MercedCERA INVESTMENT SUBCOMMITTEE MEETING AGENDA WEDNESDAY, SEPTEMBER 28, 2022, 10:30AM MERCED COUNTY EMPLOYEES' RETIREMENT ASSOCIATION VIRTUAL ONLY - ZOOM CONFERENCE

https://us06web.zoom.us/j/93030195748?pwd=NGhFeGltSVhaSTlsK2JGWE83TVFydz09 DIAL IN NUMBER: 669-900-6833, MEETING ID: 930 3019 5748, PASSCODE: 095484 (FOR USE ONLY IF ZOOM CONNECTION MALFUNCTIONS) TELEPHONE NUMBER: 1-310-372-7549, CONFERENCE CODE: 975839

Important Notice Regarding SARS-COV-2

In order to minimize the spread of COVID-19, the Board of Retirement is meeting virtually to provide for sufficient access for the Board and members of the public. Members of the public may attend the meeting virtually to offer public comment telephonically by calling into the telephone number provided above and entering the stated conference code. If you have any issues participating in the meeting telephonically or require reasonable accommodation for your participation, please contact MercedCERA staff at 209-726-2724. Please turn your cell phone or other electronic device to non-audible mode.

CALL TO ORDER: September 28, 2022.

• ROLL CALL Absent: Present:

PUBLIC COMMENT

Members of the public may comment on any item under the Board's jurisdiction. Matters presented under this item will not be discussed or acted upon by the Board at this time. For agenda items, the public may make comments at the time the item comes up for Board consideration. Persons addressing the Board will be limited to a maximum of five (5) minutes in total. Please state your name for the record.

BOARD ACTION¹/DISCUSSION

Pursuant to Govt. Code § 31594 and MercedCERA's Investment Objectives & Policy Statement due diligence analysis requirement:

- 1. Discussion and possible action to approve minutes from the September 8, 2022 subcommittee meeting Chair.
- 2. Discussion and possible action to conduct a manager search and possibly replace MercedCERA's manager Barrow Hanley and applicable allocations Meketa.

INFORMATION ONLY

Any actions/recommendations taken/made by this subcommittee will be brought to the full Board of Retirement for approval.

ADJOURNMENT:

¹ "Action" means that the Board may dispose of any item by any action, including but not limited to the following acts: approve, disapprove, authorize, modify, defer, table, take no action, or receive and file.

All supporting documentation is available for public review online at **www.co.merced.ca.us/retirement**

Any material related to an item on this Agenda submitted to the Merced County Employees' Retirement Association, after distribution of the Agenda packet is available for public inspection at www.co.merced.ca.us/retirement

Persons who require accommodation for a disability in order to review an agenda, or to participate in a meeting of the Merced County Employees' Retirement Association per the American Disabilities Act (ADA), may obtain assistance by requesting such accommodation by emailing the Merced County Employees' Association at MCERA@co.merced.ca.us, or telephonically by calling (209) 726-2724. Any such request for accommodation should be made at least 48 hours prior to the scheduled meeting for which assistance is requested.

MercedCERA INVESTMENT SUBCOMMITTEE MEETING MINUTES THURSDAY, SEPTEMBER 08, 2022 MERCED COUNTY EMPLOYEES' RETIREMENT ASSOCIATION ZOOM CONFERENCE

https://us06web.zoom.us/j/93030195748?pwd=NGhFeGltSVhaSTlsK2JGWE83TVFydz09 DIAL IN NUMBER: 669-900-6833, MEETING ID: 930 3019 5748, PASSCODE: 095484

(FOR USE ONLY IF ZOOM CONNECTION MALFUNCTIONS) TELEPHONE NUMBER: 1-310-372-7549, CONFERENCE CODE: 975839

CALL TO ORDER: September 8, 2022.

ROLL CALL at 8:39A.M.
Absent: David Ness
Present: <u>Trustees:</u> Ryan Paskin, Karen Adams and Scott Johnston. <u>Staff:</u> Kristen Santos, Brenda Mojica, Monica Gallegos, Mark Harman, Kenter Ludlow and Wendy Calderon.

PUBLIC COMMENT

No comment.

BOARD ACTION¹/DISCUSSION

Pursuant to Govt. Code § 31594 and MercedCERA's Investment Objectives & Policy Statement due diligence analysis requirement:

1. Discussion and possible action to approve minutes from the July 28, 2022 subcommittee meeting – Chair.

The MercedCERA Investment Subcommittee voted unanimously via roll call vote to approve the minutes from the July 28, 2022 subcommittee meeting. Adams/Johnston U/A (3/0)

- 2. Discussion and possible action to conduct a manager search and possibly replace MercedCERA's manager Barrow Hanley and applicable allocations Meketa.
 - The MercedCERA Investment Subcommittee voted unanimously via roll call vote to recommend to the full board at the September 22, 2022 meeting to liquidate half of Barrow Hanley allocation (roughly \$40M) and invest in Wellington Management.
 - Rebalance by taking \$40m from Vanguard Total Bond Market index fund and move to Vanguard Short Term Bond fund.

Adams/Johnston U/A (3/0)

INFORMATION ONLY Nothing to inform.

ADJOURNMENT:

The meeting adjourned at 10:03 A.M.

¹ "Action" means that the Board may dispose of any item by any action, including but not limited to the following acts: approve, disapprove, authorize, modify, defer, table, take no action, or receive and file.

Accepted By,

| Trustee Name/Position | Signature | Date |
|-----------------------|-----------|------|
| Ryan Paskin/ Chair | | |
| Al Peterson/Secretary | | |



Investment Grade Portfolio Asset Class Review and Proposal September 28, 2022

Merced County Employees' Retirement Association

MEKETA.COM



Investment Grade Bond Asset Class Proposal

Agenda

- 1. Background
- **2.** Summary Recommendations
- **3.** Manager Overviews
- 4. Appendix

Background



Introduction

\rightarrow The Merced CERA Fixed Income Portfolio has two distinct parts: Core Fixed Income, and Opportunistic Credit

- We continue to believe it is important to retain exposure to core fixed income assets as part of a long term asset allocation.
- Given the backdrop of a rising rate environment, it is a reasonable time to reconsider the structure of the Core portfolio, which is currently comprised of an actively managed core bond portfolio, a passively managed core bond portfolio, and a short duration index.

\rightarrow Merced CERA is also building out its private credit portfolio

- Assets for these investments are currently held in the Core Fixed Income allocation, specifically in the short duration bond index (post rebalancing after the 9/8 subcommittee meeting).
- → Meketa believes additional active management in the fixed income portfolio may enhance the durability of the program in uncertain times.
 - It is also worth reminding the subcommittee that expectations for fixed income assets have risen dramatically in 2022, as yields have increased. So, setting aside the pain of owning fixed income assets as rates are rising, fixed income's future contribution to returns in the portfolio are likely to be enhanced over the medium term
 - Core fixed income has been a place where active management has added small, but consistent, incremental alpha over time, through high conviction managers. The recent addition of Wellington we believe improves the core exposure of the portfolio, and considering Brandywine and Payden, as detailed in the following pages, could provide additional flexibility within the overall fixed income allocation.

MEKETA

Merced County Employees' Retirement Association

Total Fund | As of July 31, 2022

| Policy | | Current | | | Allocation vs | . Targets an | d Policy | | | |
|--------|--------|---------|----------------------|-------------------------|--------------------|-----------------------|----------|-------------|---------------|----------------------|
| | | Guirein | l | | Current Balance | Current Allocation | Policy | Difference | Policy Range | Within IPS Range? |
| | | | | US Equity | \$257,901,997 | 23.6% | 22.0% | 1.6% | 16.0% - 27.0% | Yes |
| | 22.0% | | | International Equity | \$125,766,661 | 11.5% | 11.0% | 0.5% | 6.0% - 16.0% | Yes |
| | 22.070 | | 23.6% | Emerging Markets Equity | \$64,981,493 | 6.0% | 8.0% | -2.0% | 4.0% - 12.0% | Yes |
| | | | | Private Equity | \$137,004,955 | 12.6% | 15.0% | -2.4% | 5.0% - 20.0% | Yes |
| | | | | Direct Lending | \$25,113,568 | 2.3% | 5.0% | -2.7% | 0.0% - 10.0% | Yes |
| | | | | Real Estate | \$90,611,848 | 8.3% | 8.0% | 0.3% | 6.0% - 10.0% | Yes |
| | 11.0% | | 44 50/ | US Fixed Income | \$162,944,180 | 14.9% | 11.0% | 3.9% | 6.0% - 16.0% | Yes |
| | | 11.5% | Opportunistic Credit | \$58,912,411 | 5.4% | 5.0% | 0.4% | 3.0% - 7.0% | Yes | |
| | | | | Hedge Funds | \$105,225,726 | 9.6% | 10.0% | -0.4% | 5.0% - 15.0% | Yes |
| | 8.0% | 6.0% | Real Assets | \$51,830,369 | 4.7% | 5.0% | -0.3% | 3.0% - 7.0% | Yes | |
| | | | Cash | \$11,085,479 | 1.0% | 0.0% | 1.0% | 0.0% - 5.0% | Yes | |
| | | | 12.6% | Total | \$1,091,378,687 | 100.0% | 100.0% | | | |
| | 15.0% | | 12.070 | | | | | | | |
| | | | 2.3% | | | | | | | |
| | 5.0% | | 2.070 | | | | | | | |
| | | | 8.3% | | | | | | | |
| | 8.0% | | | | | | | | | |
| | | | | | | | | | | |
| | | | 14.9% | | | | | | | |
| | 11.0% | | | | | | | | | |
| | | | | | | | | | | |
| | 5.0% | | 5.4% | | | | | | | |
| | | | | | | | | | | |
| | 10.0% | | 9.6% | | | | | | | |
| | | | | | | | | | | |
| | 5.0% | | 4.7% | | | | | | | |
| | 0.0% | | 1.0% | | | | | | | |

Cash range displayed for illustrative purposes only.

MEKETA INVESTMENT GROUP



Fixed Income Allocation Composition Proposal

\rightarrow Intermediate Investment Grade vs TIPS¹

High-quality fixed income can play a crucial role in diversifying an overall portfolio. While 2022 has been a difficult year, an allocation to a diversified, intermediate-duration fixed income approach such as Core Bond has the potential to generate meaningfully higher returns over time relative to shorter-duration fixed income or TIPS. The higher income profile of Core fixed income and the "self-healing" nature of bonds (i.e., reinvesting proceeds at higher yields) can help mitigate downside even in a rising rate environment. While TIPS may provide a suitable substitute for nominal government bonds to hedge against inflation, because of their susceptibility to other factors such as interest rate volatility, we would not suggest replacing a Core fixed income allocation with TIPS simply because of concerns about inflation risks.

\rightarrow Duration Management for diversified alpha

• Given the feedback from the subcommittee, Meketa is proposing the addition of an active manager specializing in duration management. In this case, we believe a manager like Brandywine may offer Merced a diversified alpha source targeting the concerns over interest rate volatility in the future.

\rightarrow Active management in short duration fixed income

• We propose considering an active manager within the short duration allocation, presented as Payden below. By limiting the short duration allocation to a short-term treasury index, we believe the portfolio may be limited in opportunities for additional alpha that an active manager can provide across sectors and along the short end of the yield curve. Supplementing the index with active management may provide better positioning.

¹ Commentary sourced from Wellington.

Summary and Recommendations



Investment Grade Bond Asset Class Proposal

Summary and Recommendation¹

→ While we believe the Fund's investment grade bond allocation is prudently structured following the rebalancing and allocation to Wellington Core Bond, we provide alternative structures for the IC to consider.

| | | % of | | Yield to Maturity | Fees |
|-------------------------------|--------------|-------------|-----------------------|----------------------|-------|
| Current Portfolio | Millions(\$) | Asset Class | Duration ² | (%) | (%) |
| Total | 166.4 | 100 | 5.1 | 3.9 | 0.09 |
| Wellington Core | 79.2 | 48 | 6.4 | 4.8 | 0.134 |
| Vanguard Total Bond Index | 36.9 | 22 | 6.7 | 3.4 | 0.04 |
| Vanguard Short-Term Tsy Index | 50.2 | 30 | 1.9 | 2.9 | 0.05 |
| Barclays Aggregate Index | | | 6.4 | 3.7 | |

- → The "Current Portfolio" reflects the board's decision to replace Barrow Hanley with Wellington, in addition to proposed portfolio rebalancing.
 - The rebalancing resulted in a shift of ~\$40 million (~24%) from the Vanguard Total Bond Index to the Vanguard Short-Term Treasury Index.

¹Duration and YTM figures are as of June 30, 2022.



Investment Grade Bond Asset Class Proposal

Summary and Recommendation (continued)

- → Presented below are 5 scenarios for the board to consider. For the Core and Short Duration allocations, each scenario is split 75% active management and 25% passive management, which we think provides flexibility.
- \rightarrow Our scenario analysis was performed under the assumption that Wellington will fully replace Barrow Hanley.
- → We present Scenario 1 as a "base case" and alternative options to either add or reduce exposure to the "plus" manager or to Short Duration.

| | Core (MV | Core (MV%) F | | Short Duration (MV%) | | | | |
|--------------------------|------------------------------|----------------|------------|----------------------|----------------|-------------------|-----------|----------|
| MV % | Wellington/BHMS ¹ | Vanguard TR | Brandywine | Payden | Vanguard ST | Duration (yrs) | Yield (%) | Fees (%) |
| Pre-Rebalance (94/0/6) | 48 | 46 | - | - | 6 | 6.2 | 3.7 | 0.19 |
| Current (70/0/30) | 48 | 22 | - | - | 30 | 5.1 | 3.9 | 0.09 |
| Scenario 1 (60/30/10) | 45 | 15 | 30 | 7.5 | 2.5 | 6.8 | 3.9 | 0.19 |
| Scenario 2 (40/50/10) | 30 | 10 | 50 | 7.5 | 2.5 | 7.3 | 3.6 | 0.23 |
| Scenario 3 (50/40/10) | 37.5 | 12.5 | 40 | 7.5 | 2.5 | 7.0 | 3.8 | 0.21 |
| Scenario 4 (50/30/20) | 37.5 | 12.5 | 30 | 15 | 5 | 6.3 | 3.8 | 0.21 |
| Scenario 5 (60/0/40) | 45 | 15 | - | 30 | 10 | 4.5 | 4.2 | 0.19 |
| Barclays Aggregate Index | | | | | | 6.4 | 3.7 | |

¹ The "Pre-Rebalance" portfolio is composed of Barrow Hanley High Quality Core fixed income. The "Current" and all scenarios include Wellington under the assumption that they are fully replacing Barrow Hanley as the active core fixed income manager



Investment Grade Bond Asset Class Proposal

| Historical Risk Statistics (Longest Common Period) ¹ |
|---|
| as of June 30, 2022 |

| | Pre-Rebal (94/0/6) | Current (70/0/30) | Scenario 1 (60/30/10) | Scenario 2 (40/50/10) | Scenario 3 (50/40/10) | Scenario 4 (50/30/20) | Scenario 5 (60/0/40) | BBG Aggregate Index |
|------------------------------|-----------------------|----------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------|------------------------|
| Performance ² (%) | 2.1 | 2.1 | 3.5 | 4.2 | 3.8 | 3.4 | 2.1 | 2.0 |
| Risk Measures | | | | | | | | |
| Standard Deviation (%) | 3.3 | 2.7 | 3.4 | 3.7 | 3.6 | 3.2 | 2.4 | 3.4 |
| Tracking Error (%) | 0.2 | 0.8 | 1.1 | 1.7 | 1.4 | 1.1 | 1.1 | NA |
| Beta | 1.0 | 0.8 | 1.0 | 1.0 | 1.0 | 0.9 | 0.7 | NA |
| Upside Capture (%) | 99 | 83 | 115 | 123 | 119 | 107 | 78 | NA |
| Downside Capture (%) | 97 | 74 | 81 | 76 | 78 | 73 | 64 | NA |
| Risk-Adjusted Performance | | | | | | | | |
| Sharpe Ratio | 0.5 | 0.6 | 0.9 | 1.0 | 0.9 | 0.9 | 0.7 | 0.5 |
| Jensen's Alpha | 0.1 | 0.4 | 1.5 | 2.1 | 1.8 | 1.5 | 0.5 | NA |
| Information Ratio | 0.3 | 0.1 | 1.3 | 1.2 | 1.3 | 1.2 | 0.1 | NA |

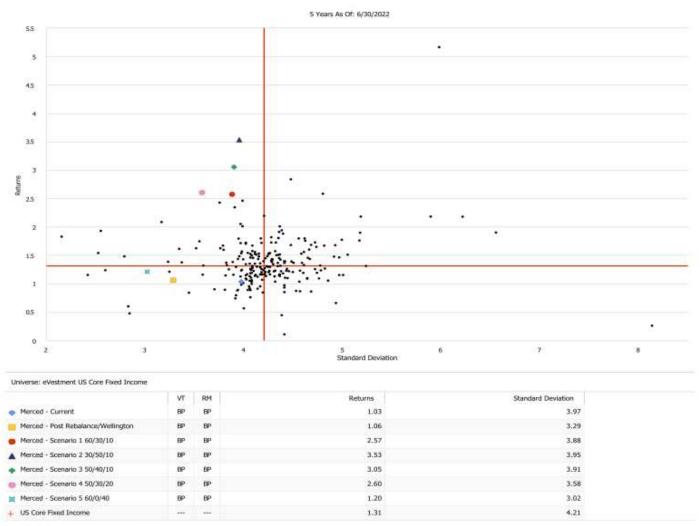
→ The introduction of Brandywine has a meaningful positive impact on risk characteristics as a result the strategies ability to produce strong risk adjusted returns over the trailing 5-year period

→ All scenarios result in minimal increase to volatility while more efficiently capturing upside market moves and protecting on the downside. Tracking error in all scenarios increase with higher allocations to Brandywine.

¹ Longest common period is defined as September 2010 through June 2022. The benchmark used for calculations is the Bloomberg US Aggregate Index. ² Gross of fees.



Investment Grade Bond Asset Class Proposal



Results displayed in USD using Spot Rate (SR).

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Investment Grade Bond Asset Class Proposal

| | _ | | _ | | | | | |
|---------------------------|-----------------------|----------------------|--------------------------|---------------------------------|--------------------------|--------------------------|-------------------------|------------------------|
| | Pre-Rebal (94/0/6) | Current (70/0/30) | Scenario 1 (60/30/10) | Scenario 2 <i>(40/50/10)</i> | Scenario 3 (50/40/10) | Scenario 4 (50/30/20) | Scenario 5 (60/0/40) | BBG Aggregate Index |
| Trailing Returns (%) | | | | | | | | |
| MRQ | -4.5 | -3.9 | -4.4 | -4.0 | -4.2 | -3.9 | -3.5 | -4.7 |
| YTD | -10.0 | -8.8 | -8.9 | -7.9 | -8.4 | -8.1 | -8.0 | -10.3 |
| 1 Year | -10.1 | -8.9 | -8.8 | -7.8 | -8.3 | -8.0 | -8.0 | -10.3 |
| 3 Years | -0.6 | -0.4 | 1.2 | 2.4 | 1.8 | 1.3 | -0.2 | -0.9 |
| 5 Years | 1.0 | 1.1 | 2.6 | 3.5 | 3.1 | 2.6 | 1.2 | 0.9 |
| 10 Year | 1.6 | 1.7 | 3.1 | 3.8 | 3.4 | 3.0 | 1.7 | 1.5 |
| Calendar Year Returns (%) | | | | | | | | |
| 2021 | -1.6 | -1.1 | -0.4 | 0.1 | -0.2 | -0.3 | -0.9 | -1.5 |
| 2020 | 8.2 | 7.2 | 10.8 | 12.3 | 11.5 | 10.2 | 6.8 | 7.5 |
| 2019 | 8.6 | 7.7 | 10.4 | 11.3 | 10.8 | 9.8 | 7.3 | 8.7 |
| 2018 | 0.1 | 0.3 | 1.3 | 2.1 | 1.7 | 1.5 | 0.6 | 0.0 |
| 2017 | 3.4 | 3.2 | 3.8 | 3.5 | 3.7 | 3.4 | 3.1 | 3.5 |
| 2016 | 2.6 | 2.9 | 5.9 | 7.5 | 6.7 | 5.7 | 2.9 | 2.6 |
| 2015 | 0.8 | 0.6 | 0.2 | -0.1 | 0.0 | 0.2 | 0.7 | 0.5 |
| 2014 | 5.6 | 4.7 | 8.3 | 9.9 | 9.1 | 7.7 | 4.2 | 6.0 |
| 2013 | -1.8 | -0.8 | -1.4 | -1.6 | -1.5 | -1.2 | -0.5 | -2.0 |

Historical Performance¹

as of June 30, 2022

¹ Gross of fees.



Investment Grade Bond Asset Class Proposal

| | Pre-Rebal (94/0/6) | Current (70/0/30) | Scenario 1 (60/30/10) | Scenario 2 (40/50/10) | Scenario 3 (50/40/10) | Scenario 4 (50/30/20) | Scenario 5 (60/0/40) | BBG US Agg |
|-------------------------------|-----------------------|----------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------|------------|
| Portfolio Profile: | | | | | | | | |
| Effective Duration (years) | 6.2 | 5.1 | 6.8 | 7.3 | 7.0 | 6.3 | 4.5 | 6.4 |
| Yield to Maturity (%) | 3.7 | 3.9 | 3.9 | 3.6 | 3.8 | 3.8 | 4.2 | 3.7 |
| Credit Quality Breakdown (%): | | | | | | | | |
| ААА | 67 | 79 | 75 | 79 | 77 | 74 | 67 | 75 |
| AA | 3 | 2 | 3 | 3 | 3 | 4 | 4 | 3 |
| А | 13 | 9 | 10 | 8 | 9 | 10 | 12 | 10 |
| BBB | 17 | 12 | 13 | 10 | 12 | 13 | 17 | 13 |
| Below BBB | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 |
| Unrated | 0 | 2 | 2 | 1 | 2 | 2 | 3 | 0 |
| Cash | 0 | -4 | -4 | -3 | -3 | -3 | -4 | 0 |
| Sector Allocation: | | | | | | | | |
| Treasury | 37 | 46 | 40 | 51 | 46 | 43 | 31 | 41 |
| Agency | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Corporate | 31 | 20 | 22 | 17 | 20 | 21 | 27 | 24 |
| Municipal | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| MBS | 24 | 29 | 32 | 26 | 29 | 28 | 30 | 28 |
| CMBS | 2 | 2 | 3 | 2 | 3 | 3 | 5 | 2 |
| ABS | 4 | 3 | 4 | 3 | 3 | 4 | 7 | 0 |
| Other | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 4 |
| Cash and Equivalents | 0 | -4 | -3 | -1 | -2 | -2 | -4 | 0 |

Portfolio Characteristics as of June 30, 2022

Manager Overviews



Investment Grade Bond Asset Class Proposal

Active Investment Grade Manager Overviews as of June 30, 2022

| | Wellington | Brandywine | Payden & Rygel |
|---------------------------------------|---------------------------------------|---------------------------------------|-----------------------------------|
| Firm Location | Boston, MA | Philadelphia, PA | Los Angeles, CA |
| Firm Inception | 1982 | 1986 | 1983 |
| Ownership Structure | 100% employee-owned | Wholly owned by Franklin Templeton | 100% employee-owned |
| Asset Under Management (Firm) | \$1.2 trillion | \$60.7 billion | \$135.9 billion |
| Strategy Name | Core Bond | US Fixed Income | Low Duration |
| Strategy Inception | December 1984 | October 1995 | January 1984 |
| Assets Under Management (Strategy) | \$53.2 billion | \$3.1 billion | \$36.8 billion |
| Benchmark | Bloomberg Barclays US Aggregate | Bloomberg Barclays US Aggregate | Bloomberg Barclays 1-3 Yr. TSY |
| Duration | 6.4 | 9.1 | 1.5 |
| Yield | 4.8 | 2.9 | 4.1 |
| Average Credit Quality | AA- | ΑΑΑ | А |
| Fees ¹ | 0.134% | 0.335% | 0.38% ² |

¹ Represents the lowest fee vehicle offered by each manager. See Fees and Terms table for more details.

² Payden has indicated to Meketa that they would be willing to waive the \$10M minimum amount given Meketa's existing relationship with the manager. Typical fees for the proposed mandate sizes would be 0.43%.



Wellington

Organization: Wellington Management, headquartered in Boston, MA, traces its history back to the founding of the Wellington Fund in 1928. Wellington Management Group (WMG) is a limited liability partnership, privately held by 177 partners who are all fully active in the business of the firm with no external entities with any ownership interest. Wellington had \$1.2 trillion in assets under management as of June 30, 2022, of which \$53.2 billion are in the Core Bond strategy

Investment Team: The Core Bond and Intermediate strategies are run by two partners of the firm, Joe Marvan and Campe Goodman, who are also members of the Broad Markets team of portfolio managers. Sector specialists manage each sector (Governments, MBS, CMBS, investment grade credit, rates, inflation) based on fundamental bottom-up research. The Core Bond portfolio managers work with the Sector Specialist Portfolio Managers and all analysts to construct and monitor the portfolio. There is no CIO. The Broad Markets team decides the broad strategy such as allocating risk to sectors and duration. Broad Markets has four portfolio managers and an Investment Director that make top-down macro decisions based on the economy, central bank policy, and rates. Portfolio managers that run other strategies usually are in agreement with their views, but they do not have to take direction from them and may run independently.

Investment Philosophy: Wellington runs a well-diversified portfolio with no one source of alpha overwhelming returns. They only invest in investment grade, US-dollar denominated, securities and do not make allocations to the high yield or non US dollar denominated sectors.

Investment Process: Core Bond strategy is managed in a benchmark-relative style that invests across the major sectors of the domestic, investment grade bond market. The strategy seeks excess returns of 50-75 bps over the Bloomberg US Aggregate Bond index, with expected tracking error of 100-150 bps. The strategy maintains an AA/A credit quality rating and overall duration is typically +/- 1.0 year relative to the index. Historical exposures across high quality fixed income sectors have been; US Treasuries and Agencies 0-50%; Investment grade credit 10-50%, Agency MBS 20 70%; Structured credit 20-40%. While individual security analysis is the cornerstone to their research effort, the Broad Markets team maintains its own top-down sector relative value analysis, as well as views on interest rates, yield curve shape, and inflation. The Broad Markets team meets formally bi-monthly to discuss and develop top-down strategy that includes an interdisciplinary team of internal analysts, macro strategists, portfolio managers, and traders.



Brandywine

Organization: Brandywine Global was founded in 1986 with headquarters in Philadelphia and offices in Toronto, Montreal, London, and Singapore. There are 225 employees managing mostly Fixed Income with total firm AUM at \$60.7 billion as of June 2021 and \$3.1 billion in the US Fixed Income strategy. The sale of Brandywine's parent company, Legg Mason, closed on July 31, 2020 making the new parent, Franklin Templeton, one of the world's largest investment managers with a combined \$1.5 trillion in assets under management. Brandywine Global remains an independent affiliate of Franklin Templeton and retains full control over investments, hiring, and compensation.

Investment Team: There are three PMs and the team is supported by the same Investment Strategy Committee and resources as Brandywine's global fixed income platform. PM Anujeet Sareen joined in May 2016 as a Portfolio Manager from Wellington with 22 years of experience and is supported by Brain Kloss and Tracy Chen, who focuses on structured credit.

Investment Philosophy: Brandywine follows a top-down, macro, value-oriented investment process. They believe interest rates, credit spreads, and the US dollar are regulators of economic activity that drive the business cycle with mean-reverting tendencies. The strategy will invest mainly in US government bonds and investment-grade corporate bonds and typically avoids securitized.

Investment Process: The US Fixed Income strategy is a differentiated, top down, macro-driven bond strategy that manages duration very widely and is highly concentrated in 20-30 issuers (30-40 issues) across corporate credit and US Treasuries, typically with no securitized exposure (although it is allowed). There is no high yield exposure and no non-US exposure. The strategy pulls two primary levers (1) active Treasury duration management and (2) allocation shifts to investment-grade corporates after spread widening events. Specifically, the team manages duration aggressively with US Treasury bonds as exhibited by duration as high as 16+ years in 2016 and close to zero in 2018. The strategy is also very active in shifting to overweight and underweight corporate credits. The team has historically made these shifts solely using cash bonds however more recently they have utilized treasury derivatives to manage overall duration while keeping credit spread duration in cash bonds to capture spread tightening in credit while limiting rate sensitivity.



Payden & Rygel

Organization: Payden and Rygel is a Los Angeles based firm with \$136 billion assets under management. The firm was founded in 1983, and it now has offices in London, Frankfurt, Boston, Paris and Milan. The firm manages \$37 billion in their Low Duration strategy. Payden & Rygel is 100% employee- owned, with ownership distributed among 21 active senior executives. Shareholders have 31 years of average industry experience and 21 years average tenure with the firm.

Investment Team: Payden & Rygel's Investment Policy Committee (IPC), made up of ten senior investment professionals, is responsible for firm-wide strategy oversight and risk management. The role of the IPC is to form the broad-based and long-term view on interest rates, economic growth, inflation, and political risk, to participate in ongoing review and determination of the firm's broad risk-management parameters, and undertake regular reviews of investment results for consistency with Payden & Rygel's fundamental views. The Low Duration team is comprised of six portfolio strategists and four traders. The senior members of the low duration team are responsible for the ongoing development and implementation of investment strategies based on the various benchmarks and client mandates.

Investment Philosophy: Payden & Rygel's focus in short-term portfolios is on sector selection and yield curve management rather than relying primarily on duration management. The firm focuses on sector selection due to the generally ongoing attractiveness of yield levels relative to short-term government bonds. The level and shape of the yield curve changes the most in the shorter end, providing significant opportunity and incentive to structure portfolios appropriately along the curve.

Investment Process: In short duration mandates, particular attention is paid to yield curve positioning in addition to portfolio duration in order to provide for greater consistency of returns over time. This aspect is especially important in managing short-term portfolios since interest rate movements are typically more pronounced at the shorter end of the yield curve. The senior members of the low duration team are responsible for the ongoing development and implementation of investment strategies based on the various benchmarks and client mandates within the low duration mandates that the firm manages. The broad research resources are all brought to bear in the development of investment strategy. Specialist strategy research teams include global government bonds, investment grade credit, high yield credit, emerging market debt, asset-backed and mortgage-backed securities, municipals, and currencies. Due to the short nature of many of these bonds, strategists and traders are looking for new bonds on a daily basis. Payden & Rygel believes strongly in issuer diversification and typically invests a maximum of 1% per issuer.



Investment Grade Bond Asset Class Proposal

| | Barrow | Wellington | Brandywine | BBG US Agg | Payden | BBG 1-3 Yr TSY |
|-------------------------------|--------|------------|------------|------------|--------|----------------|
| Portfolio Profile: | | | | | | |
| Effective Duration (years) | 6.2 | 6.4 | 9.1 | 6.4 | 1.5 | 1.9 |
| Yield to Maturity (%) | 4.0 | 4.8 | 2.9 | 3.7 | 4.1 | 3.0 |
| Number of Holdings | 298 | 924 | 22 | 12,563 | 260 | 94 |
| Average Credit Quality | AA- | AA- | AAA | AA | А | AAA |
| Credit Quality Breakdown (%): | | | | | | |
| AAA | 60 | 69 | 91 | 75 | 51 | 100 |
| AA | 2 | 4 | 2 | 3 | 7 | 0 |
| А | 16 | 14 | 4 | 10 | 12 | 0 |
| BBB | 21 | 19 | 3 | 13 | 22 | 0 |
| Below BBB | 0 | 4 | 0 | 0 | 8 | 0 |
| Cash | 1 | -9 | 0 | 0 | 0 | 0 |
| Sector Allocation: | | | | | | |
| Treasury | 20 | 12 | 76 | 41 | 28 | 100 |
| Agency | 0 | 0 | 0 | 1 | 0 | 0 |
| Corporate | 39 | 29 | 7 | 24 | 31 | 0 |
| Municipal | 0 | 2 | 0 | 0 | 0 | 0 |
| MBS | 31 | 52 | 14 | 28 | 12 | 0 |
| CMBS | 1 | 4 | 0 | 2 | 10 | 0 |
| ABS | 8 | 7 | 0 | 0 | 13 | 0 |
| Other | 0 | 3 | 0 | 4 | 6 | 0 |
| Cash and Equivalents | 1 | -9 | 3 | 0 | 0 | 0 |

Portfolio Characteristics as of June 30, 2022



Investment Grade Bond Asset Class Proposal

Historical Risk Statistics (Longest common period)¹ as of June 30, 2022

| | Barrow Hanley | Wellington | Brandywine | BBG Aggregate Index | Payden & Rygel | BBG 1-3 Yr Treasury Index |
|----------------------------------|---------------|------------|------------|------------------------|-------------------|------------------------------|
| Performance ² (%) | 2.3 | 2.9 | 5.9 | 2.0 | 1.7 | 1.1 |
| Risk Measures | | | | | | |
| Standard Deviation (%) | 3.5 | 3.6 | 5.0 | 3.4 | 1.2 | 1.0 |
| Tracking Error (%) | 0.4 | 0.8 | 3.4 | NA | 0.9 | NA |
| Beta | 1.02 | 1.03 | 1.1 | NA | 0.88 | NA |
| Upside Capture (%) | 106 | 113 | 151 | NA | 119 | NA |
| Downside Capture (%) | 100 | 95 | 70 | NA | 62 | NA |
| Risk-Adjusted Performance | | | | | | |
| Sharpe Ratio | 0.5 | 0.7 | 1.1 | 0.5 | 0.9 | 0.5 |
| Jensen's Alpha | 0.3 | 0.8 | 3.7 | NA | 0.7 | NA |
| Information Ratio | 0.7 | 1.0 | 1.1 | NA | 0.7 | NA |

¹ Longest common period is defined as September 2010 through June 2022. The benchmark used for calculations are the manager preferred benchmark. ² Gross of fees.



Investment Grade Bond Asset Class Proposal

| | | | BBG Aggregate | Payden & | BBG 1-3 Yr |
|---------------------------|------------|------------|---------------|----------|----------------|
| | Wellington | Brandywine | Index | Rygel | Treasury Index |
| Trailing Returns (%) | | | | | |
| MRQ | -5.7 | -3.5 | -4.7 | -0.8 | -0.6 |
| YTD | -11.7 | -6.1 | -10.3 | -2.9 | -3.1 |
| 1 Year | -11.6 | -5.9 | -10.3 | -3.2 | -3.6 |
| 3 Years | -0.7 | 5.2 | -0.9 | 0.7 | 0.3 |
| 5 Years | 1.2 | 5.9 | 0.9 | 1.5 | 1.1 |
| 10 Year | 2.2 | 5.7 | 1.5 | 1.6 | 1.0 |
| Calendar Year Returns (%) | | | | | |
| 2021 | -1.3 | 1.3 | -1.5 | 0.0 | -0.5 |
| 2020 | 9.4 | 16.7 | 7.5 | 3.6 | 3.3 |
| 2019 | 9.8 | 14.1 | 8.7 | 4.6 | 4.0 |
| 2018 | -0.3 | 4.1 | 0.0 | 1.7 | 1.6 |
| 2017 | 4.7 | 3.3 | 3.5 | 1.8 | 0.8 |
| 2016 | 4.3 | 11.6 | 2.6 | 2.0 | 1.3 |
| 2015 | 0.7 | -0.9 | 0.5 | 0.9 | 0.7 |
| 2014 | 6.6 | 14.5 | 6.0 | 1.2 | 0.8 |
| 2013 | -1.0 | -2.3 | -2.0 | 1.0 | 0.6 |

Historical Performance¹ as of June 30, 2022

¹ Gross of fees.

MEKETA

Merced County Employees' Retirement Association

Investment Grade Bond Asset Class Proposal

Fees and Terms

| | Wellington | Brandywine | Payden & Rygel |
|----------------------------|--------------------|---------------------------|---------------------|
| Duration | 6.4 | 9.1 | 1.5 |
| Vehicle Type | Commingled Fund | Commingled Fund or SMA | Mutual Fund |
| Liquidity | Daily | Daily | Daily |
| Effective Fee ¹ | 0.134% | 0.31% | 0.38% |
| Other Expenses | NA | NA | NA |
| Minimum Size | \$1 M | SMA: \$50 M CF: \$1 M | \$10 M ² |

¹ Effective Fees are based on a \$50 million mandate size.

² Payden has indicated to Meketa that they would be willing to waive this minimum amount given Meketa's existing relationship with the manager. Typical fees for the proposed mandate sizes would be 0.43%.

Appendix



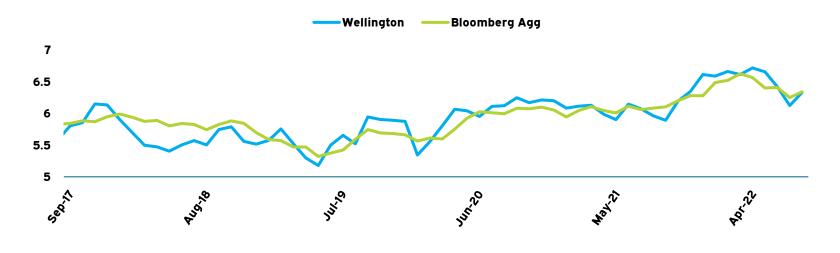
Investment Grade Bond Asset Class Proposal

Duration Comparison: Wellington vs. Barclays Aggregate

→ The monthly durations for the Wellington Core Fixed Income fund were compared against the Bloomberg Aggregate over the past five years (September 2017 – August 2022). Below are a summary of the findings:

| | Wellington Core | | |
|------------------|-----------------|--------------------------|------------|
| | Fixed Income | Barclays Aggregate Index | Difference |
| Average Duration | 5.9 | 5.9 | 0.0 |
| Min Duration | 5.2 | 5.3 | -0.1 |
| Max Duration | 6.7 | 6.6 | 0.1 |
| Range | 1.5 | 1.3 | 0.2 |

→ On average, the Wellington Core Fixed Income portfolio has maintained a duration that in line with the Bloomberg Aggregate Index, with a tight range.





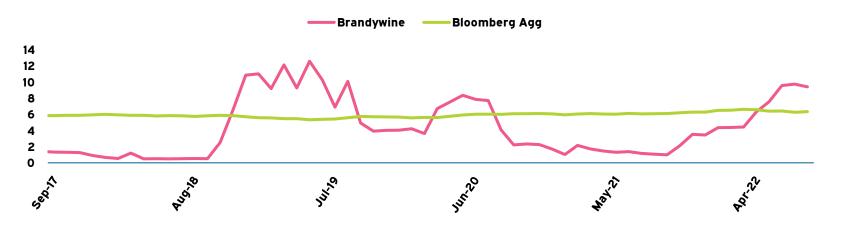
Investment Grade Bond Asset Class Proposal

Duration Comparison: Brandywine vs. Barclays Aggregate

→ The monthly durations for the Brandywine US Fixed Income fund were compared against the Bloomberg Aggregate over the past five years (September 2017 – August 2022). Below are a summary of the findings:

| | Brandywine US | | |
|------------------|---------------|--------------------------|------------|
| | Fixed Income | Barclays Aggregate Index | Difference |
| Average Duration | 4.4 | 5.9 | -1.5 |
| Min Duration | 0.5 | 5.3 | -4.8 |
| Max Duration | 12.6 | 6.6 | 5.9 |
| Range | 12.1 | 1.3 | 10.8 |

→ On average, the Brandywine US Fixed Income portfolio has maintained a duration that is 1.5 years lower than the Bloomberg Aggregate Index, with a much wider range.





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