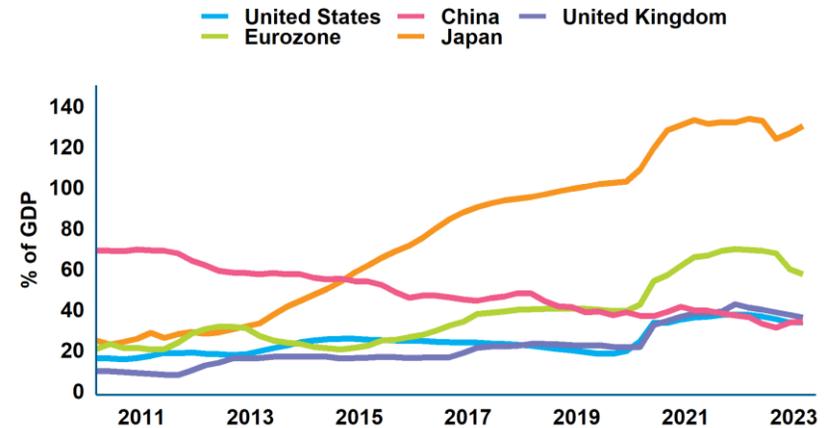
¹ Source: Oxford Economics (World GDP, US\$ prices & PPP exchange rate, real, % change YoY). Updated June 2023.

Central Bank Response¹

Policy Rates



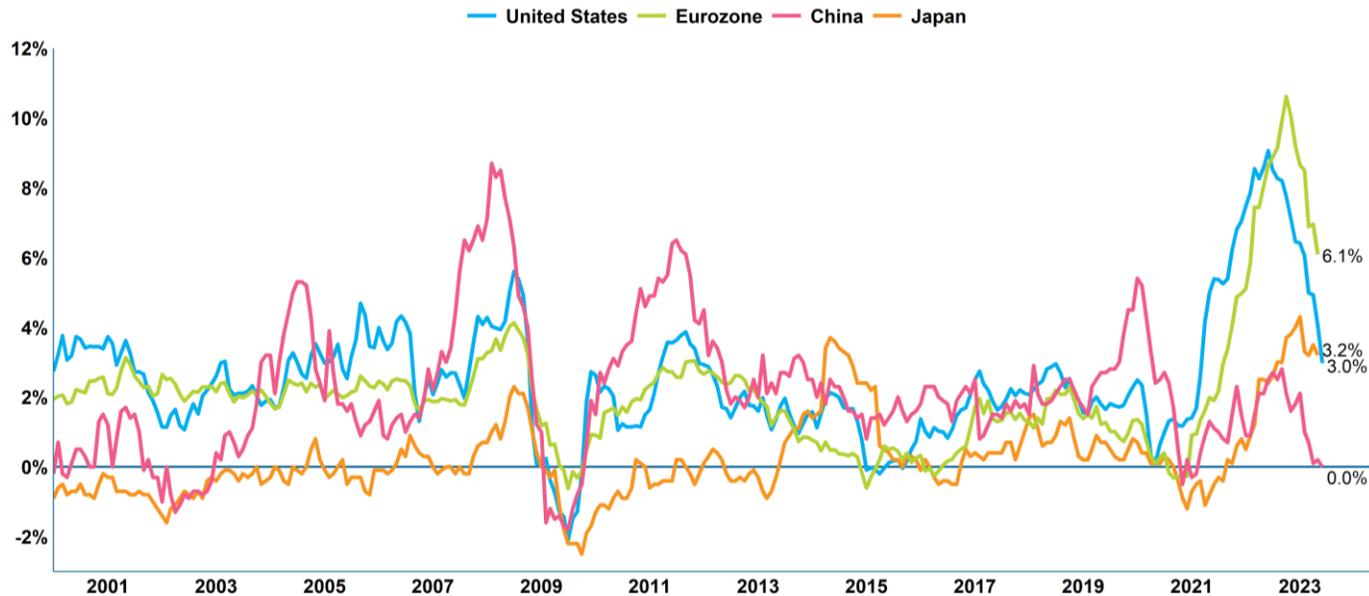
Balance Sheet as % of GDP



- In 2022, many central banks aggressively reduced pandemic-era policy support in the face of high inflation, with the US taking the most aggressive approach. Slowing inflation and growth have led to expectations for reductions in policy tightening going forward.
- In May the Fed raised rates another 25 basis points to a range of 5.0% to 5.25%. After month-end, the FOMC paused its tightening campaign but hinted that one or two additional rate hikes could come later this year.
- In China, the central bank has continued to cut interest rates and inject liquidity into the banking system, as weaker than expected economic data appears to indicate a widespread slowdown.
- Looking ahead, risks remain for a policy error as central banks attempt to balance multiple goals, bringing down inflation, maintaining financial stability, and supporting growth.

¹ Source: Bloomberg. Policy rate data is as of June 30, 2023. China policy rate is defined as the medium-term lending facility 1 year interest rate. Balance sheet as % of GDP is based on quarterly data and is as of March 31, 2023.

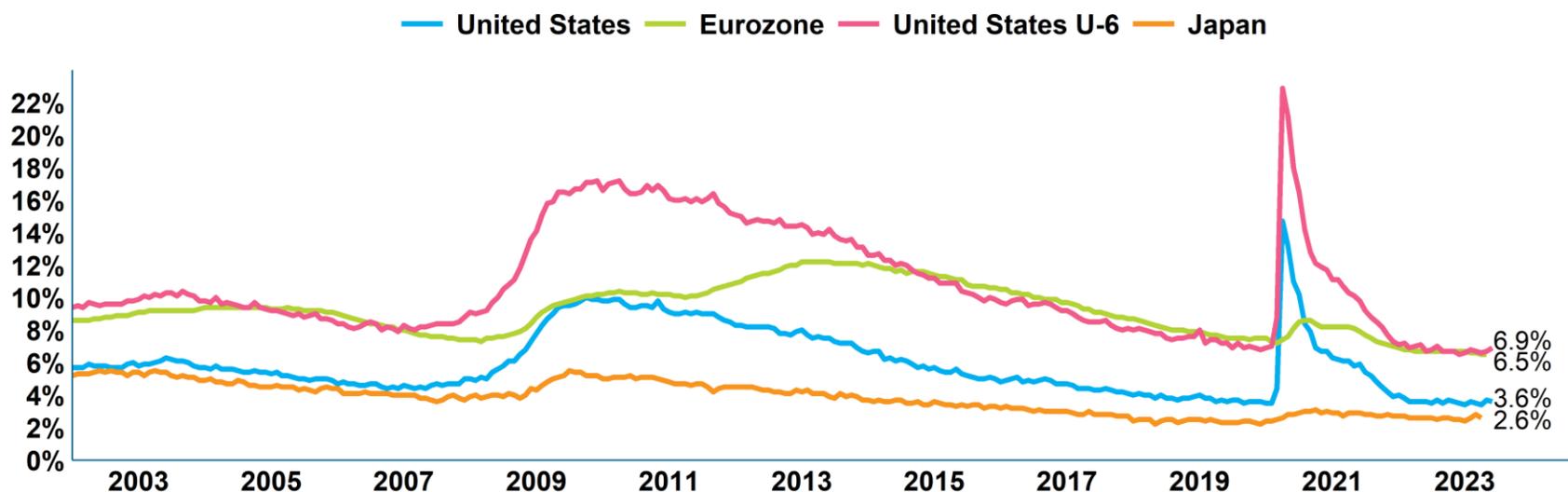
Inflation (CPI Trailing Twelve Months)¹



- Inflation pressures continued to decline globally due to the easing of supply chain issues from the pandemic, declining energy prices, and tighter monetary policy.
- In the US, inflation fell to 3.0% at month-end, while eurozone inflation also fell (6.1% from 7.0%) a level well off its peak. Despite 2023's significant declines in the US and Europe, inflation levels remain elevated compared to central bank targets.
- Inflation remains lower in China and Japan. In China, inflation levels were only slightly above 0% at month-end as the reopening of their economy has led to an uneven economic recovery.

¹ Source: Bloomberg. Data is as June 30, 2023. The most recent Japanese inflation data is as of May 2023.

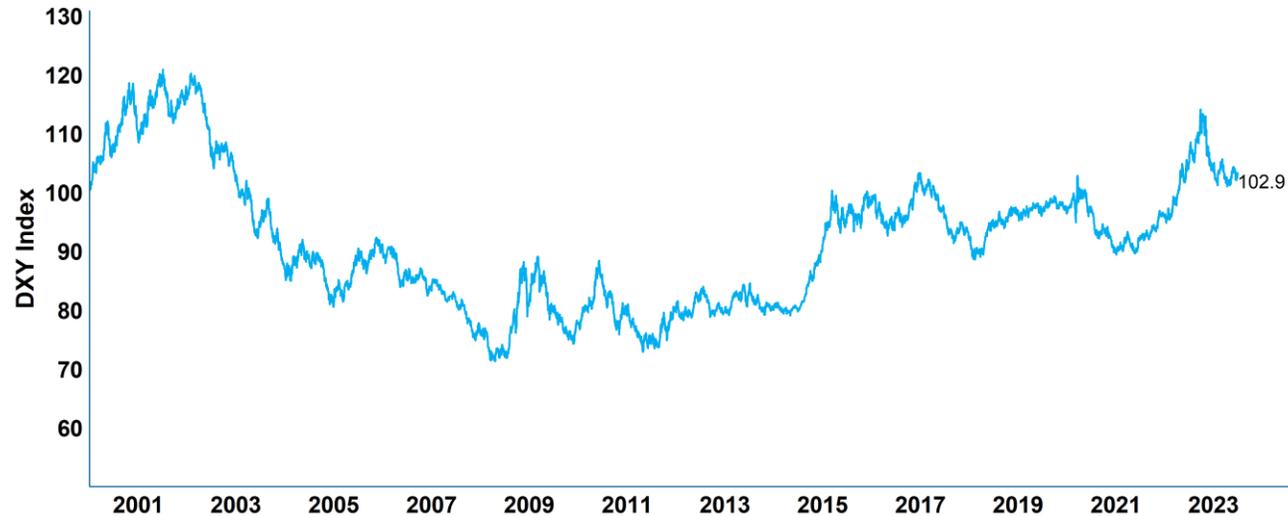
Unemployment¹



- Despite slowing growth and high inflation, the US labor market still shows signs of resiliency. Unemployment in the US, which experienced the steepest rise, recently returned to pre-pandemic levels. Broader measures of unemployment (U-6) remain higher at 6.9% but also declined dramatically from their peak.
- The strong labor market and higher wages, although beneficial for workers, motivates the Fed's efforts to fight inflation, leading to higher unemployment.
- Unemployment in Europe has also declined but remains higher than the US, while levels in Japan have been flat through the pandemic given less layoffs.

¹ Source: Bloomberg. Data is as June 30, 2023, for the US. The most recent data for Eurozone and Japanese unemployment is as of May 2023.

US Dollar versus Broad Currencies¹



- The dollar finished 2022 much higher than it started, due to the increased pace of policy tightening, stronger relative growth, and safe-haven flows.
- Late last year and into this year, the dollar declined, as weaker economic data and lower inflation led to investors anticipating the end of Fed tightening. In June, we did see a slight decline in the dollar though.
- This year, the track of inflation across economies and the corresponding monetary policies will be key drivers of currency moves.

¹ Source: Bloomberg. Data as of June 30, 2023.

Summary

Key Trends:

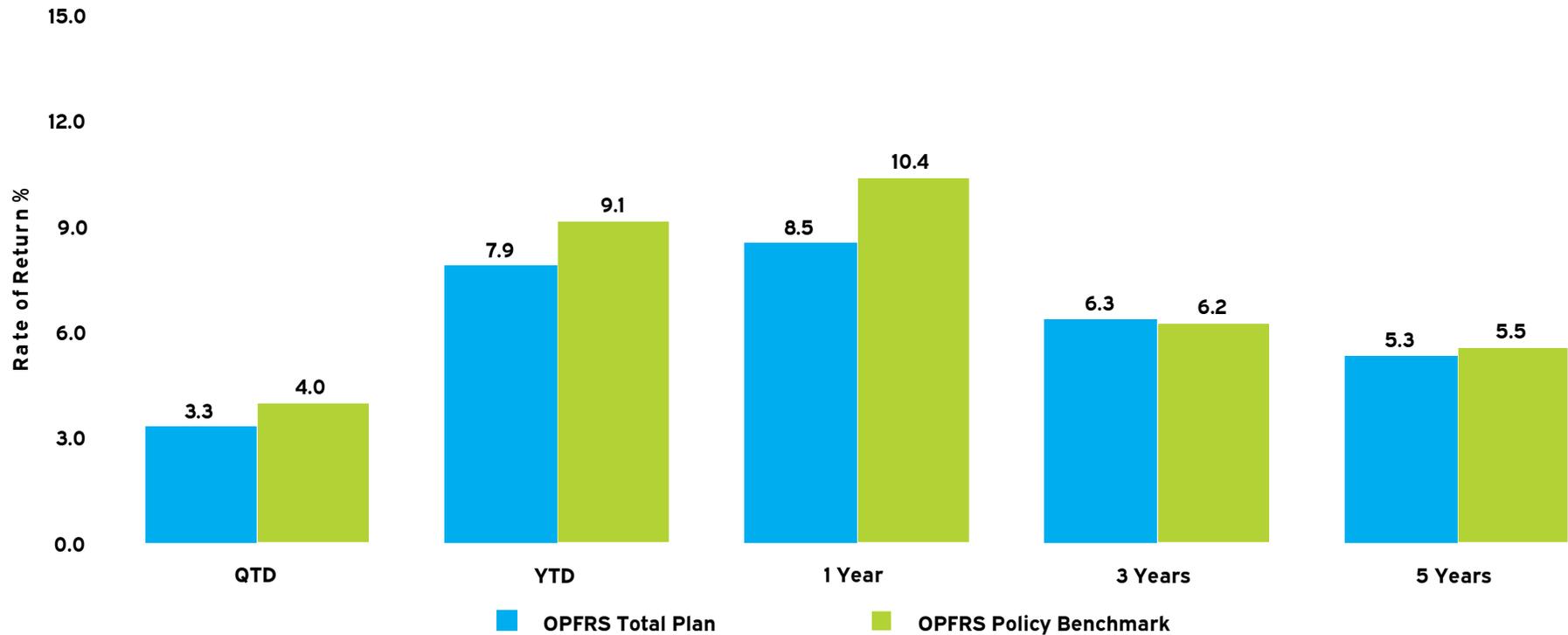
- The impacts of still relatively high inflation will remain key, with bond market volatility likely to stay high.
- Recent issues related to the banking sector seem to have subsided for now but are a reminder that there is a delicate balance for central banks to continue to fight inflation but also to try to maintain financial stability.
- Global monetary policies could diverge in 2023. The risk of policy errors remains elevated as central banks try to reduce persistent inflation while not tipping their economies into recession.
- Growth is expected to slow globally this year, with many economies forecast to tip into recession. Inflation, monetary policy, and the war will all be key.
- In the US, consumers could feel pressure as certain components of inflation remain high (e.g., shelter), borrowing cost are elevated, and the job market may weaken.
- The key for US equities going forward will be whether earnings can remain resilient if growth continues to slow.
- Equity valuations remain lower in both emerging and developed markets, but risks remain, including potential continued strength in the US dollar, higher inflation weighing particularly on Europe, and China's sluggish economic reopening and on-going weakness in the real estate sector.

2Q 2023 Performance
as of June 30, 2023

Summary of Cash Flows

	QTD	1 Year
OPFRS Total Plan		
Beginning Market Value	411,182,049	406,308,110
Net Cash Flow	-4,603,292	-20,012,998
Net Investment Change	13,591,332	33,874,977
Ending Market Value	420,170,089	420,170,089

Return Summary Ending June 30, 2023

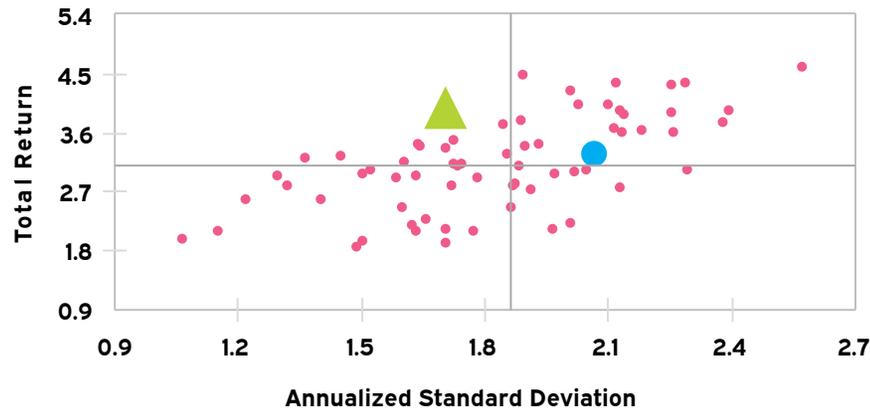


Performance shown is net of fees.

Oakland Police and Fire Retirement System

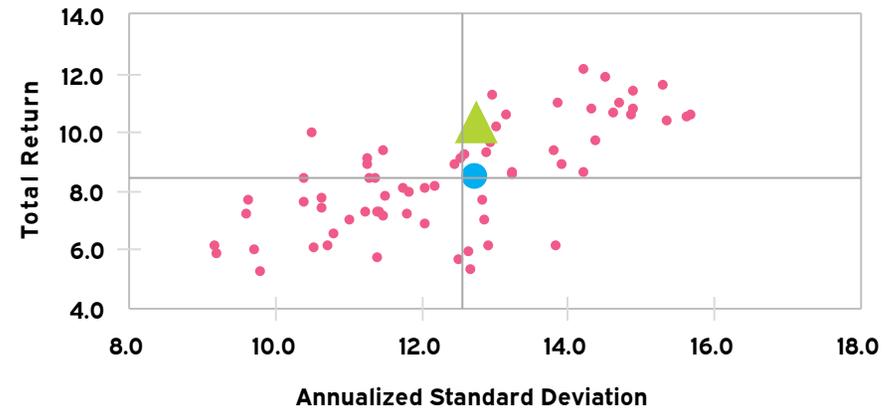
Total Plan Risk/Return Summary | As of June 30, 2023

Risk-Return Summary
QTD Ending June 30, 2023



- IM Public DB \$250M-\$1B
- OPFRS Total Plan
- ▲ OPFRS Policy Benchmark

Risk-Return Summary
1 Yr Ending June 30, 2023



- IM Public DB \$250M-\$1B
- OPFRS Total Plan
- ▲ OPFRS Policy Benchmark

	Return	Standard Deviation
OPFRS Total Plan	3.3	2.1
OPFRS Policy Benchmark	4.0	1.7
Median	3.1	1.9

	Return	Standard Deviation
OPFRS Total Plan	8.5	12.7
OPFRS Policy Benchmark	10.4	12.7
Median	8.5	12.6

Performance shown is net of fees. Parentheses contain percentile rankings. Calculation based on monthly periodicity. Fiscal year begins on July 1.

Oakland Police and Fire Retirement System

Asset Class Performance: Gross of Fees | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
OPFRS Total Plan (Gross)	420,170,089	100.0	3.4	8.0	8.8	6.6	5.6	7.3	6.6	Dec-88
<i>OPFRS Policy Benchmark</i>			<i>4.0</i>	<i>9.1</i>	<i>10.4</i>	<i>6.2</i>	<i>5.5</i>	<i>7.1</i>	<i>7.9</i>	
Excess Return			-0.6	-1.1	-1.6	0.4	0.1	0.2	-1.3	
Domestic Equity (Gross)	173,924,779	41.4	6.0	11.5	14.9	13.1	10.0	11.8	8.9	Jun-97
<i>Russell 3000 (Blend)</i>			<i>8.4</i>	<i>16.2</i>	<i>19.0</i>	<i>13.9</i>	<i>11.4</i>	<i>12.3</i>	<i>9.1</i>	
Excess Return			-2.4	-4.7	-4.1	-0.8	-1.4	-0.5	-0.2	
International Equity (Gross)	55,841,087	13.3	3.1	12.1	16.7	8.5	4.8	6.2	5.4	Jan-98
<i>MSCI ACWI ex US (Blend)</i>			<i>2.4</i>	<i>9.5</i>	<i>12.7</i>	<i>7.2</i>	<i>3.5</i>	<i>4.7</i>	<i>5.0</i>	
Excess Return			0.7	2.6	4.0	1.3	1.3	1.5	0.4	
Fixed Income (Gross)	104,462,270	24.9	-0.5	2.9	0.2	-2.7	1.3	2.1	4.7	Jan-94
<i>Bloomberg Universal (Blend)</i>			<i>-0.6</i>	<i>2.3</i>	<i>0.0</i>	<i>-3.4</i>	<i>1.0</i>	<i>1.8</i>	<i>4.5</i>	
Excess Return			0.1	0.6	0.2	0.7	0.3	0.3	0.2	
Credit (Gross)	9,200,988	2.2	3.4	7.2	8.8	7.9	4.0	--	5.2	Feb-15
<i>Blmbg. U.S. Corp: High Yield Index</i>			<i>1.7</i>	<i>5.4</i>	<i>9.1</i>	<i>3.1</i>	<i>3.4</i>	<i>4.4</i>	<i>4.2</i>	
Excess Return			1.7	1.8	-0.3	4.8	0.6	--	1.0	
Covered Calls (Gross)	22,548,100	5.4	7.4	14.0	16.6	13.7	9.9	--	9.2	Apr-14
<i>CBOE S&P 500 Buy Write Index</i>			<i>4.3</i>	<i>10.5</i>	<i>9.0</i>	<i>10.6</i>	<i>4.6</i>	<i>6.3</i>	<i>5.7</i>	
Excess Return			3.1	3.5	7.6	3.1	5.3	--	3.5	
Crisis Risk Offset (Gross)	40,159,887	9.6	2.0	2.0	-2.8	-7.3	--	--	-8.0	Aug-18
<i>Crisis Risk Offset Benchmark</i>			<i>2.7</i>	<i>2.7</i>	<i>5.2</i>	<i>4.1</i>	<i>--</i>	<i>--</i>	<i>0.1</i>	
Excess Return			-0.7	-0.7	-8.0	-11.4	--	--	-8.1	
Cash (Gross)	14,032,977	3.3	0.0	0.0	0.0	0.0	0.9	0.7	0.6	Mar-11
<i>FTSE 3 Month T-Bill</i>			<i>1.3</i>	<i>2.4</i>	<i>3.7</i>	<i>1.3</i>	<i>1.6</i>	<i>1.0</i>	<i>0.8</i>	
Excess Return			-1.3	-2.4	-3.7	-1.3	-0.7	-0.3	-0.2	

Performance shown is gross of fees. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

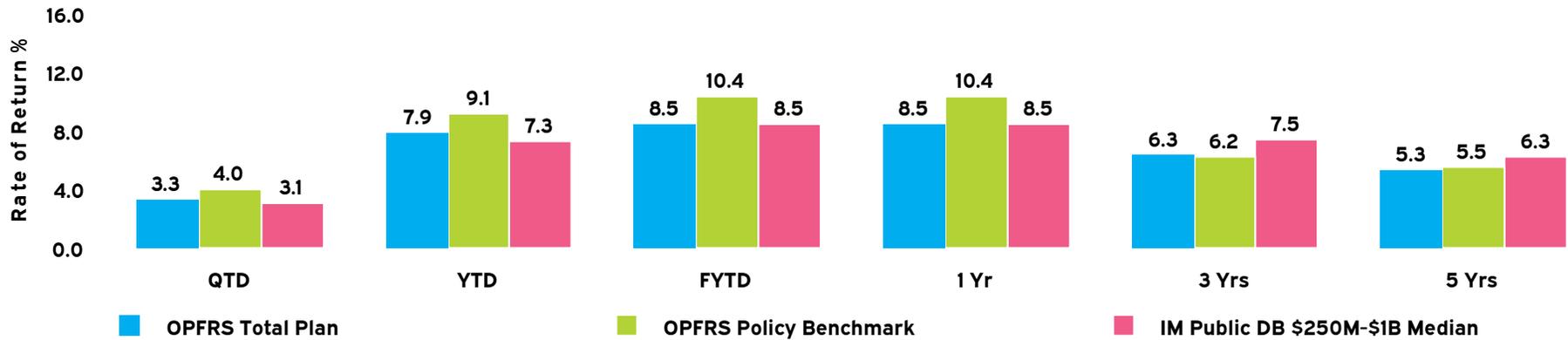
Oakland Police and Fire Retirement System

Asset Class Performance: Net of Fees | As of June 30, 2023

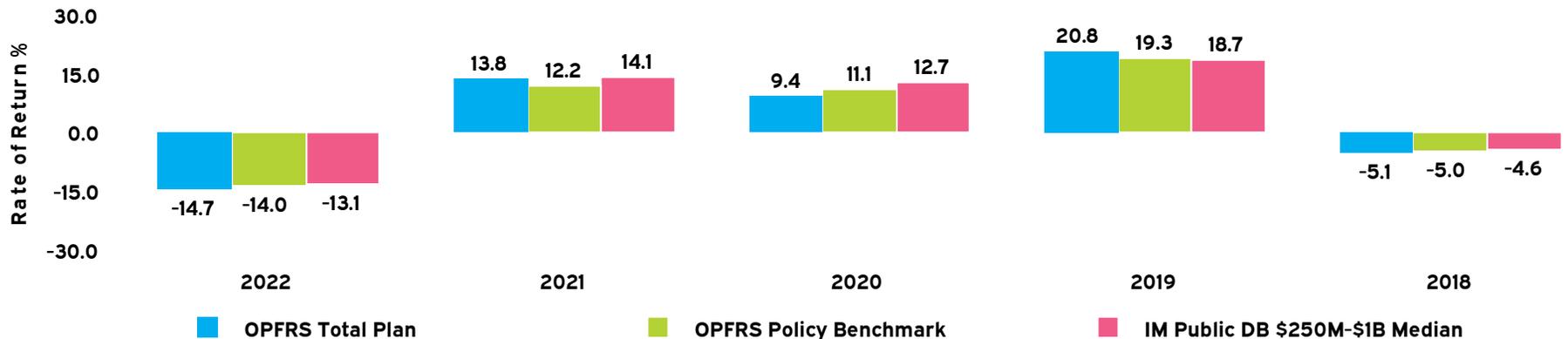
	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
OPFRS Total Plan (Net)	420,170,089	100.0	3.3	7.9	8.5	6.3	5.3	7.1	6.6	Dec-88
<i>OPFRS Policy Benchmark</i>			4.0	9.1	10.4	6.2	5.5	7.1	7.9	
Excess Return			-0.7	-1.2	-1.9	0.1	-0.2	0.0	-1.3	
<i>IM Public DB \$250M-\$1B Median (Net)</i>			3.1	7.4	8.5	7.5	6.3	7.0	8.2	
Domestic Equity (Net)	173,924,779	41.4	5.9	11.4	14.5	12.8	9.7	11.6	8.8	Jun-97
<i>Russell 3000 (Blend)</i>			8.4	16.2	19.0	13.9	11.4	12.3	9.1	
Excess Return			-2.5	-4.8	-4.5	-1.1	-1.7	-0.7	-0.3	
International Equity (Net)	55,841,087	13.3	3.0	11.8	16.0	7.9	4.2	5.8	5.2	Jan-98
<i>MSCI ACWI ex US (Blend)</i>			2.4	9.5	12.7	7.2	3.5	4.7	5.0	
Excess Return			0.6	2.3	3.3	0.7	0.7	1.1	0.2	
Fixed Income (Net)	104,462,270	24.9	-0.6	2.8	0.0	-2.8	1.1	1.9	4.5	Jan-94
<i>Bloomberg Universal (Blend)</i>			-0.6	2.3	0.0	-3.4	1.0	1.8	4.5	
Excess Return			0.0	0.5	0.0	0.6	0.1	0.1	0.0	
Credit (Net)	9,200,988	2.2	3.3	6.9	8.2	7.2	3.3	--	4.6	Feb-15
<i>Blmbg. U.S. Corp: High Yield Index</i>			1.7	5.4	9.1	3.1	3.4	4.4	4.2	
Excess Return			1.6	1.5	-0.9	4.1	-0.1	--	0.4	
Covered Calls (Net)	22,548,100	5.4	7.3	13.9	16.3	13.4	9.6	--	8.9	Apr-14
<i>CBOE S&P 500 Buy Write Index</i>			4.3	10.5	9.0	10.6	4.6	6.3	5.7	
Excess Return			3.0	3.4	7.3	2.8	5.0	--	3.2	
Crisis Risk Offset (Net)	40,159,887	9.6	1.9	1.9	-3.0	-7.4	--	--	-8.2	Aug-18
<i>Crisis Risk Offset Benchmark</i>			2.7	2.7	5.2	4.1	--	--	0.1	
Excess Return			-0.8	-0.8	-8.2	-11.5	--	--	-8.3	
Cash (Net)	14,032,977	3.3	0.0	0.0	0.0	0.0	0.9	0.7	0.6	Mar-11
<i>FTSE 3 Month T-Bill</i>			1.3	2.4	3.7	1.3	1.6	1.0	0.8	
Excess Return			-1.3	-2.4	-3.7	-1.3	-0.7	-0.3	-0.2	

Performance shown is net of fees, except for Total Plan, Domestic Equity, and International Equity composites which have a mix of gross and net of fees performance. Please see the Addendum for more details. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

Trailing Period Performance Ending June 30, 2023



Calendar Year Performance Ending December 31, 2022



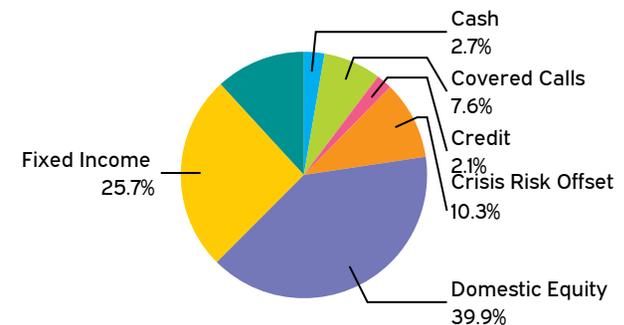
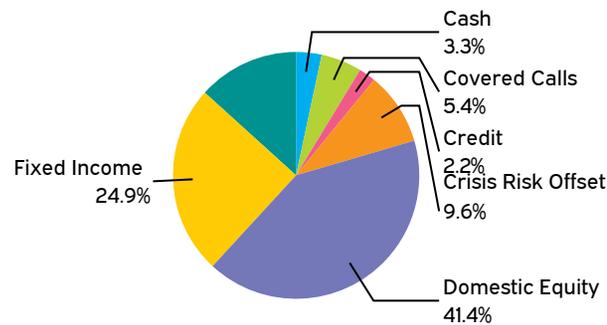
Performance shown is net of fees. Fiscal year begins on July 1.

Asset Allocation | As of June 30, 2023

	Current Balance (\$)	Current Allocation (%)	Policy (%)	Difference (%)	Policy Range (%)	Within IPS Range?
Domestic Equity	173,924,779	41.4	40.0	1.4	30.0 - 50.0	Yes
International Equity	55,841,087	13.3	12.0	1.3	8.0 - 14.0	Yes
Fixed Income	104,462,270	24.9	31.0	-6.1	25.0 - 40.0	No
Credit	9,200,988	2.2	2.0	0.2	1.0 - 3.0	Yes
Covered Calls	22,548,100	5.4	5.0	0.4	5.0 - 10.0	Yes
Crisis Risk Offset	40,159,887	9.6	10.0	-0.4	5.0 - 15.0	Yes
Cash	14,032,977	3.3	0.0	3.3	0.0 - 5.0	Yes
Total	420,170,089	100.0	100.0	0.0		

June 30, 2023: \$420,170,089.1

June 30, 2022: \$406,308,110.42



Cash account market value includes cash balances held in ETF accounts at the custodian and residuals from terminated managers. Target weights reflect the Plan's evolving asset allocation (effective 05/31/2017).

Manager Performance - Net of Fees | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Domestic Equity	173,924,779	100.0	5.9	11.4	14.5	12.8	9.7	11.6	8.8	Jun-97
<i>Russell 3000 (Blend)</i>			8.4	16.2	19.0	13.9	11.4	12.3	9.1	
Excess Return			-2.5	-4.8	-4.5	-1.1	-1.7	-0.7	-0.3	
Northern Trust Russell 1000	81,367,541	46.8	8.6	16.7	19.3	13.9	11.8	12.5	13.3	Jun-10
<i>Russell 1000 Index</i>			8.6	16.7	19.4	14.1	11.9	12.6	13.4	
Excess Return			0.0	0.0	-0.1	-0.2	-0.1	-0.1	-0.1	
EARNEST Partners	43,238,606	24.9	3.8	8.5	9.9	13.3	10.5	12.2	9.2	Apr-06
<i>Russell Midcap Index</i>			4.8	9.0	14.9	12.5	8.5	10.3	8.6	
Excess Return			-1.0	-0.5	-5.0	0.8	2.0	1.9	0.6	
eV US Mid Cap Core Equity Rank			84	72	88	61	20	18	28	
Wellington Select Quality Equity	23,373,498	13.4	4.5	5.3	12.7	--	--	--	5.3	May-22
<i>Russell 1000 Index</i>			8.6	16.7	19.4	14.1	11.9	12.6	7.8	
Excess Return			-4.1	-11.4	-6.7	--	--	--	-2.5	
eV US Large Cap Core Equity Rank			82	91	76	--	--	--	67	
Brown Fundamental Small Cap Value	11,278,982	6.5	3.8	3.2	13.8	--	--	--	2.2	Apr-21
<i>Russell 2000 Value Index</i>			3.2	2.5	6.0	15.4	3.5	7.3	-3.3	
Excess Return			0.6	0.7	7.8	--	--	--	5.5	
eV US Small Cap Value Equity Rank			48	76	37	--	--	--	34	
Rice Hall James	14,666,153	8.4	2.7	9.7	8.0	6.7	2.4	--	6.5	Aug-17
<i>Russell 2000 Growth Index</i>			7.1	13.6	18.5	6.1	4.2	8.8	6.9	
Excess Return			-4.4	-3.9	-10.5	0.6	-1.8	--	-0.4	
eV US Small Cap Growth Equity Rank			87	76	94	59	96	--	91	

Performance shown is net of fees, except for the Domestic Equity composite which has a mix of gross and net of fees performance. Please see the Addendum for more details. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

Manager Performance - Net of Fees | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
International Equity	55,841,087	100.0	3.0	11.8	16.0	7.9	4.2	5.8	5.2	Jan-98
<i>MSCI ACWI ex US (Blend)</i>			<i>2.4</i>	<i>9.5</i>	<i>12.7</i>	<i>7.2</i>	<i>3.5</i>	<i>4.7</i>	<i>5.0</i>	
Excess Return			0.6	2.3	3.3	0.7	0.7	1.1	0.2	
Vanguard Developed Markets ETF	15,464,066	27.7	2.2	10.4	15.3	8.8	--	--	6.7	Sep-19
<i>FTSE Developed All Cap ex-U.S. Index</i>			<i>3.1</i>	<i>11.1</i>	<i>16.9</i>	<i>9.3</i>	<i>4.6</i>	<i>5.9</i>	<i>7.1</i>	
Excess Return			-0.9	-0.7	-1.6	-0.5	--	--	-0.4	
SGA ACWI ex-U.S. Equity	40,377,022	72.3	3.3	12.3	16.3	7.5	--	--	3.0	Dec-19
<i>MSCI AC World ex USA (Net)</i>			<i>2.4</i>	<i>9.5</i>	<i>12.7</i>	<i>7.2</i>	<i>3.5</i>	<i>4.7</i>	<i>3.8</i>	
Excess Return			0.9	2.8	3.6	0.3	--	--	-0.8	
eV ACWI ex-US All Cap Core Eq Rank			36	24	33	62	--	--	90	

Performance shown is net of fees, except for the International Equity composite which has a mix of gross and net of fees performance. Please see the Addendum for more details. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

Manager Performance - Net of Fees | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Fixed Income	104,462,270	100.0	-0.6	2.8	0.0	-2.8	1.1	1.9	4.5	Jan-94
<i>Bloomberg Universal (Blend)</i>			-0.6	2.3	0.0	-3.4	1.0	1.8	4.5	
Excess Return			0.0	0.5	0.0	0.6	0.1	0.1	0.0	
Ramirez	70,891,932	67.9	-0.6	2.6	-0.4	-2.8	1.0	--	1.2	Feb-17
<i>Blmbg. U.S. Aggregate Index</i>			-0.8	2.1	-0.9	-4.0	0.8	1.5	0.9	
Excess Return			0.2	0.5	0.5	1.2	0.2	--	0.3	
eV US Core Fixed Inc Rank			37	22	40	14	51	--	30	
Wellington Core Bond	6,726,320	6.4	-0.6	3.0	-0.2	--	--	--	-4.7	Apr-21
<i>Blmbg. U.S. Aggregate Index</i>			-0.8	2.1	-0.9	-4.0	0.8	1.5	-4.3	
Excess Return			0.2	0.9	0.7	--	--	--	-0.4	
eV US Core Fixed Inc Rank			28	4	33	--	--	--	90	
Reams	26,844,017	25.7	-0.5	3.1	1.1	-2.5	3.4	2.8	4.9	Feb-98
<i>Bloomberg Universal (Blend)</i>			-0.6	2.3	0.0	-3.4	1.0	1.8	4.1	
Excess Return			0.1	0.8	1.1	0.9	2.4	1.0	0.8	
eV US Core Plus Fixed Inc Rank			41	11	21	35	1	8	19	

Performance shown is net of fees. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

Manager Performance - Net of Fees | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Credit	9,200,988	100.0	3.3	6.9	8.2	7.2	3.3	--	4.6	Feb-15
<i>Blmbg. U.S. Corp: High Yield Index</i>			<i>1.7</i>	<i>5.4</i>	<i>9.1</i>	<i>3.1</i>	<i>3.4</i>	<i>4.4</i>	<i>4.2</i>	
Excess Return			1.6	1.5	-0.9	4.1	-0.1	--	0.4	
Polen Capital	9,200,988	100.0	3.3	6.9	8.2	7.2	3.3	--	4.6	Feb-15
<i>ICE BofA High Yield Master II</i>			<i>1.6</i>	<i>5.4</i>	<i>8.9</i>	<i>3.2</i>	<i>3.2</i>	<i>4.3</i>	<i>4.1</i>	
Excess Return			1.7	1.5	-0.7	4.0	0.1	--	0.5	
eV US High Yield Fixed Inc Rank			3	4	52	4	45	--	17	

Performance shown is net of fees. Since inception date and performance begin in the month following an investment's initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

Manager Performance - Net of Fees | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Covered Calls	22,548,100	100.0	7.3	13.9	16.3	13.4	9.6	--	8.9	Apr-14
<i>CBOE S&P 500 Buy Write Index</i>			<i>4.3</i>	<i>10.5</i>	<i>9.0</i>	<i>10.6</i>	<i>4.6</i>	<i>6.3</i>	<i>5.7</i>	
Excess Return			3.0	3.4	7.3	2.8	5.0	--	3.2	
Parametric BXM	11,207,891	49.7	6.0	11.4	12.6	11.1	7.1	--	7.1	Apr-14
<i>CBOE S&P 500 Buy Write Index</i>			<i>4.3</i>	<i>10.5</i>	<i>9.0</i>	<i>10.6</i>	<i>4.6</i>	<i>6.3</i>	<i>5.7</i>	
Excess Return			1.7	0.9	3.6	0.5	2.5	--	1.4	
Parametric DeltaShift	11,340,209	50.3	8.7	16.5	20.2	15.4	11.9	--	10.9	Apr-14
<i>CBOE S&P 500 Buy Write Index</i>			<i>4.3</i>	<i>10.5</i>	<i>9.0</i>	<i>10.6</i>	<i>4.6</i>	<i>6.3</i>	<i>5.7</i>	
Excess Return			4.4	6.0	11.2	4.8	7.3	--	5.2	

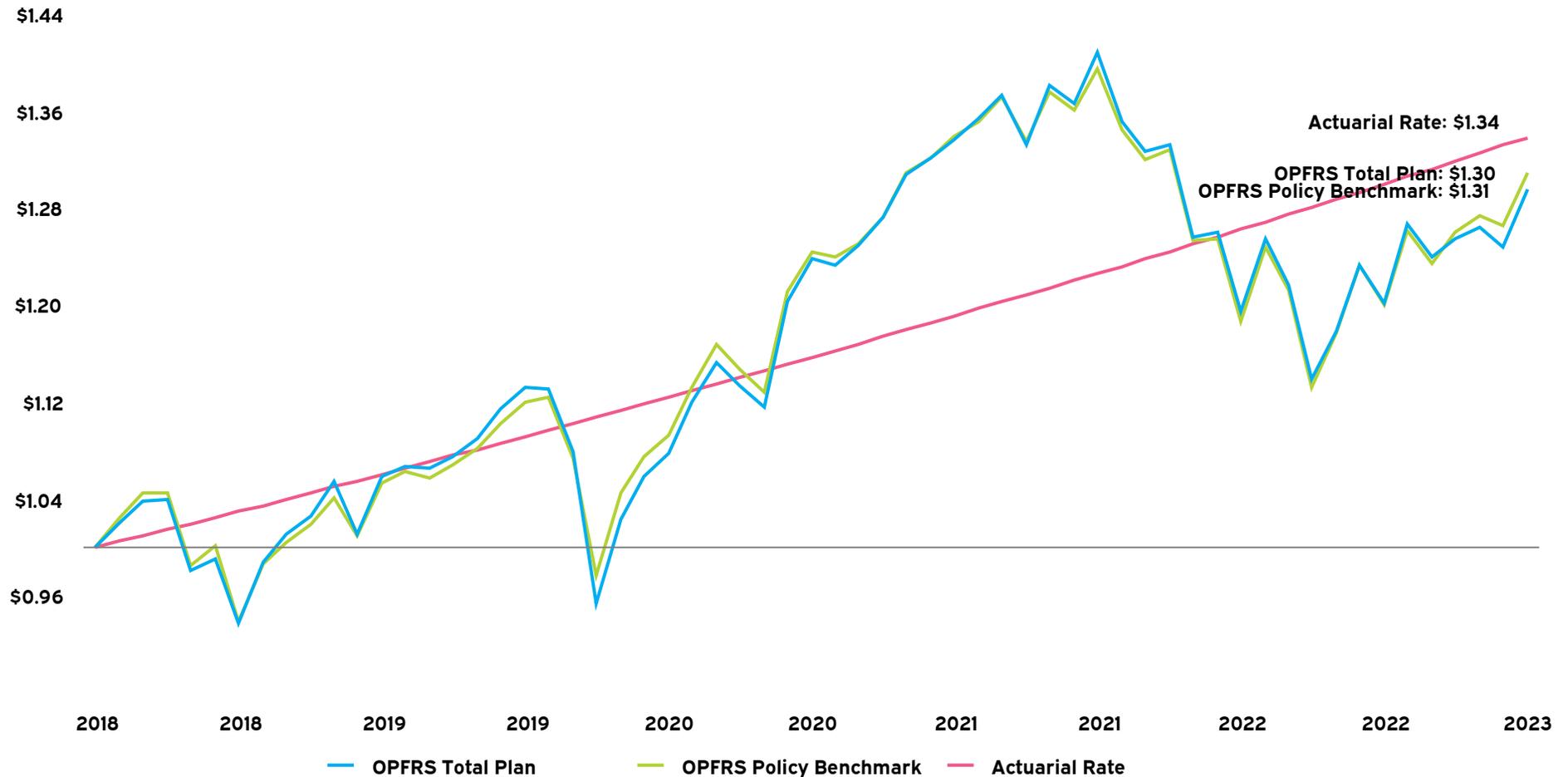
Performance shown is net of fees. Since inception date and performance begin in the month following an investment's initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

Manager Performance - Net of Fees | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Crisis Risk Offset	40,159,887	100.0	1.9	1.9	-3.0	-7.4	--	--	-8.2	Aug-18
<i>Crisis Risk Offset Benchmark</i>			<i>2.7</i>	<i>2.8</i>	<i>5.3</i>	<i>4.1</i>	<i>--</i>	<i>--</i>	<i>0.1</i>	
Over/Under			<i>-0.8</i>	<i>-0.9</i>	<i>-8.3</i>	<i>-11.5</i>	<i>--</i>	<i>--</i>	<i>-8.3</i>	
Kepos Alternative Risk Premia	10,476,679	26.1	2.0	6.5	9.8	--	--	--	3.3	Feb-22
<i>SG Multi Alternative Risk Premia Index</i>			<i>2.5</i>	<i>3.6</i>	<i>6.1</i>	<i>4.4</i>	<i>--</i>	<i>--</i>	<i>5.3</i>	
Over/Under			<i>-0.5</i>	<i>2.9</i>	<i>3.7</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>-2.0</i>	
Versor Trend Following	15,551,785	38.7	6.6	-2.6	-6.4	--	--	--	2.9	Apr-22
<i>SG Trend Index</i>			<i>8.0</i>	<i>0.1</i>	<i>-1.1</i>	<i>14.3</i>	<i>9.4</i>	<i>5.7</i>	<i>6.6</i>	
Over/Under			<i>-1.4</i>	<i>-2.7</i>	<i>-5.3</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>-3.7</i>	
Vanguard Long-Term Treasury ETF	14,131,423	35.2	-2.8	3.9	-7.3	-12.2	--	--	-4.1	Jul-19
<i>Blmbg. U.S. Government: Long Term Bond Index</i>			<i>-2.3</i>	<i>3.7</i>	<i>-6.8</i>	<i>-12.0</i>	<i>-0.9</i>	<i>1.8</i>	<i>-3.9</i>	
Over/Under			<i>-0.5</i>	<i>0.2</i>	<i>-0.5</i>	<i>-0.2</i>	<i>--</i>	<i>--</i>	<i>-0.2</i>	

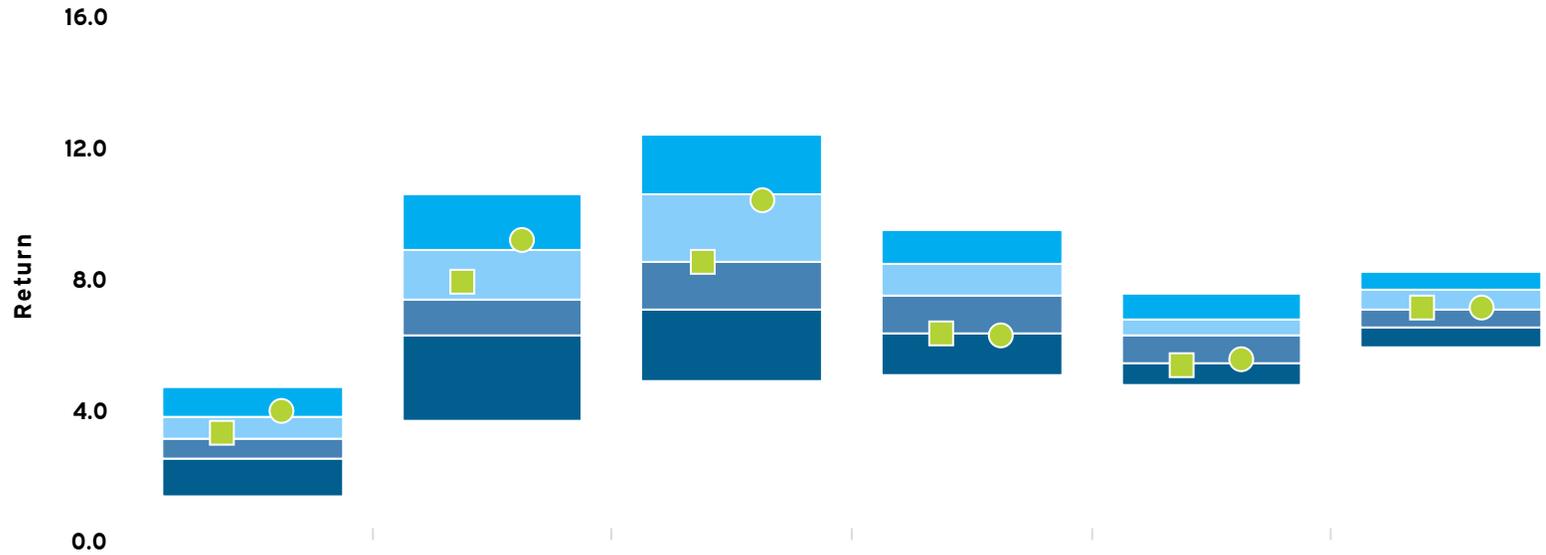
Performance shown is net of fees. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

Growth of a Dollar 5 Years ending June 30, 2023



The actuarial expected rate of return was 8% through 6/30/2009, 7.5% through 6/30/2010, 7% through 6/30/2011, 6.75% through 6/30/2014, 6.5% through 2/31/2017 and 6.0% currently.

Plan Sponsor Peer Group Performance Comparison vs. InvMetrics Public DB \$250M-\$1B



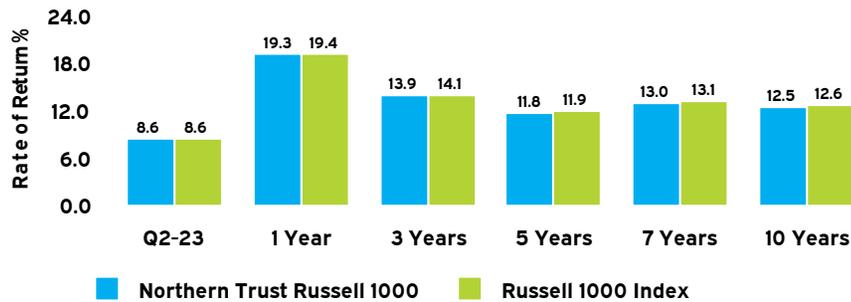
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
■ OPFRS Total Plan	3.3 (44)	7.9 (39)	8.5 (49)	6.3 (73)	5.3 (78)	7.1 (49)
● OPFRS Policy Benchmark	4.0 (18)	9.1 (21)	10.4 (27)	6.2 (77)	5.5 (73)	7.1 (49)
5th Percentile	4.7	10.5	12.4	9.4	7.5	8.2
1st Quartile	3.7	8.8	10.5	8.4	6.7	7.6
Median	3.1	7.3	8.5	7.5	6.3	7.0
3rd Quartile	2.5	6.3	7.0	6.3	5.4	6.5
95th Percentile	1.3	3.6	4.8	5.0	4.7	5.9
Population	82	82	82	82	80	71

Total Plan performance is a mix of gross and net of fees; performance is gross of fees prior to January 2016 and net of fees thereafter. Parentheses contain percentile rankings. Calculation based on monthly periodicity. Fiscal year begins on July 1.

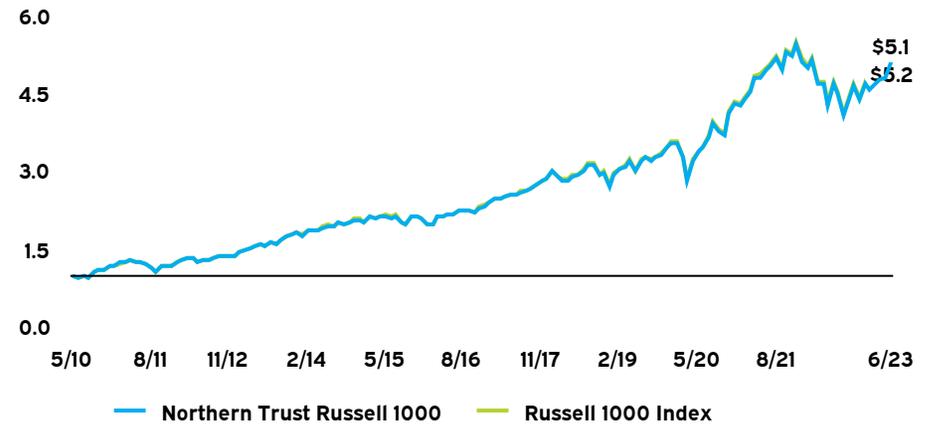
Portfolio Characteristics & Manager Profiles

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Northern Trust Russell 1000	0.00	1.00	-0.65	0.88	0.01	1.00	99.85	-
Russell 1000 Index	0.00	1.00	-	0.88	0.00	1.00	100.00	-

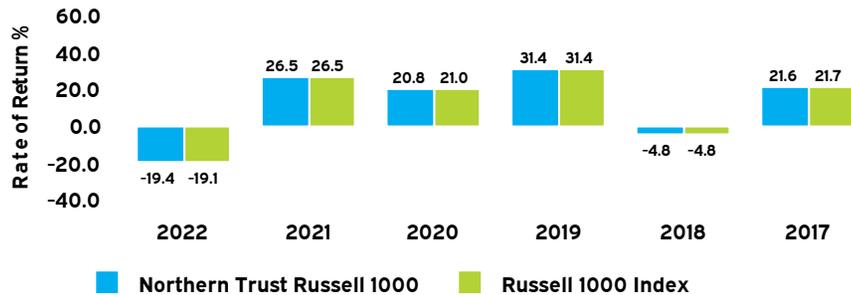
Trailing Performance (Net of Fees)



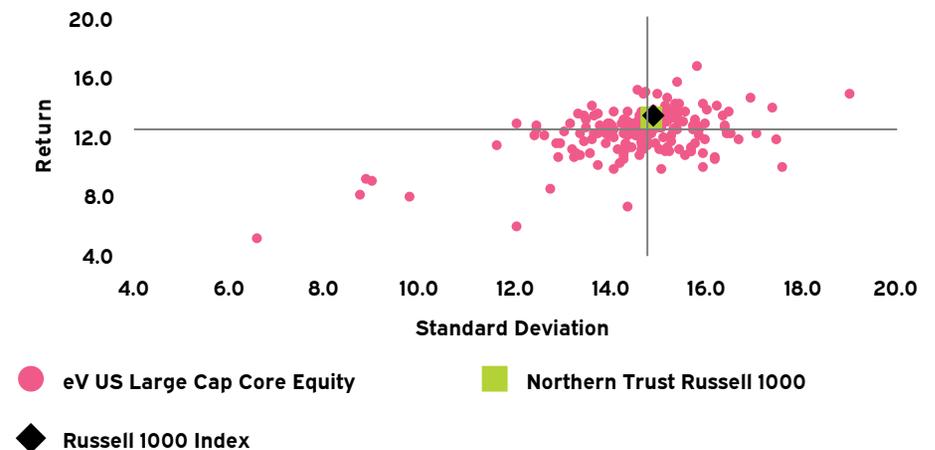
Growth of \$1 - Since Inception



Calendar Year Returns (Net of Fees)



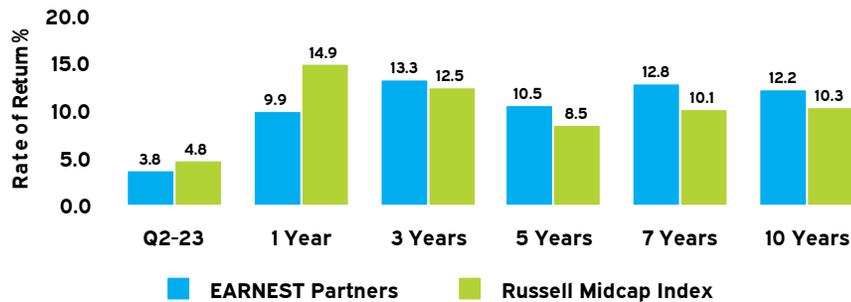
Risk/Return - Since Inception



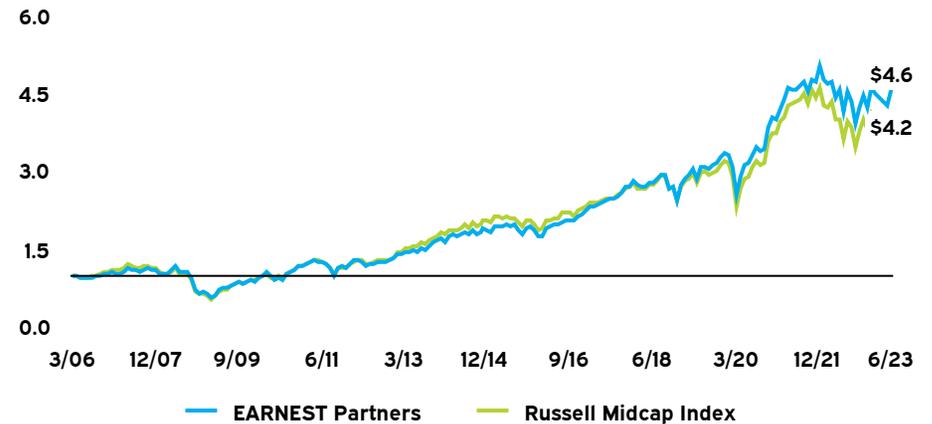
	Anlzd Return	Anlzd Standard Deviation
Northern Trust Russell 1000	8.57	2.79
Russell 1000 Index	8.58	2.80

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
EARNEST Partners	-0.15	0.90	-0.39	0.22	0.81	0.98	90.12	103.92
Russell Midcap Index	0.00	1.00	-	0.27	0.00	1.00	100.00	100.00

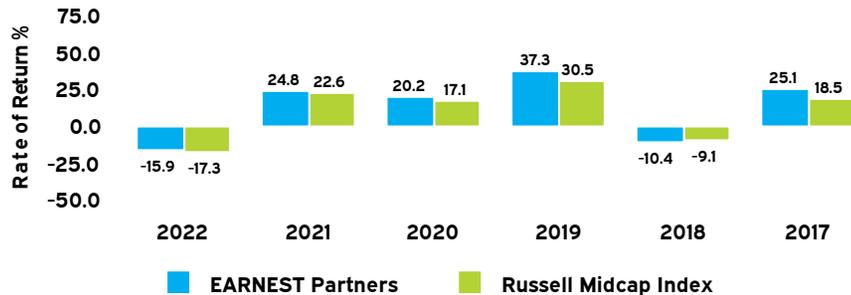
Trailing Performance (Net of Fees)



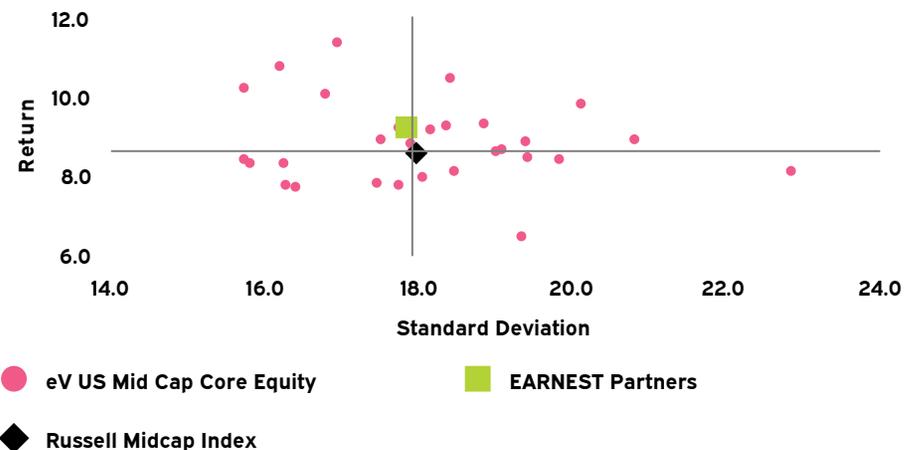
Growth of \$1 - Since Inception



Calendar Year Returns (Net of Fees)



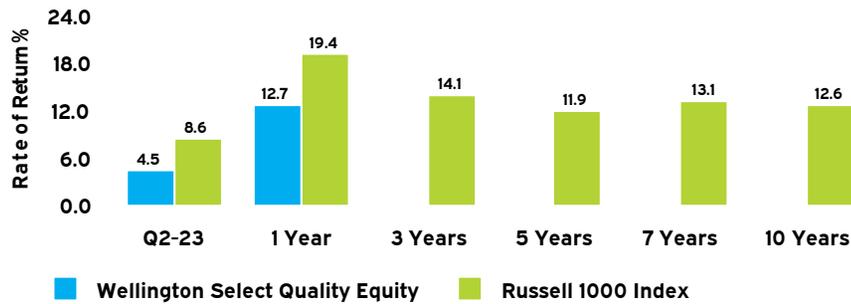
Risk/Return - Since Inception



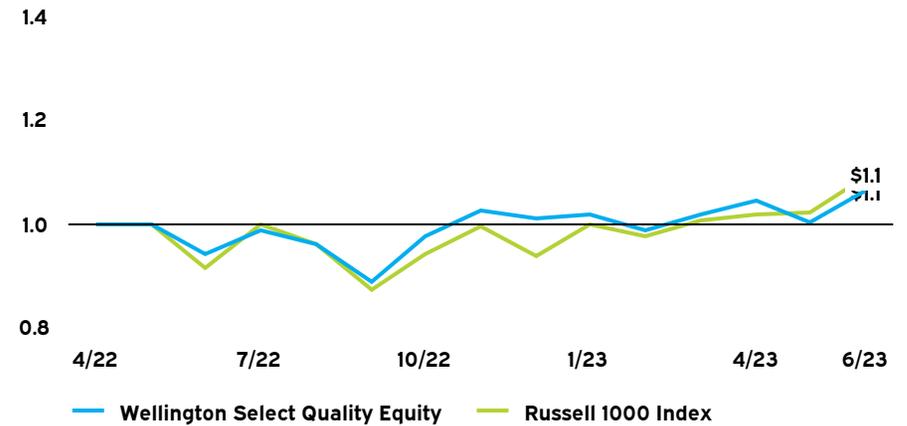
	Anlzd Return	Anlzd Standard Deviation
EARNEST Partners	3.84	4.36
Russell Midcap Index	4.76	4.81

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Wellington Select Quality Equity	-1.78	1.19	-0.52	0.29	2.41	0.67	55.57	-
Russell 1000 Index	0.00	1.00	-	0.88	0.00	1.00	100.00	-

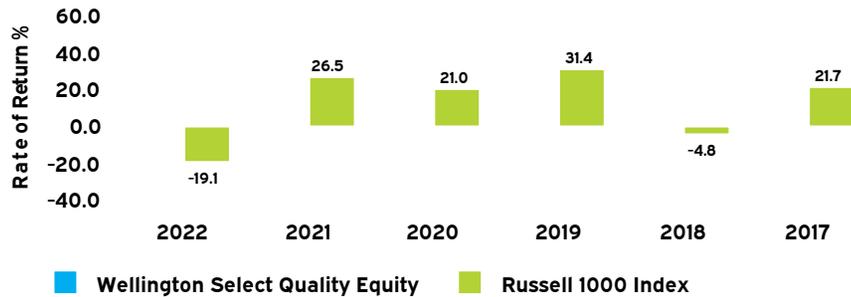
Trailing Performance (Net of Fees)



Growth of \$1 - Since Inception



Calendar Year Returns (Net of Fees)



Risk/Return - Since Inception

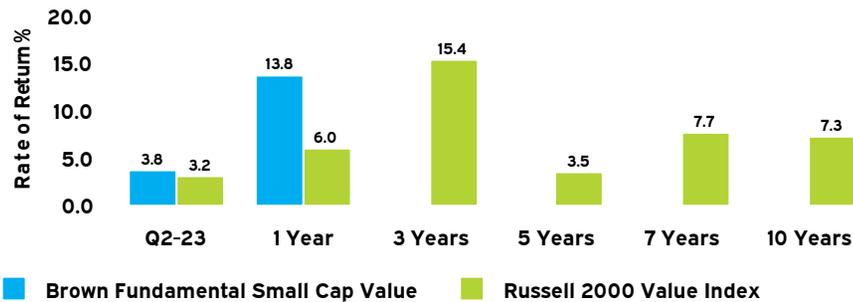


	Anlzd Return	Anlzd Standard Deviation
Wellington Select Quality Equity	4.52	4.07
Russell 1000 Index	8.58	2.80

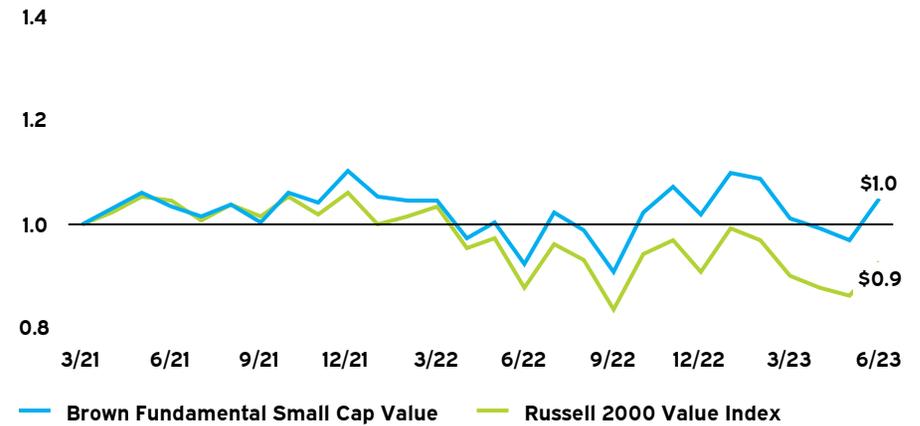
Brown Fundamental Small Cap Value | As of June 30, 2023

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Brown Fundamental Small Cap Value	0.15	1.06	0.36	0.20	0.61	0.99	108.19	99.89
Russell 2000 Value Index	0.00	1.00	-	0.16	0.00	1.00	100.00	100.00

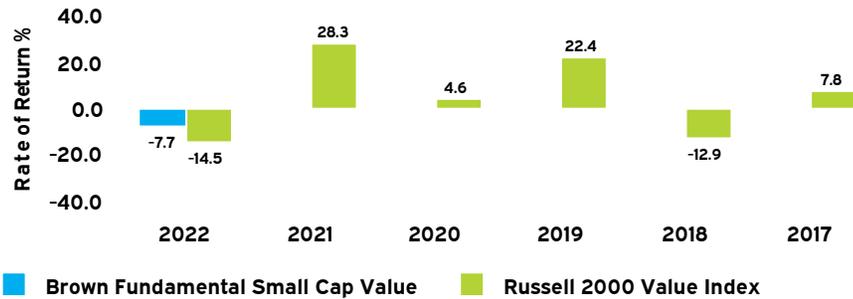
Trailing Performance (Net of Fees)



Growth of \$1 - Since Inception



Calendar Year Returns (Net of Fees)



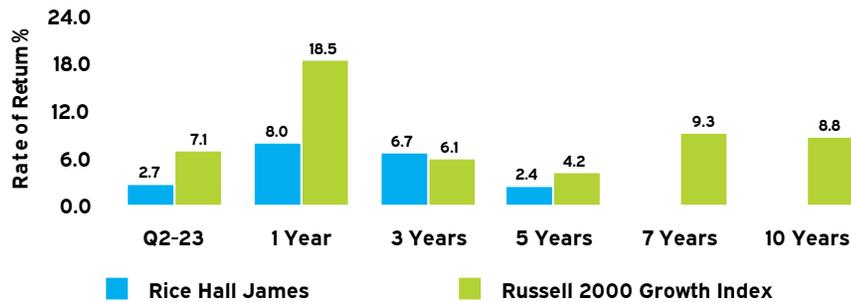
Risk/Return - Since Inception



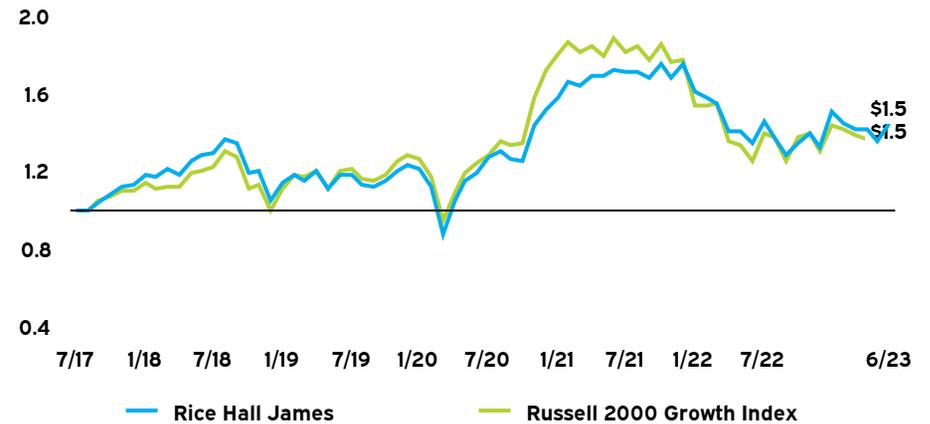
	Anlzd Return	Anlzd Standard Deviation
Brown Fundamental Small Cap Value	3.81	5.11
Russell 2000 Value Index	3.18	4.80

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Rice Hall James	-1.19	0.92	-0.54	0.14	2.53	0.71	29.38	-50.63
Russell 2000 Growth Index	0.00	1.00	-	0.48	0.00	1.00	100.00	100.00

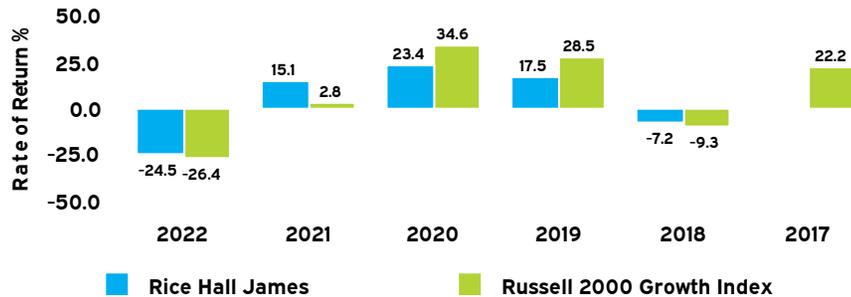
Trailing Performance (Net of Fees)



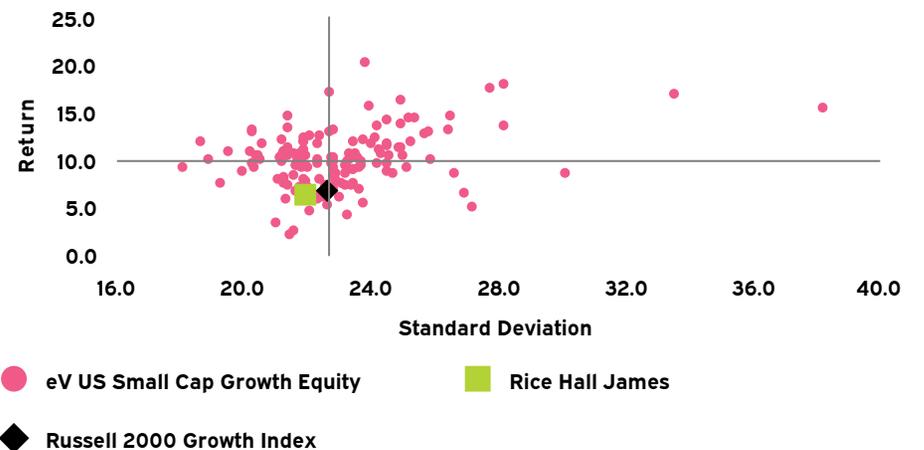
Growth of \$1 - Since Inception



Calendar Year Returns (Net of Fees)



Risk/Return - Since Inception

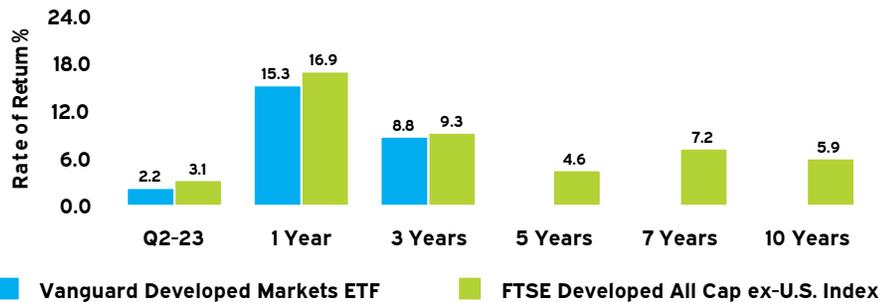


	Anlzd Return	Anlzd Standard Deviation
Rice Hall James	2.74	4.63
Russell 2000 Growth Index	7.05	4.21

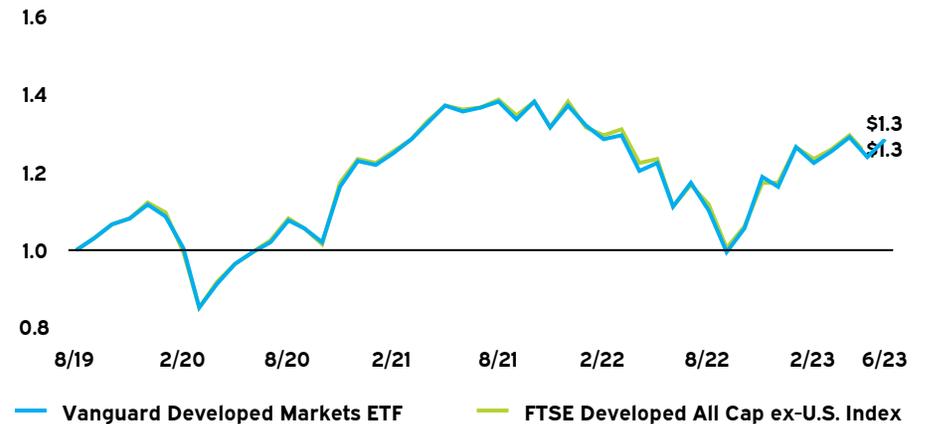
Vanguard Developed Markets ETF | As of June 30, 2023

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Vanguard Developed Markets ETF	-0.21	0.91	-0.66	0.13	0.47	0.99	86.29	98.79
FTSE Developed All Cap ex-U.S. Index	0.00	1.00	-	0.20	0.00	1.00	100.00	100.00

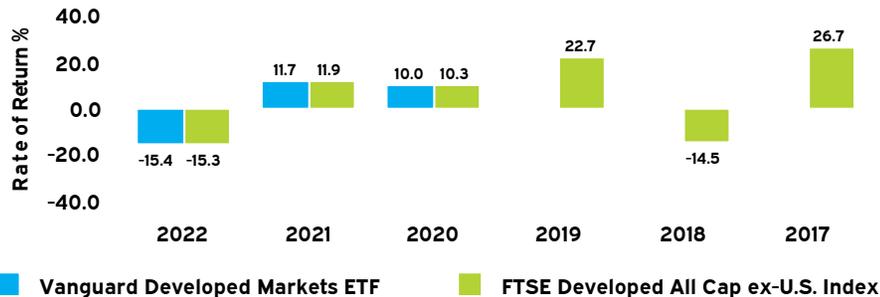
Trailing Performance (Net of Fees)



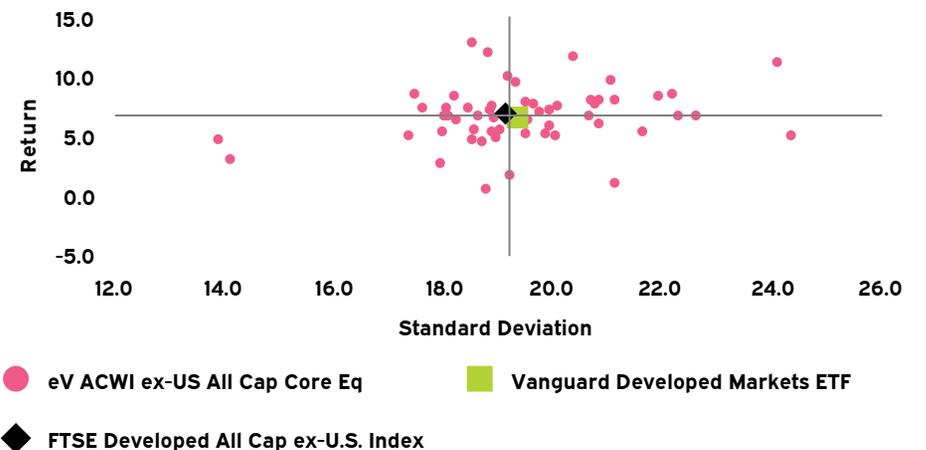
Growth of \$1 - Since Inception



Calendar Year Returns (Net of Fees)



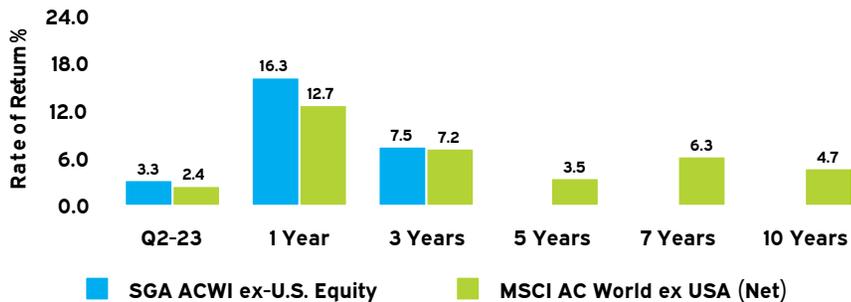
Risk/Return - Since Inception



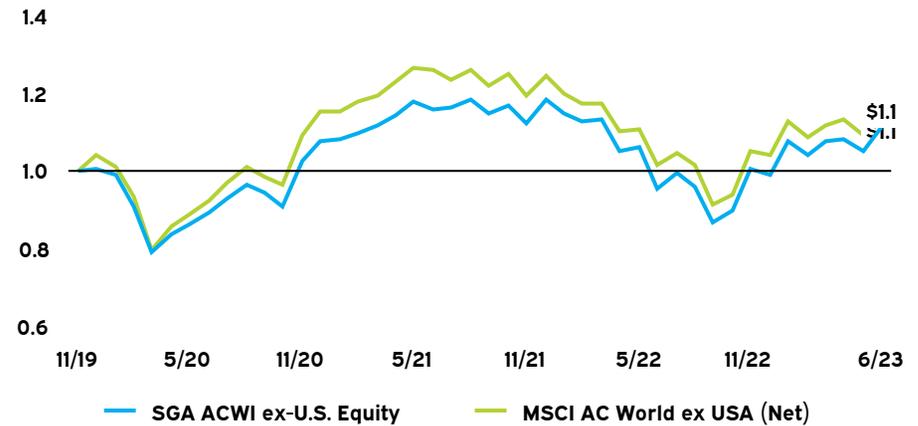
	Anlzd Return	Anlzd Standard Deviation
Vanguard Developed Markets ETF	2.24	3.22
FTSE Developed All Cap ex-U.S. Index	3.15	3.53

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
SGA ACWI ex-U.S. Equity	0.24	1.05	0.29	0.21	0.96	0.93	105.81	86.58
MSCI AC World ex USA (Net)	0.00	1.00	-	0.14	0.00	1.00	100.00	100.00

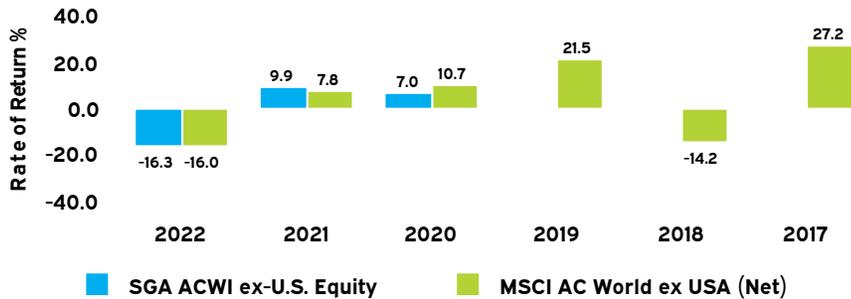
Trailing Performance (Net of Fees)



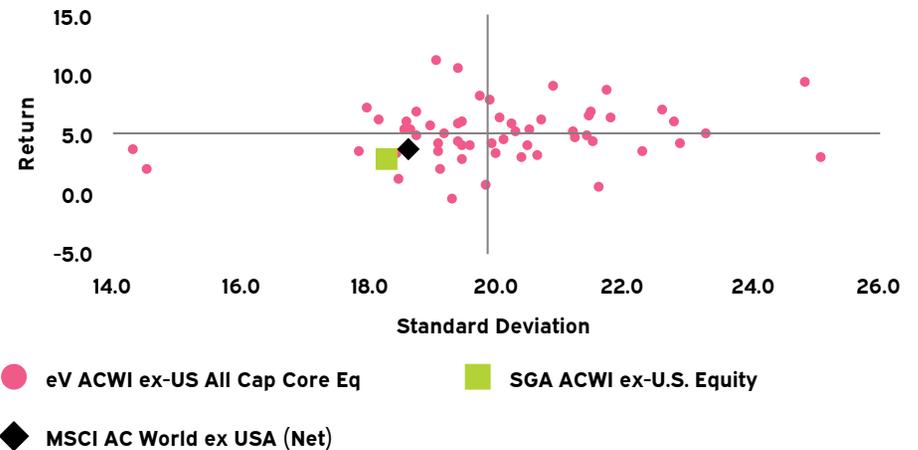
Growth of \$1 - Since Inception



Calendar Year Returns (Net of Fees)



Risk/Return - Since Inception



	Anlzd Return	Anlzd Standard Deviation
SGA ACWI ex-U.S. Equity	3.27	3.68
MSCI AC World ex USA (Net)	2.44	3.37

Account Information

Account Name	Ramirez
Account Structure	Separate Account
Inception Date	01/30/2017
Asset Class	US Fixed Income
Benchmark	Blmbg. U.S. Aggregate Index
Peer Group	eV US Core Fixed Inc

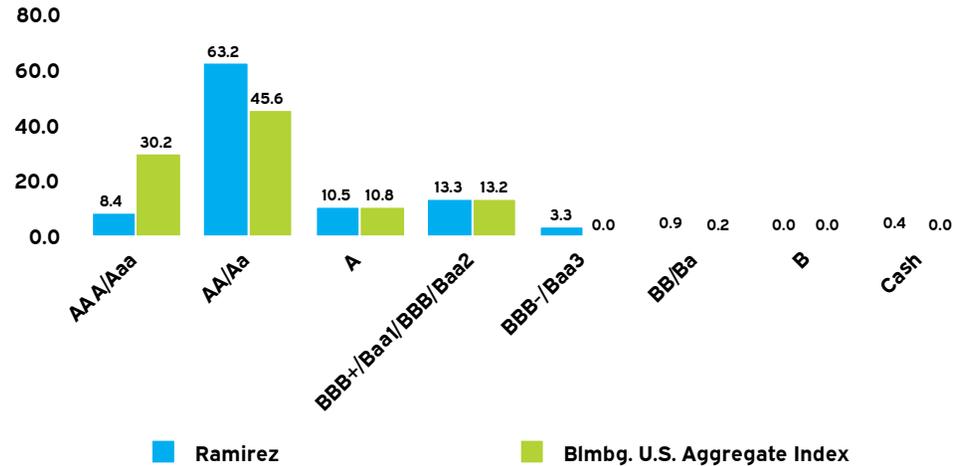
Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Ramirez	-0.6	2.6	-0.4	-2.8	1.0
Blmbg. U.S. Aggregate Index	-0.8	2.1	-0.9	-4.0	0.8

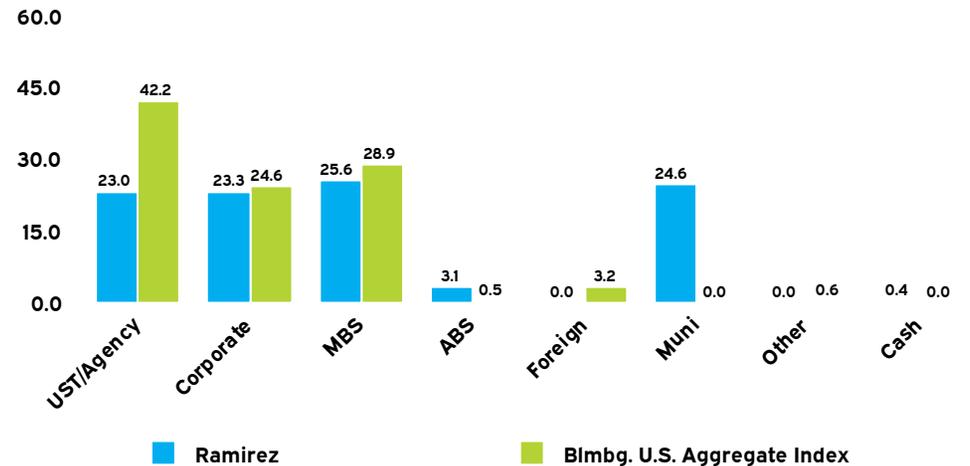
Portfolio Fixed Income Characteristics

	Q2-23 Portfolio	Q1-23 Portfolio
Yield To Maturity	5.1	4.8
Average Duration	6.1	6.0
Average Quality	AA	AA/Aa
Weighted Average Maturity	9.2	9.2

Credit Quality Allocation



Sector Allocation



Account Information

Account Name	Wellington Core Bond
Account Structure	Commingled Fund
Inception Date	04/01/2021
Asset Class	US Fixed Income
Benchmark	Blmbg. U.S. Aggregate Index
Peer Group	eV US Core Fixed Inc

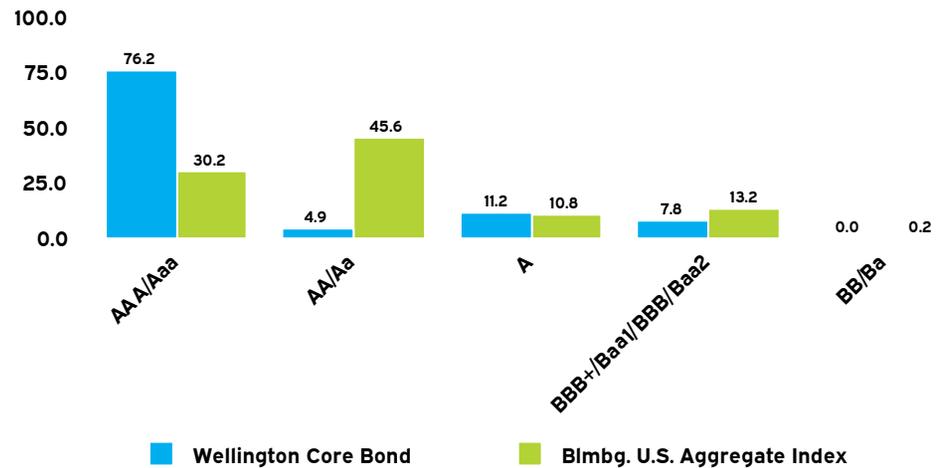
Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Wellington Core Bond	-0.6	3.0	-0.2	-	-
Blmbg. U.S. Aggregate Index	-0.8	2.1	-0.9	-4.0	0.8

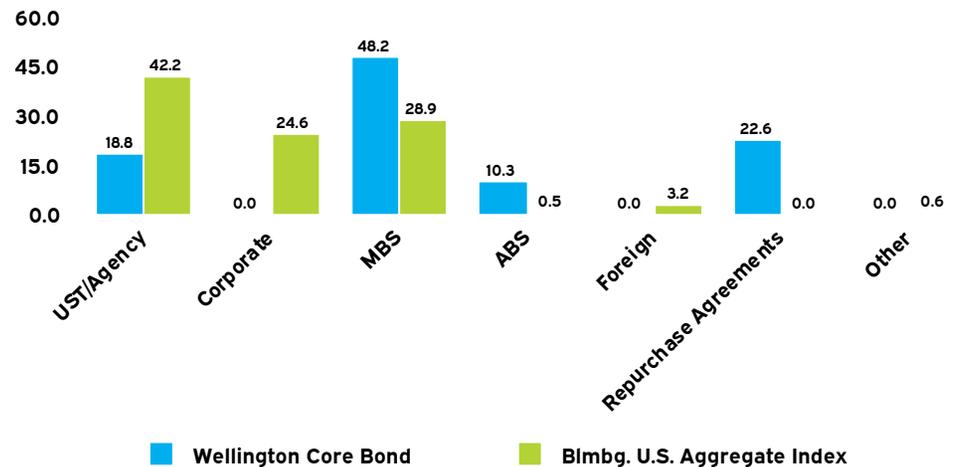
Portfolio Fixed Income Characteristics

	Q2-23 Portfolio	Q1-23 Portfolio
Yield To Maturity	5.3	4.8
Average Duration	6.8	6.9
Average Quality	AA	AA/Aa
Weighted Average Maturity	7.1	-

Credit Quality Allocation



Sector Allocation



Account Information

Account Name	Reams
Account Structure	Separate Account
Inception Date	01/01/1998
Asset Class	US Fixed Income
Benchmark	Bloomberg Universal (Blend)
Peer Group	eV US Core Plus Fixed Inc

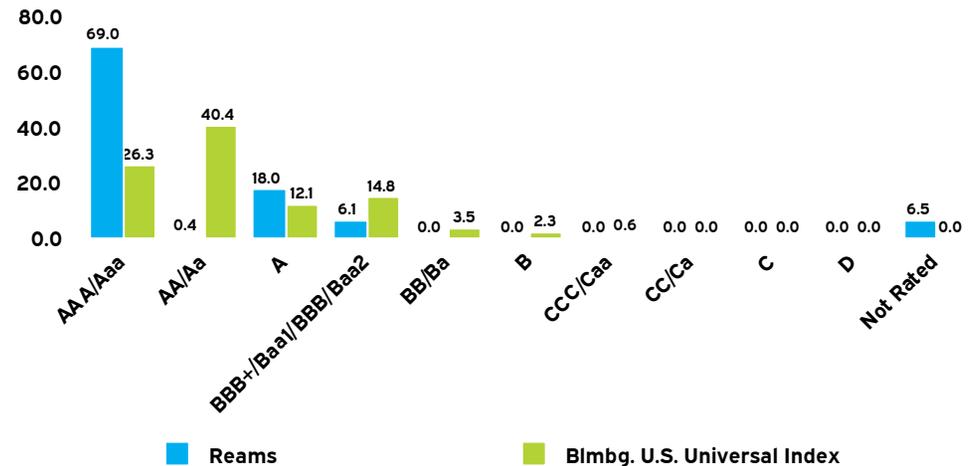
Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Reams	-0.5	3.1	1.1	-2.5	3.4
Bloomberg U.S. Universal Index	-0.6	2.3	0.0	-3.4	1.0

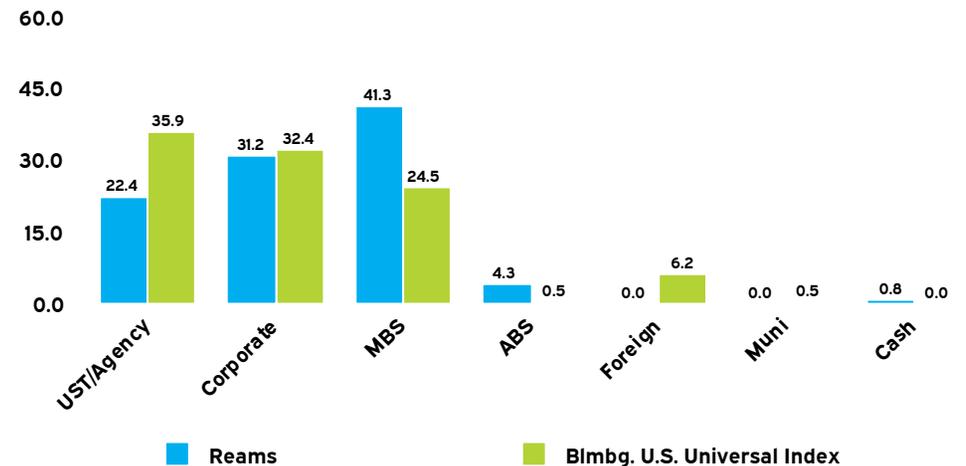
Portfolio Fixed Income Characteristics

	Q2-23 Portfolio	Q1-23 Portfolio
Yield To Maturity	5.5	5.4
Average Duration	6.7	6.4
Average Quality	AA	AA/Aa
Weighted Average Maturity	-	-

Credit Quality Allocation



Sector Allocation



Account Information

Account Name	Polen Capital
Account Structure	Commingled Fund
Inception Date	02/01/2015
Asset Class	US Fixed Income
Benchmark	ICE BofA High Yield Master II
Peer Group	eV US High Yield Fixed Inc

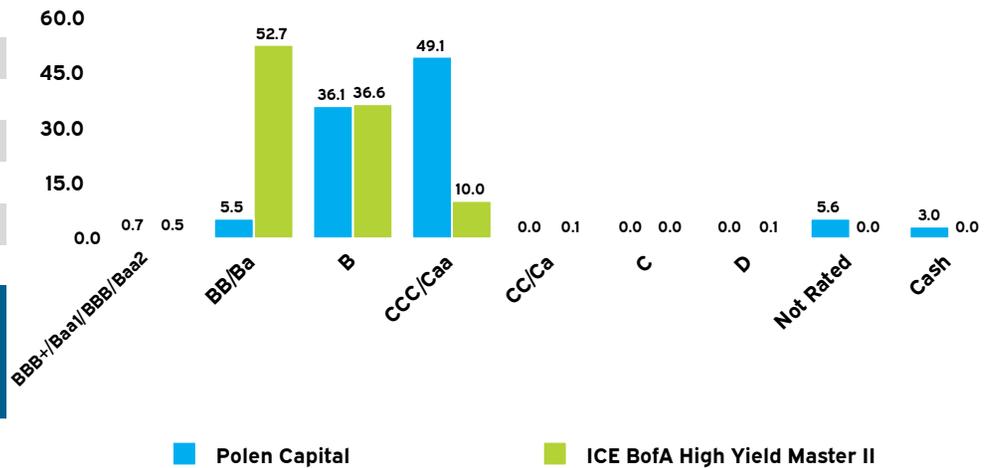
Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Polen Capital	3.3	6.9	8.2	7.2	3.3
ICE BofA High Yield Master II	1.6	5.4	8.9	3.2	3.2

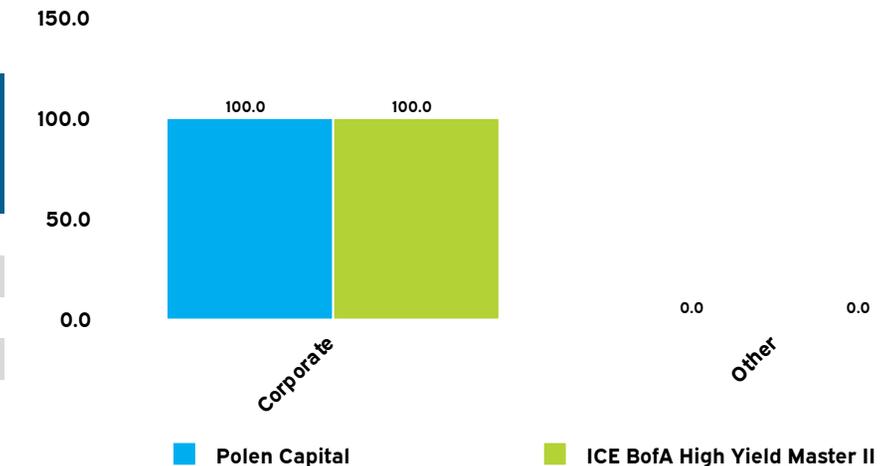
Portfolio Fixed Income Characteristics

	Q2-23 Portfolio	Q1-23 Portfolio
Yield To Maturity	11.0	11.8
Average Duration	1.8	1.8
Average Quality	BBB	CCC/Caa
Weighted Average Maturity	-	-

Credit Quality Allocation



Sector Allocation



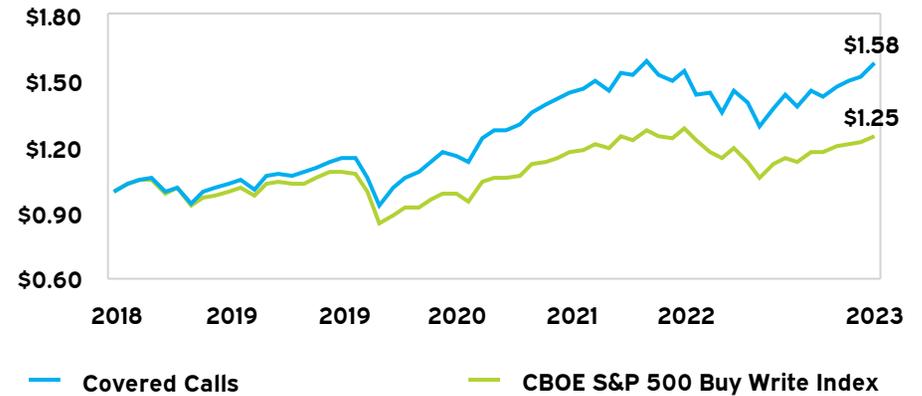
Covered Calls | As of June 30, 2023

	Return	Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Capture	Down Capture	Inception Date
Covered Calls	8.9	11.6	3.0	1.0	0.8	4.0	122.6	105.4	04/01/2014
CBOE S&P 500 Buy Write Index	5.7	10.6	0.0	1.0	-	0.0	100.0	100.0	
Parametric BXM	7.1	9.5	2.1	0.9	0.4	3.2	99.0	87.0	04/01/2014
CBOE S&P 500 Buy Write Index	5.7	10.6	0.0	1.0	-	0.0	100.0	100.0	
Parametric DeltaShift	10.9	13.9	4.2	1.2	0.8	6.2	145.3	121.0	04/01/2014
CBOE S&P 500 Buy Write Index	5.7	10.6	0.0	1.0	-	0.0	100.0	100.0	

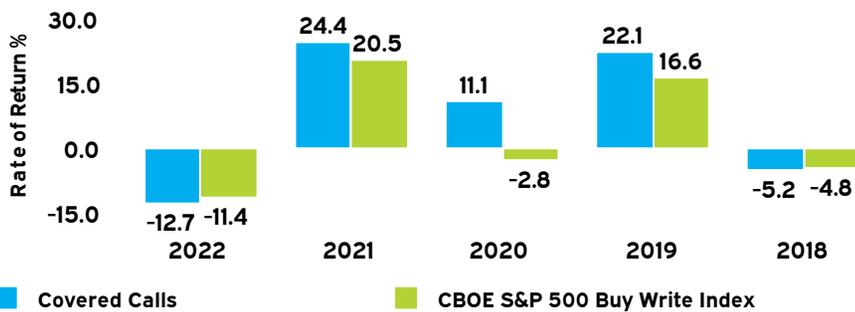
Trailing Period Performance



Growth of a Dollar



Calendar Year Performance



Crisis Risk Offset | As of June 30, 2023

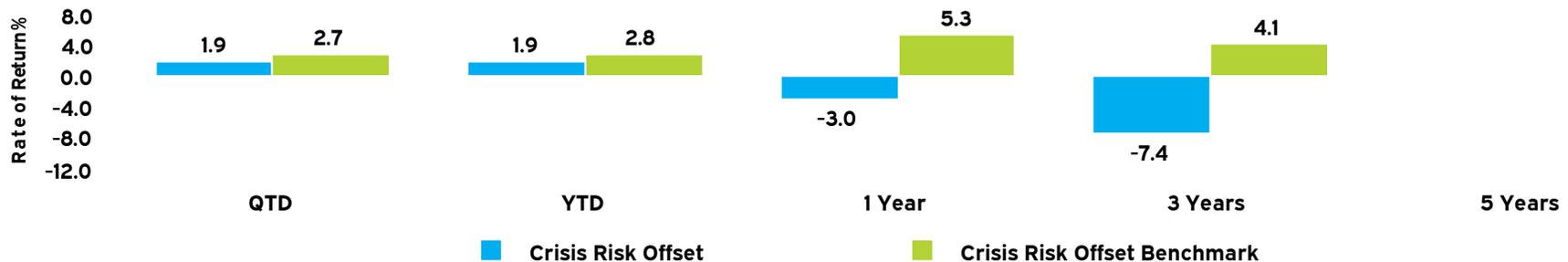
	Return	Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Capture	Down Capture	Inception Date
Crisis Risk Offset	-8.2	11.5	-7.7	0.8	-0.8	10.7	24.3	134.5	08/01/2018
Crisis Risk Offset Benchmark	0.1	5.4	0.0	1.0	-	0.0	100.0	100.0	
Kepos Alternative Risk Premia	3.3	6.0	-0.3	0.7	-0.4	5.0	73.9	82.6	02/01/2022
SG Multi Alternative Risk Premia Index	5.3	5.2	0.0	1.0	-	0.0	100.0	100.0	
Versor Trend Following	2.9	17.4	-4.1	1.2	-0.4	7.0	98.3	116.4	04/01/2022
SG Trend Index	6.6	13.9	0.0	1.0	-	0.0	100.0	100.0	
Vanguard Long-Term Treasury ETF	-4.1	14.6	-0.1	1.0	-0.1	1.2	101.9	102.3	07/01/2019
Blmbg. U.S. Government: Long Term Bond Index	-3.9	14.3	0.0	1.0	-	0.0	100.0	100.0	

Correlation Matrix

3 Months Ending June 30, 2023

	Crisis Risk Offset	MSCI AC World Index Value	S&P 500 Index	Blmbg. Global Aggregate
Crisis Risk Offset	1.00			
MSCI AC World Index Value	1.00	1.00		
S&P 500 Index	0.93	0.89	1.00	
Blmbg. Global Aggregate	0.78	0.83	0.50	1.00

Trailing Period Performance



Benchmark History		
From Date	To Date	Benchmark
OPFRS Total Plan		
06/01/2022	Present	40.0% Russell 3000 Index, 12.0% MSCI AC World ex USA (Net), 31.0% Blmbg. U.S. Universal Index, 2.0% Blmbg. U.S. Corp: High Yield Index, 5.0% CBOE S&P 500 Buy Write Index, 10.0% Crisis Risk Offset Benchmark
01/01/2019	06/01/2022	40.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 31.0% Blmbg. U.S. Universal Index, 5.0% CBOE S&P 500 Buy Write Index, 2.0% Blmbg. U.S. Treasury: Long, 10.0% Crisis Risk Offset Benchmark
05/01/2016	01/01/2019	48.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 20.0% Blmbg. U.S. Universal Index, 20.0% CBOE BXM
10/01/2015	05/01/2016	43.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 20.0% Blmbg. U.S. Universal Index, 15.0% CBOE BXM, 10.0% CPI - All Urban Consumers (unadjusted) +3%
01/01/2014	10/01/2015	48.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 20.0% Blmbg. U.S. Universal Index, 10.0% CBOE BXM, 10.0% CPI - All Urban Consumers (unadjusted) +3%
03/01/2013	01/01/2014	40.0% Russell 3000 Index, 10.0% MSCI AC World ex USA index, 17.0% Blmbg. U.S. Universal Index, 33.0% ICE BofA 3 Month U.S. T-Bill
08/01/2012	03/01/2013	20.0% Russell 3000 Index, 7.0% MSCI AC World ex USA index, 18.0% Blmbg. U.S. Universal Index, 55.0% ICE BofA 3 Month U.S. T-Bill
10/01/2007	08/01/2012	53.0% Russell 3000 Index, 17.0% MSCI AC World ex USA index, 30.0% Blmbg. U.S. Universal Index
04/01/2006	10/01/2007	35.0% Russell 3000 Index, 15.0% MSCI AC World ex USA index, 50.0% Blmbg. U.S. Universal Index
01/01/2005	04/01/2006	35.0% Russell 3000 Index, 50.0% Blmbg. U.S. Aggregate Index, 15.0% MSCI AC World ex USA index
04/01/1998	01/01/2005	20.0% Russell 1000 Value Index, 10.0% Russell 1000 Index, 5.0% Russell Midcap Index, 50.0% Blmbg. U.S. Aggregate Index, 15.0% MSCI EAFE (Net)
09/01/1988	04/01/1998	40.0% S&P 500 Index, 55.0% Blmbg. U.S. Aggregate Index, 5.0% FTSE 3 Month T-Bill

Benchmark History

From Date	To Date	Benchmark
Domestic Equity		
01/01/2005	Present	100.0% Russell 3000 Index
04/01/1998	01/01/2005	57.1% Russell 1000 Value Index, 28.6% Russell 1000 Index, 14.3% Russell Midcap Index
09/01/1988	04/01/1998	100.0% S&P 500 Index
International Equity		
01/01/2005	Present	100.0% MSCI AC World ex USA (Net)
01/01/1998	01/01/2005	100.0% MSCI EAFE Index
Fixed Income		
04/01/2006	Present	100.0% Blmbg. U.S. Universal Index
01/01/1976	04/01/2006	100.0% Blmbg. U.S. Aggregate Index
Covered Calls		
03/01/2014	Present	CBOE S&P 500 Buy Write Index
Crisis Risk Offset		
01/01/2023	Present	33.3% SG Trend Index, 33.3% SG Multi Alternative Risk Premia Index, 33.3% Blmbg. U.S. Government: Long Term Bond Index
08/01/2018	01/01/2023	100.0% SG Multi Alternative Risk Premia Index
Cash		
03/01/2011	Present	FTSE 3 Month T-Bill

Manager Monitoring / Probation Status

Manager Monitoring / Probation Status

Managers on Watch

- The following managers have breached the short-term investment performance criteria as of June 30, 2023.

Manager	Asset Class	Short-term Criteria	Medium-term Criteria	Long-term Criteria	Recommend Probation?
EARNEST Partners	Active Domestic Equity	Breached	Passed	Passed	No
Wellington Select Quality Equity	Active Domestic Equity	Breached	Not enough history	Not enough history	No
Rice Hall James	Active Domestic Equity	Breached	Passed	Passed	No

Managers on Probation Status

There are no managers currently on probation.

Investment Performance Criteria for Manager Monitoring / Probation Status

Asset Class	Short-term (Rolling 12 months)	Medium-term (Rolling 36 months)	Long-term (60 + months)
Active Domestic Equity	Fund return < benchmark return by 3.5%	Annualized Fund return < benchmark return by 1.75% for 6 consecutive months	VRR ¹ < 0.97 for 6 consecutive months
Active International Equity	Fund return < benchmark return by 4.5%	Annualized Fund return < benchmark return by 2.0% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
Passive International Equity	Tracking Error > 0.50%	Tracking Error > 0.45% for 6 consecutive months	Annualized Fund return < benchmark return by 0.4% for 6 consecutive months
Fixed Income	Fund return < benchmark return by 1.5%	Annualized Fund return < benchmark return by 1.0% for 6 consecutive months	VRR < 0.98 for 6 consecutive months

¹ VRR (Value Relative Ratio) is calculated as manager cumulative return/ benchmark cumulative return.

Additional Information

Additional Information

Performance Return Types: Performance shown is net of fees, except for OPFRS Total Plan, Domestic Equity, and International Equity Composites, which have a mix of gross and net of fees performance. Performance shown for OPFRS Total Plan and International Equity composite is gross of fees prior to January 2016. Performance shown for Domestic Equity composite is gross of fees prior to January 2017.

Inception Date: Since inception date and performance begin in the month following an investments initial funding.

Fiscal Year: Fiscal year begins on July 1.

Fair Value Pricing Methodology: Though Vanguard Developed Markets ETF is a passive strategy, short-term performance may appear to diverge from the index it tracks more than would be expected. This is due to Fair Value Pricing (FVP) adjustments that address the pricing discrepancies that may arise from time-zone differences among global securities markets. The resulting temporary divergence is expected to correct itself when the foreign markets reopen.

Disclaimer, Glossary, and Notes

WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM," "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

Credit Risk: Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security.)

Duration: Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

Information Ratio: This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

Jensen's Alpha: A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk. $\text{Portfolio Return} - [\text{Risk Free Rate} + \text{Beta} * (\text{market return} - \text{Risk Free Rate})]$.

Market Capitalization: For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

Market Weighted: Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

Maturity: The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.

Prepayment Risk: The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

Price-Book Value (P/B) Ratio: The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

Price-Earnings (P/E) Ratio: A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about its future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

Quality Rating: The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

Sharpe Ratio: A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

STIF Account: Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

Standard Deviation: A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

Style: The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

Tracking Error: A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark, as defined by the difference in standard deviation.

Yield to Maturity: The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a “basis book.” For example, a 5% bond pays \$5 a year interest on each \$100 par value. To figure its current yield, divide \$5 by \$95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay \$100 for the bond that can be bought now for \$95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

$$\frac{5\% \text{ (discount)}}{5 \text{ (yrs. to maturity)}} = 1\% \text{ pro rata, plus } 5.26\% \text{ (current yield)} = 6.26\% \text{ (yield to maturity)}$$

Yield to Worst: The lowest potential yield that can be received on a bond without the issuer actually defaulting. The yield to worst is calculated by making worst-case scenario assumptions on the issue by calculating the returns that would be received if provisions, including prepayment, call, or sinking fund, are used by the issuer.

NCREIF Property Index (NPI): Measures unleveraged investment performance of a very large pool of individual commercial real estate properties acquired in the private market by tax-exempt institutional investors for investment purposes only. The NPI index is capitalization-weighted for a quarterly time series composite total rate of return.

NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE): Measures the investment performance of 28 open-end commingled funds pursuing a core investment strategy that reflects funds' leverage and cash positions. The NFI-ODCE index is equal-weighted and is reported gross and net of fees for a quarterly time series composite total rate of return.

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999.

The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991

The Russell Indices®, TM, SM are trademarks/service marks of the Frank Russell Company.

Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.

MEMORANDUM

TO: Oakland Police and Fire Retirement System (OPFRS)
FROM: Meketa Investment Group (Meketa)
DATE: August 30, 2023
RE: Asset Liability Project

Meketa recommend that clients conduct asset-liability analyses every three to five years, or when major changes in plan provisions occur. The previous study for the Oakland Police and Fire Retirement System pension plan (“the Plan”) was completed in 2017.

Due to the period of time that has passed since the most recent asset-liability study, Meketa recommends that a new study be conducted for OPFRS. The purpose of the study would be to review the current strategic investment allocation of the Plan, given its projected future benefit obligations and the current financial risks and opportunities, in order to provide relevant information and advice to decision makers to make decisions regarding the future strategic investment allocation for the Plan.

After reviewing and discussing the above issues, Meketa proposes a fee of \$40,000 for this project, based on a scope of work that entails the following:

Scope of Work

Through our experience of conducting numerous asset-liability projects, we believe that the Plan’s asset-liability study would include the following tasks:

- Fact finding to develop appropriate inputs for the asset-liability study;
- Gather / update member, financial, and plan benefit data to use in modeling;
- Provide an overview to the Board, regarding the asset-liability modeling process, Meketa’s current capital market assumptions, and the Plan’s current allocation;
- Work with OPFRS staff to review the appropriateness of the strategic investment classes, and present proposed classes and their assumptions to the Board;
- Review and adopt decision factors and modeling constraints;
- Create and test the asset-liability model;
- Review model output with the Board, lead discussion and deliberation, guide the process towards selection of a revised forward-looking strategic allocation.

We anticipate these steps would take significant time during the upcoming 2023 board meetings, and the project would be completed over the next three to four Board meetings.

MEMORANDUM

TO: Oakland Police and Fire Retirement System (OPFRS)
FROM: Meketa Investment Group (Meketa)
DATE: August 30, 2023
RE: 2023 Ongoing Strategic Investment Agenda

On an ongoing (monthly) basis, Meketa develops a list of projects that we expect to work closely with OPFRS to complete over throughout the calendar year (see table below). In an attempt to coordinate the scheduling of these tasks, this memo details a Preliminary Investment Project Agenda by calendaring and prioritizing the expected tasks and deliverables that would be required to fulfill the Agenda. Meketa welcomes any suggestions and/or modifications to the proposed timeline.

2023 Preliminary Investment Project Agenda

Expected Completion Date	Task
September 2023	Flash Performance Report (2023 Aug) Cash Flow Report (4Q 2023) Manager Update: Versor Thermal Coal List Update: 2023
October 2023	Flash Performance Report (2023 Sep) Manager Update: Parametric Contract Renewal: Parametric
November 2023	Flash Performance Report (2023 Oct) Quarterly Performance Report (3Q 2023) Manager Update: Ramirez Contract Renewal: Ramirez
December 2023	Flash Performance Report (2023 Nov) Cash Flow Report (1Q 2024) Manager Update: Strategic Global Advisors

This agenda includes only major strategic items. Meketa also expects to work with the Staff and Board to complete more routine tasks and projects, as expected.

DS/PN/JLC/mn

Pursuant to California Government Code section 54953(e), the Oakland Police & Fire Retirement System Board and Committee Members, as well as City staff, will participate via phone/video conference, and no physical teleconference locations are required.

Please see the agenda to participate in the meeting. For additional information, contact the Retirement Unit by calling (510) 238-7295.



Retirement Unit
150 Frank H. Ogawa Plaza
Oakland, California 94612

AGENDA

RETIREMENT BOARD MEMBERS

Walter L. Johnson, Sr.
President

Jaime T. Godfrey
Vice President

Martin J. Melia
Member

Robert W. Nichelini
Member

John C. Speakman
Member

R. Steven Wilkinson
Member

Erin Roseman
Member

CLOSED SESSION of the BOARD OF ADMINISTRATION of the OAKLAND POLICE AND FIRE RETIREMENT SYSTEM (“PFRS”)

WEDNESDAY, AUGUST 30, 2023
DURING REGULAR MEETING SCHEDULED TO START AT 11:30 AM
ONE FRANK H. OGAWA PLAZA, CAUCUS ROOM, 3RD FLOOR, ROOM 336
OAKLAND, CA 94612

OBSERVE

- To observe the meeting by video conference, please click on this link: <https://us02web.zoom.us/j/82880493983> at the noticed meeting time.
- To listen to the meeting by phone, please call the numbers below at the noticed meeting time: Dial (for higher quality, dial a number based on your current location):
- iPhone one-tap: US: +16699006833, 82880493983# or +13462487799, 82880493983#
- US: +1 669 900 6833 or +1 346 248 7799 or +1 253 215 8782 or +1 301 715 8592 or +1 312 626 6799 or +1 929 205 6099
- International numbers available: <https://us02web.zoom.us/j/82880493983>
- Webinar ID: 828 8049 3983.
- If asked for a participant ID or code, press #.

PUBLIC COMMENTS

There are two ways to submit public comments.

- **Speaker Card:** All persons wishing to address the Board must complete a speaker’s card, stating their name and the agenda item they wish to address, including “Open Forum”.
- **eComment:** To send your comment directly to staff BEFORE the meeting starts, please email to mvisaya@oaklandca.gov with “PFRS Board Meeting Public Comment” in the subject line for the corresponding meeting. Please note that eComment submission **closes two (2) hours before posted meeting time.**

If you have any questions, please email Maxine Visaya, Administrative Assistant II, at mvisaya@oaklandca.gov

ORDER OF BUSINESS

**THE PFRS BOARD WILL MEET IN CLOSED SESSION
DURING ITS SCHEDULED BOARD MEETING**

Please see the meeting agenda for open session items. The board will convene in open session prior to the closed session. Speakers may address the items of business on the closed session agenda prior to closed session. The Board will reconvene in open session following the closed session to report any final decisions that the board makes in closed session.

Pursuant to California Government code Sections 54956.9(a) and 54956.9(d)(2):

- 1. REQUEST FOR AMENDMENTS TO JANUARY 29, 2020 SETTLEMENT AGREEMENTS OF RETIRED OAKLAND POLICE OFFICERS ASSOCIATION (ROPOA), PFRS AND CITY OF OAKLAND FOR ADDITIONAL HOLIDAY PAY AND EXTENSION OF TERMS – *POTENTIAL LITIGATION***

Retired Oakland Police Officers Association *Potential Plaintiff/Claimant*

Due to the termination of the statewide COVID-19 State of Emergency by the Governor of California, effective March 1, 2023, all meetings of the Oakland Police & Fire Retirement System Board and its Committees will be conducted in person.

Meetings are held in wheelchair accessible facilities.

The Board may take action on items not on the agenda only if findings pursuant to the Sunshine Ordinance and Brown Act are made that the matter is urgent or an emergency.

For additional information, contact the Retirement Unit by calling (510) 238-7295. or send an email to mvisaya@oaklandca.gov



Retirement Unit
150 Frank H. Ogawa Plaza
Oakland, California 94612

AGENDA

RETIREMENT BOARD MEMBERS

Walter L. Johnson, Sr.
President

Jaime T. Godfrey
Vice President

Martin J. Melia
Member

Robert W. Nichelini
Member

John C. Speakman
Member

R. Steven Wilkinson
Member

Erin Roseman
Member

REGULAR MEETING of the BOARD OF ADMINISTRATION of the OAKLAND POLICE AND FIRE RETIREMENT SYSTEM (“PFRS”)

WEDNESDAY, AUGUST 30, 2023

11:30 AM

**ONE FRANK H. OGAWA PLAZA, HEARING ROOM 1
OAKLAND, CA 94612**

OBSERVE

- To observe the meeting by video conference, please click on this link: <https://us02web.zoom.us/j/82880493983> at the noticed meeting time.
- To listen to the meeting by phone, please call the numbers below at the noticed meeting time: Dial (for higher quality, dial a number based on your current location):
- iPhone one-tap: US: +16699006833, 82880493983# or +13462487799, 82880493983#
- US: +1 669 900 6833 or +1 346 248 7799 or +1 253 215 8782 or +1 301 715 8592 or +1 312 626 6799 or +1 929 205 6099
- International numbers available: <https://us02web.zoom.us/j/82880493983>
- Webinar ID: 828 8049 3983.
- If asked for a participant ID or code, press #.

PUBLIC COMMENTS

There are two ways to submit public comments.

- **Speaker Card:** All persons wishing to address the Board must complete a speaker’s card, stating their name and the agenda item they wish to address, including “Open Forum”.
- **eComment:** To send your comment directly to staff BEFORE the meeting starts, please email to mvisaya@oaklandca.gov with “PFRS Board Meeting Public Comment” in the subject line for the corresponding meeting. Please note that eComment submission **closes two (2) hours before posted meeting time.**

If you have any questions, please email Maxine Visaya, Administrative Assistant II at mvisaya@oaklandca.gov

ORDER OF BUSINESS

A. CLOSED SESSION

B. REPORT OF PFRS BOARD ACTION FROM CLOSED SESSION (IF ANY)

C. **Subject:** POLICE AND FIRE RETIREMENT SYSTEM (“PFRS”) BOARD OF ADMINISTRATION MEETING MINUTES

From: Staff of the PFRS Board

Recommendation: **APPROVE** the July 26, 2023 PFRS Board of Administration Meeting Minutes

D. **AUDIT & OPERATIONS COMMITTEE AGENDA – AUGUST 30, 2023**

D1. **Subject:** ADMINISTRATIVE EXPENSES REPORT

From: Staff of the PFRS Board

Recommendation: **ACCEPT** informational report regarding PFRS administrative expenses as of June 30, 2023

D2. **Subject:** ELECTION OF A 5-YEAR RETIRED POLICE REPRESENTATIVE BOARD POSITION

From: Staff of the PFRS Board

Recommendation: **ACCEPT** an informational report regarding nominations for the 5-Year Retired Police Representative Board Position

D3. **Subject:** PFRS MEMBER VERIFICATION 2023

From: Staff of the PFRS Board

Recommendation: **ACCEPT** an informational report regarding the status of the 2023 PFRS Member Verification project

D4. **Subject:** REIMBURSEMENT OF PENSION PAYMENTS NOT RECEIVED BY PFRS MEMBER DUE TO FRAUD

From: Staff of the PFRS Board

Recommendation: **ACCEPT** an informational report regarding pension payments not received by a PFRS Member due to fraud and **APPROVE** to reimburse the affected PFRS member for the fraudulently diverted funds

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
REGULAR BOARD MEETING
AUGUST 30, 2023

E. INVESTMENT & FINANCIAL MATTERS COMMITTEE AGENDA – AUGUST 30, 2023

- E1. **Subject:** INVESTMENT MANAGER PERFORMANCE UPDATE:
WELLINGTON MANAGEMENT
From: Wellington Management
Recommendation: **ACCEPT** informational report regarding a firm overview and managerial assessment; diversity and inclusion policy and practices; and investment strategy and portfolio performance of PFRS' Defensive Equity Investment Strategy Manager Wellington Management
- E2. **Subject:** INVESTMENT MANAGER PERFORMANCE REVIEW:
WELLINGTON MANAGEMENT
From: Meketa Investment Group
Recommendation: **ACCEPT** Meketa Investment Group's review and evaluation regarding a firm overview and managerial assessment; peer ranking; and investment portfolio performance of PFRS' Defensive Equity Investment Strategy Manager Wellington Management
- E3. **Subject:** ECONOMIC AND INVESTMENT MARKET OVERVIEW
AS OF JULY 31, 2023
From: Meketa Investment Group
Recommendation: **ACCEPT** informational report regarding the Global Investment Markets as of July 31, 2023
- E4. **Subject:** PRELIMINARY INVESTMENT FUND PERFORMANCE UPDATE
AS OF JULY 31, 2023
From: Meketa Investment Group
Recommendation: **ACCEPT** informational report regarding the Preliminary Investment Fund Performance Update as of July 31, 2023
- E5. **Subject:** INVESTMENT FUND QUARTERLY PERFORMANCE UPDATE
From: Meketa Investment Group
Recommendation: **ACCEPT** the Investment Fund Quarterly Performance Update as of June 30, 2023
- E6. **Subject:** PROPOSAL TO PERFORM AN ASSET-LIABILITY STUDY OF
THE PFRS FUND AT AN ESTIMATED COST OF \$40,000
From: Meketa Investment Group
Recommendation: **APPROVE** proposal to perform an Asset-Liability Study of the PFRS Fund at an estimated cost of \$40,000

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
 REGULAR BOARD MEETING
 AUGUST 30, 2023**

F. Subject: MEMBER RESOLUTIONS NOS. 8082 – 8083
From: Staff of the PFRS Board

Recommendation: APPROVE Member Resolution Nos. 8082 – 8083

**F1. RESOLUTION
 NO. 8082**

Resolution fixing the monthly allowance of the surviving spouse of the following retired members of the Oakland Police and Fire Retirement System in the amount indicated:

<u>Deceased Member</u>	<u>Surviving Spouse</u>	<u>Monthly Allowance</u>
▪ John K. Baker	Nancy Baker	\$11,742.67
▪ Richard L. Bowser	Connie L. Bowser	\$4,433.21
▪ Richard F. Cecil	Carol Cecil	\$4,651.01

**F2. RESOLUTION
 NO. 8083**

Resolution approving death benefit payments and directing warrants thereunder in the total sum of \$1,000.00 payable to the beneficiary of the following deceased members of the Oakland Police and Fire Retirement System:

- Richard E. Castle
- Jimmie D. Thompson

G. PENDING ITEMS: NONE

H. NEW BUSINESS

I. OPEN FORUM

J. FUTURE SCHEDULING: DISCUSS November & December 2023 meeting dates in consideration of upcoming holidays

K. ADJOURNMENT

A MEETING OF THE OAKLAND POLICE AND FIRE RETIREMENT SYSTEM (“PFRS”) BOARD OF ADMINISTRATION was held on Wednesday, July 26, 2023, at One Frank H. Ogawa Plaza, Hearing Room 1, Oakland, CA.

- | | | |
|-----------------------|-----------------------|---|
| Board Members: | ▪ Walter L. Johnson | President |
| | ▪ Jaime T. Godfrey | Vice President |
| | ▪ Martin J. Melia | Member |
| | ▪ Robert W. Nichelini | Member |
| | ▪ Erin Roseman | Member (Excused) |
| | ▪ John C. Speakman | Member (Excused) |
| | ▪ R. Steven Wilkinson | Member (Excused) |
| Additional Attendees: | ▪ David F. Jones | PFRS Secretary & Plan Administrator (Excused) |
| | ▪ Téir Jenkins | PFRS Investment & Operations Manager |
| | ▪ Maxine Visaya | PFRS Staff Member |
| | ▪ Selia Warren | PFRS Legal Counsel |
| | ▪ David Sancewich | Meketa Investment Group |

The meeting was called to order at 11:32 a.m. Pacific

A. APPROVAL OF THE PFRS BOARD OF ADMINISTRATION MEETING MINUTES

Member Nichelini made a motion to approve the June 28, 2023, Board of Administration Meeting Minutes, second by Member Melia. Motion passed.

[JOHNSON: Y / GODFREY: Y / MELIA: Y / NICHELINI: Y / ROSEMAN: EXCUSED / SPEAKMAN: EXCUSED / WILKINSON: EXCUSED]
(AYES: 4 / NOES: 0 / ABSENT: 0 / ABSTAIN: 0 / EXCUSED: 3)

B. AUDIT AND OPERATIONS COMMITTEE AGENDA – JULY 26, 2023

B1. ADMINISTRATIVE EXPENSES REPORT

Investment & Operations Manager Jenkins presented an informational report on PFRS’ administrative expenditures as of May 31, 2023. PFRS has an approved annual budget of approximately \$3.6 million and have expensed approximately \$2.2 million to date for fiscal year 2022/2023. Membership consisted of 656 retired members and beneficiaries, which included 406 Police Members and 250 Fire Members.

MOTION: Member Nichelini made a motion to accept the informational report regarding the Administrative Expenses Report, second by Member Melia. Motion passed.

[JOHNSON: Y / GODFREY: Y / MELIA: Y / NICHELINI: Y / ROSEMAN: EXCUSED / SPEAKMAN: EXCUSED / WILKINSON: EXCUSED]
(AYES: 4 / NOES: 0 / ABSENT: 0 / ABSTAIN: 0 / EXCUSED: 3)

B2. REAPPOINTMENT OF WALTER L. JOHNSON, SR. TO THE PFRS BOARD AS COMMUNITY REPRESENTATIVE

President Johnson presented an informational report regarding the reappointment of Walter L. Johnson, Sr. to continue to serve the PFRS Board as Community Representative for a 5-year term commencing May 2, 2023 and ending May 1, 2028

MOTION: Member Nichelini made a motion to accept the informational report regarding the reappointment of Walter L. Johnson, Sr., second by Member Melia. Motion passed.

[JOHNSON: Y / GODFREY: Y / MELIA: Y / NICHELINI: Y / ROSEMAN: EXCUSED / SPEAKMAN: EXCUSED / WILKINSON: EXCUSED]
(AYES: 4 / NOES: 0 / ABSENT: 0 / ABSTAIN: 0 / EXCUSED: 3)

B3. REAPPOINTMENT OF JAMIE T. GODFREY. TO THE PFRS BOARD AS BANKING REPRESENTATIVE

President Johnson presented an informational report regarding the reappointment of Jamie T. Godfrey to continue to serve the PFRS Board as Banking Representative for a 5-year term commencing June 23, 2023 and ending June 22, 2028.

MOTION: Member Melia made a motion to accept the informational report regarding the Administrative Expenses Report, second by Member Nichelini. Motion passed.

[JOHNSON: Y / GODFREY: Y / MELIA: Y / NICHELINI: Y / ROSEMAN: EXCUSED / SPEAKMAN: EXCUSED / WILKINSON: EXCUSED]
(AYES: 4 / NOES: 0 / ABSENT: 0 / ABSTAIN: 0 / EXCUSED: 3)

C. INVESTMENT & FINANCIAL MATTERS COMMITTEE AGENDA – JULY 26, 2023

c1. INVESTMENT MANAGER PERFORMANCE UPDATE: KEPOS CAPITAL, LP

Vice President Godfrey presented a brief overview of the presentation provided by Kepos Capital, LP (Kepos) regarding a firm overview and managerial assessment; diversity and inclusion policy and practices; and investment strategy and portfolio performance of PFRS' Alternative Risk Premia Investment Strategy and noted they have performed well and Meketa will follow-up with the firm regarding diversity & inclusion.

MOTION: Vice President Godfrey made a motion to accept the informational report provided by Kepos, second by Member Melia. Motion passed.

[JOHNSON: Y / GODFREY: Y / MELIA: Y / NICHELINI: Y / ROSEMAN: EXCUSED / SPEAKMAN: EXCUSED / WILKINSON: EXCUSED]
(AYES: 4 / NOES: 0 / ABSENT: 0 / ABSTAIN: 0 / EXCUSED: 3)

c2. INVESTMENT MANAGER PERFORMANCE REVIEW: BROWN ADVISORY, LLC

David Sancewich of Meketa Investment Group (“Meketa”) presented an overview memo regarding a firm overview and managerial assessment; peer ranking; and investment portfolio performance of Kepos, PFRS’ Alternative Risk Premia Investment Strategy Manager. D. Sancewich advised Kepos has performed well and Meketa will follow-up with Kepos regarding their diversity policy and practices.

MOTION: Vice President Godfrey made a motion to accept Meketa’s evaluation of Kepos, second by Member Melia. Motion Passed.

[JOHNSON: Y / GODFREY: Y / MELIA: Y / NICHELINI: Y / ROSEMAN: EXCUSED / SPEAKMAN: EXCUSED / WILKINSON: EXCUSED]
(AYES: 4 / NOES: 0 / ABSENT: 0 / ABSTAIN: 0 / EXCUSED: 3)

c3. ECONOMIC AND INVESTMENT MARKET OVERVIEW AS OF JUNE 30, 2023

David Sancewich of Meketa presented an informational report regarding the Economic and Investment Market Overview as of June 30, 2023, and highlighted Index Returns and current factors impacting outcomes.

MOTION: Vice President Godfrey made a motion to accept the informational report provided by Meketa regarding the Economic and Investment Market Overview as of June 30, 2023, second by Member Melia. Motion passed.

[JOHNSON: Y / GODFREY: Y / MELIA: Y / NICHELINI: Y / ROSEMAN: EXCUSED / SPEAKMAN: EXCUSED / WILKINSON: EXCUSED]
(AYES: 4 / NOES: 0 / ABSENT: 0 / ABSTAIN: 0 / EXCUSED: 3)

c4. PRELIMINARY INVESTMENT FUND PERFORMANCE UPDATE AS OF JUNE 30, 2023

David Sancewich of Meketa presented the Preliminary Investment Fund Performance Update as of June 30, 2023 and highlighted the Asset Class Performance Summary.

MOTION: Vice President Godfrey made a motion to accept the informational report provided by Meketa regarding the Preliminary Investment Fund Performance Update as of June 30, 2023, second by Member Melia. Motion Passed.

[JOHNSON: Y / GODFREY: Y / MELIA: Y / NICHELINI: Y / ROSEMAN: EXCUSED / SPEAKMAN: EXCUSED / WILKINSON: EXCUSED]
(AYES: 4 / NOES: 0 / ABSENT: 0 / ABSTAIN: 0 / EXCUSED: 3)

D. PENDING ITEMS

President Johnson noted an update regarding ROPOA’s concerns surrounding the holiday pay settlement agreement will be provided at the next scheduled meeting.

E. NEW BUSINESS – None

F. OPEN FORUM – No Report

G. FUTURE SCHEDULING

The next Regular Board Meeting will be held in-person and is tentatively scheduled to occur August 30, 2023.

H. ADJOURNMENT

Vice President Godfrey made a motion to adjourn, second by Member Nichelini. Motion passed.

[JOHNSON: Y / GODFREY: Y / MELIA: Y / NICHELINI: Y / ROSEMAN: EXCUSED / SPEAKMAN: EXCUSED / WILKINSON: EXCUSED]
(AYES: 4 / NOES: 0 / ABSENT: 0 / ABSTAIN: 0 / EXCUSED: 3)

The meeting adjourned at 11:51 p.m.

TÉIR JENKINS
INVESTMENT & OPERATIONS MANAGER

DATE

DRAFT

Table 1

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Administrative Budget Spent to Date (Preliminary)

As of June 30, 2023

	Approved Budget		June 2023		FYTD		Remaining		Percent Remaining	
Internal Administrative Costs										
PFRS Staff Salaries	\$	1,330,000	\$	107,328	\$	1,184,789	\$	145,211		10.9%
Board Travel Expenditures		52,500		2,240		6,758		45,742		87.1%
Staff Training		20,000		-		-		20,000		100.0%
Staff Training - Tuition Reimbursement		7,500		-		-		7,500		100.0%
Board Hospitality		3,600		1,396		1,636		1,964		54.5%
Payroll Processing Fees		40,000		40,000		40,000		-		0.0%
Miscellaneous Expenditures		45,000		2,242		32,286		12,714		28.3%
Internal Service Fees (ISF)		88,000		-		48,686		39,314		44.7%
Contract Services Contingency		50,000		-		1,500		48,500		97.0%
Internal Administrative Costs Subtotal :	\$	1,636,600	\$	153,207	\$	1,315,656	\$	320,944		19.6%
Actuary and Accounting Services										
Audit	\$	50,500	\$	-	\$	52,600	\$	(2,100)		-4.2%
Actuary		47,900		19,045		43,454		4,446		9.3%
Actuary and Accounting Subtotal:	\$	98,400	\$	19,045	\$	96,054	\$	2,346		2.4%
Legal Services										
City Attorney Salaries	\$	194,000	\$	-	\$	28	\$	193,972		100.0%
Legal Contingency		150,000		-		-		150,000		100.0%
Legal Services Subtotal:	\$	344,000	\$	-	\$	28	\$	343,972		100.0%
Investment Services										
Money Manager Fees	\$	1,353,000	\$	302,139	\$	1,138,923	\$	214,077		15.8%
Custodial Fee		124,000		62,250		122,500		1,500		1.2%
Investment Consultant		100,000		25,000		100,000		-		0.0%
Investment Subtotal:	\$	1,577,000	\$	389,389	\$	1,361,423	\$	215,577		13.7%
Total Operating Budget	\$	3,656,000	\$	561,641	\$	2,773,161	\$	882,839		24.15%

Table 2

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Cash in Treasury (Fund 7100) - Preliminary

As of June 30, 2023

	June 2023
Beginning Cash as of 6/1/2023	\$ 9,393,770
Additions:	
City Pension Contribution - June	\$ 2,726,000
Investment Draw	\$ 2,000,000
Misc. Receipts	10,040
Total Additions:	\$ 4,736,040
Deductions:	
Pension Payment (May Pension Paid on 6/1/2023)	(4,156,448)
Expenditures Paid	(234,593)
Total Deductions	\$ (4,391,042)
 Ending Cash Balance as of 6/30/2023*	 \$ 9,738,769

* On 7/1/2023, June pension payment of appx \$4,132,000 will be made leaving a cash balance of \$5,607,000.

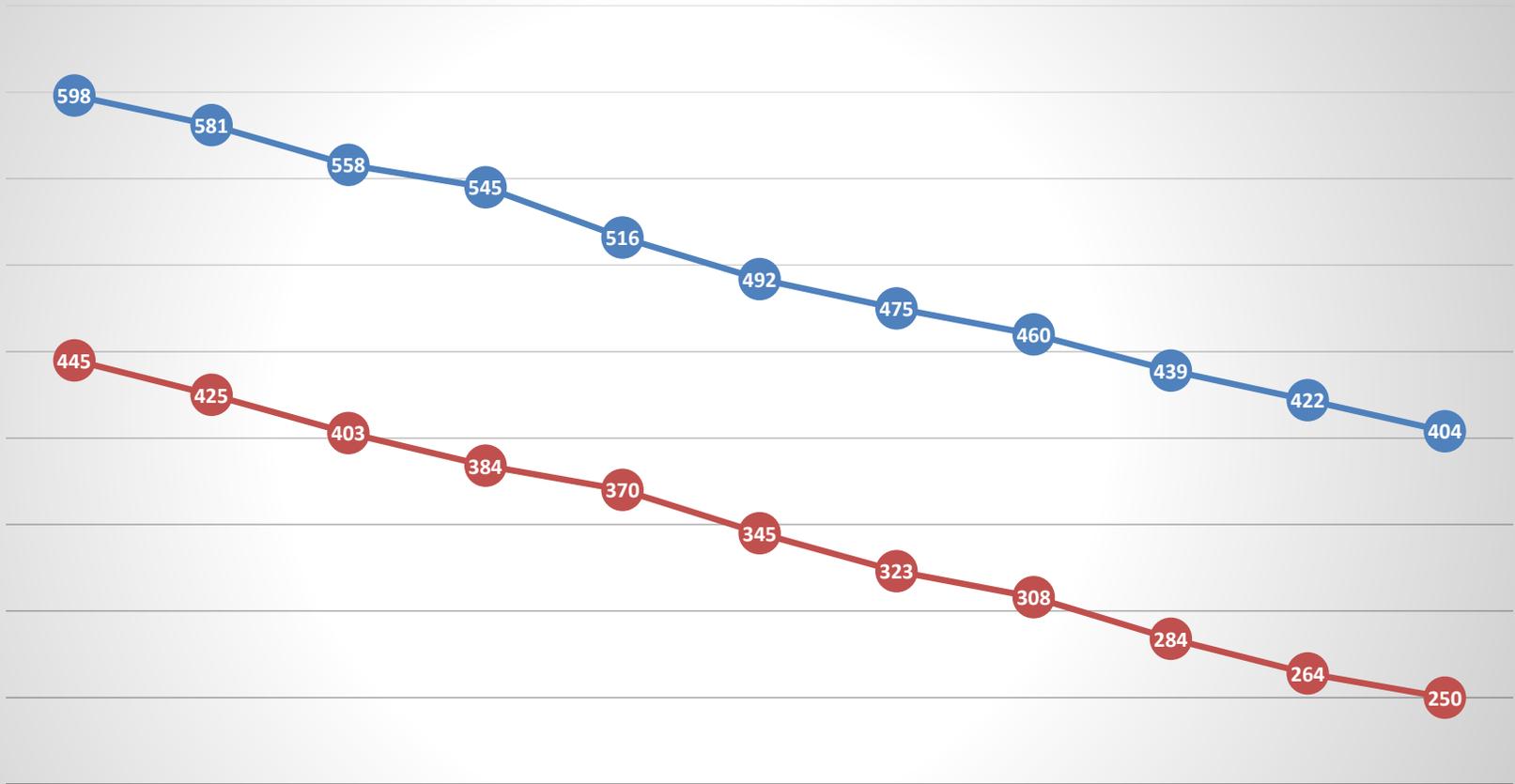
Table 3
CITY OF OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Census
As of June 30, 2023

COMPOSITION	POLICE	FIRE	TOTAL
Retired Member:			
Retiree	277	159	436
Beneficiary	127	91	218
<i>Total Retired Members</i>	404	250	654
<i>Total Membership:</i>	404	250	654

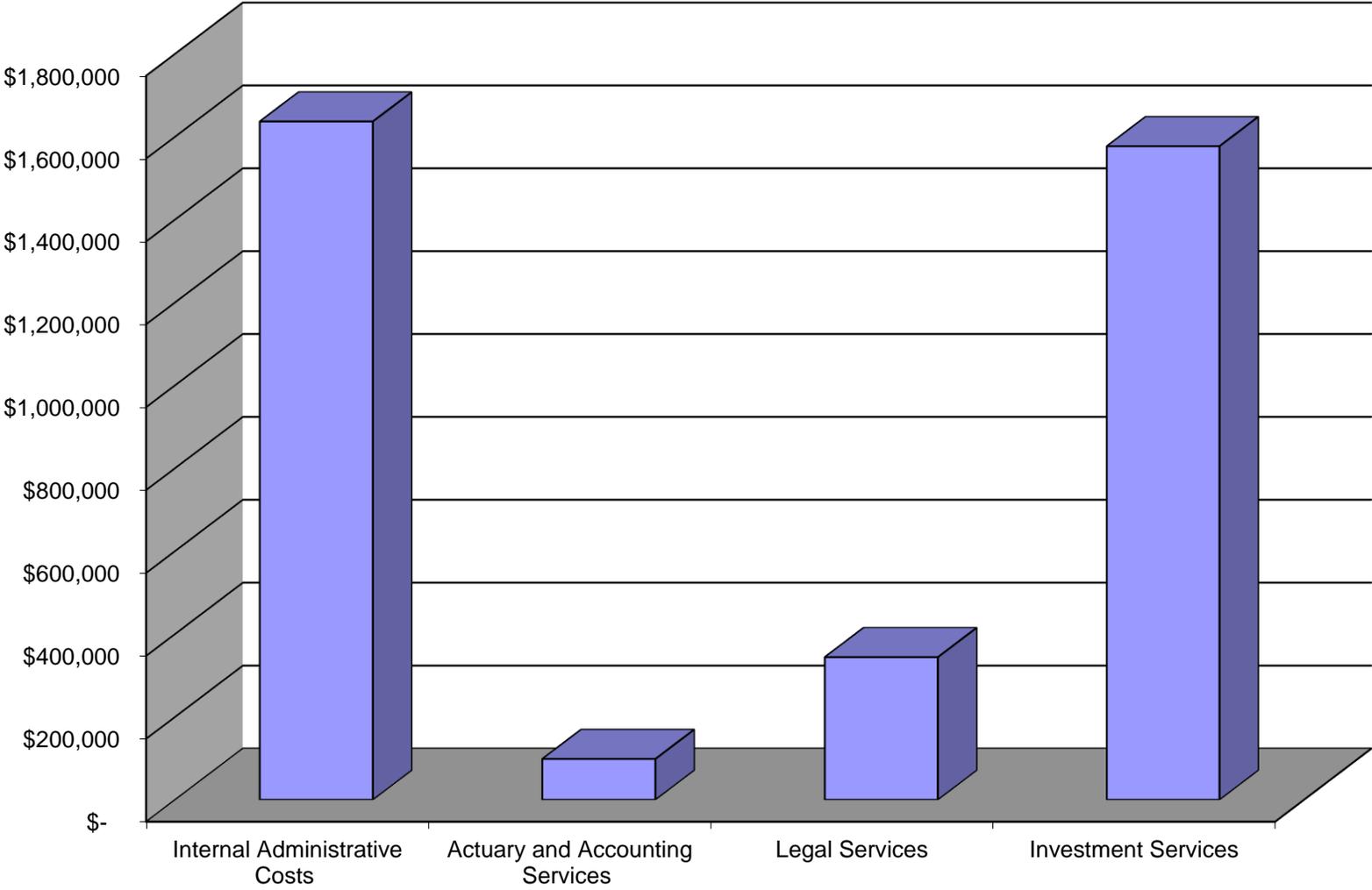
COMPOSITION	POLICE	FIRE	TOTAL
Retired Member:			
Service Retirement	270	121	391
Disability Retirement	125	118	243
Death Allowance	9	11	20
<i>Total Retired Members:</i>	404	250	654
<i>Total Membership as of June 30, 2023:</i>	404	250	654
<i>Total Membership as of June 30, 2022:</i>	422	264	686
<i>Annual Difference:</i>	-18	-14	-32

Oakland Police and Fire Retirement System Pension Plan Membership Count As of June 30, 2023 (FY 2013 - FY 2023)

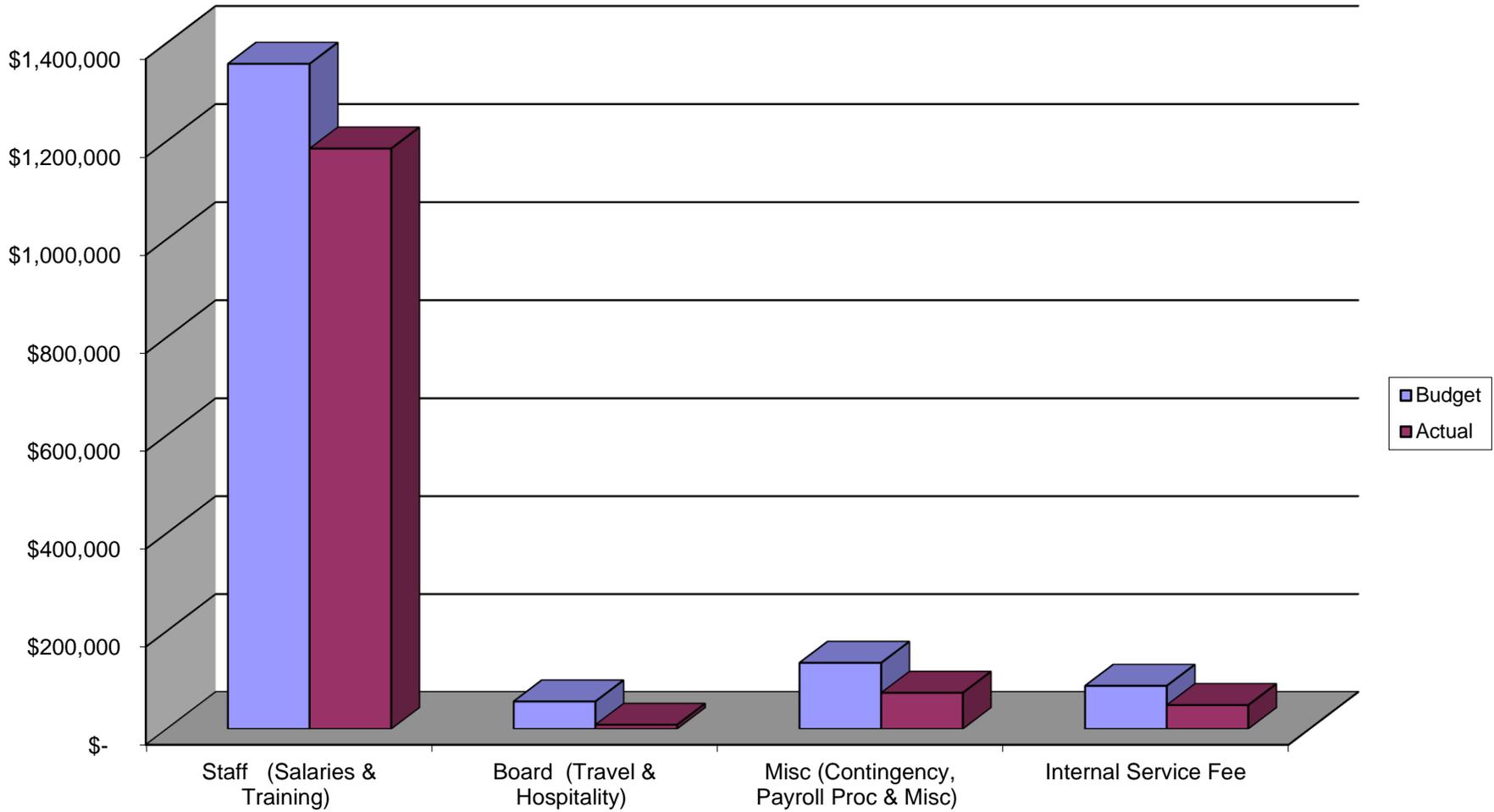


	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023 FYTD
Police	598	581	558	545	516	492	475	460	439	422	404
Fire	445	425	403	384	370	345	323	308	284	264	250
Total	1043	1006	961	929	886	837	798	768	723	686	654

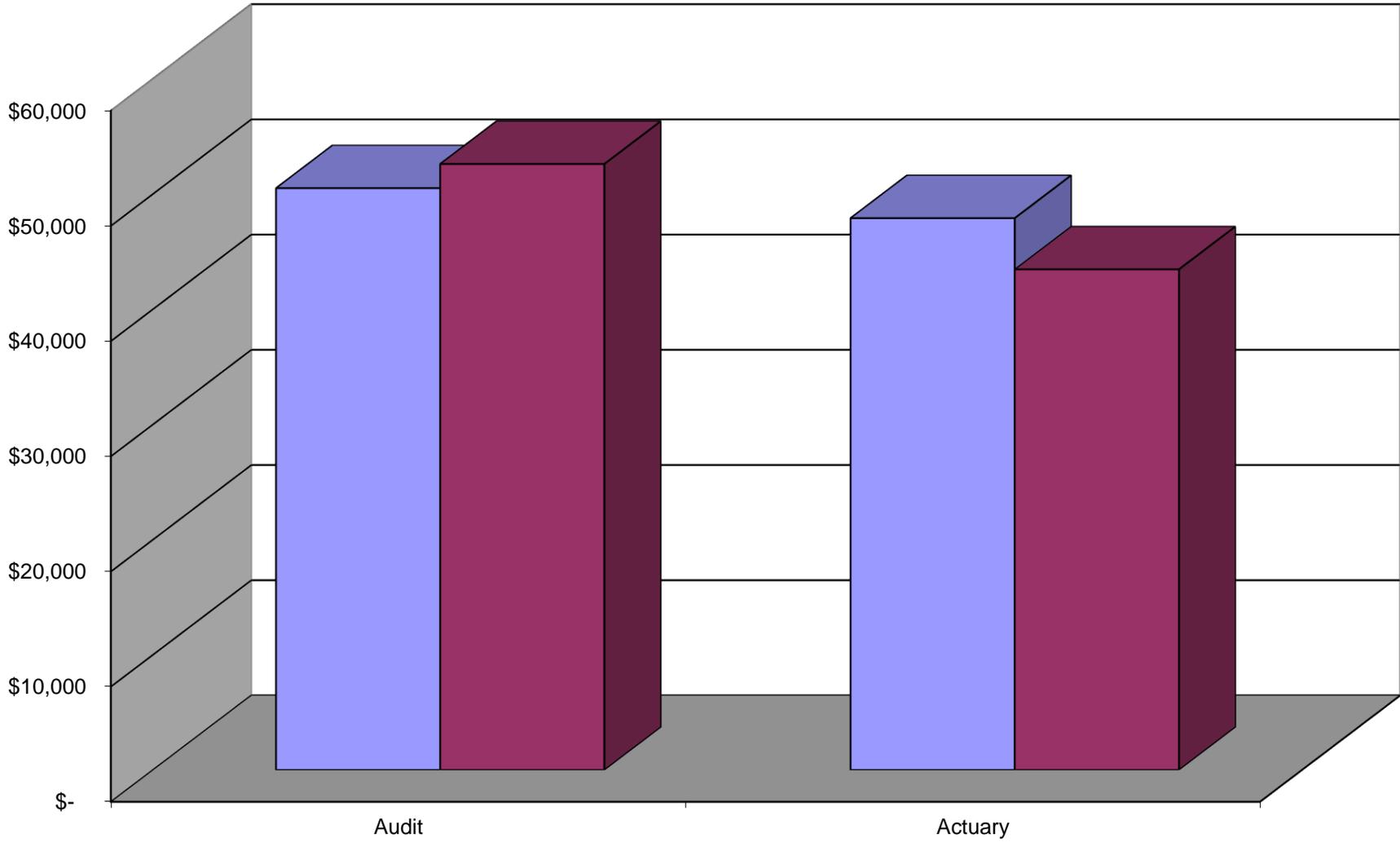
OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Approved Budget
FY 2022-2023



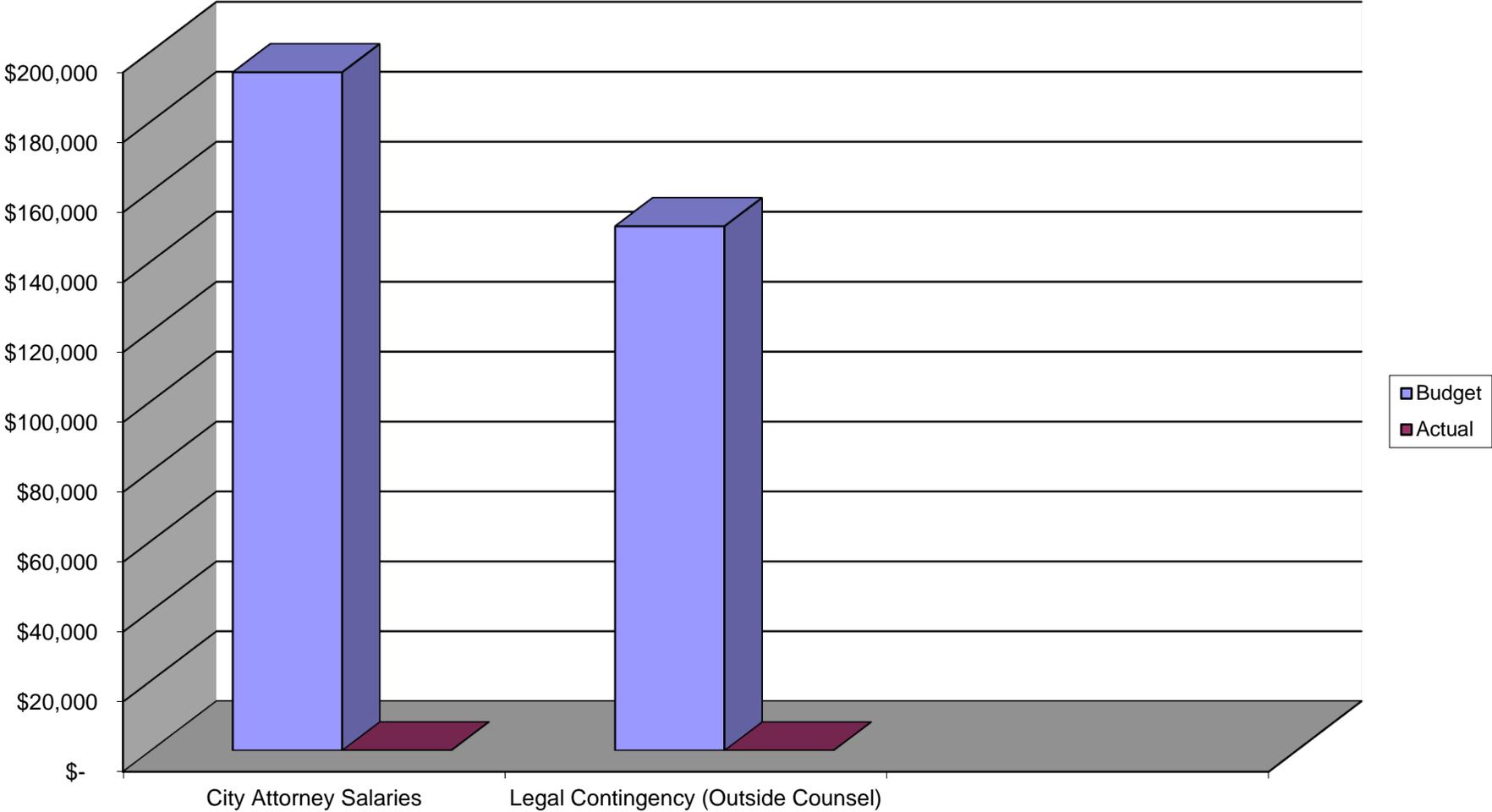
OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Budget vs Actual as of June 30, 2023
Internal Administrative Costs



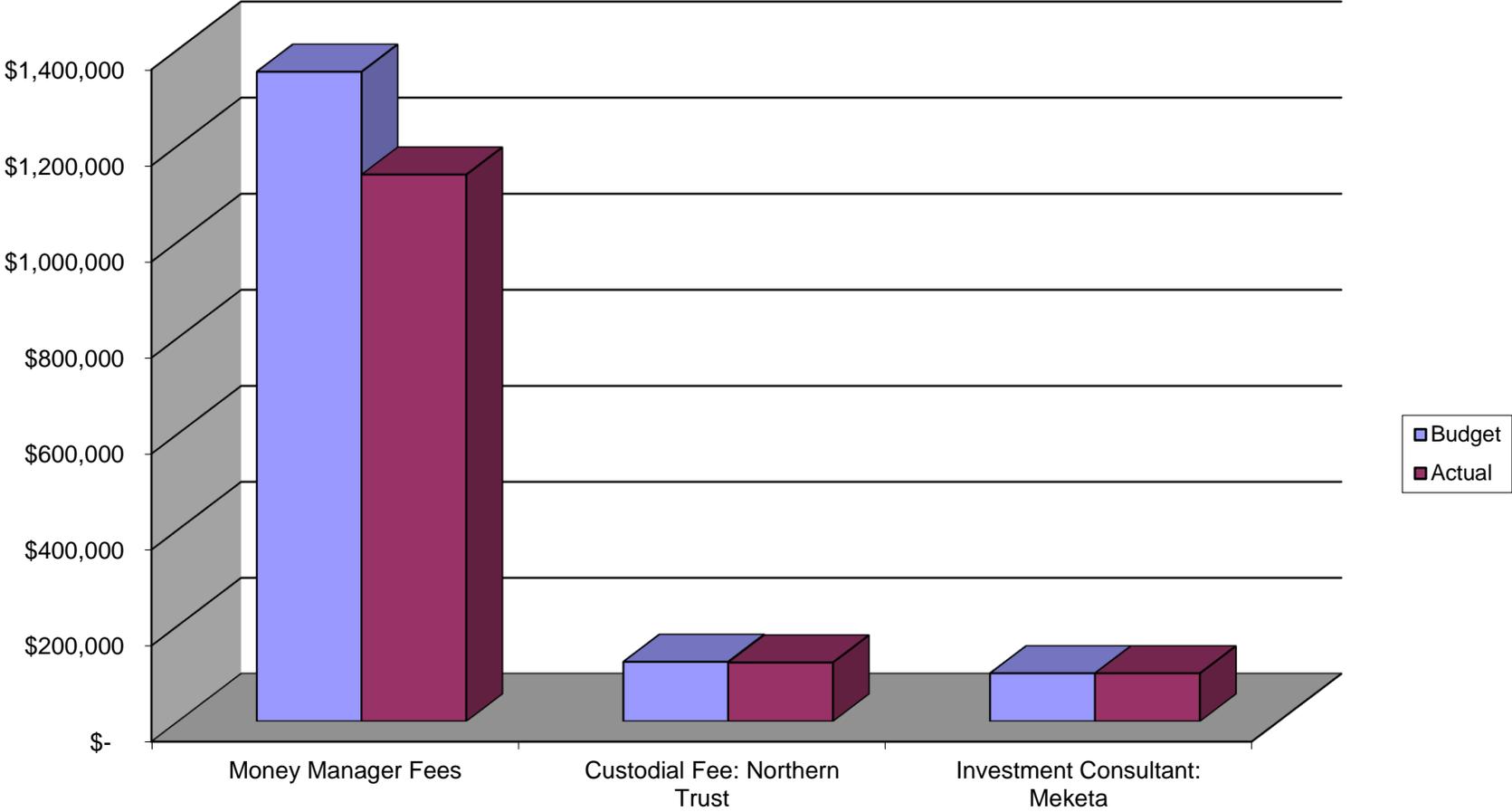
OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Budget vs. Actual as of June 30, 2023
Actuary and Accounting Services



OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Budget vs. Actual as of June 30, 2023
Legal Services



OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Budget vs. Actual as of June 30, 2023
Investment Services





AGENDA REPORT

TO: Oakland Police and Fire Retirement System Board (PFRS) **FROM:** Téir Jenkins
Investment & Operations Manager

SUBJECT: Election of 5-Year Police Department Representative Board Position **DATE:** August 30, 2023

SUMMARY

The 5-year elected police member board seat currently held by Robert W. Nichelini is set to expire August 31, 2023. Pursuant to the PFRS election guidelines outlined in Article 11 of the PFRS Rules and Regulations (**ATTACHMENT 1**), an election for this board seat was conducted by the Staff of the PFRS board with the assistance of the City Clerk's office.

BACKGROUND

Robert J. Muzar previously held the seat of the elected 5-year police representative with a set term from September 1, 2018 through August 31, 2023, and resigned from the seat effective January 22, 2020. A special election was held and Robert W. Nichelini, a retired PFRS Police member, was elected to complete the remainder of the term for the seat vacated by Robert J. Muzar. Member Nichelini's board seat is set to expire August 31, 2023 and a 5-year police member needed to be elected to this seat from the retired police membership.

Following the PFRS Rules & Regulations Article 11, Section 11.2 (**ATTACHMENT 1**), the PFRS staff informed the City Clerk's Office and the Retired Oakland Police Officers Association (ROPOA) of the board vacancy and delivered to them the election schedules and nomination forms.

The City Clerk's Office certified no more than one (1) nomination form was received by the nomination form submission deadline of 5 pm, July 19, 2023. Pursuant to PFRS Rules & Regulations Article 11, Section 11.6 (**ATTACHMENT 1**), the single nominee, Robert W. Nichelini, was declared the winner and will be automatically elected to the nominated position and will begin the new term of the 5-Year Police Department Representative Board Position effective September 1, 2023 through August 31, 2028.

Respectfully submitted,

Téir Jenkins
Investment & Operations Manager Oakland
Police and Fire Retirement System

Attachment (1): *Rules & Regulations - Excerpt of Election: Article 11*

Agenda Item D2
PFRS Board Meeting
August 30, 2023

ATTACHMENT 1

*Oakland Police & Fire Retirement System
Rules & Regulations
Excerpt of Election Article 11*

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

RULES AND REGULATIONS

Article 11: ELECTION OF MEMBERS OF THE BOARD REPRESENTING RETIRED MEMBERS OF THE RETIREMENT SYSTEM

Section 11.1: Day for Counting of Ballots

The fourth Wednesday in August of the year in which such election is required to be held is hereby the day for counting of ballots.

In the event of a vacancy of one or more of the elected PFRS Retirement Board seats before the completion of the full term, the day for counting ballots for the election to fill the vacant PFRS Retirement Board seat shall be the fourth Wednesday of the month that follows 90 days after the date of being informed of the vacancy.

Section 11.2: Notice of Nomination

On or before the first business day in June of each year in which an election is required, the office of the Police and Fire Retirement Board shall send a notice stating that nomination papers may be obtained at the office of said Police and Fire Retirement Board, the place where nomination papers shall be filed and the final date of filing thereof, the date when ballots will be counted and such other information as may be appropriate to the following organizations:

- Retired Oakland Police Officers' Association (ROPOA)
- International Association of Fire Fighters, Local 55 (IAFF Local 55)

In the event of a vacancy of one of the elected PFRS Retirement Board seats before the completion of the full term, the office of the Police and Fire Retirement Board shall send notice as stated above no later than ten (10) calendar days after the date of being informed of the vacancy.

Section 11.3: Nomination for Membership

Nomination for membership on the Police and Fire Retirement Board from the retired membership of the Police and Fire Department shall be in writing on forms supplied by the office of said Police and Fire Retirement Board upon request. Nomination papers shall be substantially in the form shown in Appendix A. Nomination papers shall be signed by at least ten retired members of the Police or Fire Department, as the case may be, who are members of the POLICE AND FIRE RETIREMENT SYSTEM, other than the person nominated. Each signatory of a nominating paper shall write the date of his/her signature at the end of the line opposite his/her signature. Beneficiaries of deceased members are not eligible to vote in elections.

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

RULES AND REGULATIONS

Section 11.4: Date of Filing Nomination Papers

Nominating papers shall be filed in the Office of the Oakland City Clerk, Room 306 of the Oakland City Hall, not less than thirty-five days before the day of counting ballots. If said date falls on a non-business day for the City of Oakland, it shall be filed on the next business day.

Section 11.5: Determination of Sufficiency of Nominating Papers

The City Clerk of the City of Oakland will determine when a member is nominated and for this purpose shall have access to the records of the Police and Fire Retirement Board the names of those retired members of the respective departments determined by him to have been nominated.

Section 11.6: Winner by Default

In the event that only one person is nominated in accordance with this Article 11 as a member of the Board, that person shall be declared a winner.

Section 11.7: Mailing of Ballots

Not less than fifteen days before the day for the counting of the ballots that shall be prepared by and mailed for the office of the Police and Fire Retirement Board to each retired member of the Police Department of Fire Department who is a member of the Police and Fire Retirement System a ballot addressed to his or her address as shown by the records of the Police and Fire Retirement Board. The Ballots shall contain the names in alphabetical order of the candidates certified by the City Clerk as nominated. Such ballot, sealed in a blank envelope provided for this purpose, which shall be enclosed in another envelope, also provided for such purpose, upon which the voter shall place his or her name, may be returned to the City Clerk not later than 10:00 a.m. of the day for the counting of ballots.

Section 11.8: Roster of Eligible Voters

There shall be prepared in the office of the Police and Fire Retirement Board a roster of eligible voters which shall contain the names of the retired members of the Police or Fire Department who are members of the Police and Fire Retirement System, excluding beneficiaries of deceased members. Such roster of eligible voters shall be delivered to the City Clerk not less than fifteen days before the day for the counting of ballots and shall be in such form as to permit appropriate asking thereon by the City Clerk to indicate that an eligible member has voted.

Section 11.9: Counting of Ballots

On the day for the counting of ballots at the hour of 10:00 A.M. thereof, the ballot box shall be opened and no ballot received after said hour shall be counted. The ballots will be counted under the

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

RULES AND REGULATIONS

supervision and control of the City Clerk in such manner that the identity of the individual casting any ballot will not be disclosed. No ballot shall be counted unless it is enclosed in an envelope bearing the name of the voter. No ballot shall be counted which contains a vote for a person not nominated in accordance with Article 12. Upon the conclusion of the counting of the ballots, the City Clerk will certify the count and the candidate elected and notify each candidate thereof by mail.

Section 11.10: Vote Necessary for Election

The candidate receiving the highest number of eligible votes shall be declared elected.

Section 11.11: Disposition of Ballots after Counting

Upon conclusion of the counting of the ballots they shall be kept by the City Clerk in the manner and for the period the ballots of municipal elections are kept.

Section 11.12: Procedure to Fill Vacancy of Elected Members

In the event a vacancy occurs before the end of a full term in any of the three (3) elected offices of the Board which are filled by retired members of the Retirement System, a successor shall be elected for the unexpired portion of the term vacated. The successor shall be elected from the same department of the member who is vacating the seat for the remainder of said unexpired three (3) year, or five (5) year, term. The election shall be governed by Article 11.



AGENDA REPORT

TO: Oakland Police and Fire Retirement System Board (PFRS) **FROM:** Téir Jenkins
Investment & Operations Manager

SUBJECT: PFRS Member Verification 2023 **DATE:** August 30, 2023

SUMMARY

The 2023 PFRS Member Verification Form serves to confirm an accurate record of current member information. Staff is in the process of mailing requests to all PFRS Members to confirm and/or update the information of record with a response due date of September 29, 2023.

PFRS Staff will reach out to both the Police and Fire Retiree Representatives to inform them the task is underway, so they may help advise members to be on the lookout for the mailing from our office.

Respectfully submitted,

Téir Jenkins
Investment & Operations Manager
Oakland Police and Fire Retirement System



AGENDA REPORT

TO: Oakland Police and Fire Retirement System (PFRS)
Board of Administration

FROM: Téir Jenkins
Investment & Operations Manager

SUBJECT: Reimbursement of pension payments not received by PFRS Member due to fraud

DATE: August 30, 2023

BACKGROUND

Earlier this year, through the criminal acts of a third party, a retired Police and Fire Retirement System (PFRS) beneficiary was a victim of identity fraud, which resulted in the loss of \$12,093.66 in fraudulently diverted pension payments. Once discovered, staff alerted the member and corrected the issue. Subsequently, staff completed the process to attempt to retrieve the fraudulently diverted pension payments from the receiving financial institution, however, staff's efforts to recover the funds were not successful and their request was denied.

SUMMARY

Between February and May 2023, an unknown third party committed identity theft and bank fraud causing a PFRS member's monthly pension checks to be diverted to a fraudulent bank account for a period of three months, from March to May 2023. The Retirement Unit confirmed that the member did not receive a monthly pension payment for March 1, 2023, April 1, 2023, and May 1, 2023, for a total net amount of \$12,093.66. Staff conducted extensive research into the matter to obtain additional information regarding the fraud, including working closely with the Oakland Police Department; the City Attorney's Office; the City of Oakland financial institution and the financial institution that received the fraudulently diverted funds. Staff also worked closely with the impacted PFRS member, who filed a police report with their local police agency. Staff followed the financial institution's process to attempt to recover the illegally diverted funds by submitting a request that the funds be returned to the City of Oakland PFRS System due to fraud and provided supporting documentation of the fraudulent incident. However, the receiving financial institution ultimately denied staff's request and staff was not able to recover the fraudulently diverted pension payments. As a result of this incident, staff has strengthened the internal controls to address evolving and escalating fraud threats and to better protect PFRS members going forward.

The impacted PFRS member has requested reimbursement of the three fraudulently diverted pension payments for a total of \$12,093.66. Based on the unique facts and circumstances in which this incident occurred, Staff believes reimbursement is a fair and equitable outcome and seeks authority from the PFRS Board to reimburse the PFRS member for the fraudulently diverted funds.

RECOMMENDATION

We request that the PFRS Board approve the reissuance of the total net amount of \$12,093.66, \$4,031.22 for each monthly pension payment not received to the PFRS member, which were originally due on March 1, 2023, April 1, 2023, and May 1, 2023.

Respectfully submitted,



Téir Jenkins
Investment & Operations Manager
Oakland Police & Fire Retirement Systems



AGENDA REPORT

TO: Oakland Police and Fire Retirement System Board (PFRS) **FROM:** Téir Jenkins
Investment & Operations Manager

SUBJECT: Request to Remove/Omit Vendor Agenda Information from Website **DATE:** August 30, 2023

By request of Wellington Management, the electronic version of this agenda item in the agenda packages for the PFRS Investment Committee and Regular Board meetings scheduled for Wednesday, August 31, 2023 has been removed/omitted.

Members of the public may obtain a copy of this presentation material by submitting a request via email at mvisaya@oaklandca.gov following the August 30, 2023 meeting.

Respectfully submitted,

Téir Jenkins
Investment & Operations Manager
Oakland Police and Fire Retirement System

MEMORANDUM

TO: Oakland Police and Fire Retirement System (OPFRS)
FROM: Meketa Investment Group (Meketa)
DATE: August 30, 2023
RE: Wellington Select Quality Equity—Manager Update

Manager: Wellington Capital Management

Inception Date:	May 2022	OPFRS AUM (7/31/2023):	\$23.5 million
Strategy:	Select Quality Equity	Strategy AUM (6/30/2023):	\$5.6 billion
Benchmark:	Russell 1000 Index	Firm-wide AUM (6/30/2023):	\$1.2 trillion
Peer Group:	US Large Cap Core Equity (Net)	Recommended Action:	None

Summary

Wellington has managed a part of OPFRS’s domestic equity portfolio since May 2022. As of July 31, 2023, the portfolio is approximately \$23.5 million or about 5.5% of OPFRS’s total plan. While the strategy has underperformed during this period, it ought not to be overly scrutinized as a recently incepted investment account with only 14 months of history. No major organizational changes or personnel turnover in the portfolio management team have been observed since the account’s initial funding in May 2022. **Therefore, Meketa does not have any major concerns with Wellington and the strategy.**

Investment Performance¹ Review

As of 7/31/2023, Wellington Select Quality Equity strategy has underperformed the Russell 1000 Index over all the trailing time periods measured. Since inception in May 2022, the strategy has generated an annualized net-of-fees investment return of 5.4%. In comparison with the other US large cap core managers, the portfolio ranks below average for all periods measured.

As of 7/31/2023	Market Value (\$000)	YTD	1 YR	3 YR	5 YR	Since Inception	Since Inception Risk
Wellington Select Quality (Net)	23,507	5.9	8.0	--	--	5.4	16.2
<i>Russell 1000 Index</i>	---	<i>20.7</i>	<i>12.9</i>	--	--	<i>10.2</i>	<i>19.8</i>
Excess Return (Net)	---	-14.8	-4.9	--	--	-4.8	--
Peer Group Median	---	15.7	11.0	--	--	8.8	19.7
Peer Group Ranking	---	92	74	--	--	79	--

The strategy was selected as a defensive equity for the portfolio. Risk level, as measured by standard deviation, of Wellington Select Quality Equity since inception is 16.2, while those of Russell 1000 and the median peer fund are 19.8 and 19.7 respectively for the same period.

¹ Performance is annualized for periods longer than one year.

Product and Organization Review Summary

Wellington Capital Management		Areas of Potential Impact			
	Level of Concern	Investment Process (Client Portfolio)	Investment Team	Performance Track Record	Team/ Firm Culture
Product					
Key people changes	None				
Changes to team structure/individuals' roles	None				
Product client gain/losses	None				
Changes to the investment process	None				
Personnel turnover	None				
Organization					
Ownership changes	None				
Key people changes	None				
Firm wide client gain/losses	None				
Recommended Action	None - X		Watch Status	Termination	

A review of Wellington Capital Management and the Select Quality Equity strategy revealed no concerning organizational issues or changes since the account's initial funding in May 2022.

Investment Summary²

The investment philosophy of the Select Quality Equity approach is based on the premise that investing in a select number of high quality, large capitalization, attractively valued companies with superior prospects for dividend growth can provide superior long-term returns.

The Select Quality Equity investment process is driven by fundamental, bottom-up research. Portfolio Manager Don Kilbride is ultimately responsible for buy and sell decisions, portfolio construction, and for coordinating the research effort for the portfolio. The portfolio management team have a wealth of experienced investment resources at the firm to leverage research and investment ideas, including global industry analysts, ESG analysts, traders, macro strategists, and other portfolio managers and analysts who support various investment approaches.

The investment process is based on the belief that above-average growth in dividends is an effective and often overlooked indicator of high quality, shareholder-oriented companies that produce consistent, above-average returns over time with lower volatility than the broad market. The team believes that a portfolio of high-quality stocks with superior prospects for dividend growth, selling at reasonable valuation levels, can produce superior total returns over time.

DS/PN/JLC/mn

² Source: manager. Abridged.



Disclosure

WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM," "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

Economic and Market Update

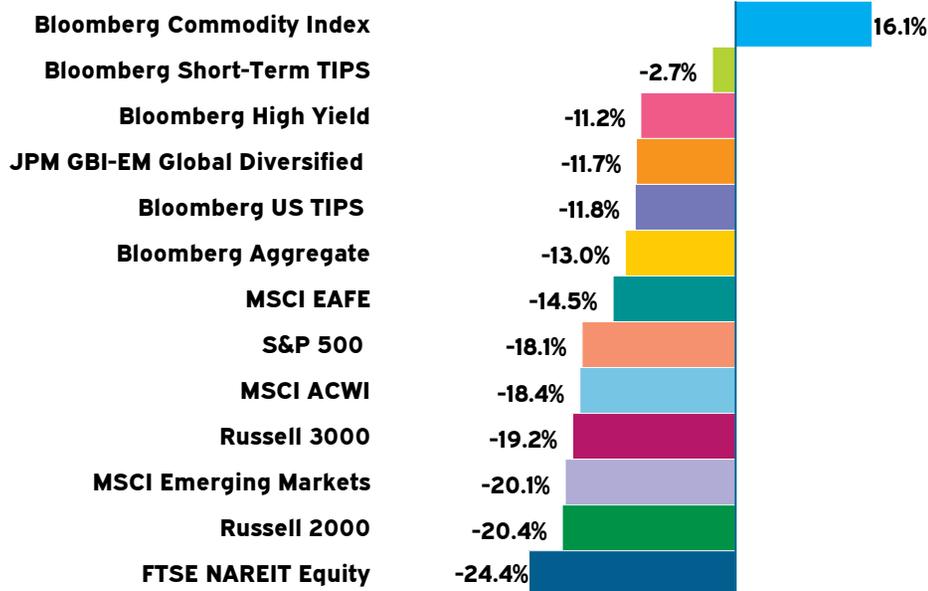
July 2023 Report

Commentary

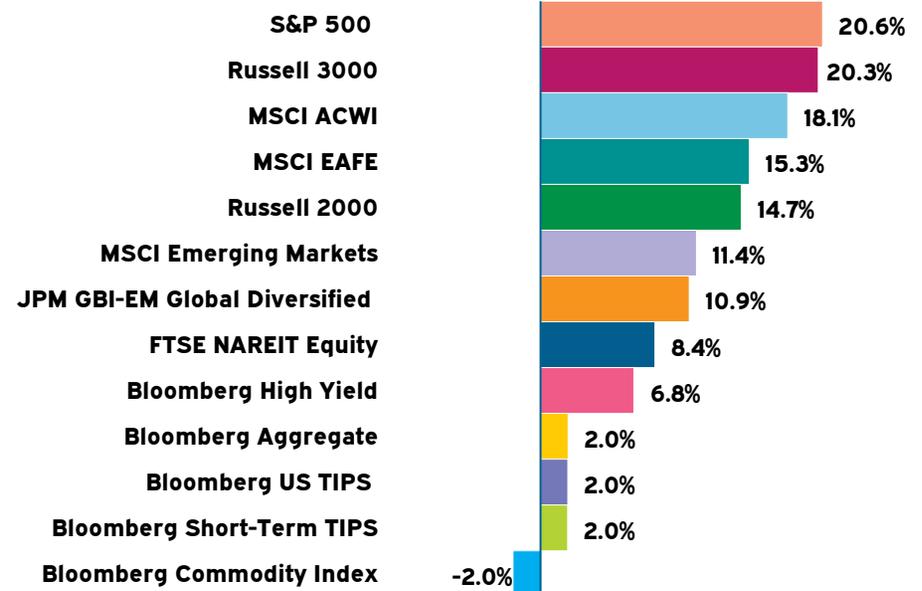
- Riskier assets continued to gain in July as economic data remained resilient while inflation receded. Except for commodities, most public market asset classes remained positive for the year, with US equities leading the way.
- After a pause in June, the Federal Reserve increased interest rates in July by 0.25% to a range of 5.25% - 5.5%, the highest level in over two decades. Markets are largely expecting that this will be the Fed's final rate increase.
 - US equity markets (Russell 3000 index) continued to rise in July (+3.8%), bringing the year-to-date gains to 20.3%. The technology sector remains the key driver of results this year, helped by artificial intelligence optimism.
 - Non-US developed equity markets also rose in July (MSCI EAFE +3.2%), but they continue to trail US markets year-to-date (15.3% versus 20.3%).
 - Emerging market equities had the strongest results in July, gaining 6.2%, driven by optimism over additional policy support in China. They continue to trail developed market equities year-to-date though, returning 11.4%, due partly to China's weak results for the period.
 - Generally, corporate bonds outperformed government bonds for the month on continued risk appetite. Overall, interest rates increased slightly in July, leading to a small decline in the broad US bond market (-0.1%). The index remains positive (+2.0%) year-to-date on declining inflation and expectations for the Fed to end their rate hikes soon.
- This year, the paths of inflation and monetary policy, slowing global growth, and the war in Ukraine will all be key.

Index Returns¹

2022



YTD



→ After a particularly difficult 2022, most public market assets are up thus far in 2023, led by developed market equities.

→ Risk sentiment has been supported by expectations that policy tightening could be ending soon, as inflation continues to fall, while growth has remained relatively resilient.

¹ Source: Bloomberg. Data is as of July 31, 2023.

Domestic Equity Returns¹

Domestic Equity	July (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
S&P 500	3.2	8.7	20.6	13.0	13.7	12.2	12.7
Russell 3000	3.6	8.4	20.3	12.6	13.1	11.4	12.1
Russell 1000	3.4	8.6	20.7	12.9	13.2	11.9	12.4
Russell 1000 Growth	3.4	12.8	33.4	17.3	12.2	15.2	15.5
Russell 1000 Value	3.5	4.1	8.8	8.3	14.1	8.0	9.0
Russell MidCap	4.0	4.8	13.3	8.7	11.8	8.8	10.1
Russell MidCap Growth	3.0	6.2	19.4	13.0	6.0	9.9	11.2
Russell MidCap Value	4.4	3.9	9.8	6.2	14.9	7.2	8.9
Russell 2000	6.1	5.2	14.7	7.9	12.0	5.1	8.2
Russell 2000 Growth	4.7	7.1	18.9	11.6	6.5	4.8	8.5
Russell 2000 Value	7.5	3.2	10.2	3.9	17.5	4.7	7.4

US Equities: Russell 3000 Index rose 3.6% in July and 20.3% YTD.

- Equity investors continue to express optimism that the Federal Reserve’s monetary tightening will not have serious impacts on earnings. Though corporate profits were down compared to a year ago, approximately 80% of S&P 500 companies that reported second quarter results in July exceeded earnings expectations.
- In contrast to the year-to-date trend, value stocks outperformed growth stocks in July, particularly in small cap, driven by outperformance in financials and energy. So far in 2023, growth has significantly outperformed value driven by optimism over artificial intelligence.
- Small cap stocks outperformed large cap stocks in July, but trail for the full year, again due to the strength of the technology sector. The July dynamic was driven partially by the outperformance of small cap banks after regulators announced higher capital requirements for larger banks.

¹ Source: Bloomberg. Data is as of July 31, 2023.

Foreign Equity Returns¹

Foreign Equity	July (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI ex. US	4.1	2.4	13.9	13.4	7.1	3.9	4.7
MSCI EAFE	3.2	3.0	15.3	16.8	9.3	4.5	5.2
MSCI EAFE (Local Currency)	1.7	4.3	14.0	13.6	13.0	6.2	7.4
MSCI EAFE Small Cap	4.4	0.6	10.2	7.9	6.1	2.1	6.0
MSCI Emerging Markets	6.2	0.9	11.4	8.3	1.5	1.7	3.5
MSCI Emerging Markets (Local Currency)	5.3	1.7	11.1	8.6	3.0	3.7	6.1
MSCI China	10.8	-9.7	4.7	1.8	-9.9	-2.8	3.7

Foreign Equity: Developed international equities (MSCI EAFE) rose 3.2% in July bringing the YTD gains to 15.3%. Emerging market equities (MSCI EM) rose 6.2% in July, rising 11.4% YTD.

- International equities also had strong results in July, led by China and emerging markets more broadly.
- Japanese equities continued their steady rise, especially in the mid- and small-cap sectors. Eurozone and UK equities were broadly supported by falling inflation and solid corporate fundamentals.
- After a disappointing reopening of the economy, China’s government announced additional support to stimulate consumption and bolster the real estate sector, leading to double-digit gains for the month (10.8%). India underperformed as higher food costs kept inflation elevated.

¹ Source: Bloomberg. Data is as of July 31, 2023.

Fixed Income Returns¹

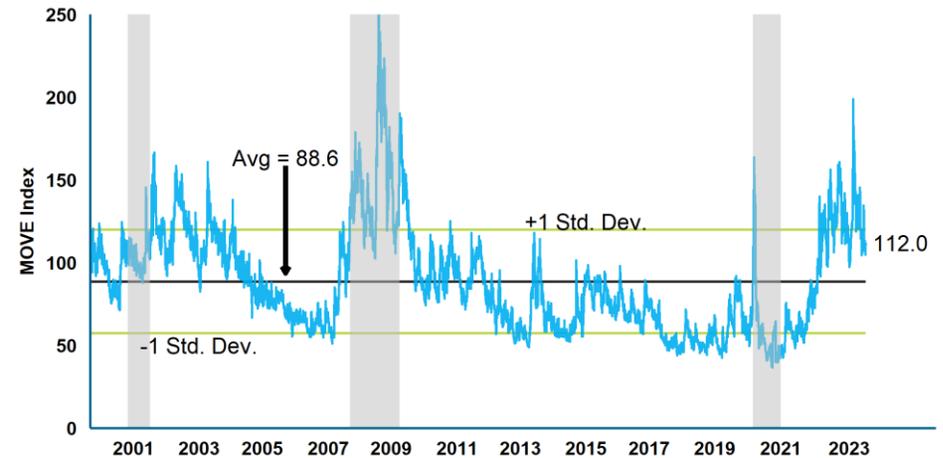
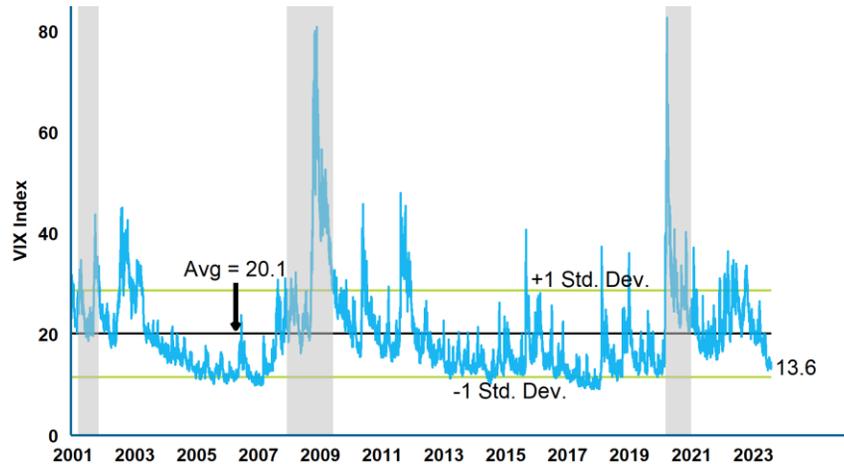
Fixed Income	July (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Current Yield (%)	Duration (Years)
Bloomberg Universal	0.1	-0.6	2.4	-2.4	-4.0	1.0	1.8	5.2	6.2
Bloomberg Aggregate	-0.1	-0.8	2.0	-3.4	-4.5	0.7	1.5	4.9	6.5
Bloomberg US TIPS	0.1	-1.4	2.0	-5.4	-0.8	2.6	2.0	4.6	6.9
Bloomberg Short-term TIPS	0.5	-0.7	2.0	-1.2	2.3	2.9	1.7	5.3	2.7
Bloomberg High Yield	1.4	1.7	6.8	4.4	2.0	3.4	4.4	8.3	4.0
JPM GBI-EM Global Diversified (USD)	2.9	2.5	10.9	14.3	-1.5	0.5	-0.2	6.5	5.0

Fixed Income: The Bloomberg Universal rose 0.1% in July remaining positive YTD (+2.4%), as inflation continues to decline, and yields remain high.

- In July, riskier bonds continued to outperform government bonds on optimism over a potential soft landing of the economy.
- The broad US bond market (Bloomberg Aggregate) declined slightly for the month (-0.1%) while the TIPS index, and the short-term TIPS index both posted small gains. All three indexes now have the same results so far in 2023.
- In the risk-on environment, high yield bonds rose 1.4% for the month, while emerging market bonds were the top performer, up 2.9%. The two asset classes remain the top performers for the year.

¹ Source: Bloomberg. JPM GBI-EM data is from InvestorForce. Data is as of July 31, 2023. The yield and duration data from Bloomberg is defined as the index's yield to worst and modified duration respectively.

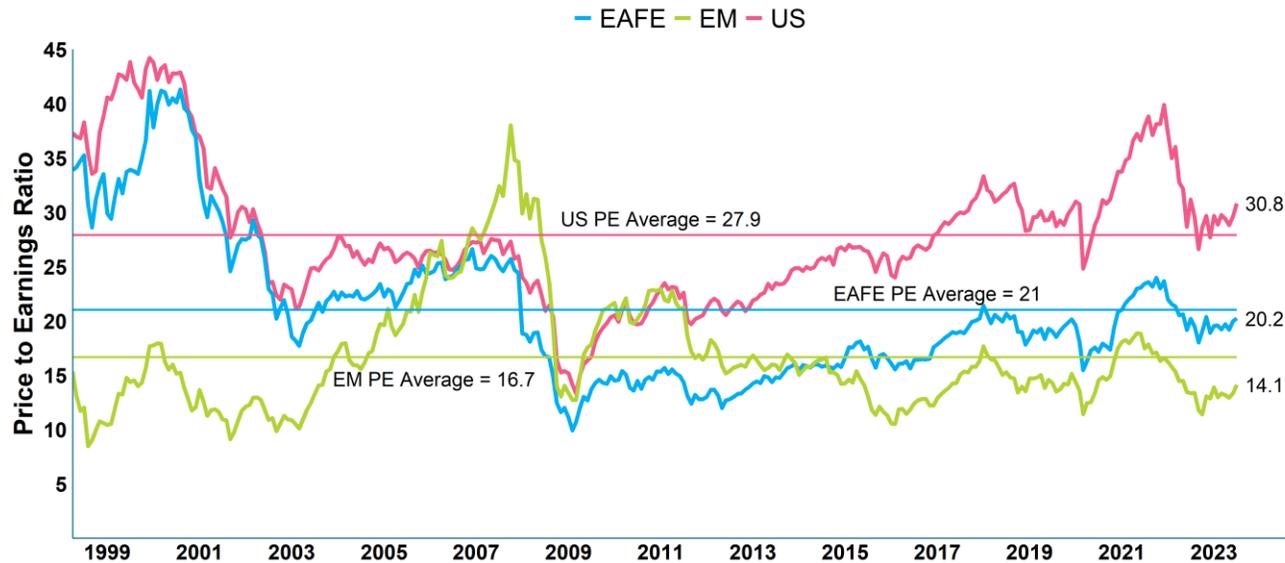
Equity and Fixed Income Volatility¹



- Volatility in equities (VIX) remains well below the historical average as investors continue to anticipate the end of the Fed's policy tightening.
- The bond market continues to be volatile after last year's historic losses and due to policy uncertainty and previous issues in the banking sector. The MOVE (fixed income volatility) remains well above (112.0) its long-run average (88.6), but off its recent peak during the heart of the banking crisis.

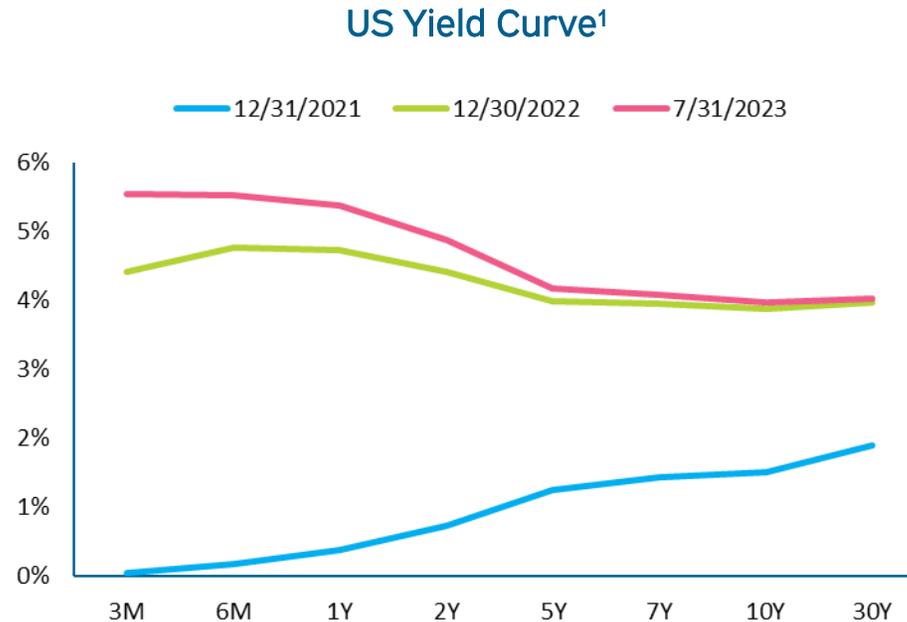
¹ Equity and Fixed Income Volatility – Source: Bloomberg. Implied volatility as measured using VIX Index for equity markets and the MOVE Index to measure interest rate volatility for fixed income markets. Data is as of July 2023. The average line indicated is the average of the VIX and MOVE values between January 2000 and July 2023.

Equity Cyclically Adjusted P/E Ratios¹



- Given the strong technology-driven rally this year, the US equity price-to-earnings ratio increased above its long-run (21st century) average.
- International developed market valuations are below their own long-term average, with those for emerging markets the lowest and well under the long-term average.

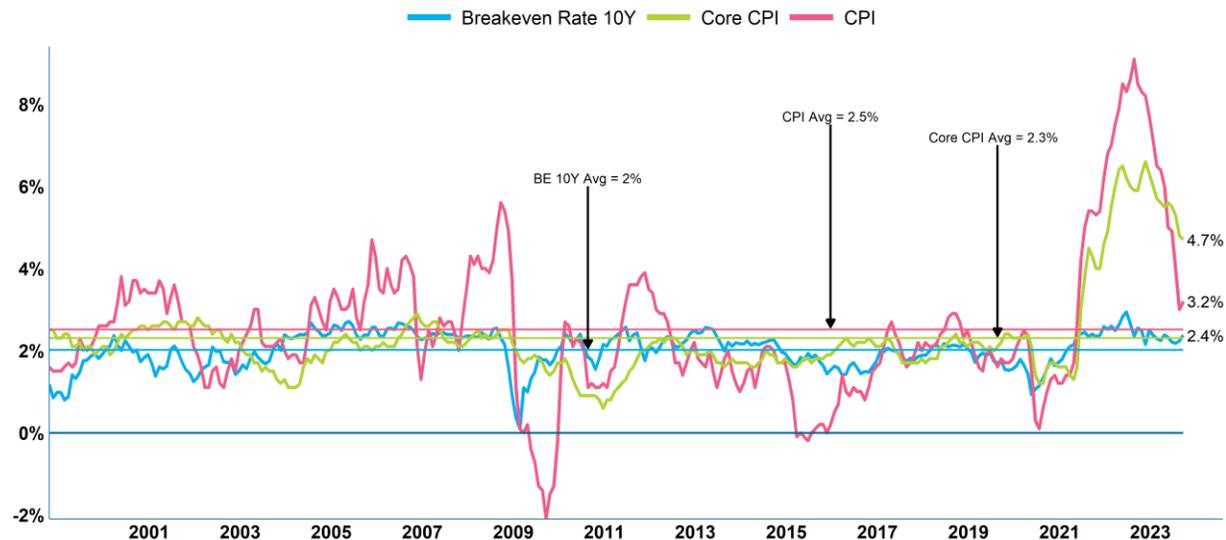
¹ US Equity Cyclically Adjusted P/E on S&P 500 Index. Source: Robert Shiller, Yale University, and Meketa Investment Group. Developed and Emerging Market Equity (MSCI EAFE and EM Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years. Data is as of July 2023. The average line is the long-term average of the US, EM, and EAFE PE values from December 1999 to the recent month-end respectively.



- In July, very short-term interest rates (6-months or less) fell as it appears interest rate hikes might be coming to an end. Longer dated maturities continued to drift higher, as economic data remains resilient. So far in 2023, rates overall remain higher, particularly the policy sensitive front-end of the yield curve.
- The yield curve remains inverted with the spread between two-year and ten-year Treasuries finishing the month at -0.91%. The more closely watched measure (by the Fed) of the three-month and ten-year Treasuries spread also remained inverted at -1.60%. Inversions in the yield curve have often preceded recessions.

¹ Source: Bloomberg. Data is as of July 31, 2023.

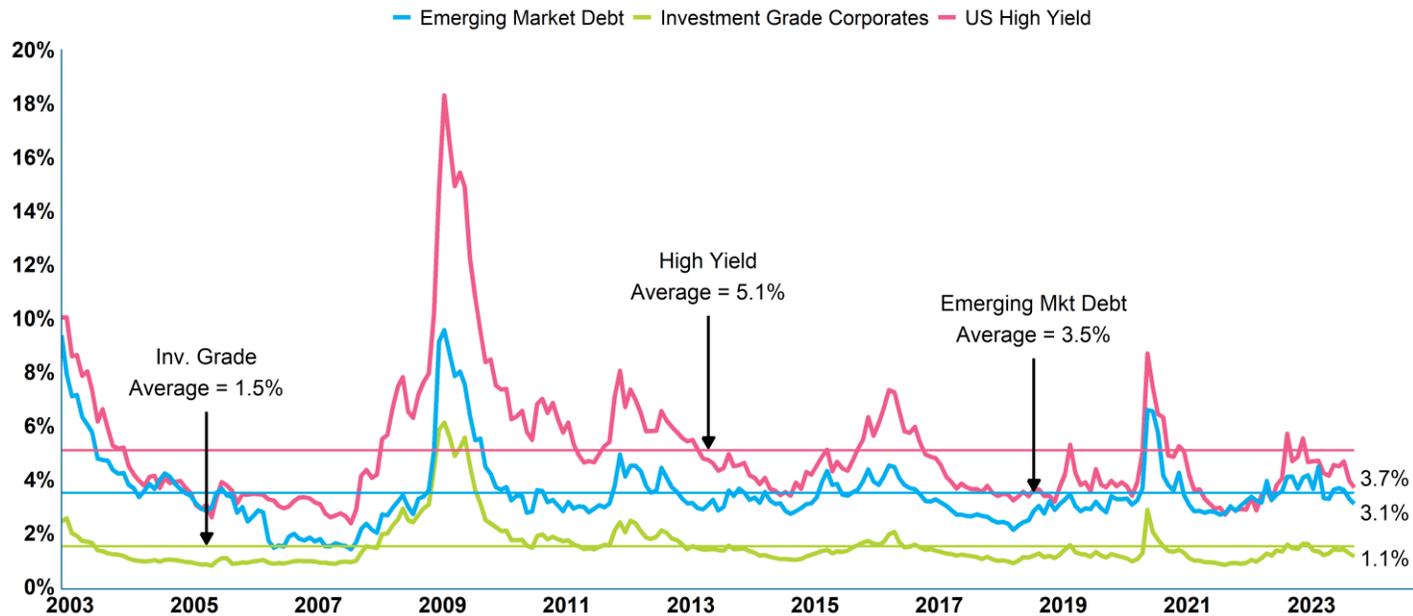
Ten-Year Breakeven Inflation and CPI¹



- Declines in inflation while other economic data remains strong has led to optimism over the Federal Reserve potentially achieving a rarely observed soft landing for the economy.
- Year-over-year headline inflation rose slightly in July (3.0% to 3.2%) but came in below expectations. The trend of lower month-over-month price increases continued with the rate staying steady at 0.2%.
- Core inflation – excluding food and energy - fell (4.8% to 4.7%) year-over-year. It remains stubbornly high though driven by shelter costs (+7.7%), particularly owners equivalent rent, and transportation services (+9.0%).
- Inflation expectations (breakevens) remain well below current inflation as investors continue to expect inflation to track back toward the Fed’s 2% average target.

¹ Source: Bloomberg. Data is as July 31, 2023. The CPI and 10 Year Breakeven average lines denote the average values from August 1998 to the present month-end, respectively. Breakeven values represent month-end values for comparative purposes.

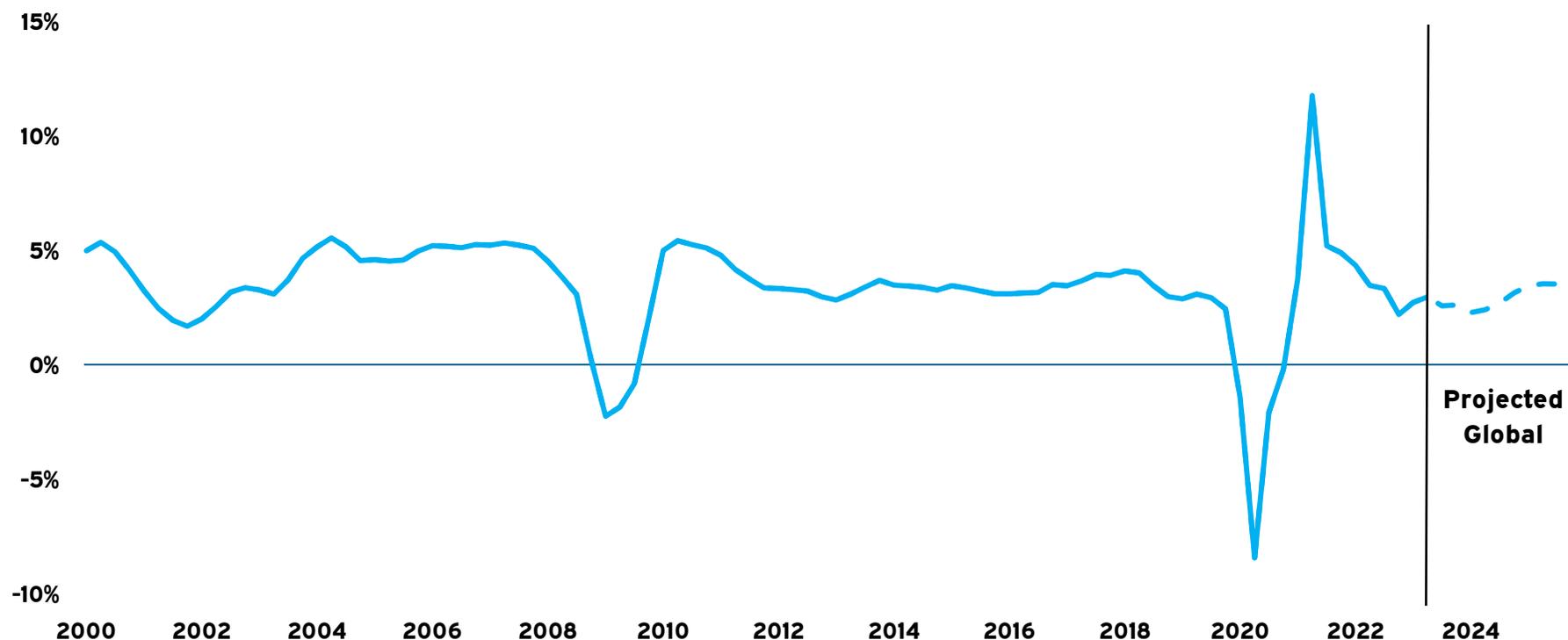
Credit Spreads vs. US Treasury Bonds¹



- Credit markets outperformed government bonds for the month with spreads (the added yield above a comparable maturity Treasury) declining. Risk appetite was strong as growth remains resilient, while inflation continues to decline.
- High yield spreads remain well below the long-term average. Investment grade and emerging market spreads are also below their respective long-term averages, but by smaller margins.

¹ Sources: Bloomberg. Data is as of July 31, 2023. Average lines denote the average of the investment grade, high yield, and emerging market spread values from August 2000 to the recent month-end, respectively.

Global Real Gross Domestic Product (GDP) Growth¹

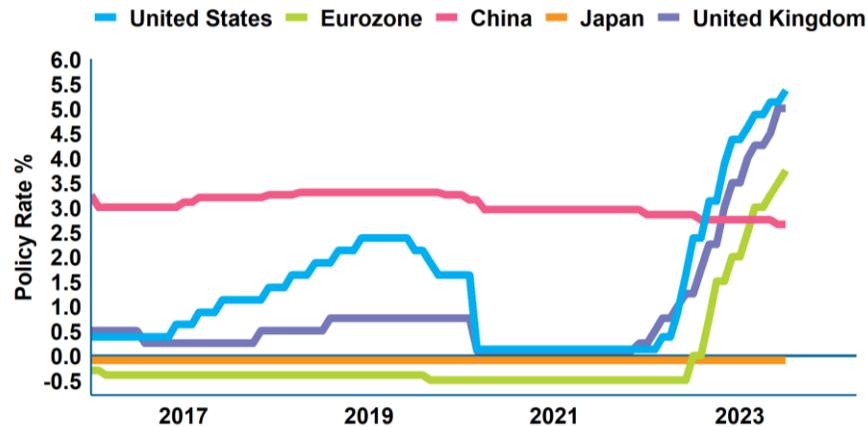


- Global economies are expected to slow this year compared to 2022. The risk of recession remains given policymakers' aggressive tightening, but optimism has started to grow over some central banks potentially navigating a soft landing.
- The delicate balancing act of central banks trying to reduce inflation without dramatically depressing growth will remain key.

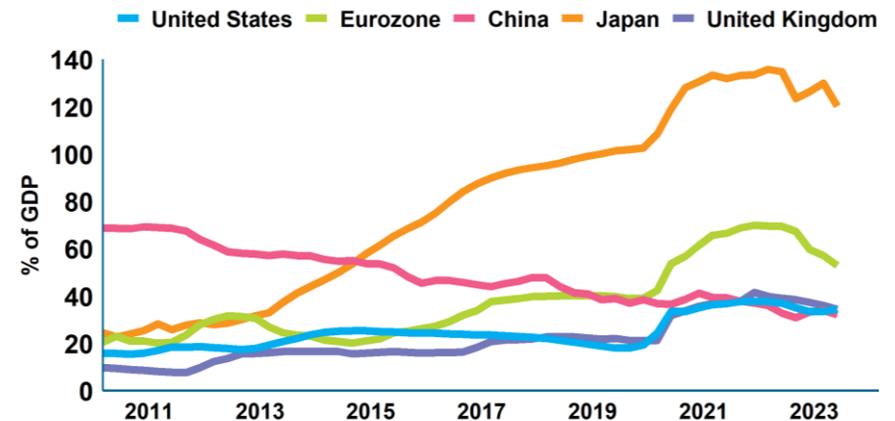
¹ Source: Oxford Economics (World GDP, US\$ prices & PPP exchange rate, real, % change YoY). Updated July 2023.

Central Bank Response¹

Policy Rates



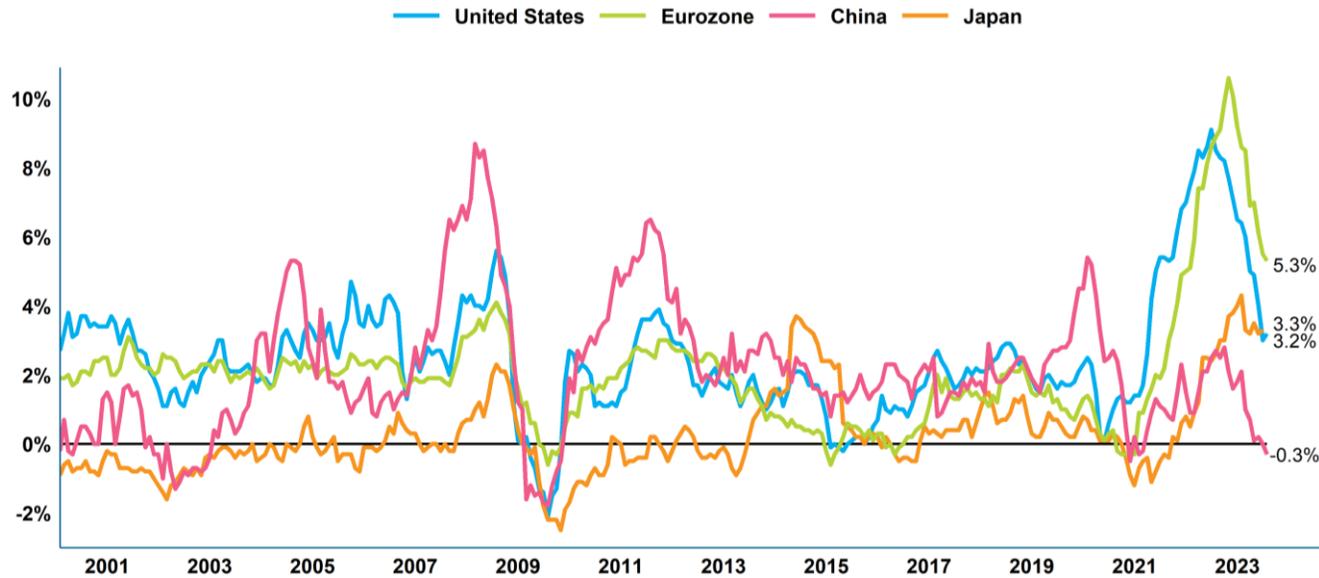
Balance Sheet as % of GDP



- Slowing inflation and growth have led to expectations for a reduction in the pace of aggressive policy tightening.
- In July the Fed raised rates another 25 basis points to a range of 5.25% to 5.50% with markets largely expecting this to be the last rate increase. After month-end, the FOMC paused its tightening campaign.
- The European Central Bank also increased rates in July, but they remain lower than in the US. In Japan the BOJ surprised markets by announcing they would be more flexible on their 10-year interest rate target.
- The central bank in China has continued to cut interest rates and inject liquidity into the banking system, as weaker than expected economic data appears to indicate a widespread slowdown.
- Looking ahead, risks remain for a policy error as central banks attempt to balance multiple goals, bringing down inflation, maintaining financial stability, and supporting growth.

¹ Source: Bloomberg. Policy rate data is as of July 31, 2023. China policy rate is defined as the medium-term lending facility 1 year interest rate. Balance sheet as % of GDP is based on quarterly data and is as of June 30, 2023.

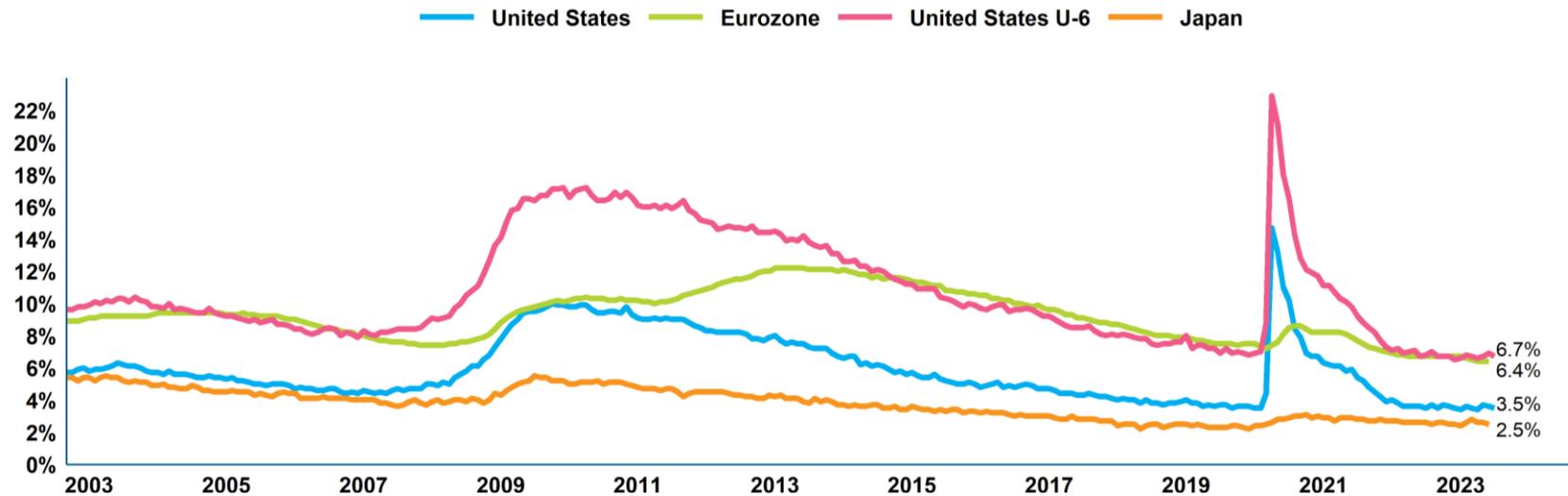
Inflation (CPI Trailing Twelve Months)¹



- The inflation picture remains mixed across the major economies.
- In the US, inflation rose slightly in July (3.0% to 3.2%), while eurozone inflation continued to fall (5.5% to 5.3%) a level well off its peak. Despite 2023’s significant declines in the US and Europe, inflation levels remain elevated compared to central bank targets.
- Inflation in Japan remains elevated at levels not seen in almost a decade largely driven by food and home related items. In China, deflationary pressures emerged in July due to falling food prices, but this is expected to be temporary as high base effects from last year work their way through.

¹ Source: Bloomberg. Data is as July 31, 2023. The most recent Japanese inflation data is as of June 2023.

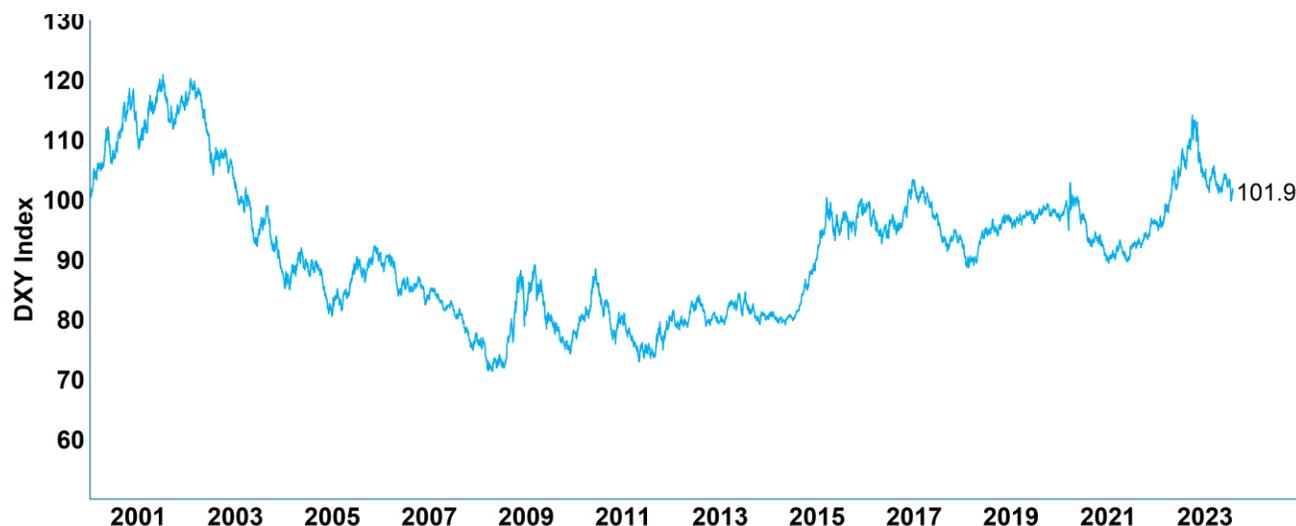
Unemployment¹



- Despite slowing growth and relatively high inflation, the US labor market continues to show signs of resilience (3.5%). Unemployment in the US, which experienced the steepest rise, recently returned to pre-pandemic levels. Broader measures of unemployment (U-6) remain higher at 6.7% but also declined dramatically from their peak.
- The strong labor market and higher wages, although beneficial for workers, motivates the Fed's efforts to fight inflation, potentially leading to higher unemployment.
- Unemployment in Europe has also declined but remains higher than the US, while levels in Japan have been flat through the pandemic given less layoffs.

¹ Source: Bloomberg. Data is as July 31, 2023, for the US. The most recent data for Eurozone and Japanese unemployment is as of June 2023.

US Dollar versus Broad Currencies¹



- The dollar finished 2022 much higher than it started, due to the increased pace of policy tightening, stronger relative growth, and safe-haven flows.
- Late last year and into early this year, the dollar declined, as weaker economic data and lower inflation led to investors anticipating the end of Fed tightening. Since then, the dollar has largely been range-bound due to competing forces of safe-haven flows and monetary policy expectations.
- For the rest of this year, the track of inflation across economies and the corresponding monetary policies will be key drivers of currency moves.

¹ Source: Bloomberg. Data as of July 31, 2023.

Summary

Key Trends:

- The impact of inflation still above policy targets will remain key, with bond market volatility likely to stay high.
- Global monetary policies could diverge in 2023. The risk of policy errors remains elevated as central banks try to reduce persistent inflation while not tipping their economies into recession.
- Growth is expected to slow globally this year, with many economies forecasted to tip into recession. Optimism has been building though that some economies could experience a soft landing. Inflation, monetary policy, and the war will all be key.
- In the US, consumers could feel pressure as certain components of inflation remain high (e.g., shelter), borrowing cost are elevated, and the job market may weaken.
- The key for US equities going forward will be whether earnings can remain resilient if growth continues to slow. Also, the future path of the large technology companies that have driven market gains will be important.
- Equity valuations remain lower in emerging and developed markets, but risks remain, including potential for renewed strength in the US dollar, higher inflation weighing particularly on Europe, and China's sluggish economic reopening and on-going weakness in the real estate sector. Japan's recent hint at potentially tightening monetary policy along with changes in corporate governance in the country could influence relative results.

WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM," "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

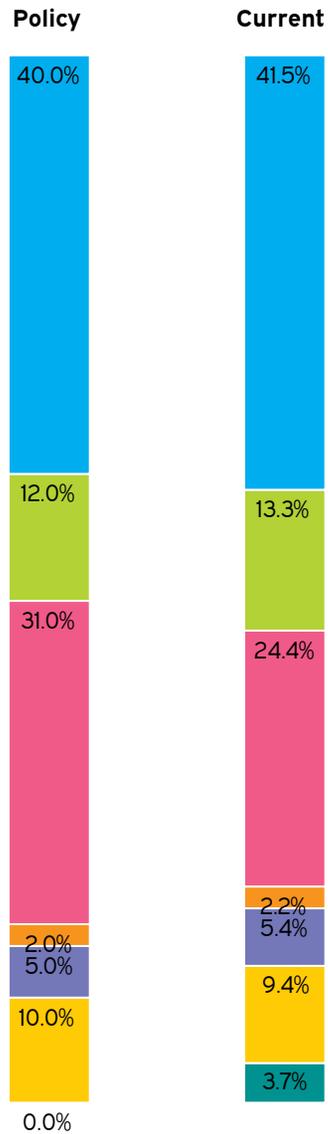
PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

Oakland Police and Fire Retirement System

July 26, 2023

June Flash Report

As of July 31, 2023



Allocation vs. Targets and Policy						
	Current Balance (\$)	Current (%)	Policy (%)	Difference (%)	Policy Range (%)	Within IPS Range?
Domestic Equity	177,309,264	41.5	40.0	1.5	30.0 - 50.0	Yes
International Equity	56,966,764	13.3	12.0	1.3	8.0 - 14.0	Yes
Fixed Income	104,393,988	24.4	31.0	-6.6	25.0 - 40.0	No
Credit	9,349,083	2.2	2.0	0.2	1.0 - 3.0	Yes
Covered Calls	22,982,542	5.4	5.0	0.4	5.0 - 10.0	Yes
Crisis Risk Offset	40,068,784	9.4	10.0	-0.6	5.0 - 15.0	Yes
Cash	15,918,372	3.7	0.0	3.7	0.0 - 5.0	Yes
Total	426,988,797	100.0	100.0	0.0		

Asset Class Performance Summary										
	Market Value (\$)	% of Portfolio	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
OPFRS Total Plan	426,988,797	100.0	1.6	9.6	5.0	5.6	5.2	6.9	6.6	Dec-88
<i>OPFRS Policy Benchmark</i>			<i>1.9</i>	<i>11.2</i>	<i>7.0</i>	<i>5.6</i>	<i>5.4</i>	<i>7.0</i>	<i>7.9</i>	
Excess Return			-0.3	-1.6	-2.0	0.0	-0.2	-0.1	-1.3	
Domestic Equity	177,309,264	41.5	3.1	14.8	8.7	11.9	9.7	11.4	8.9	Jun-97
<i>Russell 3000 (Blend)</i>			<i>3.6</i>	<i>20.3</i>	<i>12.6</i>	<i>13.1</i>	<i>11.4</i>	<i>12.1</i>	<i>9.2</i>	
Excess Return			-0.5	-5.5	-3.9	-1.2	-1.7	-0.7	-0.3	
International Equity	56,966,764	13.3	2.0	14.0	13.0	7.3	4.1	5.5	5.3	Jan-98
<i>MSCI ACWI ex US (Blend)</i>			<i>4.1</i>	<i>13.9</i>	<i>13.4</i>	<i>7.1</i>	<i>3.9</i>	<i>4.7</i>	<i>5.2</i>	
Excess Return			-2.1	0.1	-0.4	0.2	0.2	0.8	0.1	
Fixed Income	104,393,988	24.4	-0.1	2.7	-2.3	-3.5	1.0	1.9	4.5	Jan-94
<i>Bloomberg Universal (Blend)</i>			<i>0.1</i>	<i>2.4</i>	<i>-2.4</i>	<i>-4.0</i>	<i>1.0</i>	<i>1.8</i>	<i>4.5</i>	
Excess Return			-0.2	0.3	0.1	0.5	0.0	0.1	0.0	
Credit	9,349,083	2.2	1.6	8.7	7.4	6.5	3.4	--	4.7	Feb-15
<i>Blmbg. U.S. Corp: High Yield Index</i>			<i>1.4</i>	<i>6.8</i>	<i>4.4</i>	<i>2.0</i>	<i>3.4</i>	<i>4.4</i>	<i>4.3</i>	
Excess Return			0.2	1.9	3.0	4.5	0.0	--	0.4	
Covered Calls	22,982,542	5.4	1.9	16.1	11.0	12.5	9.4	--	9.1	Apr-14
<i>CBOE S&P 500 Buy Write Index</i>			<i>1.4</i>	<i>12.1</i>	<i>6.4</i>	<i>9.7</i>	<i>4.3</i>	<i>6.4</i>	<i>5.8</i>	
Excess Return			0.5	4.0	4.6	2.8	5.1	--	3.3	
Crisis Risk Offset	40,068,784	9.4	-0.1	1.8	-1.7	-8.2	-8.1	--	-8.1	Aug-18
<i>Crisis Risk Offset Benchmark</i>			<i>-1.4</i>	<i>1.4</i>	<i>5.0</i>	<i>3.6</i>	<i>-0.2</i>	<i>--</i>	<i>-0.2</i>	
Excess Return			1.3	0.4	-6.7	-11.8	-7.9	--	-7.9	

Performance shown is net of fees, except for Total Plan, Domestic Equity, and International Equity composites which have a mix of gross and net of fees performance. Please see the Addendum for more details. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

Asset Class & Manager Performance | As of July 31, 2023

	Market Value (\$)	% of Portfolio	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
OPFRS Total Plan	426,988,797	100.0	1.6	9.6	5.0	5.6	5.2	6.9	6.6	Dec-88
<i>OPFRS Policy Benchmark</i>			<i>1.9</i>	<i>11.2</i>	<i>7.0</i>	<i>5.6</i>	<i>5.4</i>	<i>7.0</i>	<i>7.9</i>	
Excess Return			-0.3	-1.6	-2.0	0.0	-0.2	-0.1	-1.3	
Domestic Equity	177,309,264	41.5	3.1	14.8	8.7	11.9	9.7	11.4	8.9	Jun-97
<i>Russell 3000 (Blend)</i>			<i>3.6</i>	<i>20.3</i>	<i>12.6</i>	<i>13.1</i>	<i>11.4</i>	<i>12.1</i>	<i>9.2</i>	
Excess Return			-0.5	-5.5	-3.9	-1.2	-1.7	-0.7	-0.3	
Northern Trust Russell 1000	84,160,873	19.7	3.4	20.7	12.9	13.1	11.8	12.3	13.5	Jun-10
<i>Russell 1000 Index</i>			<i>3.4</i>	<i>20.7</i>	<i>12.9</i>	<i>13.2</i>	<i>11.9</i>	<i>12.4</i>	<i>13.6</i>	
Excess Return			0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	
EARNEST Partners	42,499,305	10.0	2.9	11.6	3.8	12.4	10.5	11.9	9.4	Apr-06
<i>Russell Midcap Index</i>			<i>4.0</i>	<i>13.3</i>	<i>8.7</i>	<i>11.8</i>	<i>8.8</i>	<i>10.1</i>	<i>8.8</i>	
Excess Return			-1.1	-1.7	-4.9	0.6	1.7	1.8	0.6	
Wellington Select Quality Equity	23,507,008	5.5	0.6	5.9	8.0	--	--	--	5.4	May-22
<i>Russell 1000 Index</i>			<i>3.4</i>	<i>20.7</i>	<i>12.9</i>	<i>13.2</i>	<i>11.9</i>	<i>12.4</i>	<i>10.2</i>	
Excess Return			-2.8	-14.8	-4.9	--	--	--	-4.8	
Brown Fundamental Small Cap Value	12,001,225	2.8	6.4	9.9	9.5	--	--	--	4.8	Apr-21
<i>Russell 2000 Value Index</i>			<i>7.5</i>	<i>10.2</i>	<i>3.9</i>	<i>17.5</i>	<i>4.7</i>	<i>7.4</i>	<i>-0.1</i>	
Excess Return			-1.1	-0.3	5.6	--	--	--	4.9	
Rice Hall James	15,140,852	3.5	3.2	13.2	2.9	5.6	3.0	--	7.0	Aug-17
<i>Russell 2000 Growth Index</i>			<i>4.7</i>	<i>18.9</i>	<i>11.6</i>	<i>6.5</i>	<i>4.8</i>	<i>8.5</i>	<i>7.6</i>	
Excess Return			-1.5	-5.7	-8.7	-0.9	-1.8	--	-0.6	

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Asset Class & Manager Performance | As of July 31, 2023

	Market Value (\$)	% of Portfolio	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
International Equity	56,966,764	13.3	2.0	14.0	13.0	7.3	4.1	5.5	5.3	Jan-98
<i>MSCI ACWI ex US (Blend)</i>			4.1	13.9	13.4	7.1	3.9	4.7	5.2	
Excess Return			-2.1	0.1	-0.4	0.2	0.2	0.8	0.1	
Vanguard Developed Markets ETF	15,949,620	3.7	3.1	13.9	12.9	9.0	--	--	7.4	Sep-19
<i>FTSE Developed All Cap ex-U.S. Index</i>			3.6	15.1	15.2	9.5	4.9	5.7	7.9	
Excess Return			-0.5	-1.2	-2.3	-0.5	--	--	-0.5	
SGA ACWI ex-U.S. Equity	41,017,144	9.6	1.5	14.0	13.0	6.6	--	--	3.4	Dec-19
<i>MSCI AC World ex USA (Net)</i>			4.1	13.9	13.4	7.1	3.9	4.7	4.9	
Excess Return			-2.6	0.1	-0.4	-0.5	--	--	-1.5	
Fixed Income	104,393,988	24.4	-0.1	2.7	-2.3	-3.5	1.0	1.9	4.5	Jan-94
<i>Bloomberg Universal (Blend)</i>			0.1	2.4	-2.4	-4.0	1.0	1.8	4.5	
Excess Return			-0.2	0.3	0.1	0.5	0.0	0.1	0.0	
Ramirez	70,759,121	16.6	-0.2	2.4	-2.5	-3.6	1.0	--	1.2	Feb-17
<i>Blmbg. U.S. Aggregate Index</i>			-0.1	2.0	-3.4	-4.5	0.7	1.5	0.8	
Excess Return			-0.1	0.4	0.9	0.9	0.3	--	0.4	
Wellington Core Bond	6,727,417	1.6	0.0	3.0	-2.8	--	--	--	-4.6	Apr-21
<i>Blmbg. U.S. Aggregate Index</i>			-0.1	2.0	-3.4	-4.5	0.7	1.5	-4.2	
Excess Return			0.1	1.0	0.6	--	--	--	-0.4	
Reams	26,907,450	6.3	0.2	3.4	-1.9	-3.1	3.5	2.9	4.9	Feb-98
<i>Bloomberg Universal (Blend)</i>			0.1	2.4	-2.4	-4.0	1.0	1.8	4.1	
Excess Return			0.1	1.0	0.5	0.9	2.5	1.1	0.8	

Performance shown is net of fees, except for International Equity composite which has a mix of gross and net of fees performance. Please see the Addendum for more details. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see the Benchmark History for custom benchmark compositions.

Asset Class & Manager Performance | As of July 31, 2023

	Market Value (\$)	% of Portfolio	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
Credit	9,349,083	2.2	1.6	8.7	7.4	6.5	3.4	--	4.7	Feb-15
<i>Blmbg. U.S. Corp: High Yield Index</i>			<i>1.4</i>	<i>6.8</i>	<i>4.4</i>	<i>2.0</i>	<i>3.4</i>	<i>4.4</i>	<i>4.3</i>	
Excess Return			0.2	1.9	3.0	4.5	0.0	--	0.4	
Polen Capital	9,349,083	2.2	1.6	8.7	7.4	6.5	3.4	--	4.7	Feb-15
<i>ICE BofA High Yield Master II</i>			<i>1.4</i>	<i>6.9</i>	<i>4.1</i>	<i>2.1</i>	<i>3.2</i>	<i>4.3</i>	<i>4.2</i>	
Excess Return			0.2	1.8	3.3	4.4	0.2	--	0.5	
Covered Calls	22,982,542	5.4	1.9	16.1	11.0	12.5	9.4	--	9.1	Apr-14
<i>CBOE S&P 500 Buy Write Index</i>			<i>1.4</i>	<i>12.1</i>	<i>6.4</i>	<i>9.7</i>	<i>4.3</i>	<i>6.4</i>	<i>5.8</i>	
Excess Return			0.5	4.0	4.6	2.8	5.1	--	3.3	
Parametric BXM	11,379,679	2.7	1.5	13.1	8.9	10.3	6.8	--	7.2	Apr-14
<i>CBOE S&P 500 Buy Write Index</i>			<i>1.4</i>	<i>12.1</i>	<i>6.4</i>	<i>9.7</i>	<i>4.3</i>	<i>6.4</i>	<i>5.8</i>	
Excess Return			0.1	1.0	2.5	0.6	2.5	--	1.4	
Parametric DeltaShift	11,602,863	2.7	2.3	19.1	13.0	14.2	11.6	--	11.1	Apr-14
<i>CBOE S&P 500 Buy Write Index</i>			<i>1.4</i>	<i>12.1</i>	<i>6.4</i>	<i>9.7</i>	<i>4.3</i>	<i>6.4</i>	<i>5.8</i>	
Excess Return			0.9	7.0	6.6	4.5	7.3	--	5.3	

Performance shown is net of fees. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see the Benchmark History for custom benchmark compositions.

Asset Class & Manager Performance | As of July 31, 2023

	Market Value (\$)	% of Portfolio	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
Crisis Risk Offset	40,068,784	9.4	-0.1	1.8	-1.7	-8.2	-8.1	--	-8.1	Aug-18
<i>Crisis Risk Offset Benchmark</i>			<i>-1.4</i>	<i>1.4</i>	<i>5.0</i>	<i>3.6</i>	<i>-0.2</i>	<i>--</i>	<i>-0.2</i>	
Excess Return			1.3	0.4	-6.7	-11.8	-7.9	--	-7.9	
Kepos Alternative Risk Premia	10,737,026	2.5	2.5	9.1	13.3	--	--	--	4.9	Feb-22
<i>SG Multi Alternative Risk Premia Index</i>			<i>-0.3</i>	<i>3.3</i>	<i>7.0</i>	<i>4.2</i>	<i>0.2</i>	<i>--</i>	<i>4.8</i>	
Excess Return			2.8	5.8	6.3	--	--	--	0.1	
Versor Trend Following	15,551,785	3.6	0.0	-2.6	-0.6	--	--	--	2.7	Apr-22
<i>SG Trend Index</i>			<i>-1.6</i>	<i>-1.5</i>	<i>1.8</i>	<i>12.5</i>	<i>9.2</i>	<i>5.6</i>	<i>4.9</i>	
Excess Return			1.6	-1.1	-2.4	--	--	--	-2.2	
Vanguard Long-Term Treasury ETF	13,779,972	3.2	-2.2	1.6	-11.7	-14.1	--	--	-4.5	Jul-19
<i>Blmbg. U.S. Gov Long Index</i>			<i>-2.2</i>	<i>1.5</i>	<i>-11.2</i>	<i>-13.8</i>	<i>-1.0</i>	<i>1.8</i>	<i>-4.3</i>	
Excess Return			0.0	0.1	-0.5	-0.3	--	--	-0.2	
Cash	15,918,372	3.7	--	--	--	--	--	--	--	Mar-11

Performance shown is net of fees. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see the Benchmark History for custom benchmark compositions.

Cash Flow Summary

	Beginning Market Value	Net Cash Flow	Net Investment Change	Ending Market Value
Northern Trust Russell 1000	81,367,541	-	2,793,332	84,160,873
EARNEST Partners	43,238,606	-2,000,000	1,260,700	42,499,305
Wellington Select Quality Equity	23,373,498	-	133,510	23,507,008
Brown Fundamental Small Cap Value	11,278,982	-	722,243	12,001,225
Rice Hall James	14,666,153	-	474,700	15,140,852
Vanguard Developed Markets ETF	15,464,066	-	485,554	15,949,620
SGA ACWI ex-U.S. Equity	40,377,022	-	640,123	41,017,144
Ramirez	70,891,932	-	-132,811	70,759,121
Wellington Core Bond	6,726,320	-	1,096	6,727,417
Reams	26,844,017	-	63,433	26,907,450
Polen Capital	9,200,988	-	148,095	9,349,083
Parametric BXM	11,207,891	-	171,789	11,379,679
Parametric DeltaShift	11,340,209	-	262,653	11,602,863
Kepos Alternative Risk Premia	10,476,679	-	260,348	10,737,026
Versor Trend Following	15,551,785	-	-	15,551,785
Vanguard Long-Term Treasury ETF	14,131,423	-	-351,450	13,779,972
Cash - Money Market	4,357,977	1,080,395	-	5,438,372
Cash - Treasury	9,675,000	805,000	-	10,480,000
Securities Lending Northern Trust	-	-12,559	12,559	-
OPFRS Total Plan	420,170,089	-127,165	6,945,873	426,988,797

Benchmark History		
From Date	To Date	Benchmark
OPFRS Total Plan		
06/01/2022	Present	40.0% Russell 3000 Index, 12.0% MSCI AC World ex USA (Net), 31.0% Blmbg. U.S. Universal Index, 2.0% Blmbg. U.S. Corp: High Yield Index, 5.0% CBOE S&P 500 Buy Write Index, 10.0% Crisis Risk Offset Benchmark
01/01/2019	06/01/2022	40.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 31.0% Blmbg. U.S. Universal Index, 5.0% CBOE S&P 500 Buy Write Index, 2.0% Blmbg. U.S. Treasury: Long, 10.0% Crisis Risk Offset Benchmark
05/01/2016	01/01/2019	48.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 20.0% Blmbg. U.S. Universal Index, 20.0% CBOE BXM
10/01/2015	05/01/2016	43.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 20.0% Blmbg. U.S. Universal Index, 15.0% CBOE BXM, 10.0% CPI - All Urban Consumers (unadjusted) +3%
01/01/2014	10/01/2015	48.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 20.0% Blmbg. U.S. Universal Index, 10.0% CBOE BXM, 10.0% CPI - All Urban Consumers (unadjusted) +3%
03/01/2013	01/01/2014	40.0% Russell 3000 Index, 10.0% MSCI AC World ex USA index, 17.0% Blmbg. U.S. Universal Index, 33.0% ICE BofA 3 Month U.S. T-Bill
08/01/2012	03/01/2013	20.0% Russell 3000 Index, 7.0% MSCI AC World ex USA index, 18.0% Blmbg. U.S. Universal Index, 55.0% ICE BofA 3 Month U.S. T-Bill
10/01/2007	08/01/2012	53.0% Russell 3000 Index, 17.0% MSCI AC World ex USA index, 30.0% Blmbg. U.S. Universal Index
04/01/2006	10/01/2007	35.0% Russell 3000 Index, 15.0% MSCI AC World ex USA index, 50.0% Blmbg. U.S. Universal Index
01/01/2005	04/01/2006	35.0% Russell 3000 Index, 50.0% Blmbg. U.S. Aggregate Index, 15.0% MSCI AC World ex USA index
04/01/1998	01/01/2005	20.0% Russell 1000 Value Index, 10.0% Russell 1000 Index, 5.0% Russell Midcap Index, 50.0% Blmbg. U.S. Aggregate Index, 15.0% MSCI EAFE (Net)
09/01/1988	04/01/1998	40.0% S&P 500 Index, 55.0% Blmbg. U.S. Aggregate Index, 5.0% FTSE 3 Month T-Bill

Benchmark History

From Date	To Date	Benchmark
Domestic Equity		
01/01/2005	Present	100.0% Russell 3000 Index
04/01/1998	01/01/2005	57.1% Russell 1000 Value Index, 28.6% Russell 1000 Index, 14.3% Russell Midcap Index
09/01/1988	04/01/1998	100.0% S&P 500 Index
International Equity		
01/01/2005	Present	100.0% MSCI AC World ex USA (Net)
01/01/1998	01/01/2005	100.0% MSCI EAFE Index
Fixed Income		
04/01/2006	Present	100.0% Blmbg. U.S. Universal Index
01/01/1976	04/01/2006	100.0% Blmbg. U.S. Aggregate Index
Covered Calls		
03/01/2014	Present	CBOE S&P 500 Buy Write Index
Crisis Risk Offset		
01/01/2023	Present	33.3% SG Trend Index, 33.3% SG Multi Alternative Risk Premia Index, 33.3% Blmbg. U.S. Government: Long Term Bond Index
08/01/2018	01/01/2023	100.0% SG Multi Alternative Risk Premia Index
Cash		
03/01/2011	Present	FTSE 3 Month T-Bill

Additional Information

Performance Return Types: Performance shown is net of fees, except for OPFRS Total Plan, Domestic Equity, and International Equity Composites, which have a mix of gross and net of fees performance. Performance shown for OPFRS Total Plan and International Equity composite is gross of fees prior to January 2016. Performance shown for Domestic Equity composite is gross of fees prior to January 2017.

Inception Date: Since inception date and performance begin in the month following an investments initial funding.

Fiscal Year: Fiscal year begins on July 1.

Fair Value Pricing Methodology: Though Vanguard Developed Markets ETF is a passive strategy, short-term performance may appear to diverge from the index it tracks more than would be expected. This is due to Fair Value Pricing (FVP) adjustments that address the pricing discrepancies that may arise from time-zone differences among global securities markets. The resulting temporary divergence is expected to correct itself when the foreign markets reopen.

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PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

Oakland Police and Fire Retirement System

Quarterly Performance Report
as of June 30, 2023

Agenda

1. Executive Summary
2. Economic and Market Update as of June 30, 2023
3. Quarterly Performance as of June 30, 2023
4. Manager Monitoring / Probation Status
5. Disclaimer, Glossary, and Notes

Executive Summary

Total Portfolio Review

The Oakland Police and Fire Retirement System (OPFRS) finished the quarter with a market value of \$420.2 million.

→ This represents a \$13.6 million in investment gains after \$4.6 million in net outflows over the quarter.

→ Over the past 12 months, the Total Portfolio appreciated by \$33.9 million, after withdrawals totaling \$20.0 million for net outflows including benefit payments.

→ As of 06/30/2023, most asset classes were within acceptable allocation ranges relative to policy targets except for Fixed Income, which was marginally out of the policy range.¹

Investment Performance

→ During the quarter, the OPFRS portfolio generated an absolute return of 3.3%, net of fees, underperforming its policy benchmark² by -0.7%. The portfolio underperformed the benchmark over the trailing 1- and 5-year periods while outperforming the latter over the 3-year period.

- The quarterly underperformance was primarily driven by the Domestic Equity segment's performance.

	QTD	YTD	FYTD ³ / 1 Year	3 Year	5 Year
Total Portfolio (Gross)	3.4	8.0	8.8	6.6	5.6
Total Portfolio (Net)	3.3	7.9	8.5	6.3	5.3
Policy Benchmark	4.0	9.1	10.4	6.2	5.5
Excess Return (Net)	-0.7	-1.3	-1.9	0.1	-0.2
Peer Group Median Fund ³	3.1	7.3	8.5	7.5	6.3
vs. Peer Median	0.1	0.6	0.0	-1.2	-1.0

¹ Target weightings reflect the interim phase (where Crisis Risk Offset component is set to 10%) of the Plan's previously approved asset allocation (effective 5/31/2017).

² Evolving Policy Benchmark consists of 40% Russell 3000, 12% MSCI ACWI ex U.S., 33% Bloomberg Universal, 5% CBOE BXM, 6.7% SG Multi Asset Risk Premia, 3.3% Bloomberg Long Treasury from 1/1/2019 through 5/31/2022; and 40% Russell 3000 / 12% MSCI ACWI ex USA / 31% Bloomberg US Universal TR / 5% CBOE BXM / 10% Crisis Risk Offset Benchmark / 2% Bloomberg US High Yield thereafter.

³ Fiscal year begins on July 01. Peer group is Investment Metrics peer universe of Public Defined Benefit plans with \$250 million to \$1 billion in assets. The number of peers is about 80 portfolios in each time period.

Asset Class & Manager Highlights

- **Domestic equity** underperformed the Russell 3000 Index over all trailing periods.
 - All the active managers, except **Brown Fundamental Small Cap Value**, underperformed their respective benchmarks in the quarter, year-to-date, and 1-year time periods.
- **International equity** outperformed the MSCI ACWI ex US Index for all time periods measured.
 - The active **SGA MSCI ACWI ex US** outperformed its benchmark over all time periods except since inception.
 - The passive **Vanguard** posted some variation¹ from the tracked benchmark over the periods measured.
- **Fixed income** outperformed or matched its benchmark across all time periods. The underlying managers also outperformed their respective benchmarks across almost all time periods measured.
- The **Credit** segment, with **Polen Capital** as its only manager, outperformed the asset class's benchmark, Bloomberg US High Yield Index, for all time periods except in the 1- and 5-year trailing periods.
- **Covered Calls**, as well as both the passive BXM and the active DeltaShift strategies outperformed the CBOE S&P 500 Buy-Write Index across all periods measured.
- The **Crisis Risk Offset** segment trailed its custom benchmark across all time periods measured.
 - With the Committee's approval in the May meeting, this segment's benchmark has been updated effective 01/01/2023 to better reflect its underlying components and their respective targets.

¹ Due to Vanguard's fair-value pricing methodology and timing of the international markets, the strategy's returns may deviate from its tracked index in the short-term that are expected to equalize over the longer term.

Economic and Market Update

Data as of June 30, 2023

Commentary

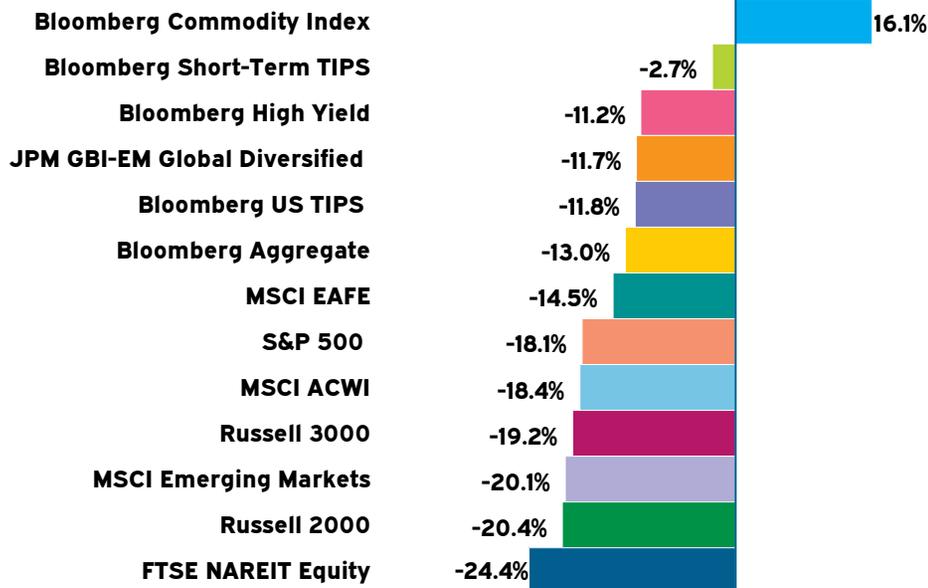
→ Asset returns were positive in June with US and Non-US equities posting gains, while most fixed income sectors sold-off on expectations for further interest rate hikes later this year. Except for commodities, most public market asset classes remain up for the year.

- Although the Fed skipped a rate-hike in June, Fed comments signaled further rate hikes in the 2H 2023; the US economy appears to be resilient supporting domestic demand and low unemployment.
- US equity markets (Russell 3000) rose in June (+6.8%) adding to YTD gains (+16.2%). Some of the largest technology names drove positive results. Growth stocks continued to outpace value stocks, particularly in the large cap space.
- Non-US developed equity markets rose in June (MSCI EAFE 4.6%) falling behind US equities in 2023 (+16.2% versus +11.7%). A strengthening US dollar weighed on returns.
- Emerging market equities rose in June (+3.8%) supported by positive returns in China (+4.0%). They significantly trail developed market equities YTD returning +4.9%, due partly to higher US-China tensions.
- Rates generally rose in June leading to bond markets declining, with the broad US bond market (Bloomberg Aggregate) falling 0.4% for the month. It remains positive (+2.1%) year-to-date, though, on declining inflation and expectations for the Fed to end their rate hikes soon.

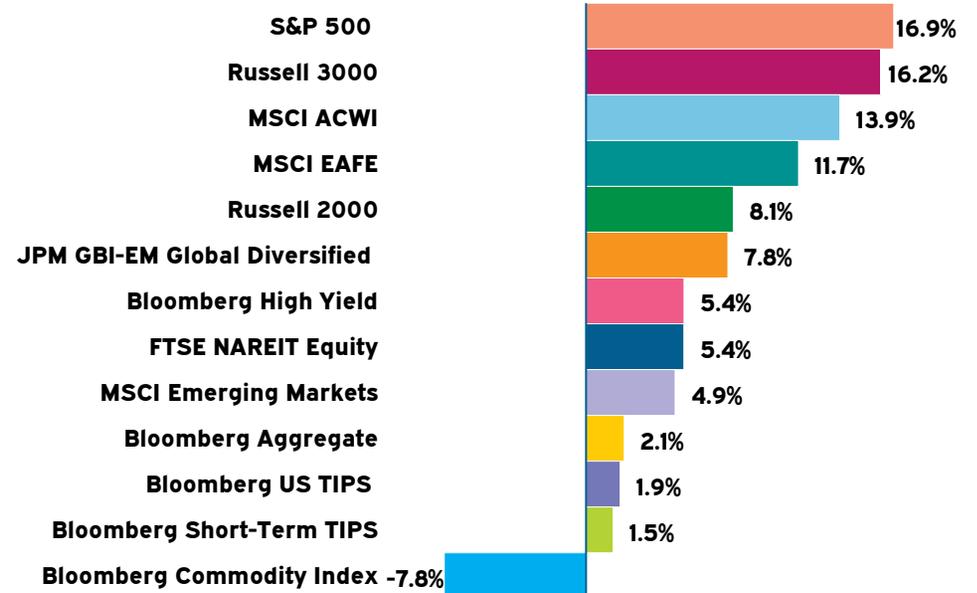
→ This year, the paths of inflation and monetary policy, slowing global growth and the war in Ukraine will all be key.

Index Returns¹

2022



YTD



→ After a particularly difficult 2022, most public market assets are up thus far in 2023, building on gains from the fourth quarter of last year.

→ Risk sentiment has been supported by expectations that policy tightening could be ending soon, as inflation continues to fall, and growth has slowed.

¹ Source: Bloomberg and FactSet. Data is as of June 30, 2023.

Domestic Equity Returns¹

Domestic Equity	June (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
S&P 500	6.6	8.7	16.9	19.6	14.6	12.3	12.8
Russell 3000	6.8	8.4	16.2	19.0	13.9	11.4	12.3
Russell 1000	6.8	8.6	16.7	19.4	14.1	11.9	12.6
Russell 1000 Growth	6.8	12.8	29.0	27.1	13.7	15.1	15.7
Russell 1000 Value	6.6	4.1	5.1	11.5	14.3	8.1	9.2
Russell MidCap	8.3	4.8	9.0	14.9	12.5	8.4	10.3
Russell MidCap Growth	7.7	6.2	15.9	23.1	7.6	9.7	11.5
Russell MidCap Value	8.7	3.9	5.2	10.5	15.0	6.8	9.0
Russell 2000	8.1	5.2	8.1	12.3	10.8	4.2	8.2
Russell 2000 Growth	8.3	7.1	13.6	18.5	6.1	4.2	8.8
Russell 2000 Value	7.9	3.2	2.5	6.0	15.4	3.5	7.3

US Equities: Russell 3000 Index rose 8.4% in the second quarter and 16.2% YTD.

- US stocks rose sharply in the second quarter of 2023. Most of the gains came in the month of June when the Fed kept its target rate unchanged for the first time since early 2022. Investors are expressing optimism that the Fed can tame inflation without widespread disruptions to the equity markets.
- With the exception of energy and utilities, each sector of the Russell 3000 index appreciated during the second quarter. Technology led all sectors and was driven by enthusiasm for growth stocks, particularly those with exposure to artificial intelligence (e.g., NVIDIA).
- Large cap stocks continue to outperform small cap stocks, driven by technology and the underperformance of small cap biotechnology stocks. Growth stocks continue to broadly outperform value stocks.

¹ Source: Bloomberg. Data is as of June 30, 2023.

Foreign Equity Returns¹

Foreign Equity	June (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI ex. US	4.5	2.4	9.5	12.7	7.2	3.5	4.7
MSCI EAFE	4.6	3.0	11.7	18.8	8.9	4.4	5.4
MSCI EAFE (Local Currency)	3.6	4.3	12.1	17.5	11.7	6.4	7.7
MSCI EAFE Small Cap	2.9	0.6	5.5	10.2	5.7	1.3	6.2
MSCI Emerging Markets	3.8	0.9	4.9	1.8	2.3	0.9	2.9
MSCI Emerging Markets (Local Currency)	3.4	1.7	5.6	3.3	3.9	3.0	5.7
MSCI China	4.0	-9.7	-5.5	-16.8	-10.3	-5.3	3.0

Foreign Equity: Developed international equities (MSCI EAFE) rose 3.0% in the second quarter bringing the YTD results to +11.7%. Emerging market equities (MSCI EM) rose 0.9% in the quarter, rising 4.9% YTD.

- Eurozone and Japan markets continued their strength in June, wrapping up a strong second quarter. In Europe, financials and IT led returns whereas energy and communication services lagged. Enthusiasm for AI helped company fundamentals and prices for semiconductor stocks. Headline inflation was down in June, although core inflation was up slightly month over month. Energy and materials were the main drivers for falling UK equities, along with Bank of England rate hikes. Optimism continues to build for Japanese investors, while the Yen remains weak and Bank of Japan remains dovish.
- Emerging markets were laggards as China equities struggled from weak export demands and rising negative sentiments. Brazil, India and Taiwan are bright spots in EM, the former due to good earnings and macro, the latter from AI and IT strength.

¹ Source: Bloomberg. Data is as of June 30, 2023.

Fixed Income Returns¹

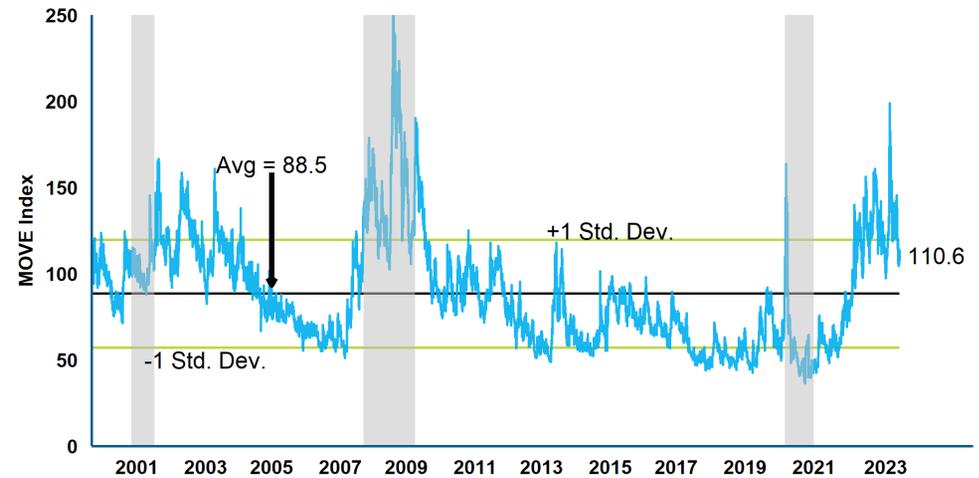
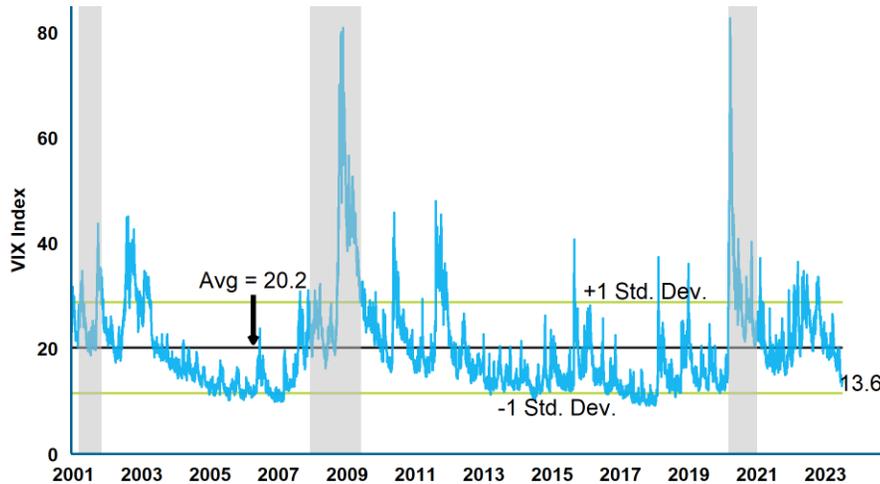
Fixed Income	June (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Current Yield (%)	Duration (Years)
Bloomberg Universal	-0.2	-0.6	2.3	0.0	-3.4	1.0	1.8	5.2	6.3
Bloomberg Aggregate	-0.4	-0.8	2.1	-0.9	-4.0	0.8	1.5	4.8	6.5
Bloomberg US TIPS	-0.3	-1.4	1.9	-1.4	-0.1	2.5	2.1	4.6	6.8
Bloomberg Short-term TIPS	-0.2	-0.7	1.5	0.1	2.3	2.7	1.7	5.3	2.5
Bloomberg High Yield	1.7	1.7	5.4	9.1	3.1	3.4	4.4	8.5	4.1
JPM GBI-EM Global Diversified (USD)	3.3	2.5	7.8	11.4	-1.4	0.3	-0.6	6.6	5.0

Fixed Income: The Bloomberg Universal declined 0.6% in the second quarter as global sovereign debt yields generally rose. Bonds retained a positive start to the year (+2.3% YTD) though as inflation continues to decline.

- US Treasury yields generally rose over the month, with 1-year to 10-year maturity sector rising the most due to higher policy expectations.
- The TIPS index and the short-term TIPS index posted negative returns for the month as inflation concerns continued to ease.
- Continued risk appetite drove high yield bond performance (1.7%) and outperformance versus the broad US bond market (Bloomberg Aggregate). Emerging market bonds (3.3%) also performed well on investor risk sentiment.

¹ Source: Bloomberg. JPM GBI-EM data is from InvestorForce. Data is as of June 30, 2023. The yield and duration data from Bloomberg is defined as the index's yield to worst and modified duration respectively.

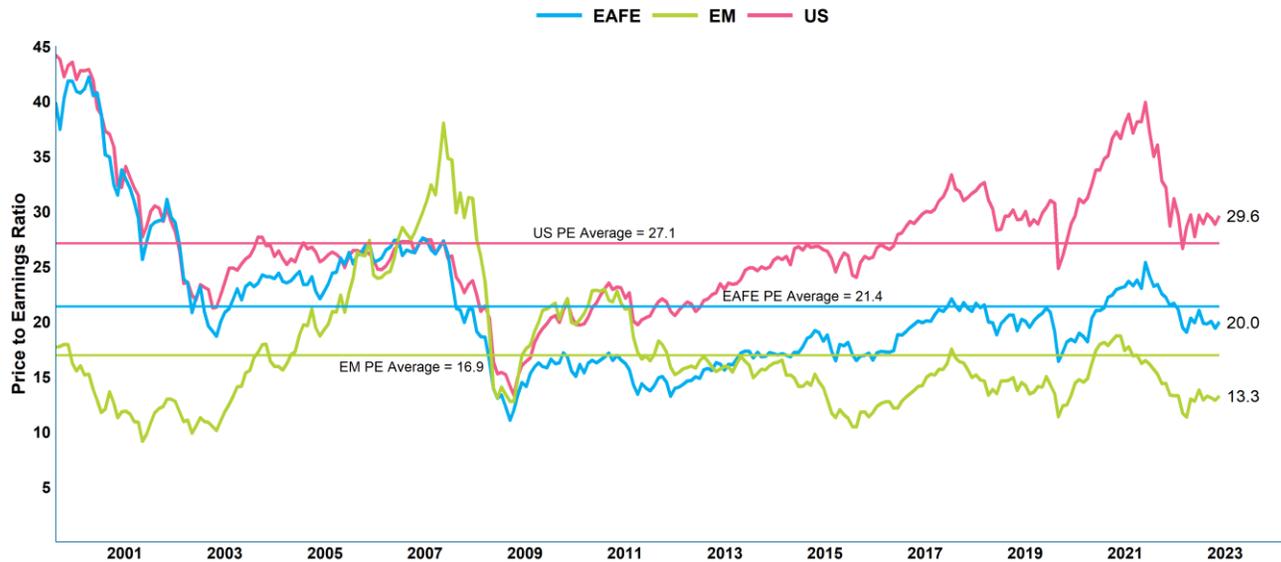
Equity and Fixed Income Volatility¹



- Volatility in equities (VIX) declined in June and remains low as investors continue to anticipate the end of the Fed's policy tightening.
- In comparison, the bond market remains on edge after last year's historic losses and continued volatility in interest rates this year due to policy uncertainty and issues in the banking sector. The MOVE (fixed income volatility) remains well above (110.6) its long-run average (88.4), but off its recent peak during the heart of the banking crisis.

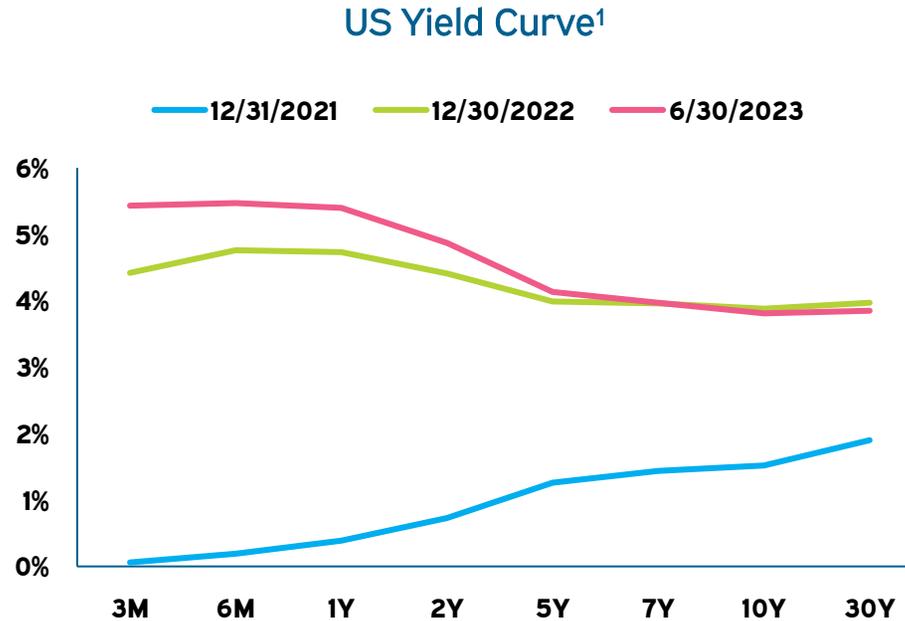
¹ Equity and Fixed Income Volatility – Source: Bloomberg. Implied volatility as measured using VIX Index for equity markets and the MOVE Index to measure interest rate volatility for fixed income markets. Data is as of June 2023. The average line indicated is the average of the VIX and MOVE values between January 2000 and June 2023.

Equity Cyclically Adjusted P/E Ratios¹



- After its dramatic decline last year the US equity price-to-earnings ratio remains above its long-run (21st century) average.
- International developed market valuations are below their own long-term average, with those for emerging markets the lowest and well under the long-term average.

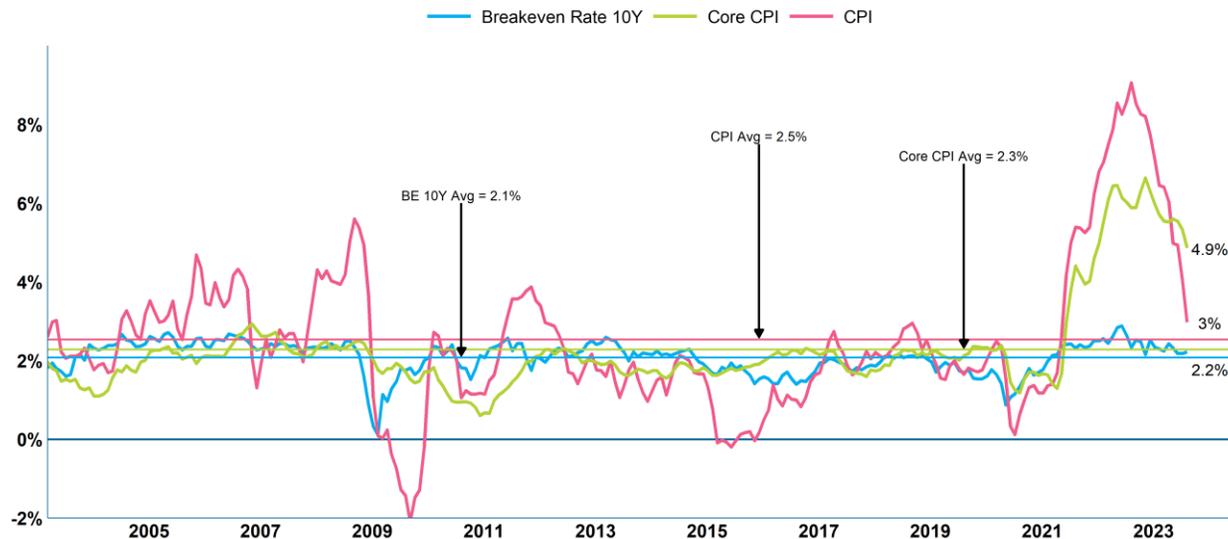
¹ US Equity Cyclically Adjusted P/E on S&P 500 Index. Source: Robert Shiller, Yale University, and Meketa Investment Group. Developed and Emerging Market Equity (MSCI EAFE and EM Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years. Data is as of June 2023. The average line is the long-term average of the US, EM, and EAFE PE values from December 1999 to the recent month-end respectively.



- Interest rates have started rising again across the curve given policy maker guidance that policy rates are likely to rise further and potentially stay longer at the terminal rate than market participants expect. The rise in rates was particularly acute at the very front-end (< 1 year). Maturities from two years out also drifted higher as market participants considered the possibility of additional policy rate increases as economic data (mainly inflation and labor markets) remains strong.
- The yield curve remains inverted with the spread between two-year and ten-year Treasuries finishing the month at -1.06%. The more closely watched measure (by the Fed) of the three-month and ten-year Treasuries spread also remained inverted at -1.62%. Inversions in the yield curve have often preceded recessions.

¹ Source: Bloomberg. Data is as of June 30, 2023.

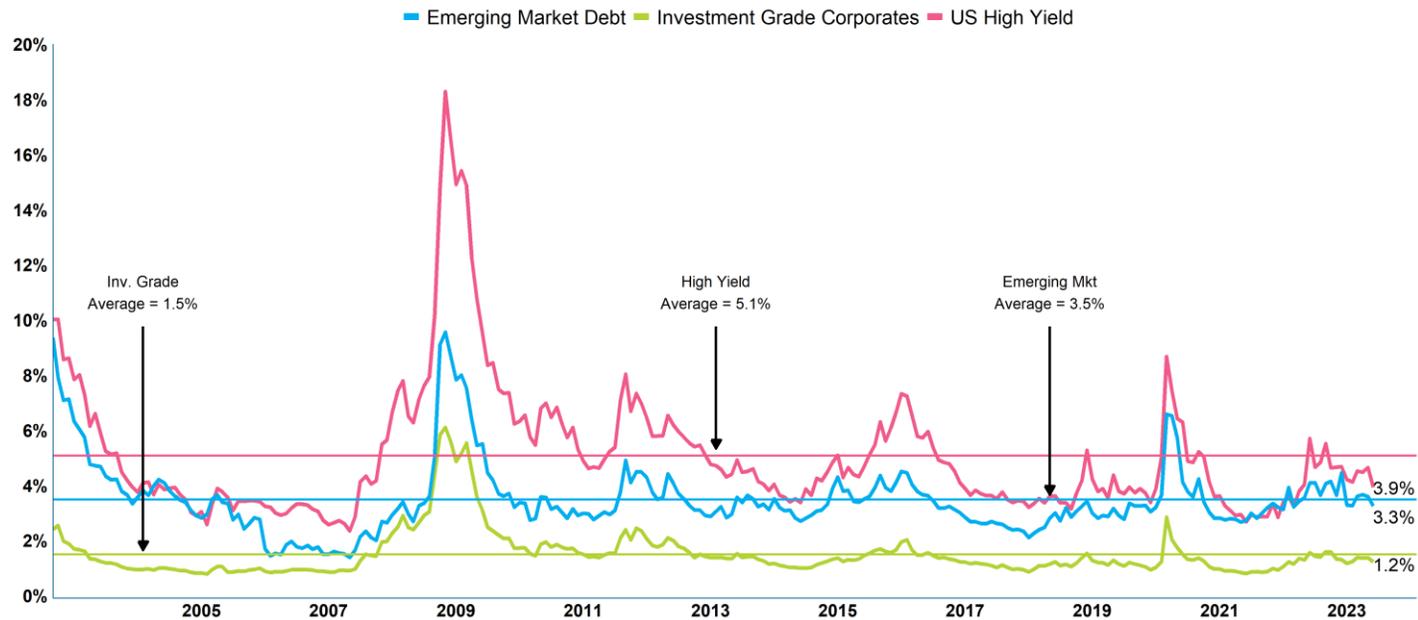
Ten-Year Breakeven Inflation and CPI¹



- Headline inflation continued to decline in June, with the year-over-year reading falling from 4.0% to 3.0% and coming in slightly below estimates. The month-over-month rate of price increases rose slightly (0.2% versus 0.1%), with food prices ticking up slightly (0.1%) and energy prices rose (0.6%).
- Core inflation – excluding food and energy - fell (5.3% to 4.9%), coming in slightly above forecasts. It remains stubbornly high driven by shelter costs.
- Inflation expectations (breakevens) remain well below current inflation as investors continue to expect inflation to track back toward the Fed’s 2% average target.

¹ Source: Bloomberg. Data is as June 30, 2023. The CPI and 10 Year Breakeven average lines denote the average values from August 1998 to the present month-end, respectively. Breakeven values represent month-end values for comparative purposes.

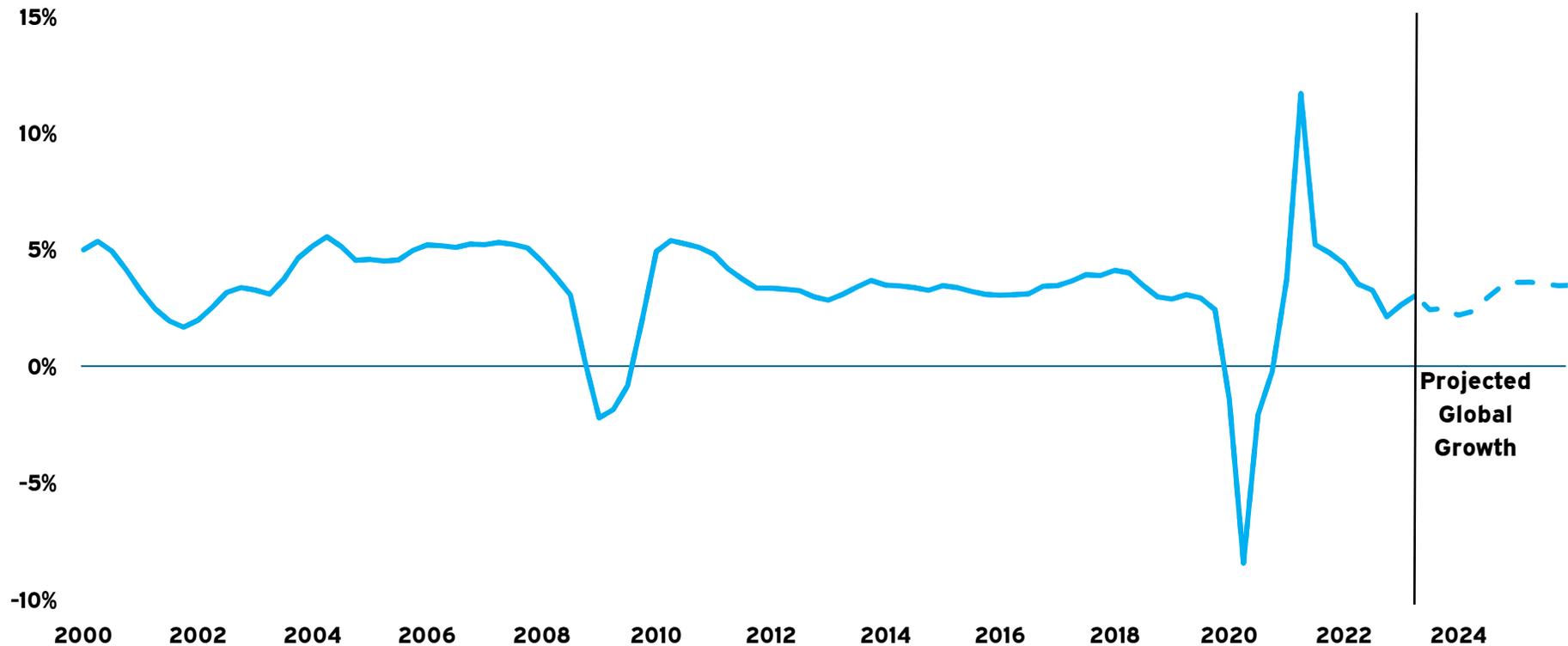
Credit Spreads vs. US Treasury Bonds¹



- Spreads (the added yield above a comparable maturity Treasury) declined in June as risk appetite remained robust for respective credit exposures.
- High yield spreads remain below their long-term average. Investment grade spreads and emerging market spreads are narrower than high yield spreads and close to their respective long-term averages.

¹ Sources: Bloomberg. Data is as of June 30, 2023. Average lines denote the average of the investment grade, high yield, and emerging market spread values from August 2000 to the recent month-end, respectively.

Global Real Gross Domestic Product (GDP) Growth¹

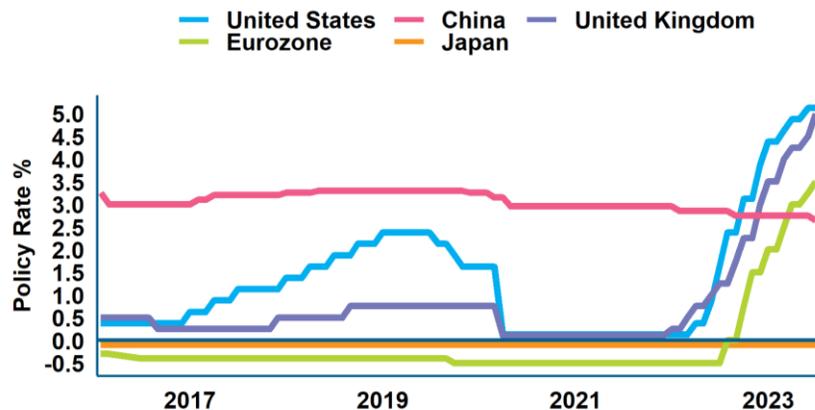


- Global economies are expected to slow this year compared to 2022, with risks of recession as the impacts of policymakers' aggressive tightening to fight inflation flow through economies.
- The delicate balancing act of central banks trying to reduce inflation without dramatically depressing growth will remain key.

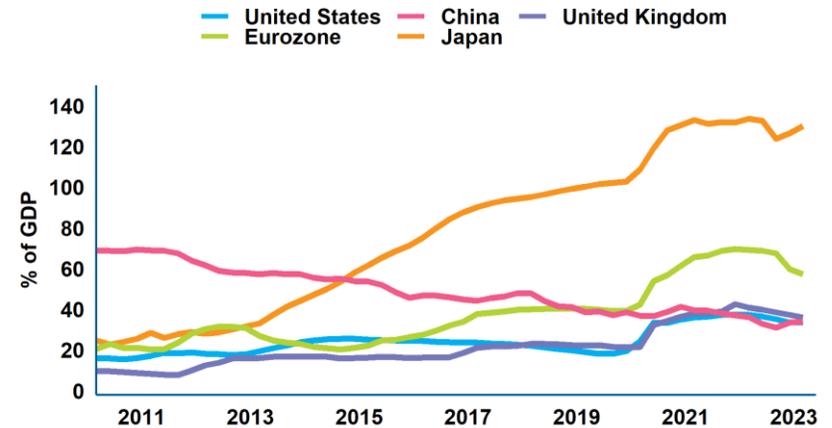
¹ Source: Oxford Economics (World GDP, US\$ prices & PPP exchange rate, real, % change YoY). Updated June 2023.

Central Bank Response¹

Policy Rates



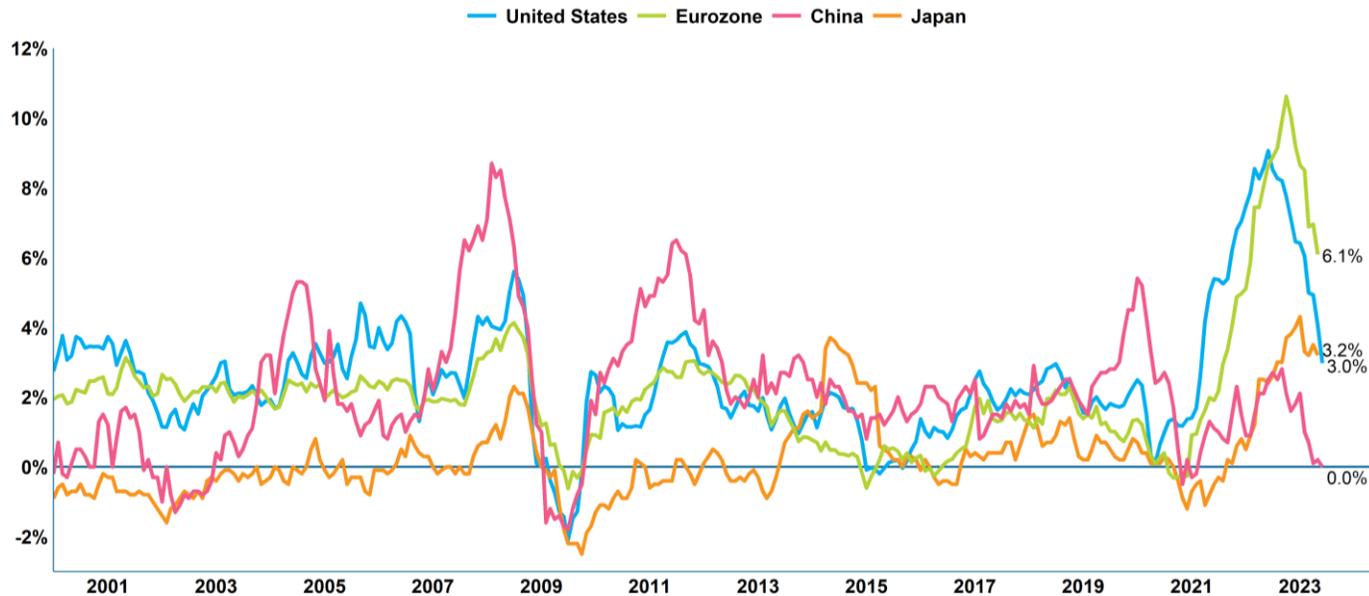
Balance Sheet as % of GDP



- In 2022, many central banks aggressively reduced pandemic-era policy support in the face of high inflation, with the US taking the most aggressive approach. Slowing inflation and growth have led to expectations for reductions in policy tightening going forward.
- In May the Fed raised rates another 25 basis points to a range of 5.0% to 5.25%. After month-end, the FOMC paused its tightening campaign but hinted that one or two additional rate hikes could come later this year.
- In China, the central bank has continued to cut interest rates and inject liquidity into the banking system, as weaker than expected economic data appears to indicate a widespread slowdown.
- Looking ahead, risks remain for a policy error as central banks attempt to balance multiple goals, bringing down inflation, maintaining financial stability, and supporting growth.

¹ Source: Bloomberg. Policy rate data is as of June 30, 2023. China policy rate is defined as the medium-term lending facility 1 year interest rate. Balance sheet as % of GDP is based on quarterly data and is as of March 31, 2023.

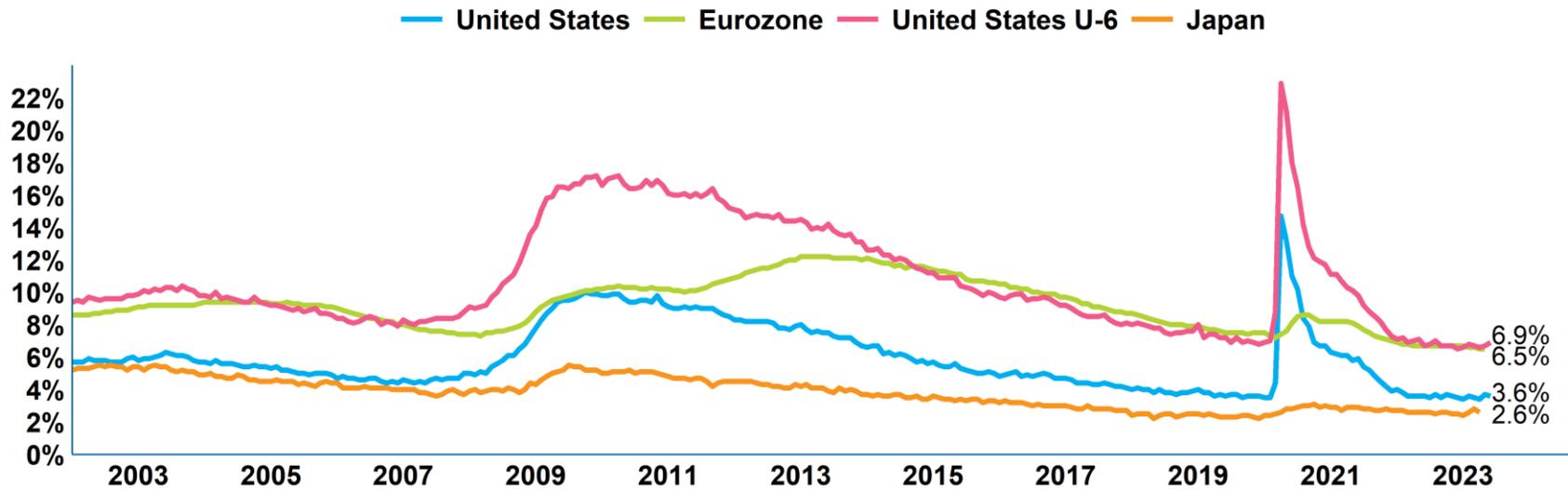
Inflation (CPI Trailing Twelve Months)¹



- Inflation pressures continued to decline globally due to the easing of supply chain issues from the pandemic, declining energy prices, and tighter monetary policy.
- In the US, inflation fell to 3.0% at month-end, while eurozone inflation also fell (6.1% from 7.0%) a level well off its peak. Despite 2023's significant declines in the US and Europe, inflation levels remain elevated compared to central bank targets.
- Inflation remains lower in China and Japan. In China, inflation levels were only slightly above 0% at month-end as the reopening of their economy has led to an uneven economic recovery.

¹ Source: Bloomberg. Data is as June 30, 2023. The most recent Japanese inflation data is as of May 2023.

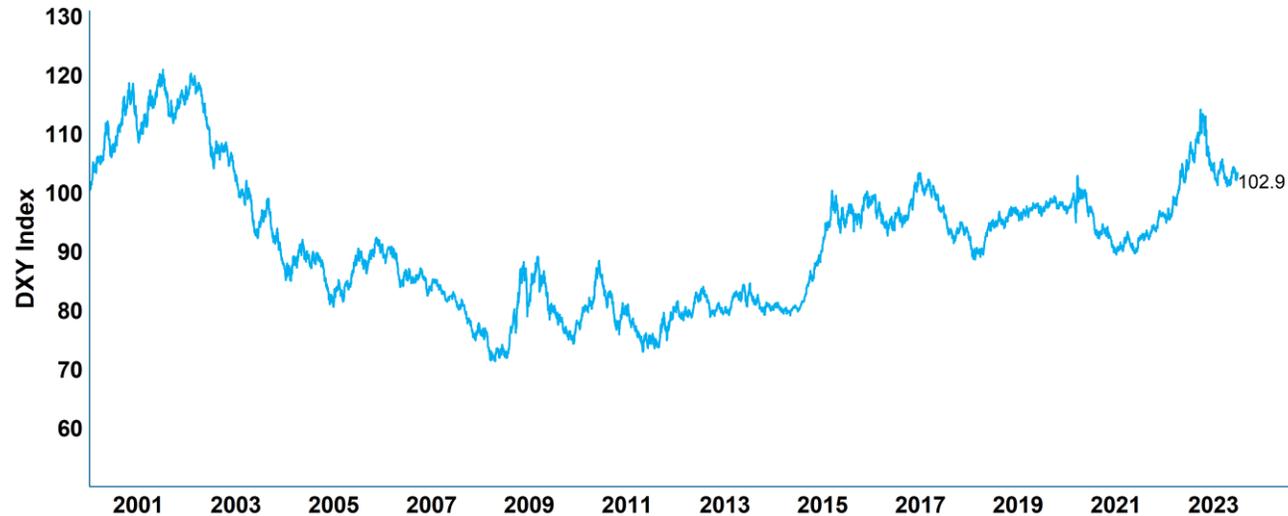
Unemployment¹



- Despite slowing growth and high inflation, the US labor market still shows signs of resiliency. Unemployment in the US, which experienced the steepest rise, recently returned to pre-pandemic levels. Broader measures of unemployment (U-6) remain higher at 6.9% but also declined dramatically from their peak.
- The strong labor market and higher wages, although beneficial for workers, motivates the Fed's efforts to fight inflation, leading to higher unemployment.
- Unemployment in Europe has also declined but remains higher than the US, while levels in Japan have been flat through the pandemic given less layoffs.

¹ Source: Bloomberg. Data is as June 30, 2023, for the US. The most recent data for Eurozone and Japanese unemployment is as of May 2023.

US Dollar versus Broad Currencies¹



- The dollar finished 2022 much higher than it started, due to the increased pace of policy tightening, stronger relative growth, and safe-haven flows.
- Late last year and into this year, the dollar declined, as weaker economic data and lower inflation led to investors anticipating the end of Fed tightening. In June, we did see a slight decline in the dollar though.
- This year, the track of inflation across economies and the corresponding monetary policies will be key drivers of currency moves.

¹ Source: Bloomberg. Data as of June 30, 2023.

Summary

Key Trends:

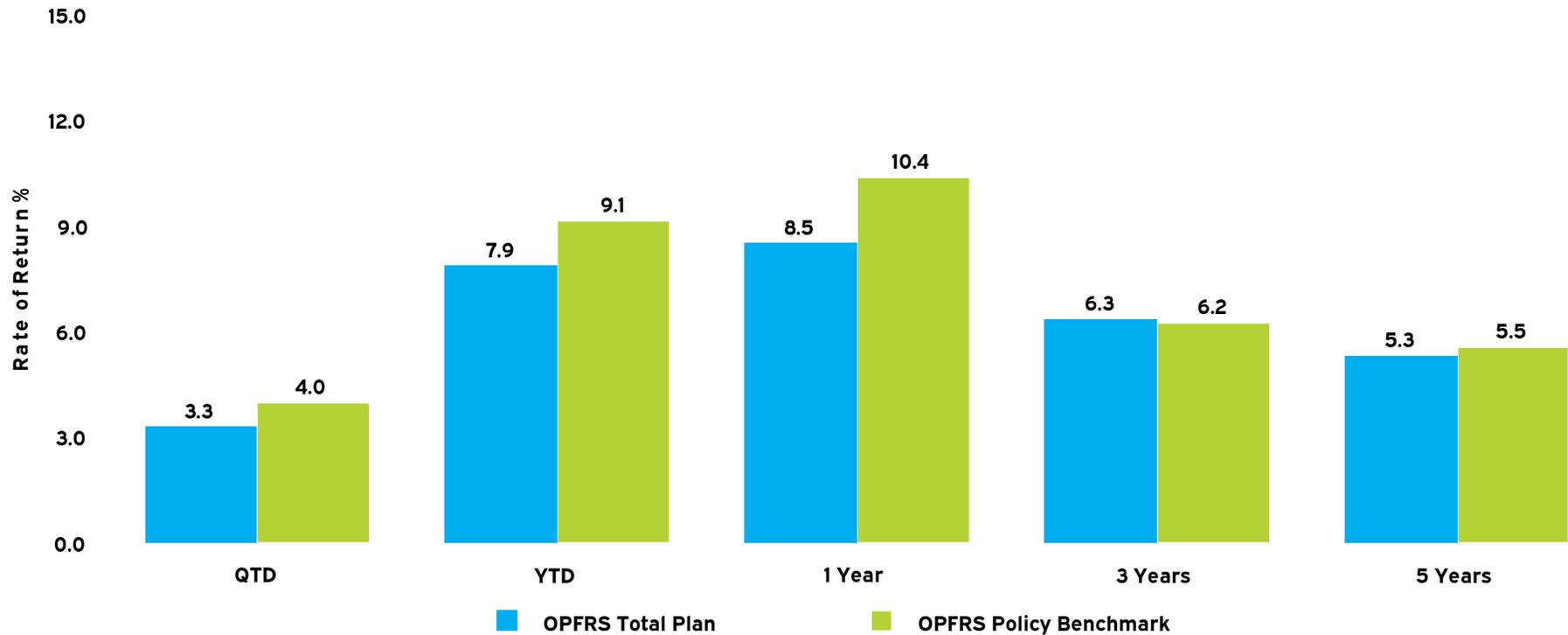
- The impacts of still relatively high inflation will remain key, with bond market volatility likely to stay high.
- Recent issues related to the banking sector seem to have subsided for now but are a reminder that there is a delicate balance for central banks to continue to fight inflation but also to try to maintain financial stability.
- Global monetary policies could diverge in 2023. The risk of policy errors remains elevated as central banks try to reduce persistent inflation while not tipping their economies into recession.
- Growth is expected to slow globally this year, with many economies forecast to tip into recession. Inflation, monetary policy, and the war will all be key.
- In the US, consumers could feel pressure as certain components of inflation remain high (e.g., shelter), borrowing cost are elevated, and the job market may weaken.
- The key for US equities going forward will be whether earnings can remain resilient if growth continues to slow.
- Equity valuations remain lower in both emerging and developed markets, but risks remain, including potential continued strength in the US dollar, higher inflation weighing particularly on Europe, and China's sluggish economic reopening and on-going weakness in the real estate sector.

2Q 2023 Performance
as of June 30, 2023

Summary of Cash Flows

	QTD	1 Year
OPFRS Total Plan		
Beginning Market Value	411,182,049	406,308,110
Net Cash Flow	-4,603,292	-20,012,998
Net Investment Change	13,591,332	33,874,977
Ending Market Value	420,170,089	420,170,089

Return Summary Ending June 30, 2023

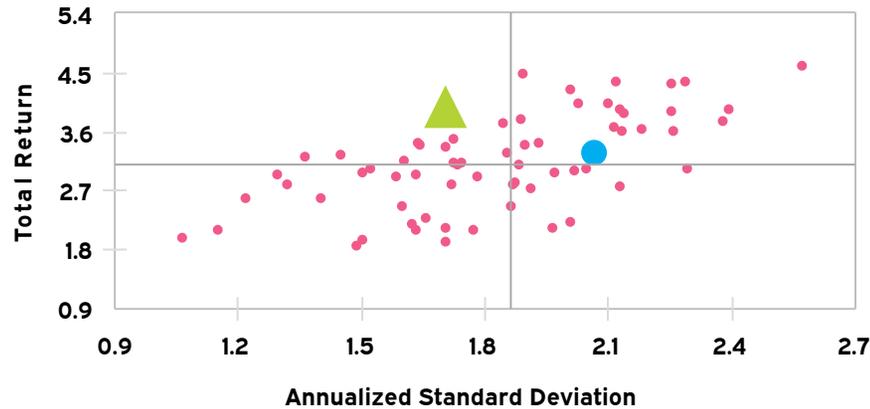


Performance shown is net of fees.

Oakland Police and Fire Retirement System

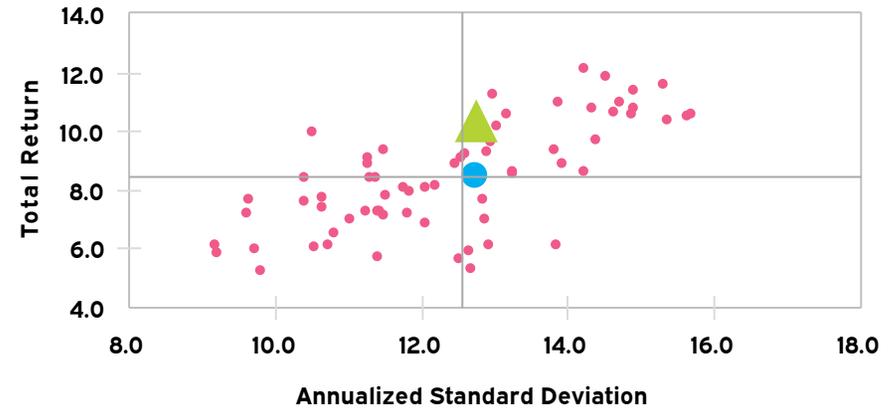
Total Plan Risk/Return Summary | As of June 30, 2023

Risk-Return Summary
QTD Ending June 30, 2023



- IM Public DB \$250M-\$1B
- OPFRS Total Plan
- ▲ OPFRS Policy Benchmark

Risk-Return Summary
1 Yr Ending June 30, 2023



- IM Public DB \$250M-\$1B
- OPFRS Total Plan
- ▲ OPFRS Policy Benchmark

	Return	Standard Deviation
OPFRS Total Plan	3.3	2.1
OPFRS Policy Benchmark	4.0	1.7
Median	3.1	1.9

	Return	Standard Deviation
OPFRS Total Plan	8.5	12.7
OPFRS Policy Benchmark	10.4	12.7
Median	8.5	12.6

Performance shown is net of fees. Parentheses contain percentile rankings. Calculation based on monthly periodicity. Fiscal year begins on July 1.

Oakland Police and Fire Retirement System

Asset Class Performance: Gross of Fees | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
OPFRS Total Plan (Gross)	420,170,089	100.0	3.4	8.0	8.8	6.6	5.6	7.3	6.6	Dec-88
<i>OPFRS Policy Benchmark</i>			<i>4.0</i>	<i>9.1</i>	<i>10.4</i>	<i>6.2</i>	<i>5.5</i>	<i>7.1</i>	<i>7.9</i>	
Excess Return			-0.6	-1.1	-1.6	0.4	0.1	0.2	-1.3	
Domestic Equity (Gross)	173,924,779	41.4	6.0	11.5	14.9	13.1	10.0	11.8	8.9	Jun-97
<i>Russell 3000 (Blend)</i>			<i>8.4</i>	<i>16.2</i>	<i>19.0</i>	<i>13.9</i>	<i>11.4</i>	<i>12.3</i>	<i>9.1</i>	
Excess Return			-2.4	-4.7	-4.1	-0.8	-1.4	-0.5	-0.2	
International Equity (Gross)	55,841,087	13.3	3.1	12.1	16.7	8.5	4.8	6.2	5.4	Jan-98
<i>MSCI ACWI ex US (Blend)</i>			<i>2.4</i>	<i>9.5</i>	<i>12.7</i>	<i>7.2</i>	<i>3.5</i>	<i>4.7</i>	<i>5.0</i>	
Excess Return			0.7	2.6	4.0	1.3	1.3	1.5	0.4	
Fixed Income (Gross)	104,462,270	24.9	-0.5	2.9	0.2	-2.7	1.3	2.1	4.7	Jan-94
<i>Bloomberg Universal (Blend)</i>			<i>-0.6</i>	<i>2.3</i>	<i>0.0</i>	<i>-3.4</i>	<i>1.0</i>	<i>1.8</i>	<i>4.5</i>	
Excess Return			0.1	0.6	0.2	0.7	0.3	0.3	0.2	
Credit (Gross)	9,200,988	2.2	3.4	7.2	8.8	7.9	4.0	--	5.2	Feb-15
<i>Blmbg. U.S. Corp: High Yield Index</i>			<i>1.7</i>	<i>5.4</i>	<i>9.1</i>	<i>3.1</i>	<i>3.4</i>	<i>4.4</i>	<i>4.2</i>	
Excess Return			1.7	1.8	-0.3	4.8	0.6	--	1.0	
Covered Calls (Gross)	22,548,100	5.4	7.4	14.0	16.6	13.7	9.9	--	9.2	Apr-14
<i>CBOE S&P 500 Buy Write Index</i>			<i>4.3</i>	<i>10.5</i>	<i>9.0</i>	<i>10.6</i>	<i>4.6</i>	<i>6.3</i>	<i>5.7</i>	
Excess Return			3.1	3.5	7.6	3.1	5.3	--	3.5	
Crisis Risk Offset (Gross)	40,159,887	9.6	2.0	2.0	-2.8	-7.3	--	--	-8.0	Aug-18
<i>Crisis Risk Offset Benchmark</i>			<i>2.7</i>	<i>2.7</i>	<i>5.2</i>	<i>4.1</i>	<i>--</i>	<i>--</i>	<i>0.1</i>	
Excess Return			-0.7	-0.7	-8.0	-11.4	--	--	-8.1	
Cash (Gross)	14,032,977	3.3	0.0	0.0	0.0	0.0	0.9	0.7	0.6	Mar-11
<i>FTSE 3 Month T-Bill</i>			<i>1.3</i>	<i>2.4</i>	<i>3.7</i>	<i>1.3</i>	<i>1.6</i>	<i>1.0</i>	<i>0.8</i>	
Excess Return			-1.3	-2.4	-3.7	-1.3	-0.7	-0.3	-0.2	

Performance shown is gross of fees. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

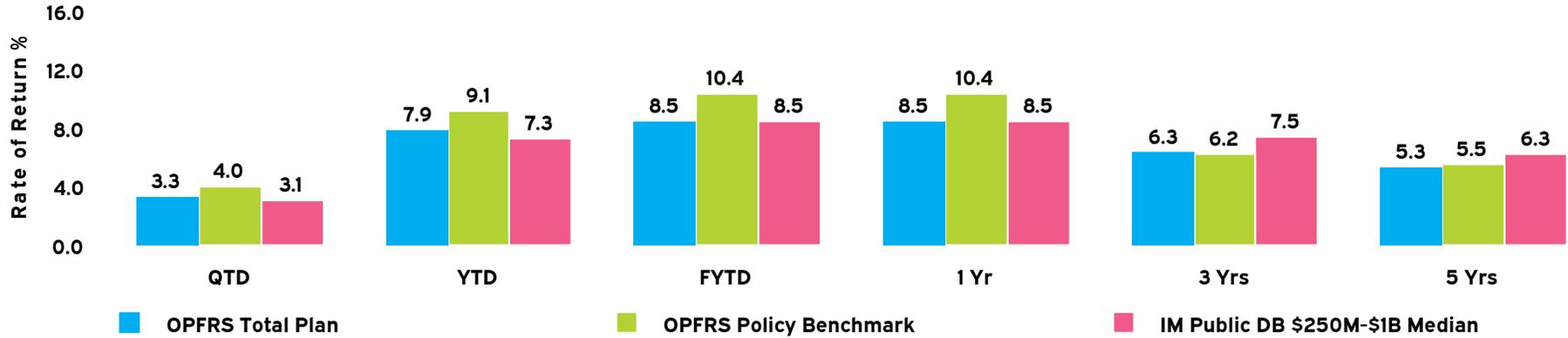
Oakland Police and Fire Retirement System

Asset Class Performance: Net of Fees | As of June 30, 2023

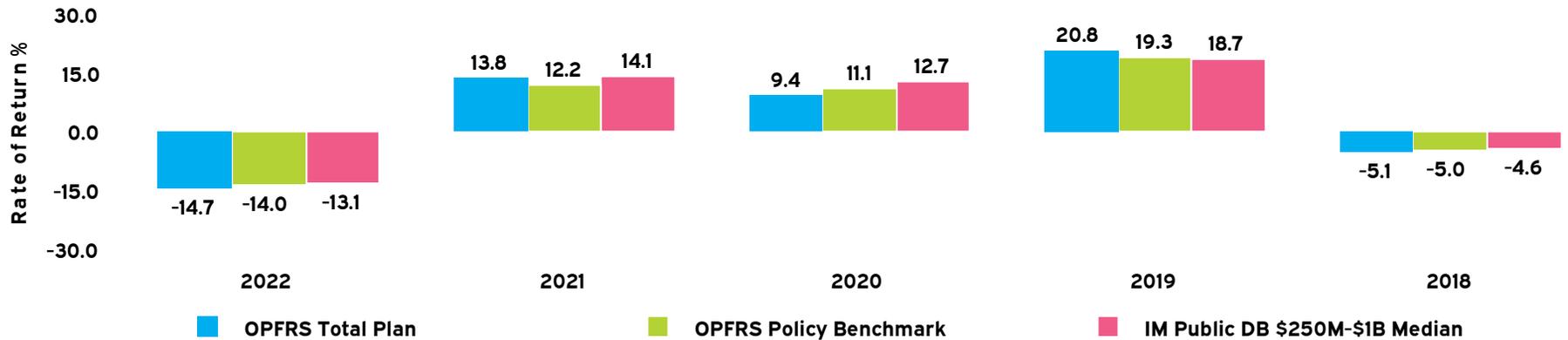
	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
OPFRS Total Plan (Net)	420,170,089	100.0	3.3	7.9	8.5	6.3	5.3	7.1	6.6	Dec-88
<i>OPFRS Policy Benchmark</i>			4.0	9.1	10.4	6.2	5.5	7.1	7.9	
Excess Return			-0.7	-1.2	-1.9	0.1	-0.2	0.0	-1.3	
<i>IM Public DB \$250M-\$1B Median (Net)</i>			3.1	7.4	8.5	7.5	6.3	7.0	8.2	
Domestic Equity (Net)	173,924,779	41.4	5.9	11.4	14.5	12.8	9.7	11.6	8.8	Jun-97
<i>Russell 3000 (Blend)</i>			8.4	16.2	19.0	13.9	11.4	12.3	9.1	
Excess Return			-2.5	-4.8	-4.5	-1.1	-1.7	-0.7	-0.3	
International Equity (Net)	55,841,087	13.3	3.0	11.8	16.0	7.9	4.2	5.8	5.2	Jan-98
<i>MSCI ACWI ex US (Blend)</i>			2.4	9.5	12.7	7.2	3.5	4.7	5.0	
Excess Return			0.6	2.3	3.3	0.7	0.7	1.1	0.2	
Fixed Income (Net)	104,462,270	24.9	-0.6	2.8	0.0	-2.8	1.1	1.9	4.5	Jan-94
<i>Bloomberg Universal (Blend)</i>			-0.6	2.3	0.0	-3.4	1.0	1.8	4.5	
Excess Return			0.0	0.5	0.0	0.6	0.1	0.1	0.0	
Credit (Net)	9,200,988	2.2	3.3	6.9	8.2	7.2	3.3	--	4.6	Feb-15
<i>Blmbg. U.S. Corp: High Yield Index</i>			1.7	5.4	9.1	3.1	3.4	4.4	4.2	
Excess Return			1.6	1.5	-0.9	4.1	-0.1	--	0.4	
Covered Calls (Net)	22,548,100	5.4	7.3	13.9	16.3	13.4	9.6	--	8.9	Apr-14
<i>CBOE S&P 500 Buy Write Index</i>			4.3	10.5	9.0	10.6	4.6	6.3	5.7	
Excess Return			3.0	3.4	7.3	2.8	5.0	--	3.2	
Crisis Risk Offset (Net)	40,159,887	9.6	1.9	1.9	-3.0	-7.4	--	--	-8.2	Aug-18
<i>Crisis Risk Offset Benchmark</i>			2.7	2.7	5.2	4.1	--	--	0.1	
Excess Return			-0.8	-0.8	-8.2	-11.5	--	--	-8.3	
Cash (Net)	14,032,977	3.3	0.0	0.0	0.0	0.0	0.9	0.7	0.6	Mar-11
<i>FTSE 3 Month T-Bill</i>			1.3	2.4	3.7	1.3	1.6	1.0	0.8	
Excess Return			-1.3	-2.4	-3.7	-1.3	-0.7	-0.3	-0.2	

Performance shown is net of fees, except for Total Plan, Domestic Equity, and International Equity composites which have a mix of gross and net of fees performance. Please see the Addendum for more details. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

Trailing Period Performance Ending June 30, 2023



Calendar Year Performance Ending December 31, 2022



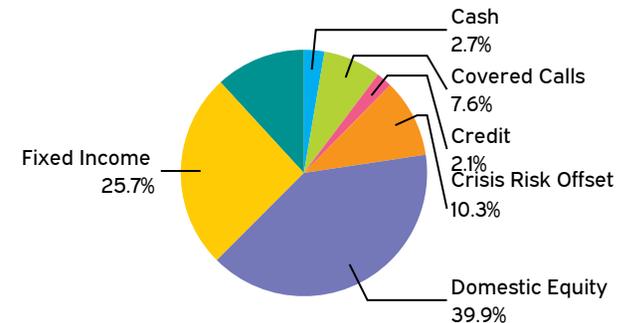
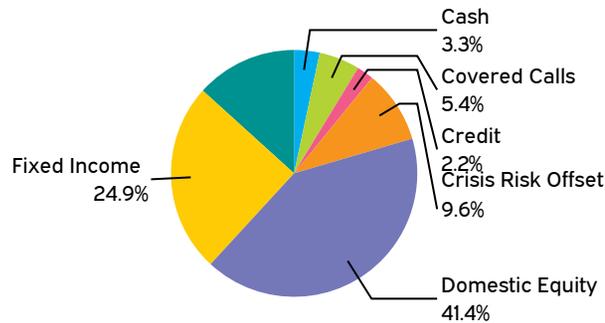
Performance shown is net of fees. Fiscal year begins on July 1.

Asset Allocation | As of June 30, 2023

	Current Balance (\$)	Current Allocation (%)	Policy (%)	Difference (%)	Policy Range (%)	Within IPS Range?
Domestic Equity	173,924,779	41.4	40.0	1.4	30.0 - 50.0	Yes
International Equity	55,841,087	13.3	12.0	1.3	8.0 - 14.0	Yes
Fixed Income	104,462,270	24.9	31.0	-6.1	25.0 - 40.0	No
Credit	9,200,988	2.2	2.0	0.2	1.0 - 3.0	Yes
Covered Calls	22,548,100	5.4	5.0	0.4	5.0 - 10.0	Yes
Crisis Risk Offset	40,159,887	9.6	10.0	-0.4	5.0 - 15.0	Yes
Cash	14,032,977	3.3	0.0	3.3	0.0 - 5.0	Yes
Total	420,170,089	100.0	100.0	0.0		

June 30, 2023: \$420,170,089.1

June 30, 2022: \$406,308,110.42



Cash account market value includes cash balances held in ETF accounts at the custodian and residuals from terminated managers. Target weights reflect the Plan's evolving asset allocation (effective 05/31/2017).

Manager Performance - Net of Fees | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Domestic Equity	173,924,779	100.0	5.9	11.4	14.5	12.8	9.7	11.6	8.8	Jun-97
<i>Russell 3000 (Blend)</i>			8.4	16.2	19.0	13.9	11.4	12.3	9.1	
Excess Return			-2.5	-4.8	-4.5	-1.1	-1.7	-0.7	-0.3	
Northern Trust Russell 1000	81,367,541	46.8	8.6	16.7	19.3	13.9	11.8	12.5	13.3	Jun-10
<i>Russell 1000 Index</i>			8.6	16.7	19.4	14.1	11.9	12.6	13.4	
Excess Return			0.0	0.0	-0.1	-0.2	-0.1	-0.1	-0.1	
EARNEST Partners	43,238,606	24.9	3.8	8.5	9.9	13.3	10.5	12.2	9.2	Apr-06
<i>Russell Midcap Index</i>			4.8	9.0	14.9	12.5	8.5	10.3	8.6	
Excess Return			-1.0	-0.5	-5.0	0.8	2.0	1.9	0.6	
eV US Mid Cap Core Equity Rank			84	72	88	61	20	18	28	
Wellington Select Quality Equity	23,373,498	13.4	4.5	5.3	12.7	--	--	--	5.3	May-22
<i>Russell 1000 Index</i>			8.6	16.7	19.4	14.1	11.9	12.6	7.8	
Excess Return			-4.1	-11.4	-6.7	--	--	--	-2.5	
eV US Large Cap Core Equity Rank			82	91	76	--	--	--	67	
Brown Fundamental Small Cap Value	11,278,982	6.5	3.8	3.2	13.8	--	--	--	2.2	Apr-21
<i>Russell 2000 Value Index</i>			3.2	2.5	6.0	15.4	3.5	7.3	-3.3	
Excess Return			0.6	0.7	7.8	--	--	--	5.5	
eV US Small Cap Value Equity Rank			48	76	37	--	--	--	34	
Rice Hall James	14,666,153	8.4	2.7	9.7	8.0	6.7	2.4	--	6.5	Aug-17
<i>Russell 2000 Growth Index</i>			7.1	13.6	18.5	6.1	4.2	8.8	6.9	
Excess Return			-4.4	-3.9	-10.5	0.6	-1.8	--	-0.4	
eV US Small Cap Growth Equity Rank			87	76	94	59	96	--	91	

Performance shown is net of fees, except for the Domestic Equity composite which has a mix of gross and net of fees performance. Please see the Addendum for more details. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

Manager Performance - Net of Fees | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
International Equity	55,841,087	100.0	3.0	11.8	16.0	7.9	4.2	5.8	5.2	Jan-98
<i>MSCI ACWI ex US (Blend)</i>			<i>2.4</i>	<i>9.5</i>	<i>12.7</i>	<i>7.2</i>	<i>3.5</i>	<i>4.7</i>	<i>5.0</i>	
Excess Return			0.6	2.3	3.3	0.7	0.7	1.1	0.2	
Vanguard Developed Markets ETF	15,464,066	27.7	2.2	10.4	15.3	8.8	--	--	6.7	Sep-19
<i>FTSE Developed All Cap ex-U.S. Index</i>			<i>3.1</i>	<i>11.1</i>	<i>16.9</i>	<i>9.3</i>	<i>4.6</i>	<i>5.9</i>	<i>7.1</i>	
Excess Return			-0.9	-0.7	-1.6	-0.5	--	--	-0.4	
SGA ACWI ex-U.S. Equity	40,377,022	72.3	3.3	12.3	16.3	7.5	--	--	3.0	Dec-19
<i>MSCI AC World ex USA (Net)</i>			<i>2.4</i>	<i>9.5</i>	<i>12.7</i>	<i>7.2</i>	<i>3.5</i>	<i>4.7</i>	<i>3.8</i>	
Excess Return			0.9	2.8	3.6	0.3	--	--	-0.8	
eV ACWI ex-US All Cap Core Eq Rank			36	24	33	62	--	--	90	

Performance shown is net of fees, except for the International Equity composite which has a mix of gross and net of fees performance. Please see the Addendum for more details. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

Manager Performance - Net of Fees | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Fixed Income	104,462,270	100.0	-0.6	2.8	0.0	-2.8	1.1	1.9	4.5	Jan-94
<i>Bloomberg Universal (Blend)</i>			-0.6	2.3	0.0	-3.4	1.0	1.8	4.5	
Excess Return			0.0	0.5	0.0	0.6	0.1	0.1	0.0	
Ramirez	70,891,932	67.9	-0.6	2.6	-0.4	-2.8	1.0	--	1.2	Feb-17
<i>Blmbg. U.S. Aggregate Index</i>			-0.8	2.1	-0.9	-4.0	0.8	1.5	0.9	
Excess Return			0.2	0.5	0.5	1.2	0.2	--	0.3	
eV US Core Fixed Inc Rank			37	22	40	14	51	--	30	
Wellington Core Bond	6,726,320	6.4	-0.6	3.0	-0.2	--	--	--	-4.7	Apr-21
<i>Blmbg. U.S. Aggregate Index</i>			-0.8	2.1	-0.9	-4.0	0.8	1.5	-4.3	
Excess Return			0.2	0.9	0.7	--	--	--	-0.4	
eV US Core Fixed Inc Rank			28	4	33	--	--	--	90	
Reams	26,844,017	25.7	-0.5	3.1	1.1	-2.5	3.4	2.8	4.9	Feb-98
<i>Bloomberg Universal (Blend)</i>			-0.6	2.3	0.0	-3.4	1.0	1.8	4.1	
Excess Return			0.1	0.8	1.1	0.9	2.4	1.0	0.8	
eV US Core Plus Fixed Inc Rank			41	11	21	35	1	8	19	

Performance shown is net of fees. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

Manager Performance - Net of Fees | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Credit	9,200,988	100.0	3.3	6.9	8.2	7.2	3.3	--	4.6	Feb-15
<i>Blmbg. U.S. Corp: High Yield Index</i>			<i>1.7</i>	<i>5.4</i>	<i>9.1</i>	<i>3.1</i>	<i>3.4</i>	<i>4.4</i>	<i>4.2</i>	
Excess Return			1.6	1.5	-0.9	4.1	-0.1	--	0.4	
Polen Capital	9,200,988	100.0	3.3	6.9	8.2	7.2	3.3	--	4.6	Feb-15
<i>ICE BofA High Yield Master II</i>			<i>1.6</i>	<i>5.4</i>	<i>8.9</i>	<i>3.2</i>	<i>3.2</i>	<i>4.3</i>	<i>4.1</i>	
Excess Return			1.7	1.5	-0.7	4.0	0.1	--	0.5	
eV US High Yield Fixed Inc Rank			3	4	52	4	45	--	17	

Performance shown is net of fees. Since inception date and performance begin in the month following an investment's initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

Manager Performance - Net of Fees | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Covered Calls	22,548,100	100.0	7.3	13.9	16.3	13.4	9.6	--	8.9	Apr-14
<i>CBOE S&P 500 Buy Write Index</i>			<i>4.3</i>	<i>10.5</i>	<i>9.0</i>	<i>10.6</i>	<i>4.6</i>	<i>6.3</i>	<i>5.7</i>	
Excess Return			3.0	3.4	7.3	2.8	5.0	--	3.2	
Parametric BXM	11,207,891	49.7	6.0	11.4	12.6	11.1	7.1	--	7.1	Apr-14
<i>CBOE S&P 500 Buy Write Index</i>			<i>4.3</i>	<i>10.5</i>	<i>9.0</i>	<i>10.6</i>	<i>4.6</i>	<i>6.3</i>	<i>5.7</i>	
Excess Return			1.7	0.9	3.6	0.5	2.5	--	1.4	
Parametric DeltaShift	11,340,209	50.3	8.7	16.5	20.2	15.4	11.9	--	10.9	Apr-14
<i>CBOE S&P 500 Buy Write Index</i>			<i>4.3</i>	<i>10.5</i>	<i>9.0</i>	<i>10.6</i>	<i>4.6</i>	<i>6.3</i>	<i>5.7</i>	
Excess Return			4.4	6.0	11.2	4.8	7.3	--	5.2	

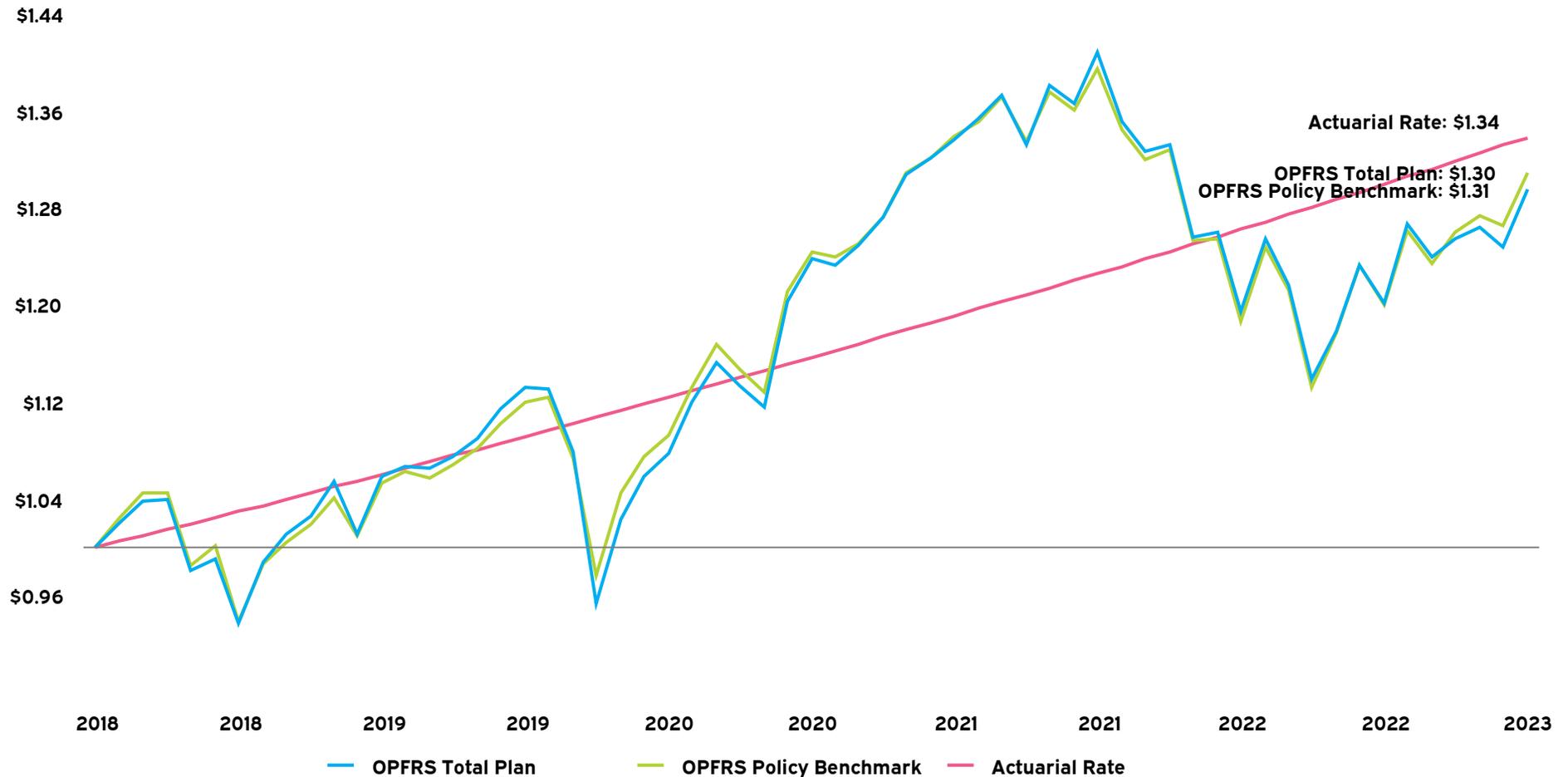
Performance shown is net of fees. Since inception date and performance begin in the month following an investment's initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

Manager Performance - Net of Fees | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Crisis Risk Offset	40,159,887	100.0	1.9	1.9	-3.0	-7.4	--	--	-8.2	Aug-18
<i>Crisis Risk Offset Benchmark</i>			<i>2.7</i>	<i>2.8</i>	<i>5.3</i>	<i>4.1</i>	<i>--</i>	<i>--</i>	<i>0.1</i>	
Over/Under			<i>-0.8</i>	<i>-0.9</i>	<i>-8.3</i>	<i>-11.5</i>	<i>--</i>	<i>--</i>	<i>-8.3</i>	
Kepos Alternative Risk Premia	10,476,679	26.1	2.0	6.5	9.8	--	--	--	3.3	Feb-22
<i>SG Multi Alternative Risk Premia Index</i>			<i>2.5</i>	<i>3.6</i>	<i>6.1</i>	<i>4.4</i>	<i>--</i>	<i>--</i>	<i>5.3</i>	
Over/Under			<i>-0.5</i>	<i>2.9</i>	<i>3.7</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>-2.0</i>	
Versor Trend Following	15,551,785	38.7	6.6	-2.6	-6.4	--	--	--	2.9	Apr-22
<i>SG Trend Index</i>			<i>8.0</i>	<i>0.1</i>	<i>-1.1</i>	<i>14.3</i>	<i>9.4</i>	<i>5.7</i>	<i>6.6</i>	
Over/Under			<i>-1.4</i>	<i>-2.7</i>	<i>-5.3</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>-3.7</i>	
Vanguard Long-Term Treasury ETF	14,131,423	35.2	-2.8	3.9	-7.3	-12.2	--	--	-4.1	Jul-19
<i>Blmbg. U.S. Government: Long Term Bond Index</i>			<i>-2.3</i>	<i>3.7</i>	<i>-6.8</i>	<i>-12.0</i>	<i>-0.9</i>	<i>1.8</i>	<i>-3.9</i>	
Over/Under			<i>-0.5</i>	<i>0.2</i>	<i>-0.5</i>	<i>-0.2</i>	<i>--</i>	<i>--</i>	<i>-0.2</i>	

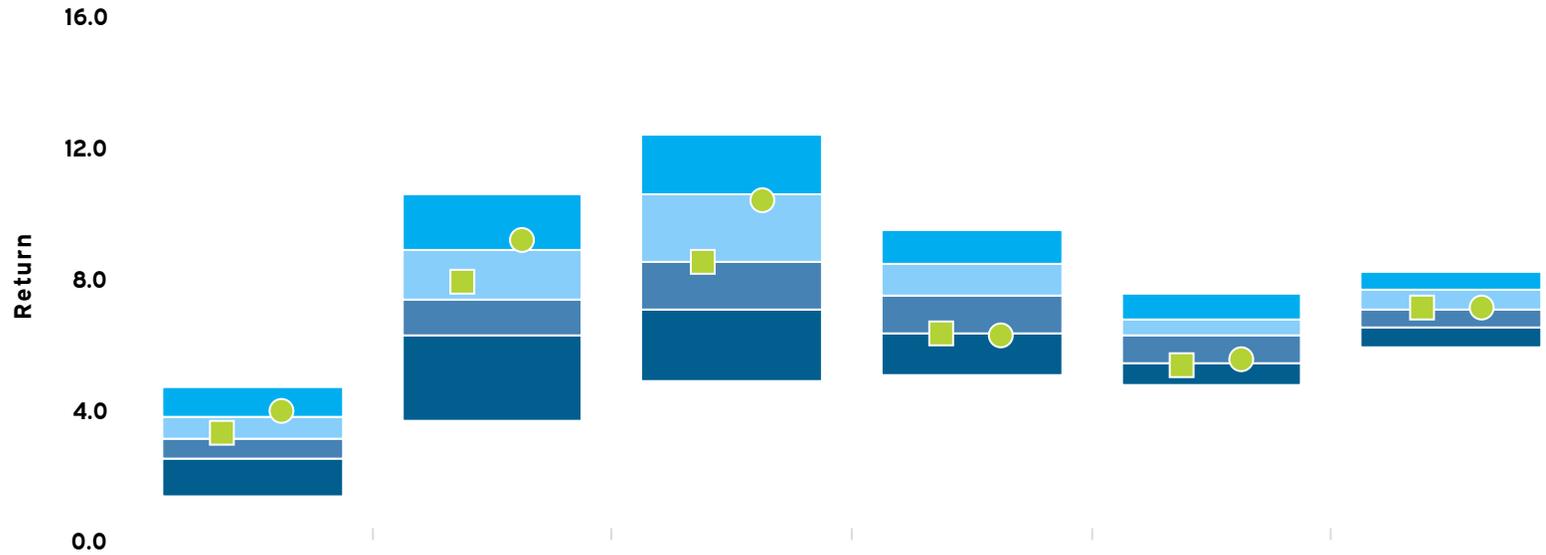
Performance shown is net of fees. Since inception date and performance begin in the month following an investment's initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

Growth of a Dollar 5 Years ending June 30, 2023



The actuarial expected rate of return was 8% through 6/30/2009, 7.5% through 6/30/2010, 7% through 6/30/2011, 6.75% through 6/30/2014, 6.5% through 2/31/2017 and 6.0% currently.

Plan Sponsor Peer Group Performance Comparison vs. InvMetrics Public DB \$250M-\$1B



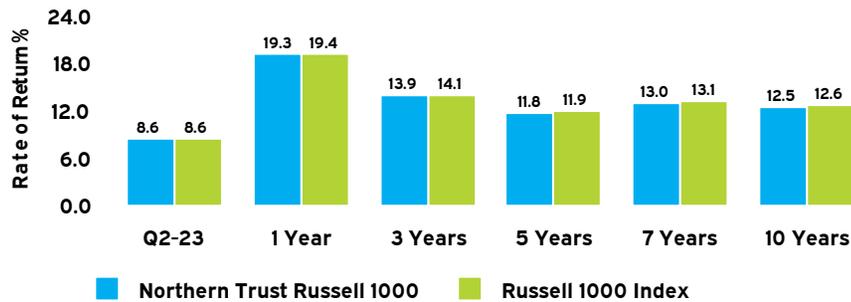
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
■ OPFRS Total Plan	3.3 (44)	7.9 (39)	8.5 (49)	6.3 (73)	5.3 (78)	7.1 (49)
● OPFRS Policy Benchmark	4.0 (18)	9.1 (21)	10.4 (27)	6.2 (77)	5.5 (73)	7.1 (49)
5th Percentile	4.7	10.5	12.4	9.4	7.5	8.2
1st Quartile	3.7	8.8	10.5	8.4	6.7	7.6
Median	3.1	7.3	8.5	7.5	6.3	7.0
3rd Quartile	2.5	6.3	7.0	6.3	5.4	6.5
95th Percentile	1.3	3.6	4.8	5.0	4.7	5.9
Population	82	82	82	82	80	71

Total Plan performance is a mix of gross and net of fees; performance is gross of fees prior to January 2016 and net of fees thereafter. Parentheses contain percentile rankings. Calculation based on monthly periodicity. Fiscal year begins on July 1.

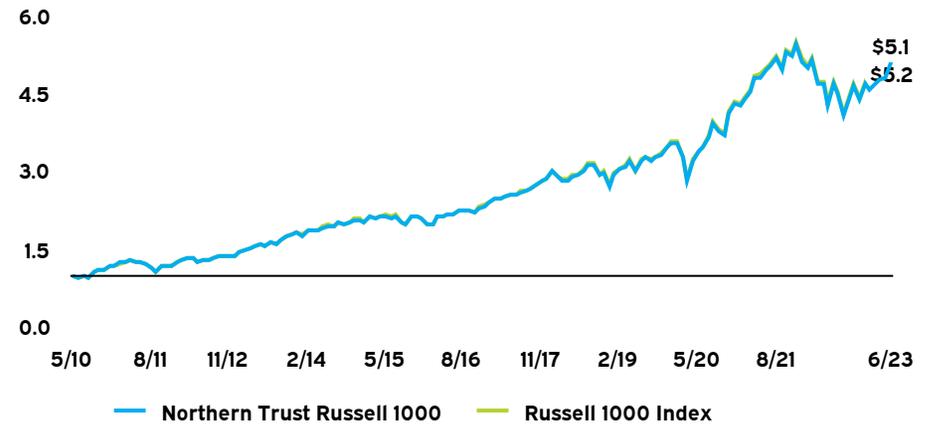
Portfolio Characteristics & Manager Profiles

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Northern Trust Russell 1000	0.00	1.00	-0.65	0.88	0.01	1.00	99.85	-
Russell 1000 Index	0.00	1.00	-	0.88	0.00	1.00	100.00	-

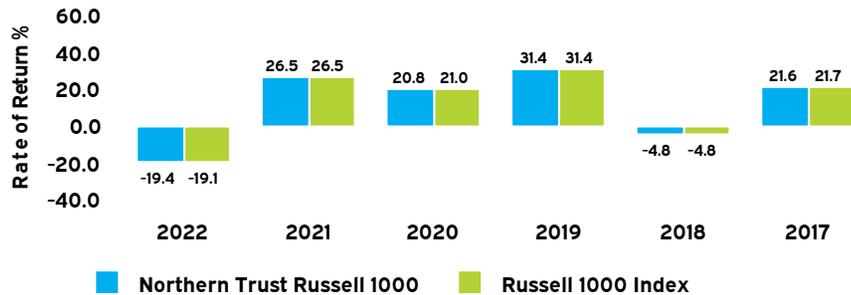
Trailing Performance (Net of Fees)



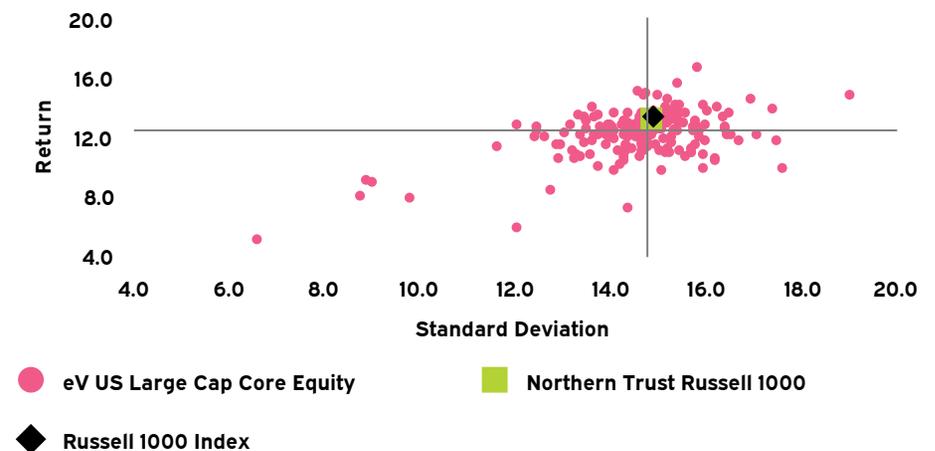
Growth of \$1 - Since Inception



Calendar Year Returns (Net of Fees)



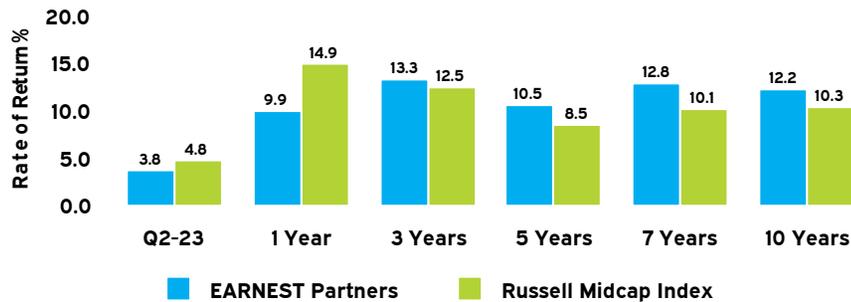
Risk/Return - Since Inception



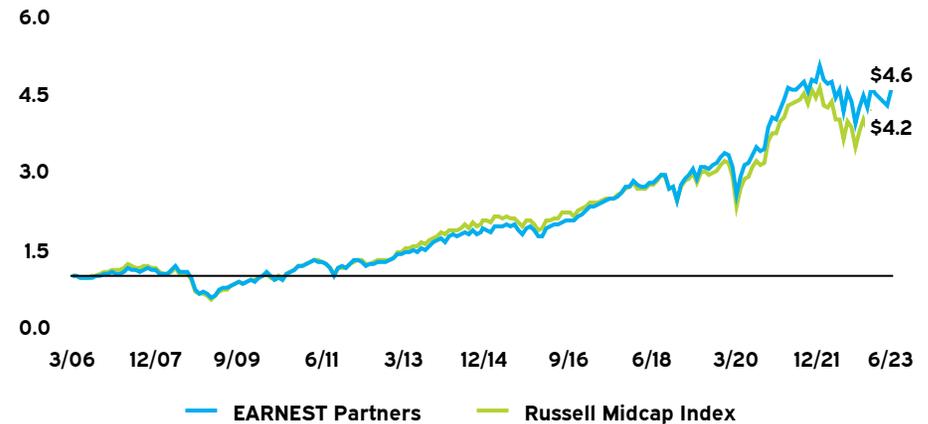
	Anlzd Return	Anlzd Standard Deviation
Northern Trust Russell 1000	8.57	2.79
Russell 1000 Index	8.58	2.80

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
EARNEST Partners	-0.15	0.90	-0.39	0.22	0.81	0.98	90.12	103.92
Russell Midcap Index	0.00	1.00	-	0.27	0.00	1.00	100.00	100.00

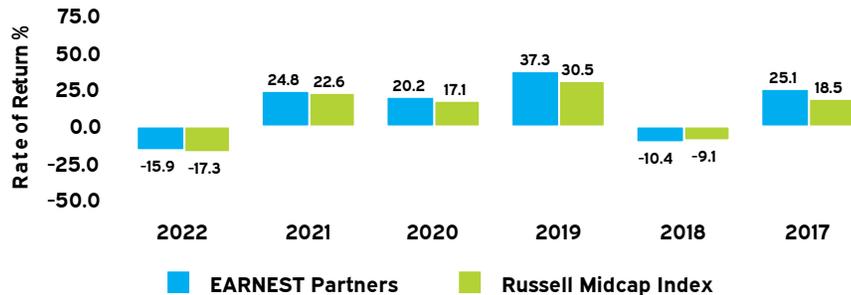
Trailing Performance (Net of Fees)



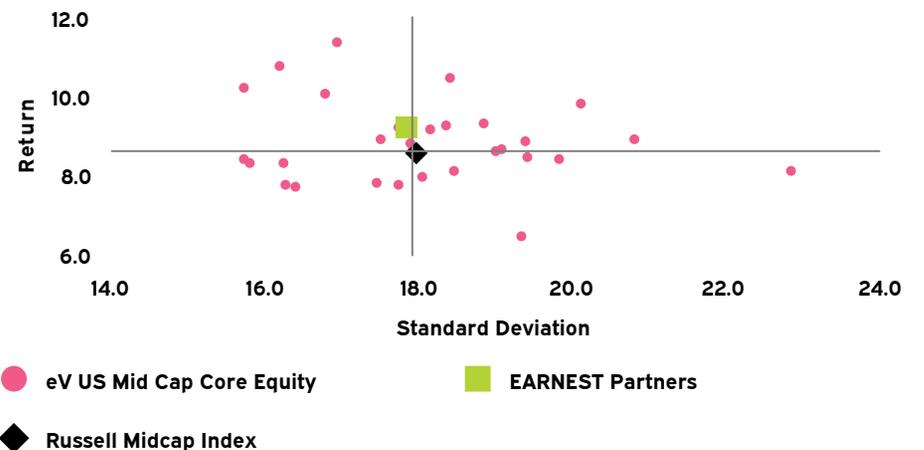
Growth of \$1 - Since Inception



Calendar Year Returns (Net of Fees)



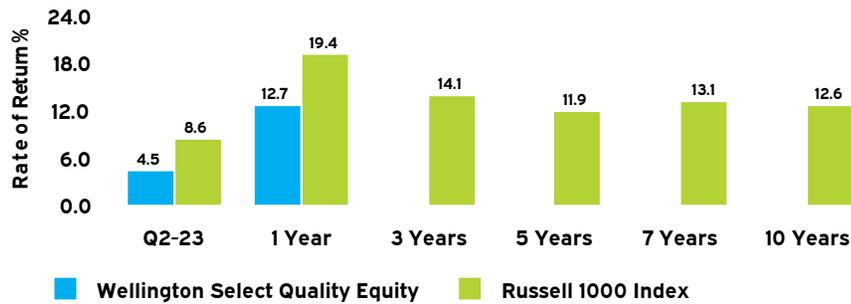
Risk/Return - Since Inception



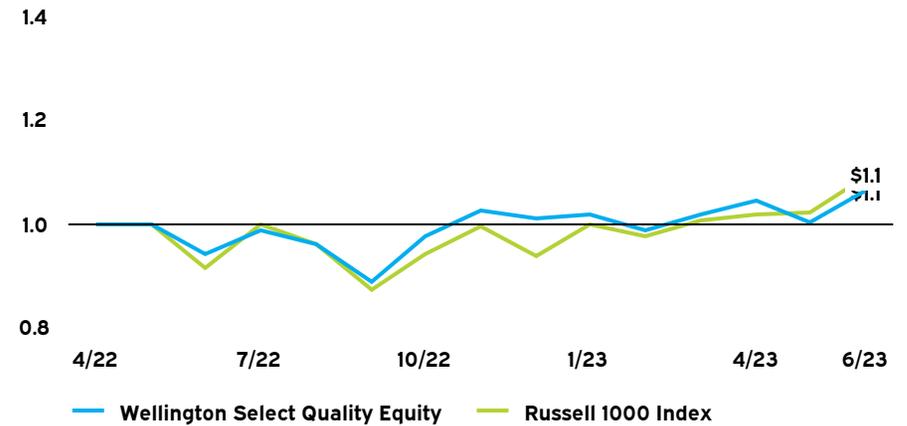
	Anlzd Return	Anlzd Standard Deviation
EARNEST Partners	3.84	4.36
Russell Midcap Index	4.76	4.81

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Wellington Select Quality Equity	-1.78	1.19	-0.52	0.29	2.41	0.67	55.57	-
Russell 1000 Index	0.00	1.00	-	0.88	0.00	1.00	100.00	-

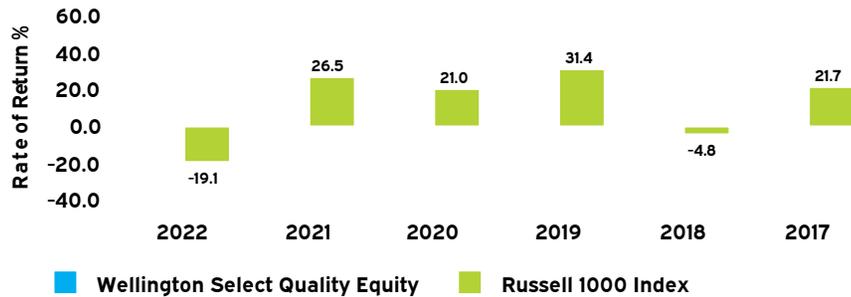
Trailing Performance (Net of Fees)



Growth of \$1 - Since Inception



Calendar Year Returns (Net of Fees)



Risk/Return - Since Inception

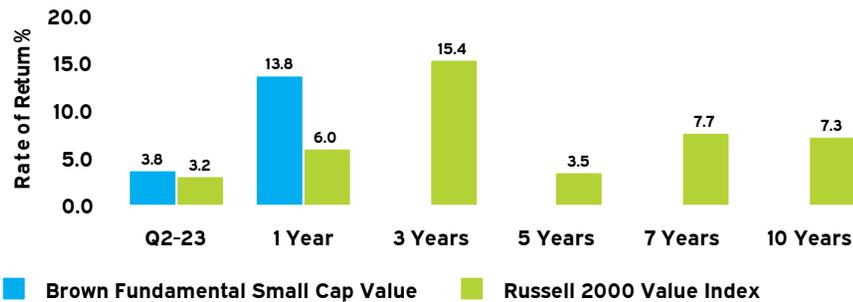


	Anlzd Return	Anlzd Standard Deviation
Wellington Select Quality Equity	4.52	4.07
Russell 1000 Index	8.58	2.80

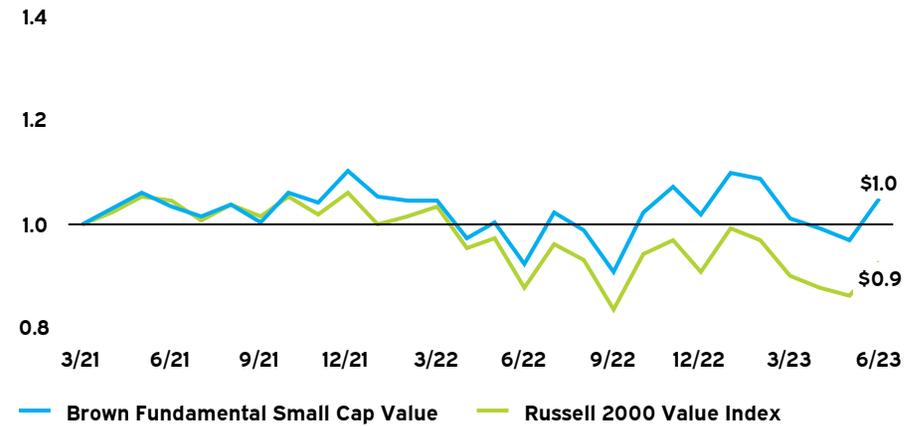
Brown Fundamental Small Cap Value | As of June 30, 2023

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Brown Fundamental Small Cap Value	0.15	1.06	0.36	0.20	0.61	0.99	108.19	99.89
Russell 2000 Value Index	0.00	1.00	-	0.16	0.00	1.00	100.00	100.00

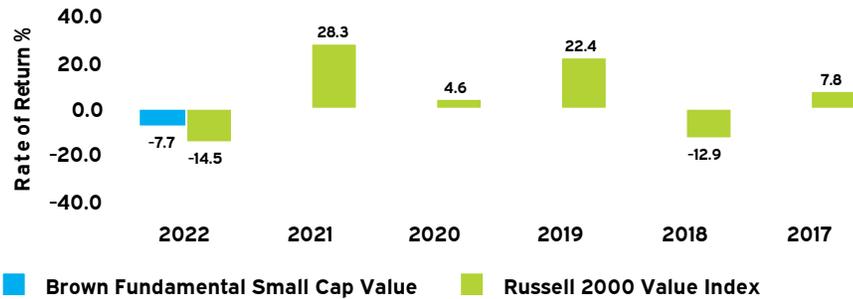
Trailing Performance (Net of Fees)



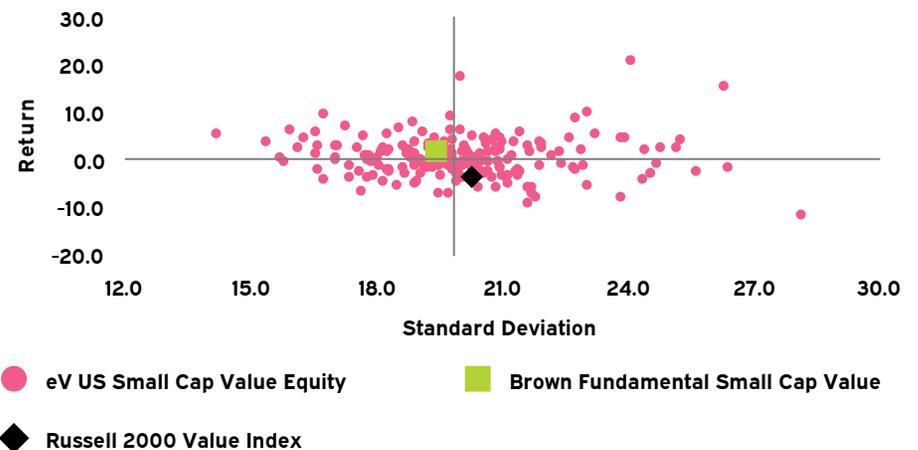
Growth of \$1 - Since Inception



Calendar Year Returns (Net of Fees)



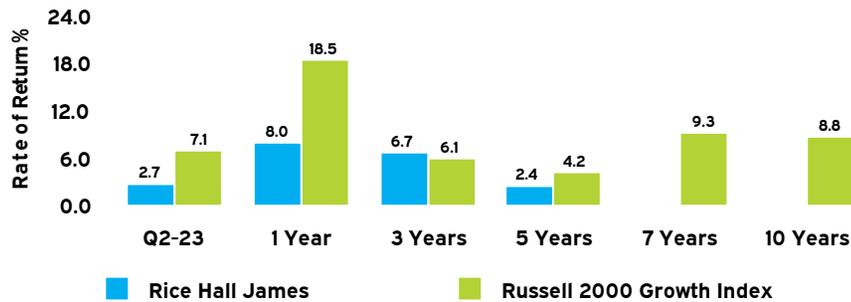
Risk/Return - Since Inception



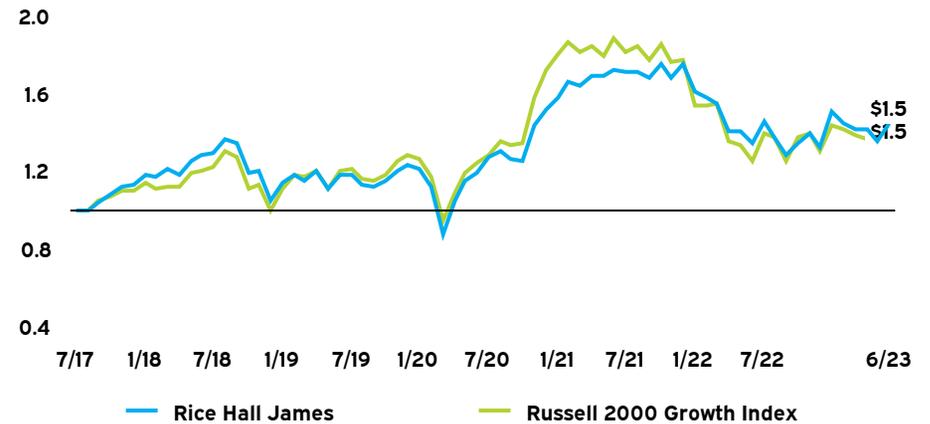
	Anlzd Return	Anlzd Standard Deviation
Brown Fundamental Small Cap Value	3.81	5.11
Russell 2000 Value Index	3.18	4.80

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Rice Hall James	-1.19	0.92	-0.54	0.14	2.53	0.71	29.38	-50.63
Russell 2000 Growth Index	0.00	1.00	-	0.48	0.00	1.00	100.00	100.00

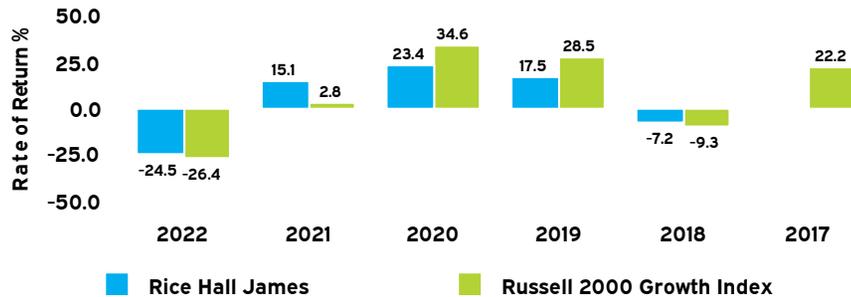
Trailing Performance (Net of Fees)



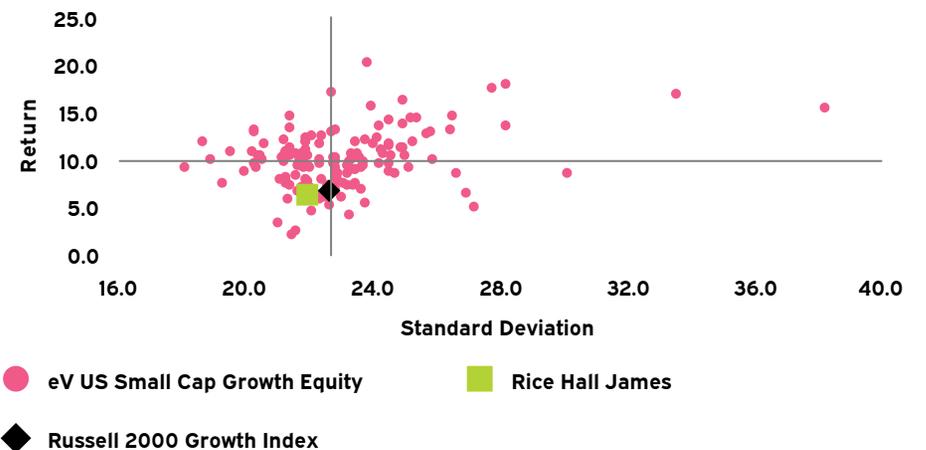
Growth of \$1 - Since Inception



Calendar Year Returns (Net of Fees)



Risk/Return - Since Inception

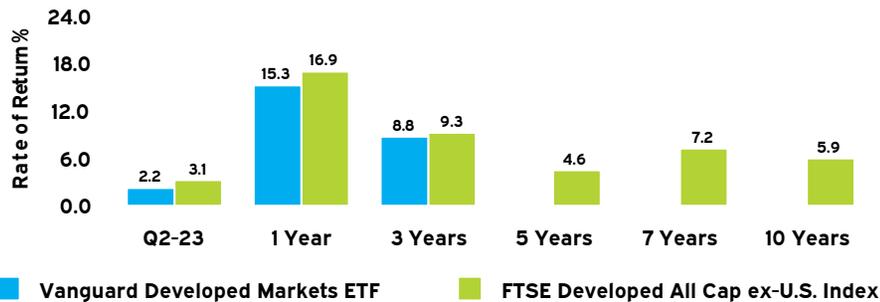


	Anlzd Return	Anlzd Standard Deviation
Rice Hall James	2.74	4.63
Russell 2000 Growth Index	7.05	4.21

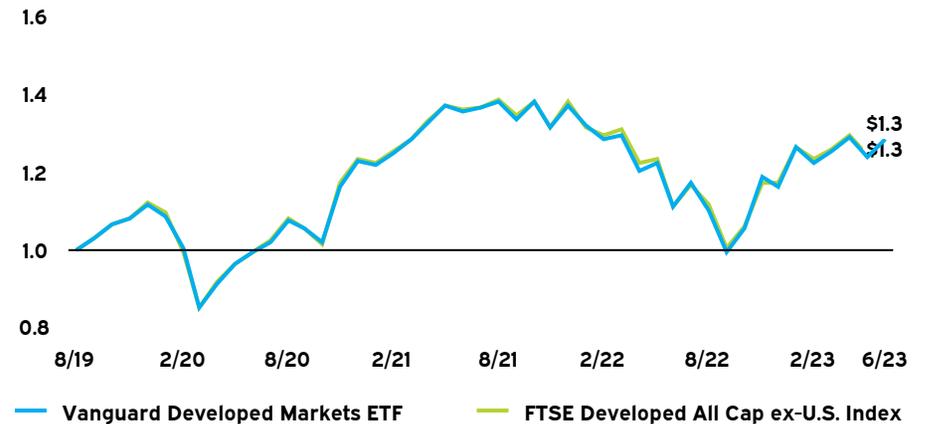
Vanguard Developed Markets ETF | As of June 30, 2023

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
Vanguard Developed Markets ETF	-0.21	0.91	-0.66	0.13	0.47	0.99	86.29	98.79
FTSE Developed All Cap ex-U.S. Index	0.00	1.00	-	0.20	0.00	1.00	100.00	100.00

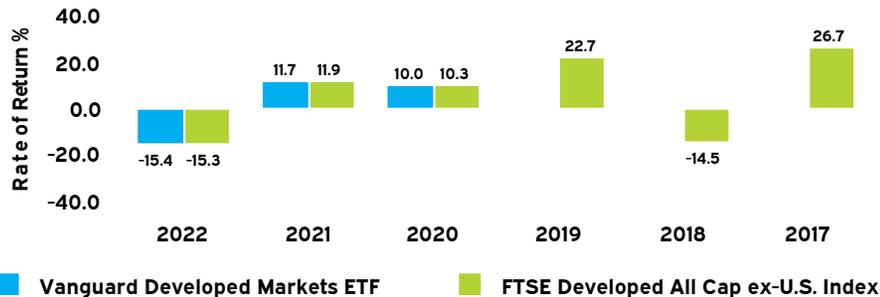
Trailing Performance (Net of Fees)



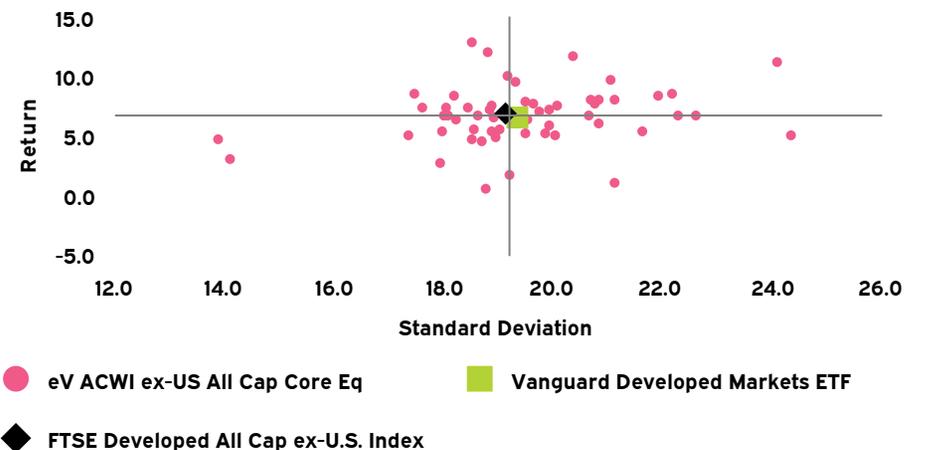
Growth of \$1 - Since Inception



Calendar Year Returns (Net of Fees)



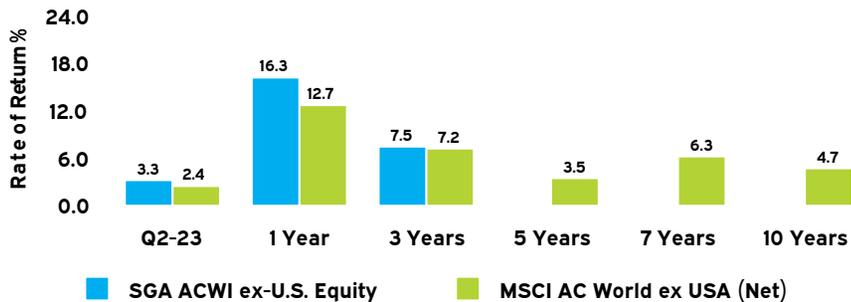
Risk/Return - Since Inception



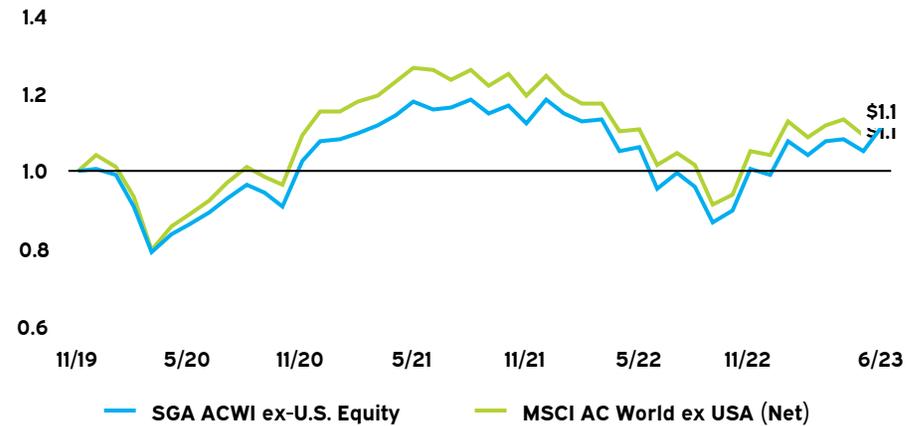
	Anlzd Return	Anlzd Standard Deviation
Vanguard Developed Markets ETF	2.24	3.22
FTSE Developed All Cap ex-U.S. Index	3.15	3.53

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Capture	Down Capture
SGA ACWI ex-U.S. Equity	0.24	1.05	0.29	0.21	0.96	0.93	105.81	86.58
MSCI AC World ex USA (Net)	0.00	1.00	-	0.14	0.00	1.00	100.00	100.00

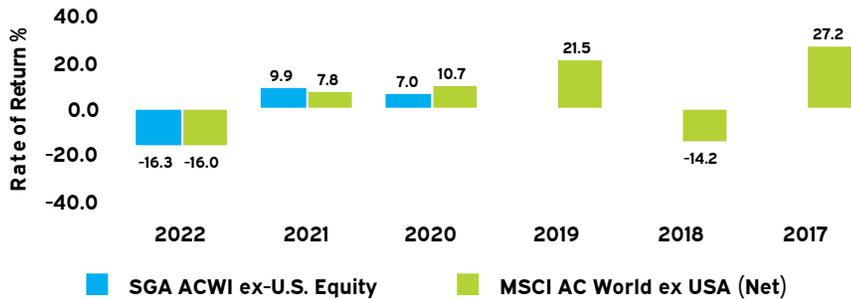
Trailing Performance (Net of Fees)



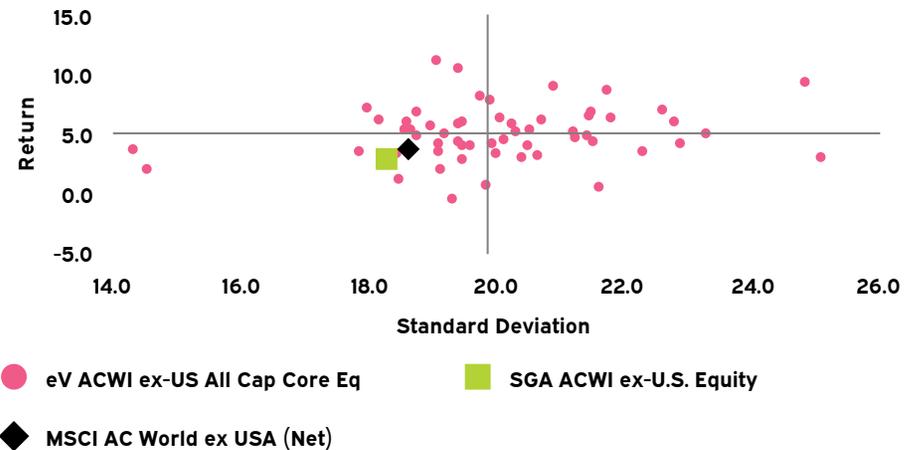
Growth of \$1 - Since Inception



Calendar Year Returns (Net of Fees)



Risk/Return - Since Inception



	Anlzd Return	Anlzd Standard Deviation
SGA ACWI ex-U.S. Equity	3.27	3.68
MSCI AC World ex USA (Net)	2.44	3.37

Account Information

Account Name	Ramirez
Account Structure	Separate Account
Inception Date	01/30/2017
Asset Class	US Fixed Income
Benchmark	Blmbg. U.S. Aggregate Index
Peer Group	eV US Core Fixed Inc

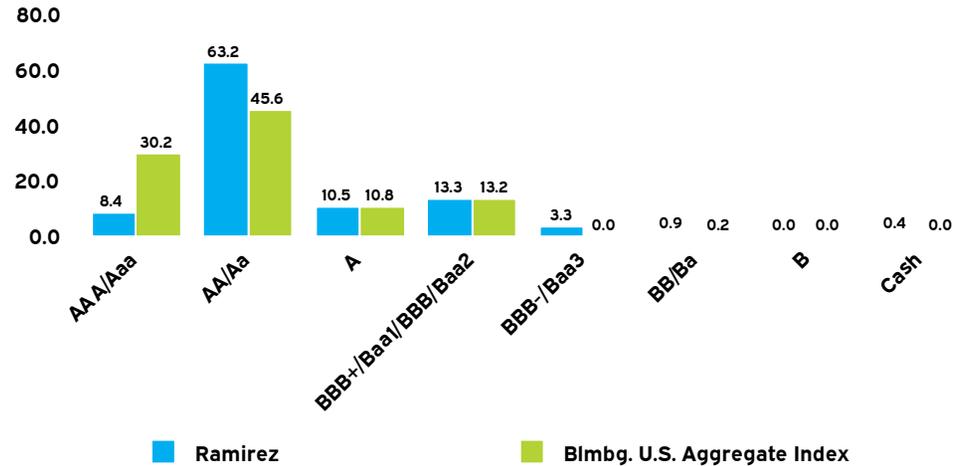
Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Ramirez	-0.6	2.6	-0.4	-2.8	1.0
Blmbg. U.S. Aggregate Index	-0.8	2.1	-0.9	-4.0	0.8

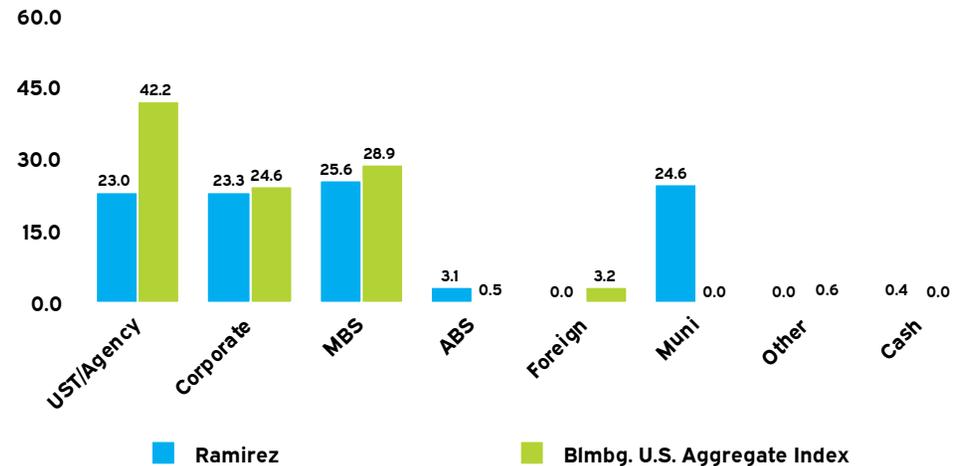
Portfolio Fixed Income Characteristics

	Q2-23 Portfolio	Q1-23 Portfolio
Yield To Maturity	5.1	4.8
Average Duration	6.1	6.0
Average Quality	AA	AA/Aa
Weighted Average Maturity	9.2	9.2

Credit Quality Allocation



Sector Allocation



Account Information

Account Name	Wellington Core Bond
Account Structure	Commingled Fund
Inception Date	04/01/2021
Asset Class	US Fixed Income
Benchmark	Blmbg. U.S. Aggregate Index
Peer Group	eV US Core Fixed Inc

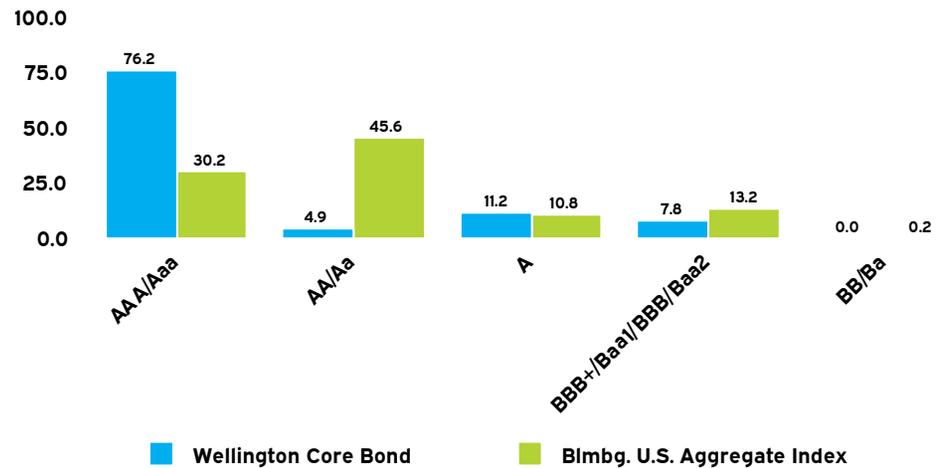
Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Wellington Core Bond	-0.6	3.0	-0.2	-	-
Blmbg. U.S. Aggregate Index	-0.8	2.1	-0.9	-4.0	0.8

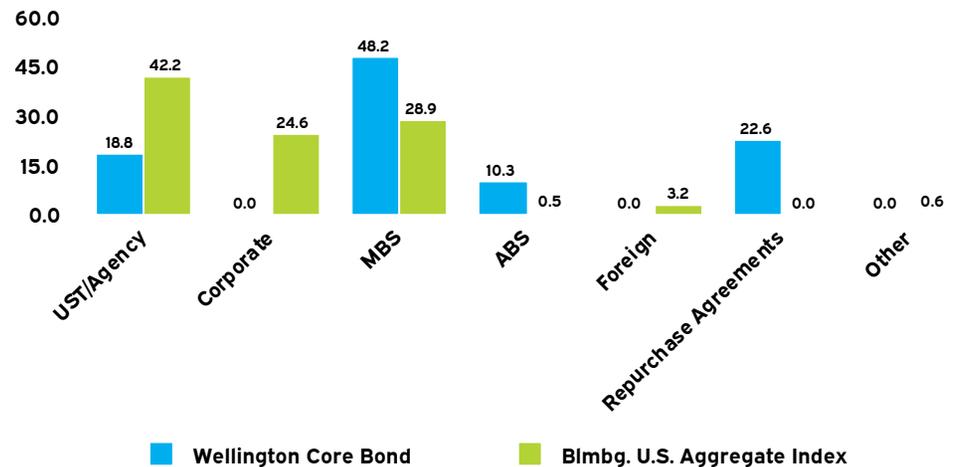
Portfolio Fixed Income Characteristics

	Q2-23 Portfolio	Q1-23 Portfolio
Yield To Maturity	5.3	4.8
Average Duration	6.8	6.9
Average Quality	AA	AA/Aa
Weighted Average Maturity	7.1	-

Credit Quality Allocation



Sector Allocation



Account Information

Account Name	Reams
Account Structure	Separate Account
Inception Date	01/01/1998
Asset Class	US Fixed Income
Benchmark	Bloomberg Universal (Blend)
Peer Group	eV US Core Plus Fixed Inc

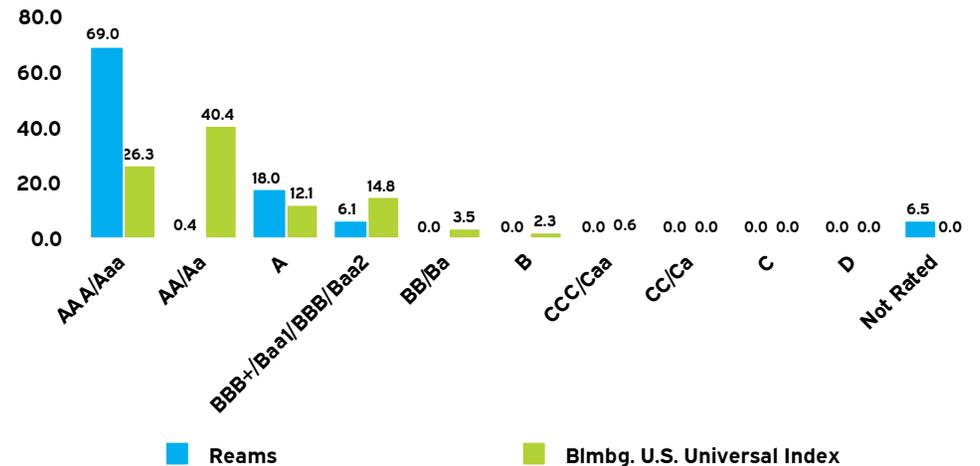
Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Reams	-0.5	3.1	1.1	-2.5	3.4
Bloomberg U.S. Universal Index	-0.6	2.3	0.0	-3.4	1.0

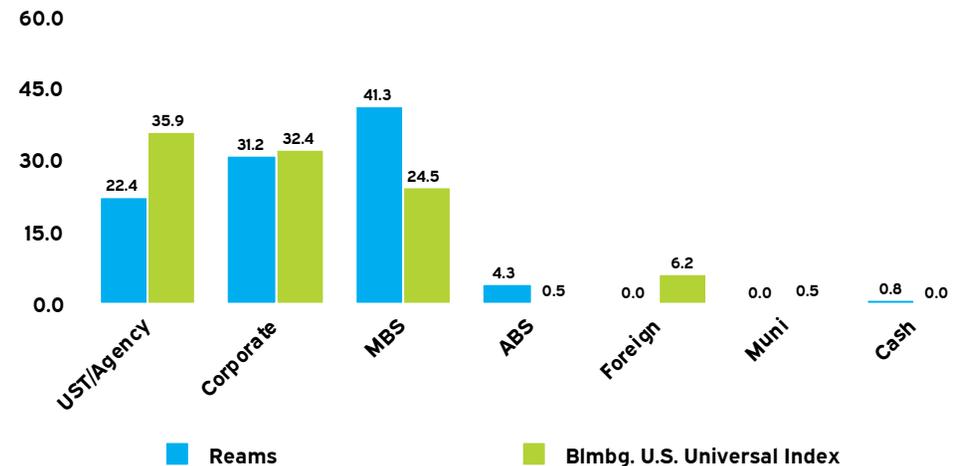
Portfolio Fixed Income Characteristics

	Q2-23 Portfolio	Q1-23 Portfolio
Yield To Maturity	5.5	5.4
Average Duration	6.7	6.4
Average Quality	AA	AA/Aa
Weighted Average Maturity	-	-

Credit Quality Allocation



Sector Allocation



Account Information

Account Name	Polen Capital
Account Structure	Commingled Fund
Inception Date	02/01/2015
Asset Class	US Fixed Income
Benchmark	ICE BofA High Yield Master II
Peer Group	eV US High Yield Fixed Inc

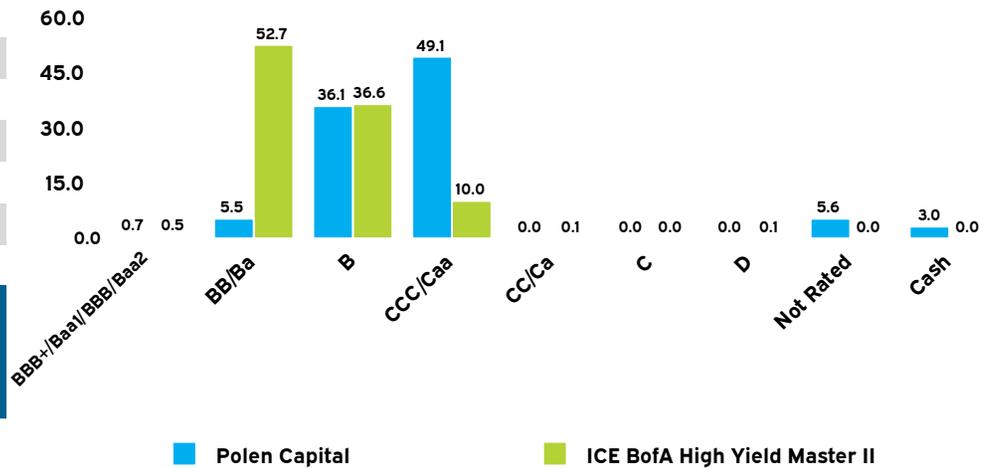
Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Polen Capital	3.3	6.9	8.2	7.2	3.3
ICE BofA High Yield Master II	1.6	5.4	8.9	3.2	3.2

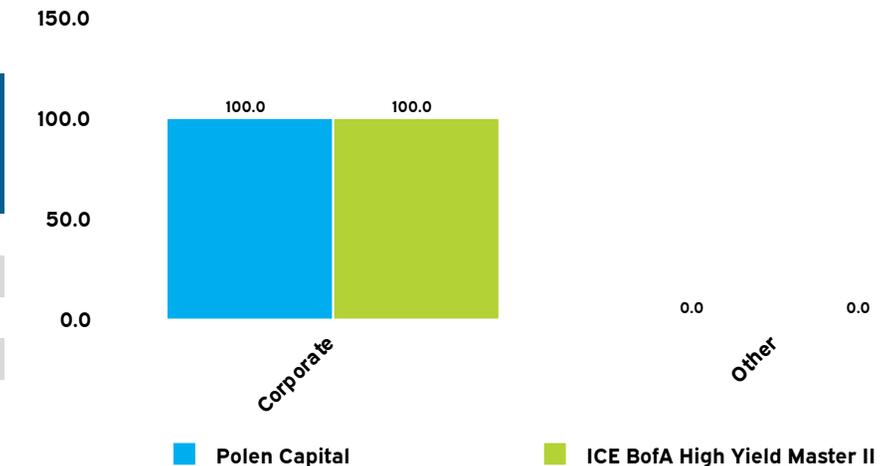
Portfolio Fixed Income Characteristics

	Q2-23 Portfolio	Q1-23 Portfolio
Yield To Maturity	11.0	11.8
Average Duration	1.8	1.8
Average Quality	BBB	CCC/Caa
Weighted Average Maturity	-	-

Credit Quality Allocation



Sector Allocation



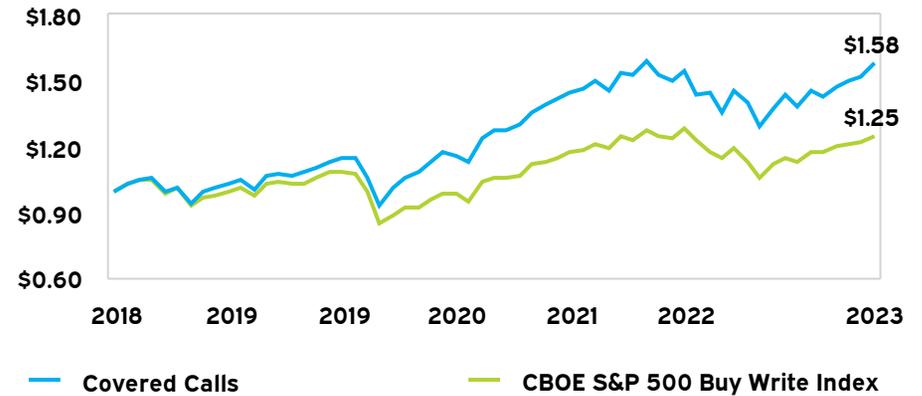
Covered Calls | As of June 30, 2023

	Return	Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Capture	Down Capture	Inception Date
Covered Calls	8.9	11.6	3.0	1.0	0.8	4.0	122.6	105.4	04/01/2014
CBOE S&P 500 Buy Write Index	5.7	10.6	0.0	1.0	-	0.0	100.0	100.0	
Parametric BXM	7.1	9.5	2.1	0.9	0.4	3.2	99.0	87.0	04/01/2014
CBOE S&P 500 Buy Write Index	5.7	10.6	0.0	1.0	-	0.0	100.0	100.0	
Parametric DeltaShift	10.9	13.9	4.2	1.2	0.8	6.2	145.3	121.0	04/01/2014
CBOE S&P 500 Buy Write Index	5.7	10.6	0.0	1.0	-	0.0	100.0	100.0	

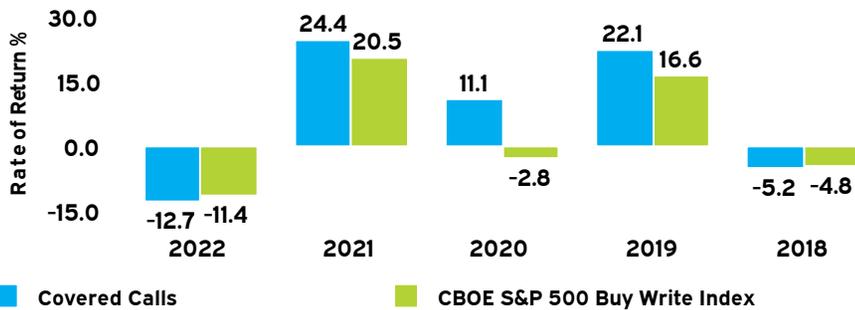
Trailing Period Performance



Growth of a Dollar



Calendar Year Performance



Crisis Risk Offset | As of June 30, 2023

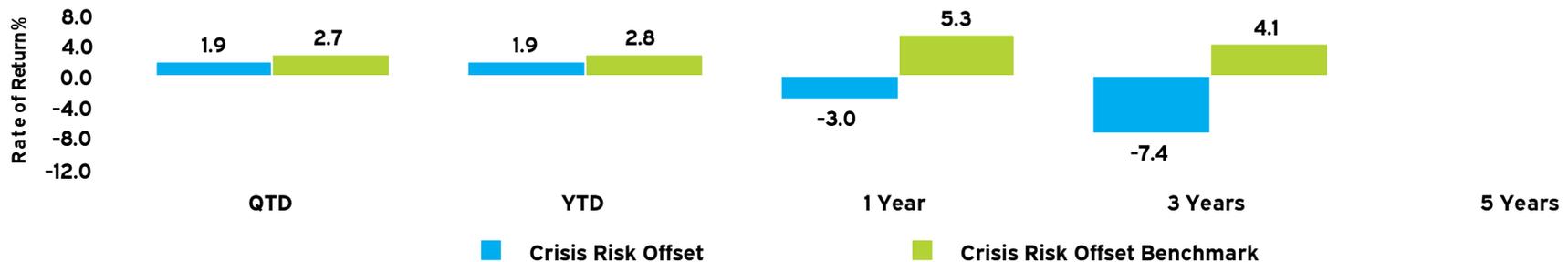
	Return	Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Capture	Down Capture	Inception Date
Crisis Risk Offset	-8.2	11.5	-7.7	0.8	-0.8	10.7	24.3	134.5	08/01/2018
Crisis Risk Offset Benchmark	0.1	5.4	0.0	1.0	-	0.0	100.0	100.0	
Kepos Alternative Risk Premia	3.3	6.0	-0.3	0.7	-0.4	5.0	73.9	82.6	02/01/2022
SG Multi Alternative Risk Premia Index	5.3	5.2	0.0	1.0	-	0.0	100.0	100.0	
Versor Trend Following	2.9	17.4	-4.1	1.2	-0.4	7.0	98.3	116.4	04/01/2022
SG Trend Index	6.6	13.9	0.0	1.0	-	0.0	100.0	100.0	
Vanguard Long-Term Treasury ETF	-4.1	14.6	-0.1	1.0	-0.1	1.2	101.9	102.3	07/01/2019
Blmbg. U.S. Government: Long Term Bond Index	-3.9	14.3	0.0	1.0	-	0.0	100.0	100.0	

Correlation Matrix

3 Months Ending June 30, 2023

	Crisis Risk Offset	MSCI AC World Index Value	S&P 500 Index	Blmbg. Global Aggregate
Crisis Risk Offset	1.00			
MSCI AC World Index Value	1.00	1.00		
S&P 500 Index	0.93	0.89	1.00	
Blmbg. Global Aggregate	0.78	0.83	0.50	1.00

Trailing Period Performance



Benchmark History		
From Date	To Date	Benchmark
OPFRS Total Plan		
06/01/2022	Present	40.0% Russell 3000 Index, 12.0% MSCI AC World ex USA (Net), 31.0% Blmbg. U.S. Universal Index, 2.0% Blmbg. U.S. Corp: High Yield Index, 5.0% CBOE S&P 500 Buy Write Index, 10.0% Crisis Risk Offset Benchmark
01/01/2019	06/01/2022	40.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 31.0% Blmbg. U.S. Universal Index, 5.0% CBOE S&P 500 Buy Write Index, 2.0% Blmbg. U.S. Treasury: Long, 10.0% Crisis Risk Offset Benchmark
05/01/2016	01/01/2019	48.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 20.0% Blmbg. U.S. Universal Index, 20.0% CBOE BXM
10/01/2015	05/01/2016	43.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 20.0% Blmbg. U.S. Universal Index, 15.0% CBOE BXM, 10.0% CPI - All Urban Consumers (unadjusted) +3%
01/01/2014	10/01/2015	48.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 20.0% Blmbg. U.S. Universal Index, 10.0% CBOE BXM, 10.0% CPI - All Urban Consumers (unadjusted) +3%
03/01/2013	01/01/2014	40.0% Russell 3000 Index, 10.0% MSCI AC World ex USA index, 17.0% Blmbg. U.S. Universal Index, 33.0% ICE BofA 3 Month U.S. T-Bill
08/01/2012	03/01/2013	20.0% Russell 3000 Index, 7.0% MSCI AC World ex USA index, 18.0% Blmbg. U.S. Universal Index, 55.0% ICE BofA 3 Month U.S. T-Bill
10/01/2007	08/01/2012	53.0% Russell 3000 Index, 17.0% MSCI AC World ex USA index, 30.0% Blmbg. U.S. Universal Index
04/01/2006	10/01/2007	35.0% Russell 3000 Index, 15.0% MSCI AC World ex USA index, 50.0% Blmbg. U.S. Universal Index
01/01/2005	04/01/2006	35.0% Russell 3000 Index, 50.0% Blmbg. U.S. Aggregate Index, 15.0% MSCI AC World ex USA index
04/01/1998	01/01/2005	20.0% Russell 1000 Value Index, 10.0% Russell 1000 Index, 5.0% Russell Midcap Index, 50.0% Blmbg. U.S. Aggregate Index, 15.0% MSCI EAFE (Net)
09/01/1988	04/01/1998	40.0% S&P 500 Index, 55.0% Blmbg. U.S. Aggregate Index, 5.0% FTSE 3 Month T-Bill

Benchmark History

From Date	To Date	Benchmark
Domestic Equity		
01/01/2005	Present	100.0% Russell 3000 Index
04/01/1998	01/01/2005	57.1% Russell 1000 Value Index, 28.6% Russell 1000 Index, 14.3% Russell Midcap Index
09/01/1988	04/01/1998	100.0% S&P 500 Index
International Equity		
01/01/2005	Present	100.0% MSCI AC World ex USA (Net)
01/01/1998	01/01/2005	100.0% MSCI EAFE Index
Fixed Income		
04/01/2006	Present	100.0% Blmbg. U.S. Universal Index
01/01/1976	04/01/2006	100.0% Blmbg. U.S. Aggregate Index
Covered Calls		
03/01/2014	Present	CBOE S&P 500 Buy Write Index
Crisis Risk Offset		
01/01/2023	Present	33.3% SG Trend Index, 33.3% SG Multi Alternative Risk Premia Index, 33.3% Blmbg. U.S. Government: Long Term Bond Index
08/01/2018	01/01/2023	100.0% SG Multi Alternative Risk Premia Index
Cash		
03/01/2011	Present	FTSE 3 Month T-Bill

Manager Monitoring / Probation Status

Manager Monitoring / Probation Status

Managers on Watch

- The following managers have breached the short-term investment performance criteria as of June 30, 2023.

Manager	Asset Class	Short-term Criteria	Medium-term Criteria	Long-term Criteria	Recommend Probation?
EARNEST Partners	Active Domestic Equity	Breached	Passed	Passed	No
Wellington Select Quality Equity	Active Domestic Equity	Breached	Not enough history	Not enough history	No
Rice Hall James	Active Domestic Equity	Breached	Passed	Passed	No

Managers on Probation Status

There are no managers currently on probation.

Investment Performance Criteria for Manager Monitoring / Probation Status

Asset Class	Short-term (Rolling 12 months)	Medium-term (Rolling 36 months)	Long-term (60 + months)
Active Domestic Equity	Fund return < benchmark return by 3.5%	Annualized Fund return < benchmark return by 1.75% for 6 consecutive months	VRR ¹ < 0.97 for 6 consecutive months
Active International Equity	Fund return < benchmark return by 4.5%	Annualized Fund return < benchmark return by 2.0% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
Passive International Equity	Tracking Error > 0.50%	Tracking Error > 0.45% for 6 consecutive months	Annualized Fund return < benchmark return by 0.4% for 6 consecutive months
Fixed Income	Fund return < benchmark return by 1.5%	Annualized Fund return < benchmark return by 1.0% for 6 consecutive months	VRR < 0.98 for 6 consecutive months

¹ VRR (Value Relative Ratio) is calculated as manager cumulative return/ benchmark cumulative return.

Additional Information

Additional Information

Performance Return Types: Performance shown is net of fees, except for OPFRS Total Plan, Domestic Equity, and International Equity Composites, which have a mix of gross and net of fees performance. Performance shown for OPFRS Total Plan and International Equity composite is gross of fees prior to January 2016. Performance shown for Domestic Equity composite is gross of fees prior to January 2017.

Inception Date: Since inception date and performance begin in the month following an investments initial funding.

Fiscal Year: Fiscal year begins on July 1.

Fair Value Pricing Methodology: Though Vanguard Developed Markets ETF is a passive strategy, short-term performance may appear to diverge from the index it tracks more than would be expected. This is due to Fair Value Pricing (FVP) adjustments that address the pricing discrepancies that may arise from time-zone differences among global securities markets. The resulting temporary divergence is expected to correct itself when the foreign markets reopen.

Disclaimer, Glossary, and Notes

WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM," "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

Credit Risk: Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security.)

Duration: Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

Information Ratio: This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

Jensen's Alpha: A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk. $\text{Portfolio Return} - [\text{Risk Free Rate} + \text{Beta} * (\text{market return} - \text{Risk Free Rate})]$.

Market Capitalization: For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

Market Weighted: Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

Maturity: The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.

Prepayment Risk: The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

Price-Book Value (P/B) Ratio: The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

Price-Earnings (P/E) Ratio: A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about its future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

Quality Rating: The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

Sharpe Ratio: A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

STIF Account: Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

Standard Deviation: A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

Style: The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

Tracking Error: A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark, as defined by the difference in standard deviation.

Yield to Maturity: The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a “basis book.” For example, a 5% bond pays \$5 a year interest on each \$100 par value. To figure its current yield, divide \$5 by \$95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay \$100 for the bond that can be bought now for \$95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

$$\frac{5\% \text{ (discount)}}{5 \text{ (yrs. to maturity)}} = 1\% \text{ pro rata, plus } 5.26\% \text{ (current yield)} = 6.26\% \text{ (yield to maturity)}$$

Yield to Worst: The lowest potential yield that can be received on a bond without the issuer actually defaulting. The yield to worst is calculated by making worst-case scenario assumptions on the issue by calculating the returns that would be received if provisions, including prepayment, call, or sinking fund, are used by the issuer.

NCREIF Property Index (NPI): Measures unleveraged investment performance of a very large pool of individual commercial real estate properties acquired in the private market by tax-exempt institutional investors for investment purposes only. The NPI index is capitalization-weighted for a quarterly time series composite total rate of return.

NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE): Measures the investment performance of 28 open-end commingled funds pursuing a core investment strategy that reflects funds' leverage and cash positions. The NFI-ODCE index is equal-weighted and is reported gross and net of fees for a quarterly time series composite total rate of return.

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999.
The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991

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Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.

MEMORANDUM

TO: Oakland Police and Fire Retirement System (OPFRS)
FROM: Meketa Investment Group (Meketa)
DATE: August 30, 2023
RE: Asset Liability Project

Meketa recommend that clients conduct asset-liability analyses every three to five years, or when major changes in plan provisions occur. The previous study for the Oakland Police and Fire Retirement System pension plan (“the Plan”) was completed in 2017.

Due to the period of time that has passed since the most recent asset-liability study, Meketa recommends that a new study be conducted for OPFRS. The purpose of the study would be to review the current strategic investment allocation of the Plan, given its projected future benefit obligations and the current financial risks and opportunities, in order to provide relevant information and advice to decision makers to make decisions regarding the future strategic investment allocation for the Plan.

After reviewing and discussing the above issues, Meketa proposes a fee of \$40,000 for this project, based on a scope of work that entails the following:

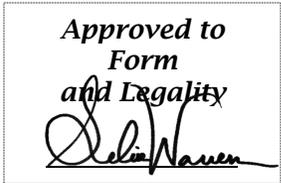
Scope of Work

Through our experience of conducting numerous asset-liability projects, we believe that the Plan’s asset-liability study would include the following tasks:

- Fact finding to develop appropriate inputs for the asset-liability study;
- Gather / update member, financial, and plan benefit data to use in modeling;
- Provide an overview to the Board, regarding the asset-liability modeling process, Meketa’s current capital market assumptions, and the Plan’s current allocation;
- Work with OPFRS staff to review the appropriateness of the strategic investment classes, and present proposed classes and their assumptions to the Board;
- Review and adopt decision factors and modeling constraints;
- Create and test the asset-liability model;
- Review model output with the Board, lead discussion and deliberation, guide the process towards selection of a revised forward-looking strategic allocation.

We anticipate these steps would take significant time during the upcoming 2023 board meetings, and the project would be completed over the next three to four Board meetings.

OAKLAND POLICE AND FIRE RETIREMENT BOARD
 CITY OF OAKLAND, CALIFORNIA
RESOLUTION No. 8082



ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

RESOLUTION FIXING THE MONTHLY ALLOWANCE OF NANCY BAKER, SURVIVING SPOUSE OF JOHN K. BAKER; CONNIE L. BOWSER, SURVIVING SPOUSE OF RICHARD L. BOWSER; CAROL CECIL, SURVIVING SPOUSE OF RICHARD F. CECIL; RETIRED MEMBERS OF THE CITY OF OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

WHEREAS, the retired members of the Police and Fire Retirement System, whose names appear in Column (1) below, died on the dates shown in Column (2) below; and

WHEREAS, the surviving spouses, whose names appear in Column (3) below, do not claim that their spouse's death was by reason of an injury received in, or illness caused by, or arising out of the performance of duty; and

WHEREAS, there is now presented to this Board, the monthly allowances shown in Column (7) below and as calculated by the Actuary in accordance with Article XXVI of the Charter of the City of Oakland; now, therefore, be it

RESOLVED: That the Police and Fire Retirement Board does hereby fix the amounts shown in Column (7) as the monthly allowance that said surviving spouses shall receive beginning on the dates shown in Column (4):

(1) Name of Deceased Member	(2) Date of Death	(3) Name of Surviving Spouse	(4) Effective Date of Allowance	(5) Form of Retirement	(6) % of Compensation Attached to Avg. Rank Held	(7) Monthly Allowance
John K. Baker	07/23/23	Nancy Baker	07/24/23	SVC	44.44%	\$11,742.67
Richard L. Bowser	07/30/23	Connie L. Bowser	07/31/23	DIS	33.33%	\$4,433.21
Richard F. Cecil	08/12/23	Carol Cecil	08/13/23	DIS	38.43%	\$4,651.01

IN BOARD MEETING, CITY HALL, OAKLAND, CA AUGUST 30, 2023

PASSED BY THE FOLLOWING VOTE:

AYES: MELIA, NICHELINI, ROSEMAN, SPEAKMAN, WILKINSON, & PRESIDENT JOHNSON

NOES:

ABSTAIN:

EXCUSED: GODFREY

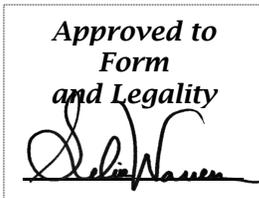
ATTEST: _____
 PRESIDENT

ATTEST: _____
 SECRETARY

OAKLAND POLICE AND FIRE RETIREMENT BOARD

CITY OF OAKLAND, CALIFORNIA

RESOLUTION No. 8083



ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

RESOLUTION APPROVING DEATH BENEFIT PAYMENTS AND DIRECTING WARRANTS THEREUNDER IN THE AMOUNT OF \$1,000.00 PAYABLE TO THE BENEFICIARIES OF DECEASED CITY OF OAKLAND POLICE AND FIRE RETIREMENT SYSTEM MEMBERS RICHARD E. CASTLE AND JIMMIE D. THOMPSON.

WHEREAS, due proof having been received in accordance with Article XXVI of the Charter of the City of Oakland of the death of the retired member of the Oakland Police or Fire Department identified in Column (1) below; and

WHEREAS, the beneficiaries to whom the death benefit provided in Charter Section 2612 is payable, are the people whose names are stated in Column (2) opposite the name of the deceased retired member; and

WHEREAS, the amount of said death benefit is stated in Column (3) opposite the name of the beneficiaries; now, therefore, be it

RESOLVED: That the Police and Fire Retirement System Board does hereby approve the Death Benefit payments to the people named in Column (2); and be it

FURTHER RESOLVED: That the Director of Finance, be and is hereby directed to draw and sign a warrant for the amount in Column (3) payable to the people whose names appears in Column (2):

Table with 3 columns: (1) Name of Deceased Member, (2) Names of Beneficiaries, (3) Death Benefit Amount. Rows include Richard E. Castle and Jimmie D. Thompson.

IN BOARD MEETING, CITY HALL, OAKLAND, CA JULY 26, 2023

PASSED BY THE FOLLOWING VOTE:

AYES: MELIA, NICHELINI, ROSEMAN, SPEAKMAN, WILKINSON, & PRESIDENT JOHNSON

NOES:

EXCUSED: GODFREY

ATTEST: _____ PRESIDENT

ATTEST: _____ SECRETARY