SWIB Board of Trustees Meeting of September 9, 2026

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AGENDA / NOTICE

STATE OF WISCONSIN INVESTMENT BOARD

Name of Meeting: **Regular Meeting of the Board of Trustees**
Date/Time: Wednesday, September 9, 2026 9:00 am
Room: 1st Floor Conference Room
Address: 4703 Madison Yards Way, Madison, WI 53705
Virtual: Join the meeting now; 608-267-3179, code 177471723#

OPEN SESSION
1. Committee Reports – Open Session Items A. Audit and Finance B. Benchmark and Performance C. Strategic Planning and Corporate Governance
2. Consent Agenda A. Open Session Minutes of June 17, 2026 B. Recommended Actions from Committee Agendas – Open Session Items
3. Investment Forum Recap
4. Fiduciary & Public Records Topics
5. Investment Performance and Market Updates A. Board Investment Performance Report, Q2 2026 B. Callan Quarterly Report
6. Committee Open Session Business A. Amendments to WRS Investment Committee Investment Guidelines B. Approved Open Session Investment Committee Meeting Minutes of May 26, June 23, and July 28, 2026 C. Final Open Session Investment Committee Agenda for August 25, 2026 and Draft Open Session Agendas for September 22 and October 27, 2026 D. Draft Open Session Minutes of May 21, 2026 Enterprise Risk and Compliance Committee Meeting
7. Quarterly Investment Update, Q2 2026

CLOSED SESSION*
RECONVENE IN OPEN SESSION
8. Announcement of Matters Taken Up in Closed Session
9. In the Absence of Questions, the Following Reports will be Filed Without Comment (For informational purposes): A. Quarterly Charges to Funds Reports, Q2 2026 B. Private Markets and Funds Alpha Commitments, Q2 2026 C. Board Contact Log D. Updated Committee Assignments
10. Future Items for Discussion A. 2026 Board Meeting and Agenda Plan
11. Motion to Adjourn
NOTES: Items may be taken in order other than listed. *Estimated times are for planning purposes only. Agenda items will last until discussion is concluded.* *The meeting site is physical accessible. Upon prior request, reasonable accommodations will be provided.*

*For further details on virtual format of meeting, please contact Dawn Tuescher (608-261-9341 or dawn.tuescher@swib.state.wi.us).

* The motion to go into closed session at this meeting is made pursuant to: (i) Sections 19.36(5) and 19.85(1)(e) of the Wisconsin Statutes to consider confidential and proprietary strategies for the investment of public funds relating to specific proprietary investment strategies of internal WRS portfolios, asset allocation, and risk management, and/or for any comments or discussion on prior closed session minutes that discuss the same; (ii) Section 19.85(1)(c) of the Wisconsin Statutes to discuss the compensation and performance evaluation data of specific SWIB employees, including SWIB's executive director/chief investment officer and SWIB's board of trustees, and/or for any comments or discussion on prior closed session minutes that discuss the same; and (iii) Section 19.85(1)(g) of the Wisconsin Statutes to confer with SWIB's chief legal counsel to receive advice concerning legal strategy for ongoing and potential litigation, and/or for any comments or discussion on prior closed session minutes that discuss the same. The Board may convene in additional closed sessions or announce additional closed session items at the meeting in accordance with the procedure outlined in the Attorney General's Opinion reported at 66 OAG 106 (1977). Whenever a closed session is held, the Board will subsequently reconvene in open session to cover remaining agenda items.

Board Meeting

Tab 1 – Committee Reports – Open Session Items

A. Audit and Finance Committee

B. Benchmark and Performance Committee

C. Strategic Planning and Corporate Governance Committee

Board Meeting

Tab 2 – Consent Agenda

A. Open Session Minutes of June 17, 2026

B. Recommended Actions from Committee Agendas – Open Session Items

Regular Meeting of the Board of Trustees

Wednesday, September 9, 2026

STATE OF WISCONSIN INVESTMENT BOARD

CONSENT AGENDA – OPEN SESSION ITEMS

Proposed Motions:

1. Move to approve the Open Session Minutes of June 17, 2026, as presented.
2. *[TBD after Committee meetings]*

STATE OF WISCONSIN INVESTMENT BOARD
Board of Trustees Meeting – Open Session
Tuesday, June 16 and Wednesday, June 17, 2026

Offices of the Investment Board
4703 Madison Yards Way, Madison, WI

OPEN SESSION

Trustee Merfeld, Vice Chair and Chair Pro Tempore, called the meeting of the Board of Trustees (the "Board") to order at 1:30 p.m. on June 16, 2026. Trustee Merfeld introduced the other Trustees as well as Edwin Denson, Executive Director/Chief Investment Officer, who acknowledged and thanked the planning committee and contributors for this annual event.

<u>INVESTMENT FORUM</u> (June 16, 2026) ***(See Attachment 1 for Attendance List)***

1. <u>U.S. Economic Outlook</u>

David Mericle, Chief U.S. Economist in Global Investment Research, Goldman Sachs

David Mericle, Chief U.S. Economist in Global Investment Research at Goldman Sachs, began by covering inflation expectations. Mr. Mericle stated that he expects PCE inflation to stay below 4%, with core near 3%, and anticipates a decline towards 2% in 2027. He noted that, at present, wage and rent growth still appear compatible with 2% or lower inflation. Further, Mr. Mericle stated that inflation had been boosted by the effect of the Iran war and the impact of artificial intelligence ("AI"). Finally, while the immediate tariff effect may fade, the overall impact of tariffs, higher energy prices, and memory prices for AI hold steady in terms of their impact on inflation.

Mr. Mericle stated that he continues to expect GDP growth to be approximately 1.8% in 2026. He noted that real income growth continues to be weak, due in part to higher oil prices. Mr. Mericle commented that he expects this to weigh on consumer spending this year. Further, he stated that business investment continues to be a bright spot, supported primarily by AI investments, the passing of new tax incentives, and the fading of tariff impacts.

In the context of the labor market, Mr. Mericle noted that payroll numbers have been much stronger and that he is now projecting the unemployment rate to rise to just 4.4% in 2026. He noted that immigration levels are down significantly from pre-pandemic levels of one million per year to around 200,000 per year at present, and that the effects on employment from AI have been modest and are not driving unemployment, as we begin to see a shift in adaptation by workers.

Finally, Mr. Mericle concluded by stating that he does not see room for interest rate cuts or a smaller Federal Reserve balance sheet during the remainder of the year, as the current economic environment does not appear to support either outcome.

2. <u>Recent Academic Research in Defined Benefits</u>

Nicole Boyson, Professor of Finance, Northeastern University

Nicole Boyson, Professor of Finance at Northeastern University, provided a high level overview of several financial topics that are undergoing review and analysis in academic papers. She began by discussing pension plan funding levels, highlighting the finding in academic literature that public and private pension plans often use different discount rates. For example, she explained that, if public plans used the same discount rate as private plans, unfunded liabilities could jump from $1.1 trillion to $6.5 trillion. Ms. Boyson also highlighted that, relative to other public pension plans, SWIB remains in an excellent position given its current funding level. For many other pension plans, a funding shortfall has pushed those plans to increase their exposure to various alternative asset classes.

Ms. Boyson then discussed the benchmarking process, commenting that the academic literature indicates that investment consultants, influenced by their own incentives, have the potential to impact benchmark selection at certain plans. Finally, Ms. Boyson commented on recent developments in the private credit sector, noting that non-bank financing, particularly for private equity-backed companies, has increased materially in recent years.

The Board recessed for the day at 3:45 pm.

<u>REGULAR BOARD MEETING</u> (June 17, 2026)

Board Members Present: Tom Merfeld, Vice Chair & Secretary and Chair Pro Tempore
Esther Ancel, Trustee
Kathy Blumenfeld, Trustee
Barb Bolens, Trustee
J. Michael Collins, Trustee
Robert Scott, Trustee
John Voelker, Trustee

Staff/Others Present: Eric Barber, Chief Legal Counsel
Brandon Brickner, Head of Internal Audit
Sara Chandler, Chief of Staff & Strategy and Interim Head of Private Markets & Funds Alpha
Edwin Denson, Executive Director/Chief Investment Officer
Greg Fletcher, Performance Director
Jameson Greenfield, Chief Financial Officer
Dan Gyorog, Internal Auditor
Tori Hassler, Internal Auditor
Becca Hewison, Administrative Services Manager and Executive Assistant
Rochelle Klaskin, Deputy Executive Director/Chief Operating Officer
Jon Loboda, Performance Measurement Operations Manager
Bill Luetzow, Senior Legal Counsel
Todd Mattina, Head Economist, Asset & Risk Allocation CIO
Frank Mazzucco, Senior Legal Counsel
Scott Parrish, Head of Private Equity
Chris Prestigiacomo, Head of Private Debt & Venture Capital
Jason Rothenberg, Head of Real Estate
Dawn Tuescher, Executive Administrative Assistant
Makayla Pesch, Legislative Audit Bureau
Sam Rebenstorf, Legislative Audit Bureau
Oindrila VanMeter, Legislative Audit Bureau
Marena Wood, Legislative Audit Bureau
Anne Steinberg, Public Attendee
(Some individuals may have attended only portions of the meeting.)

Trustee Merfeld, Vice Chair of the Board of Trustees (the "Board"), declared a quorum was present and called the Board meeting to order at 9:02 a.m. on June 17, 2026.

1. <u>Committee Reports – Open Session Items</u>

A. Audit and Finance Committee

Trustee Scott, Chair of the Audit and Finance Committee, reported that, in open session, the Committee: (i) approved prior meeting minutes; (ii) reviewed and approved the Calendar Year 2025 Retirement Funds Annual Report, including the Retirement Funds' Audited Financial Statements for Calendar Year 2025, which included a clean and unmodified opinion from the Legislative Audit Bureau ("LAB"); (iii) reviewed the *Open Audit Issues Report as of May 31, 2026*; (iv) approved the draft audit report for Investment Guidelines Compliance; (v) reviewed annual affirmations and disclosures; (vi) reviewed the 2026 Internal

Audit Plan Status; (vii) reviewed the Five-Year Audit Summary; (viii) reviewed the Quarterly Cost of Management Update for Q1 2026 and recommended that the Board approve the FY 2027 State Operating Budget; and (ix) received a report on administrative matters.

B. Compensation and Workforce Development

Trustee Bolens, Chair of the Compensation and Workforce Development Committee, reported that, in open session, the Committee: (i) approved prior meeting minutes; (ii) considered changes to the IMS incentive compensation plan and recommended that the Board approve the same; and (iii) received a Human Resources division update.

C. Strategic Planning and Corporate Governance Committee

Trustee Merfeld, Chair of the Strategic Planning and Corporate Governance Committee, reported that, in open session, the Committee: (i) approved prior meeting minutes; (ii) heard an update on innovation and projects in process at SWIB; and (iii) received an update on the targeted strategic planning initiative related to the cadence of future asset allocation reviews.

2. Consent Agenda

Eric Barber, Chief Legal Counsel, distributed a proposed consent agenda. Trustee Merfeld asked whether there were any motions listed on the consent agenda that should be removed for further discussion and individual action. Hearing none, he referred to the following items on the consent agenda:

- Move to approve the Open Session Minutes of March 18, 2026, as presented.
- Move to approve the preliminary FY 2027 State Operating Budget of $113.3 million, as recommended by the Audit and Finance Committee.
- Move to approve the changes to the Incentive Compensation Plan – Unclassified Investment Management Staff, as recommended by the Compensation and Workforce Development Committee and as set forth in the Committee's meeting materials.

Motion: A motion was made by Trustee Bolens and seconded by Trustee Scott to approve the consent agenda, as presented. The motion passed unanimously.

3. Investment Performance and Market Updates

A. Board Investment Performance Report, Q1 2026

Greg Fletcher, Performance Director, presented the *Investment Performance Report as of March 31, 2026,* included on pages 75-90 of the meeting materials. Mr. Fletcher reported that: (i) the Core Trust Fund ("CTF") returned -0.33% net of all fees and expenses in Q1 2026, representing 24 basis points ("bps") of outperformance relative to its benchmark for the quarter; (ii) the CTF returned 12.24% net of all fees and expenses for the one-year period, resulting in an excess return of 59 bps; (iii) the CTF returned 9.81% net of all fees and expenses for the three-year period and outperformed the benchmark by 81 bps; (iv) the CTF returned 6.43% net of all fees and expenses for the five-year period, resulting in an excess return of 69 bps; and (v) the CTF net of all fees and expenses return outperformed the 60/40 Reference Portfolio return by 15.7% (cumulative) over the past twenty years, which equates to an excess value add of $8.8 billion over the same period.

In addition, Mr. Fletcher highlighted that (i) the Variable Trust Fund ("VTF") net of all fees and expenses return outperformed its benchmark for the year-to-date and one-year periods and underperformed for the three- and five-year periods; and (ii) SWIB's investment management has added more than $4.1 billion above benchmark returns to the Wisconsin Retirement System ("WRS") over the last five years.

Mr. Fletcher reviewed the overall assets under management of SWIB, noting that the gross market value of assets increased by approximately $12 billion over the past year. He then noted that the percentage of WRS assets that are actively managed has declined year-over-year, and that the percentage of WRS assets that are internally managed increased slightly over the same period. Next, Mr. Fletcher: (i) provided a breakdown of CTF asset class exposures, noting that the portfolio remains well diversified and all asset classes are within asset allocation target ranges; (ii) reviewed the asset class performance for the CTF over various time periods and discussed the performance of the alpha pool overlay; (iii) reviewed VTF performance and asset class exposures, noting that asset class exposures were within target ranges; and (iv) presented return information for the Separately Managed Funds.

Finally, Mr. Fletcher presented *Leverage Performance as of March 31, 2026*, included on pages 91-92 of the meeting materials, commenting that policy leverage contributed -14 bps to CTF absolute performance year-to-date but remained a positive contributor over the one-, three-, and five-year periods.

B. Callan Quarterly Report

Mr. Fletcher noted that the *Callan Quarterly Report Summary as of March 31, 2026* was included on pages 93-97 of the meeting materials. He highlighted that the CTF's total fund unadjusted performance rankings are in the second quartile for the first quarter and for the three- and ten-year periods, and are in the third quartile for the one- and five-year periods. On an asset allocation adjusted basis, the CTF's rankings are in the first quartile for the one-, three-, five-, and ten-year periods and in the second quartile for the first quarter. When comparing the CTF ten-year cumulative performance to peers, Mr. Fletcher noted the CTF exhibits low tracking error relative to its peers and produces stable, ascending cumulative performance over ten years.

4. <u>Committee Open Session Business</u>

A. Amendments to WRS Investment Committee Guidelines

Mr. Barber then discussed amendments to the *SWIB Investment Committee Wisconsin Retirement System Investment Guidelines*, included on pages 109-118 of the meeting materials, which were approved by the Investment Committee at its April 2026 meeting. Mr. Barber noted that the changes (i) clarify the leverage use policy to acknowledge that the VTF uses many of the same tools for liquidity management purposes that the CTF uses in the context of leverage; and (ii) address the Liquidity Management and Beta Implementation ("LMBI") group's role in rebalancing procedures with respect to the intra-month allocation adjustments of cash and exposures across LMBI-managed portfolios, which do not impact asset allocation or active risk and are subject to ED/CIO approval and notification thresholds.

B. Approved Open Session Investment Committee Minutes

Mr. Barber stated that the approved open session minutes of the February 24, March 31, and April 28, 2026 Investment Committee meetings were included on pages 119-134 of the meeting materials for the

Board's review. He noted that staff had previously reviewed the agendas for these meetings with the Board.

C. Agendas for Upcoming Meetings

Mr. Barber commented that the final open session agenda for the May 26, 2026 Investment Committee meeting, as well as draft open session agendas for the June 23 and July 28, 2026 Investment Committee meetings, were included on pages 135-140 of the meeting materials for the Board's review.

5. <u>Quarterly Investment Update, Q1 2026</u>

Sara Chandler, Chief of Staff & Strategy and Interim Head of Private Markets & Funds Alpha, Scott Parrish, Head of Private Equity, Chris Prestigiacomo, Head of Private Debt & Venture Capital, and Jason Rothenberg, Head of Real Estate, presented the *Quarterly Investment Update: Private Markets*, included on pages 142-150 of the meeting materials. Ms. Chandler began by highlighting key aspects of SWIB's private markets portfolios, noting that (i) investment in private markets requires evaluating both opportunities and risks, with diversification benefits and return potential balanced against illiquidity, higher fees and embedded leverage; (ii) while SWIB has deliberately grown its private markets footprint since 2020 as a proactive asset allocation decision, in a broader context, global private markets AUM grew at 14% annually over the same period; and (iii) SWIB's private markets portfolios are tasked with delivering both alpha and beta, with no passive options for beta replication.

Ms. Chandler then reviewed in depth the primary benefits of investing in private markets, including achieving higher expected returns, influencing operations at the portfolio company level, securing access to top-tier external managers by leveraging SWIB's size and scale, and obtaining inflation protection and stable cash flows in certain asset classes, as well as the main considerations associated with investing in private markets, including illiquidity, fee loads, and performance dispersion across managers. She reviewed the year-over-year increase in private markets global AUM since 2012, the CTF's private markets AUM growth over the same period, and the CTF's asset class allocations across private markets since 2019. Ms. Chandler also reiterated the importance of high-quality manager selection to meet the private markets portfolios' aggregate excess value added ("EVA") target.

Finally, Ms. Chandler noted that an additional *Quarterly Investment Update* presentation was included on pages 151-165 for the Board's review.

6. <u>Motion to Convene in Closed Session</u>

<u>Motion</u>: A motion to convene in closed session pursuant to: (i) Sections 19.36(5) and 19.85(1)(e) of the Wisconsin Statutes to consider confidential and proprietary strategies for the investment of public funds relating to specific proprietary investment strategies of internal WRS portfolios, asset allocation, and risk management and/or for any comments or discussion on prior closed session minutes that discuss the same; (ii) Section 19.85(1)(c) of the Wisconsin Statutes to discuss the compensation and performance evaluation data of specific SWIB employees, including SWIB's executive director/chief investment officer and SWIB's board of trustees, and/or for any comments or discussion on prior closed session minutes that discuss the same; and (iii) Section 19.85(1)(g) of the Wisconsin Statutes to confer with SWIB's chief legal counsel to receive advice concerning legal strategy for ongoing and potential litigation and/or for any comments or discussion on prior closed session minutes that discuss the same, was made by Trustee Bolens and seconded by Trustee Scott.

The Chair called for a roll call vote.

Ancel–Aye	Blumenfeld–Aye	Bolens–Aye	Collins–Aye
Merfeld–Aye	Scott–Aye	Voelker–Aye	

There being seven ayes and no nays, the Chair declared the motion passed. The Board convened in closed session at 9:44 a.m. and reconvened in open session at 11:19 a.m.

7. Announcement of Board Actions Relating to Items Taken up in Closed Session

Trustee Merfeld announced that, while in closed session, the Board (i) received a closed session quarterly investment update, including a review of the Q1 2026 private markets strategy reports and market outlook; (ii) heard an update on the Risk Management division; and (iii) received an update regarding Investment Committee closed session business. Trustee Merfeld also reported that, while in executive closed session, the Board (i) received Committee reports on closed session matters; and (ii) approved the closed session consent agenda.

8. ERCC Charter Amendments

Mr. Barber reviewed proposed revisions to the Enterprise Risk and Compliance Committee Charter, included on pages 223-225 of the meeting materials. He noted that the changes (i) change the chair of the Committee; (ii) add the Head of LMBI and the Operation Risk Manager as members to the Committee; and (iii) make other minor clarifying changes throughout.

Motion: A motion was made by Trustee Voelker and seconded by Trustee Scott to approve the amendments to the Enterprise Risk and Compliance Committee Charter, as presented. The motion passed unanimously.

9. Reports Filed Without Comment

In the absence of questions, the following reports, included on pages 227-240 of the meeting materials, were filed without comment: (i) Quarterly Charges to Funds Report, Q1 2026; (ii) Private Markets and Funds Alpha Commitments, Q1 2026; and (iii) Board Contact Log.

10. Future Items for Discussion

Mr. Barber noted that the 2026 Board Meeting and Agenda Plan was included on pages 242-245 in the meeting materials for the Board's information.

In closing, Trustee Merfeld noted Trustee Voelker would be stepping down from the Board following his upcoming retirement as Secretary of the Department of Employee Trust Funds ("ETF") and thanked Trustee Voelker for his commitment, dedication, and hard work on behalf of ETF, SWIB, and all WRS beneficiaries. Trustee Voelker acknowledged the recognition with appreciation of the trustees and staff.

11. Adjournment

Motion: A motion to adjourn was made by Trustee Bolens and seconded by Trustee Blumenfeld. The motion passed unanimously, and the meeting was adjourned at 11:30 a.m.

Date of Board Approval: ______________________________

Signed: ______________________________

Thomas J. Merfeld, Board Secretary

Attachment 1 – Investment Forum Attendees – June 16, 2026

Name	Organization
Esther Ancel	SWIB Trustee
Kathy Blumenfeld	SWIB Trustee
Barb Bolens	SWIB Trustee
J. Michael Collins	SWIB Trustee
Tom Merfeld	SWIB Trustee
Robert Scott	SWIB Trustee
John Voelker	SWIB Trustee
Hannah Zhang	PEI Group
Andrew Roper	Public Attendee
Dawn Tuescher	SWIB
Matt Terpstra	SWIB
Caitlin Silver	SWIB
Barrett Wiencek	SWIB
Scott Parrish	SWIB
Dan Perik	SWIB
Lisa Lange	SWIB
Brian Planey	SWIB
Rhiannon Friedel	SWIB
Thomas Freeman	SWIB
Ivy Zhang	SWIB
Hannibal Smith	SWIB
Jeremy McCauley	SWIB
Randy Eggert	SWIB
Nicole Penna	SWIB
Bennett Wolfe	SWIB
Maggie Clanfield	SWIB
Alyssa Moore	SWIB
Josh Proefrock	SWIB
Jason Rothenberg	SWIB
Ned Willig	SWIB
Ping Wong	SWIB
Michael Richards	SWIB
Hillary Holstein	SWIB
Bill Luetzow	SWIB
Zonglin Han	SWIB
Tilly Steinbeck	SWIB
Jason Krueger	SWIB
Tom Drake	SWIB
Christopher Benish	SWIB
Becca Hewison	SWIB
Alex Li	SWIB
Tony Lubarsky	SWIB
Jason Fralish	SWIB
Lin Maung	SWIB

Katie Kuryla	SWIB
Joy Mukherjee	SWIB
Amy Widiger	SWIB
Tom Bowes	SWIB
Connor Weida	SWIB
Timothy Wirkus	SWIB
Sarah Bare	SWIB
Mike Brusberg	SWIB
John Drake	SWIB
Gus Schasker	SWIB
Fahad Rehman	SWIB
Nick Johnson	SWIB
Dylan Krivoshein	SWIB
Harsh Shah	SWIB
Ryan Yanke	SWIB
Sam Shibilski	SWIB
Theresa Holterman	SWIB
Beth Holzberger	SWIB
Tom Robinson	SWIB
Jason Kowalke	SWIB
Edward Martinez	SWIB
Roger Ding	SWIB
Aaron Stoltenberg	SWIB
Sarah Zhao	SWIB
Thomas Gregg	SWIB
Trey Edgerle	SWIB
James Laufenberg	SWIB
Edwin Denson	SWIB
Rochelle Klaskin	SWIB
Sara Chandler	SWIB
Eric Barber	SWIB
Frank Mazzucco	SWIB

Board Meeting

Tab 3 – Investment Forum Recap

Board Meeting

Tab 4 – Fiduciary & Public Records Topics

Board Meeting

Tab 5 – Investment Performance and Market Updates

A. Board Investment Performance Report, Q2 2026

B. Callan Quarterly Report

Investment Performance Report

as of June 30, 2026

STATE OF WISCONSIN
INVESTMENT BOARD

Investment Performance Report

2Q 2026 Key Insights

Absolute and Relative Performance YTD[1]

- Quarterly Return: Core Trust Fund (CTF) up 6.11% and Variable Trust Fund (VTF) up 15.34% with both lagging their benchmark by 4 bps during the quarter.
- YTD Return: CTF up 5.77% and VTF up 12.08% with excess performance of +22 bps and -3 bps, respectively.

Key Portfolio Outcomes

- Strong equity markets drove second-quarter CTF performance, with Public Equities significantly outpacing other asset classes.
- CTF slightly underperformed its benchmark during the quarter, as positive Public Equity and Public Fixed Income relative results were more than offset by underperformance in Private Equity / Debt and the Alpha Pool Overlay.
- Strong second-quarter market performance drove positive YTD returns across all major CTF asset classes, led by Public Equities, Private Equity / Debt and Real Estate, with Public Fixed Income, Inflation Sensitive and the Alpha Pool providing modestly positive returns.
- Relative YTD performance was positive, led by Emerging Market China, Emerging Market ex-China and International Small Cap equities for Public Equity, along with Emerging Market Debt – Local, MBS and Emerging Market Debt – USD for Public Fixed Income; results were partially offset by underperformance in US Small Cap, High Yield, Leveraged Loan and Private Equity / Debt.

Positioning Relative to Peers

- The CTF has relatively less public equity exposure compared to other large public plans, reflecting a cautious approach to high equity valuations.
- Asset allocation-adjusted performance relative to peers demonstrates strong portfolio implementation. Results are more mixed when not controlling for asset allocation, reflecting lower exposure to public equity during a market runup.

Notes
[1] All returns are net of fees and expenses

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

WRS Performance
as of June 30, 2026

Fund		Net of All Fees and Expenses Return (%)					
	YTD	1 Year	3 Year	5 Year	10 Year	15 Year	20 Year
Core Trust Fund	5.77	12.67	11.17	6.35	9.02	7.98	7.20
Core Trust Fund Benchmark	5.55	12.50	10.36	5.71	8.45	7.56	6.91
Excess	+0.22	+0.17	+0.81	+0.64	+0.57	+0.42	+0.29
Net Excess Value Add (in millions)	$ 274.7	$ 200.7	$ 2,786.5	$ 3,848.3	N/A	N/A	N/A
Variable Trust Fund	12.08	24.71	20.36	11.57	13.71	11.87	9.69
Variable Trust Fund Benchmark	12.11	24.83	20.26	11.56	13.75	11.86	9.69
Excess	(0.03)	(0.12)	+0.09	+0.01	(0.04)	+0.01	(0.00)
Net Excess Value Add (in millions)	$ (5.6)	$ (12.6)	$ 25.2	$ 8.7	N/A	N/A	N/A

Periods greater than 1 yr show annualized return

SWIB's investment management has added more than $3.8 billion above benchmark returns over the last five years to the WRS after consideration of all fees and expenses.

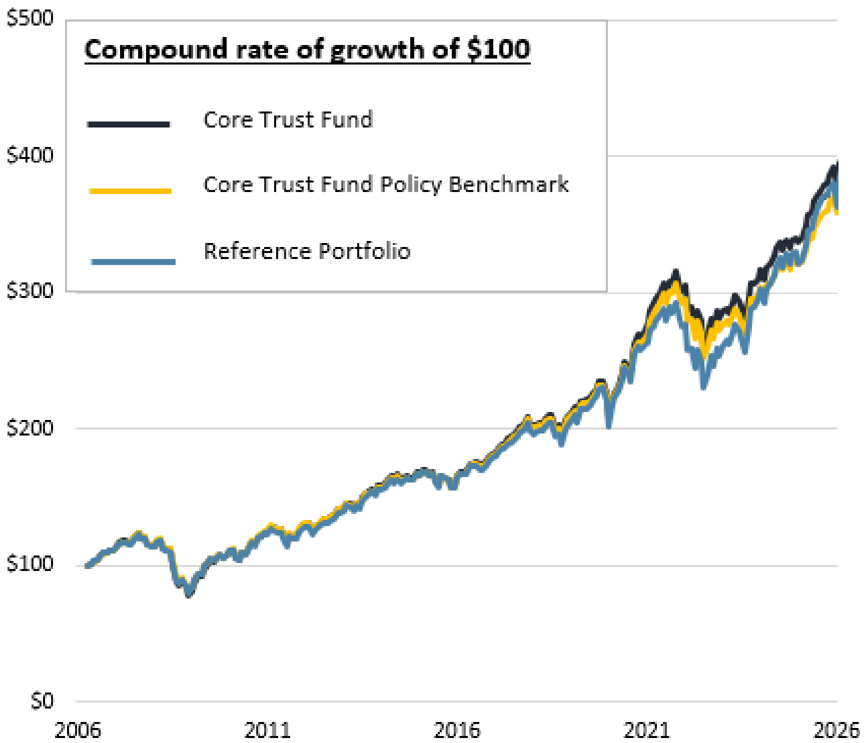
Excess returns may contain rounding differences
Refer to the disclosure section for additional details

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

CTF vs. 60/40 Reference Portfolio

20-year cumulative return[1]: July 1, 2006, to June 30, 2026

Indexed Impact of CTF's Asset Allocation & Active Management Over Time



Net of All Fees and Expenses Return & EVA			
Portfolio / Benchmark	Annualized Return	Cumulative Return	Cumulative Excess Value Added
Reference Portfolio[2] (60% equity/40% bonds)	7.1%	294.3%	= Passive Market Return
Impact of CTF Asset Allocation			
CTF Policy Benchmark	6.9%	280.5%	-$3.1B
Impact of CTF Active Management			
CTF	7.2%	301.9%	+$9.0B
CTF Excess Return vs. Reference Portfolio	**+0.1% pts**	**+7.6% pts**	**+$5.9B**

Notes

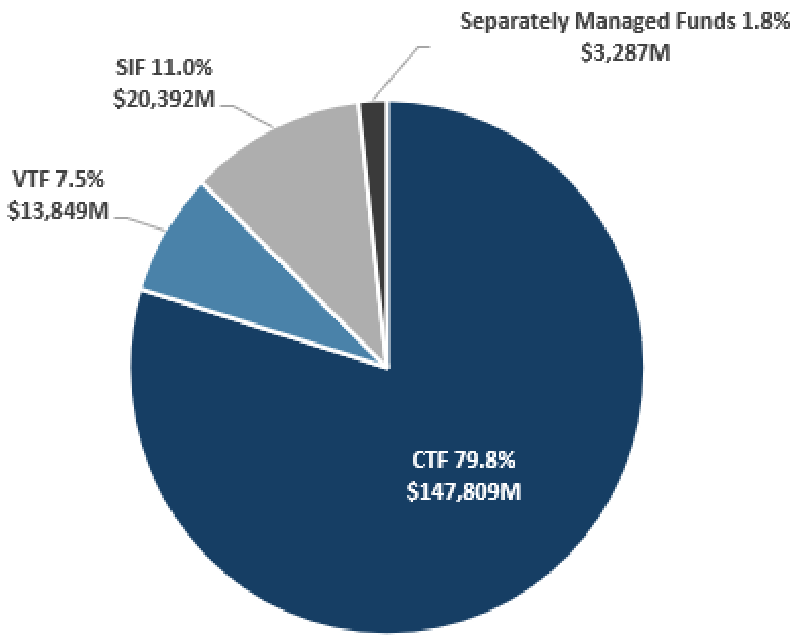
[1] Core Trust Fund beginning market value, as of July 1, 2006, was $69.9B and ending market value, as of June 30, 2026, was $147.7B.

[2] Reference Portfolio is composed of 60% MSCI World and 40% Bloomberg US Gov't / Credit (rebalanced monthly).

Refer to the disclosure section for additional details

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Total Assets Under Management (AUM)
as of June 30, 2026



Gross Market Value of Assets (in millions)						
By Fund		6/30/2025		6/30/2026		1 Year Change
Total WRS	**$**	**147,282**	**$**	**161,659**	**$**	**14,376**
Core Trust Fund		135,553		147,809		12,257
Variable Trust Fund		11,730		13,849		2,120
State Investment Fund (SIF)[1]		20,813		20,392		(421)
Separately Managed Funds		3,090		3,287		197
Total SWIB AUM	**$**	**171,186**	**$**	**185,338**	**$**	**14,152**

Notes

[1] Excludes cash invested in SIF held on behalf of CTF and VTF.

Refer to the disclosure section for additional details

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

WRS Assets as of June 30, 2026

Breakdown of Active vs. Passive and Internal vs. External

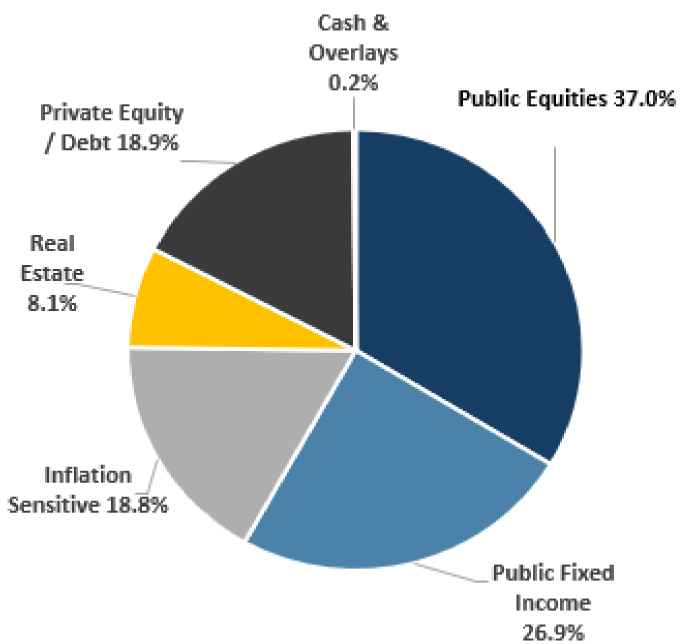
53% of Total SWIB Assets (including SIF) are internally managed

Refer to the disclosure section for additional details

CTF Assets Under Management

Breakdown by Asset Class as of June 30, 2026

Total Exposure - % of Total 6/30/2026



Total CTF Exposure[1] (in millions)						
Total by Asset Class		**6/30/2025**		**6/30/2026**		**Year over Year Change**
Public Equities	$	50,320	$	54,681	$	4,361
Public Fixed Income		36,074		39,739		3,665
Inflation Sensitive		25,539		27,758		2,219
Real Estate [2]		12,010		12,020		10
Private Equity / Debt [2]		27,499		27,953		453
Cash & Overlays		212		287		75
Total Exposure	**$**	**151,654**	**$**	**162,437**	**$**	**10,783**
Less: Policy Leverage		16,100		14,633		(1,467)
Total Market Value	**$**	**135,554**	**$**	**147,805**	**$**	**12,250**

Notes

[1] Total Exposure is composed of the gross market value of investments, plus beta exposure added or offset through derivative instruments.

[2] The Real Estate and Private Equity / Debt asset classes (27% of the Core Trust Fund) contain Illiquid Investments, as defined in "Report Disclosures: Glossary, Definitions & Data Sources" below.

Refer to the disclosure section for additional details

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Core Trust Fund Allocation
as of June 30, 2026

Allocation - Exposure Based

Strategies	(in millions) Total Exposure	As % of Total Fund Portfolio Exposure %	Benchmark Target %	Target Range %
Public Equities	**$ 54,681**	**37.0**	**37.0**	**31.0 - 43.0**
Global Developed	43,045	29.1	29.2	
US Small Cap	3,372	2.3	2.3	
International Small Cap	2,744	1.9	1.8	
Emerging Markets	5,520	3.7	3.7	
Public Fixed Income	**39,739**	**26.9**	**26.9**	**20.9 - 32.9**
Investment Grade	23,876	16.2	16.2	
Non-Investment Grade	11,826	8.0	8.1	
Emerging Market Debt	4,037	2.7	2.7	
Inflation Sensitive	**27,758**	**18.8**	**19.0**	**14.0 - 24.0**
Real Estate	**12,020**	**8.1**	**8.1**	**4.0 - 12.0**
Private Equity / Debt	**27,953**	**18.9**	**18.9**	**12.0 - 28.0**
Cash / Overlays	**287**	**0.2**	**0.0**	
Leverage	**$ (14,633)**	**(9.9)**	**(10.0)**	**(18.0) - (2.0)**
Total Fund - Total Exposure	**$ 162,437**	**109.9**	**110.0**	**102.0 - 118.0**
Total Fund - Market Value	**$ 147,805**	**100.0**	**100.0**	

Notes

Public & Private exposures include cash.

Cash / Overlays:
Includes liquidity, overlay cash, cash used to fund synthetic beta related to Alpha Pool.

Benchmark Target weights are adjusted monthly to reflect the actual exposure to Private Equity/Debt and Real Estate. Offsetting adjustments are made to Public Equities and Public Fixed Income.

Additional CTF leverage details are available in the disclosure section.

Asset $ exposures and % weights may contain rounding differences

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Core Trust Fund: Asset Class Returns
as of June 30, 2026

Public Equities	Performance Start Date	Total Exposure (in millions)	Net of External Manager Fee Return % YTD	1 Year	3 Year	5 Year	10 Year or ITD
Public Equities	**12/31/2002**	**$ 54,656**	**12.99**	**25.53**	**20.47**	**11.46**	**13.32**
Benchmark			**12.49**	**25.26**	**20.10**	**11.34**	**13.35**
Excess			**+0.49**	**+0.26**	**+0.38**	**+0.12**	**(0.03)**
Global Developed	2/28/2017	$ 40,655	10.01	21.82	19.83	11.75	12.99
Benchmark			9.94	21.80	19.75	11.96	13.25
Excess			+0.07	+0.02	+0.08	(0.22)	(0.26)
Global Equities w/EM	5/31/2021	$ 2,722	11.89	24.80	21.79	12.71	13.02
Benchmark			11.78	24.56	20.29	11.50	11.59
Excess			+0.12	+0.24	+1.49	+1.21	+1.43
US Small Cap	2/28/2017	$ 3,372	21.10	34.17	19.32	8.78	11.37
Benchmark			22.82	37.83	18.67	7.76	10.61
Excess			(1.73)	(3.65)	+0.66	+1.01	+0.77
International Small Cap	1/31/2020	$ 2,719	12.47	20.83	18.81	7.78	9.94
Benchmark			9.29	20.15	16.76	6.17	8.73
Excess			+3.18	+0.68	+2.05	+1.60	+1.21
Emerging Market ex China	3/31/2022	$ 4,564	42.95	68.15	28.90	N/A	17.30
Benchmark			38.83	63.25	28.44	N/A	17.01
Excess			+4.12	+4.91	+0.46	N/A	+0.29
Emerging Market China	3/31/2022	$ 619	3.50	19.17	15.67	N/A	5.94
Benchmark			(5.08)	9.50	11.08	N/A	3.92
Excess			+8.58	+9.68	+4.59	N/A	+2.02

Periods greater than 1 yr show annualized return; since inception returns shown for strategies with less than 10-year history

Excess returns may contain rounding differences
Refer to the disclosure section for additional details

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Core Trust Fund: Asset Class Returns
as of June 30, 2026

Public Fixed Income	Performance Start Date	Total Exposure (in millions)	Net of External Manager Fee Return % YTD	1 Year	3 Year	5 Year	10 Year or ITD
Public Fixed Income	**12/31/2003**	**$ 39,738**	**1.16**	**5.09**	**6.28**	**1.46**	**2.67**
Benchmark			**1.07**	**4.85**	**5.70**	**1.34**	**2.39**
Excess			**+0.09**	**+0.24**	**+0.58**	**+0.12**	**+0.28**
Investment Grade US Credit	2/28/2022	$ 9,422	1.09	4.92	5.98	N/A	2.00
Benchmark			0.85	4.34	5.19	N/A	1.60
Excess			+0.24	+0.58	+0.79	N/A	+0.40
US Treasuries	2/28/2022	$ 11,319	0.31	2.68	3.08	N/A	(0.13)
Benchmark			0.28	2.71	3.17	N/A	0.05
Excess			+0.03	(0.03)	(0.10)	N/A	(0.18)
MBS	4/30/2020	$ 3,136	1.90	6.56	6.60	1.44	1.28
Benchmark			0.99	5.21	4.60	0.50	0.34
Excess			+0.92	+1.35	+2.01	+0.95	+0.94

Periods greater than 1 yr show annualized return; since inception returns shown for strategies with less than 10-year history

Excess returns may contain rounding differences
Refer to the disclosure section for additional details

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Core Trust Fund: Asset Class Returns
as of June 30, 2026

Public Fixed Income & Inflation Sensitive	Performance Start Date	Total Exposure (in millions)	Net of External Manager Fee Return % YTD	1 Year	3 Year	5 Year	10 Year or ITD
High Yield	7/31/2019	$ 7,892	1.70	5.71	8.70	2.86	4.49
Benchmark			2.07	6.02	8.42	3.99	4.78
Excess			(0.36)	(0.31)	+0.28	(1.13)	(0.30)
Leveraged Loans	3/31/2023	$ 3,936	0.04	2.77	7.23	N/A	7.64
Benchmark			0.42	4.34	7.60	N/A	8.08
Excess			(0.37)	(1.57)	(0.37)	N/A	(0.43)
Emerging Market Debt - USD	6/30/2005	$ 2,044	4.05	13.15	11.28	3.37	4.42
Benchmark			3.32	11.78	10.32	2.58	3.72
Excess			+0.73	+1.36	+0.95	+0.78	+0.70
Emerging Market Debt - Local	7/31/2017	$ 1,993	2.92	11.61	8.87	3.30	2.45
Benchmark			1.52	7.85	7.31	2.13	2.06
Excess			+1.40	+3.76	+1.56	+1.17	+0.39
Inflation Sensitive	**12/31/2003**	**$ 27,757**	**1.14**	**3.41**	**3.98**	**1.04**	**2.72**
Benchmark			**1.15**	**3.42**	**3.98**	**1.01**	**2.64**
Excess			**(0.01)**	**(0.01)**	**+0.00**	**+0.03**	**+0.09**

Periods greater than 1 yr show annualized return; since inception returns shown for strategies with less than 10-year history

Excess returns may contain rounding differences
Refer to the disclosure section for additional details

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Core Trust Fund: Asset Class Returns
as of June 30, 2026

Private Markets & Alpha Pool Overlay	Performance Start Date	Total Exposure (in millions)	Net of External Manager Fee Return % YTD	1 Year	3 Year	5 Year	10 Year or ITD
Real Estate	12/31/2003	$ 12,020	2.00	2.92	(0.61)	4.01	5.35
Benchmark			1.75	3.11	(2.81)	2.34	3.78
Excess			+0.25	(0.20)	+2.20	+1.67	+1.57
Private Equity / Debt	11/30/2006	$ 27,953	2.38	8.02	8.11	9.89	13.76
Benchmark			2.79	8.53	7.95	8.76	11.64
Excess			(0.41)	(0.51)	+0.16	+1.13	+2.11
Other strategies:							
Alpha Pool Overlay	1/31/2011	$ 13,886	0.85	1.47	3.48	2.82	3.20
Benchmark (set to zero as of 1/1/2019)			0.00	0.00	0.00	0.00	0.45
Excess			+0.85	+1.47	+3.48	+2.82	+2.74

Periods greater than 1 yr show annualized return; since inception returns shown for strategies with less than 10-year history

Excess returns may contain rounding differences
Refer to the disclosure section for additional details

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Core Trust Fund: Asset Class Returns

Net of External Mgr Fee - Excess Returns as of June 30, 2026

	Excess Return (%)				
	YTD	1 Year	3 Year	5 Year	10 Year or ITD
Total CTF	0.27	0.28	0.93	0.76	0.68
Public Equities	0.49	0.26	0.38	0.12	(0.03)
Public Fixed Income	0.09	0.24	0.58	0.12	0.28
Inflation Sensitive	(0.01)	(0.01)	0.00	0.03	0.09
Real Estate	0.25	(0.20)	2.20	1.67	1.57
Private Equity / Debt	(0.41)	(0.51)	0.16	1.13	2.11
Alpha Pool Overlay	0.85	1.47	3.48	2.82	2.74

Periods greater than 1 yr show annualized return; since inception returns shown for strategies with less than 10-year history

Excess returns may contain rounding differences
Refer to the disclosure section for additional details

Core Trust Fund: Alpha Pool Overlay
as of June 30, 2026

Alpha Pool Return	Performance Start Date	Market Value (in millions)	Net of External Manager Fee Return % YTD	1 Year	3 Year	5 Year	10 Year
Total Alpha Pool Composite	1/31/2011	$ 13,886	0.85	1.47	3.48	2.82	3.20
CTF Policy Benchmark (Beta)			5.55	12.50	10.36	5.71	8.45
Alpha Pool Overlay Return (Alpha Pool Composite + Beta)			**6.40**	**13.98**	**13.84**	**8.53**	**11.64**

Periods greater than 1 yr show annualized return

Sub Strategy Details

Alpha Pool: Key Sub Strategies	Market Value ($millions)	% of Alpha Pool	NEVA (in millions) YTD	NEVA (in millions) 1 Year	Alpha Pool Contribution YTD	Alpha Pool Contribution 1 Year
Hedge Funds	$ 9,658	70%	$ 133.4	$ 310.2	0.99	2.17
Multi Strat	1,776	13%	4.2	84.1	0.01	0.57
Public Exposure Alpha	1,997	14%	(32.8)	(236.8)	(0.36)	(1.75)
TBA - Mortgages	455	3%	3.9	20.6	0.04	0.14

- Prior to 2022, Hedge Fund sub strategy assets comprised > 90% of the Alpha Pool Composite.
- Each sub strategy in the composite incurs the cost of implementation expense (assessed on a pro rata basis using AUM). Hence, each sub strategy is assigned a Zero Benchmark.

Excess returns may contain rounding differences
Refer to the disclosure section for additional details

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Variable Trust Fund
as of June 30, 2026

Performance

Fund	Performance Start Date	Market Value (in millions)	Net of External Manager Fee Return % YTD	1 Year	3 Year	5 Year	10 Year
Variable Trust Fund	6/30/1977	$ 13,835	12.12	24.78	20.41	11.62	13.77
Variable Trust Fund Benchmark			12.11	24.83	20.26	11.56	13.75
Excess			+0.00	(0.05)	+0.15	+0.06	+0.02

Periods greater than 1 yr show annualized return

Portfolio Allocation

By Portfolio	Total Exposure (in millions)	As % of Total Fund: Portfolio Exposure %	Benchmark Target %	Target Range %
Public Equities	**$ 13,775**	**99.6**	**100.0**	
US Equities	9,655	69.8	70.0	65.0 - 75.0
International Equities	4,120	29.8	30.0	25.0 - 35.0
Cash & Overlays	**$ 60**	**0.4**	**0.0**	
Total Fund	**$ 13,835**	**100.0**	**100.0**	

Asset Class exposures are within the Target Range

Excess returns may contain rounding differences
Refer to the disclosure section for additional details

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Separately Managed Funds

as of June 30, 2026

			Net of External Manager Fee Return %				
Fund	**Performance Start Date**	**Market Value (in millions)**	**YTD**	**1 Year**	**3 Year**	**5 Year**	**10 Year or ITD**
State Investment Fund (SIF)	6/30/1975	$ 23,733	1.84	4.01	4.78	3.66	2.39
SIF Benchmark			1.81	3.88	4.62	3.57	2.34
Excess			+0.03	+0.13	+0.16	+0.09	+0.06
State Life Insurance Fund	10/31/1994	$ 94	0.81	3.84	2.91	(1.64)	1.47
No Benchmark			N/A	N/A	N/A	N/A	N/A
Excess			N/A	N/A	N/A	N/A	N/A
Historical Society Endowment Fund	12/31/1993	$ 34	8.43	18.20	16.65	9.54	12.11
Historical Society Endowment Benchmark			8.33	17.79	16.20	9.33	11.79
Excess			+0.10	+0.40	+0.45	+0.21	+0.32
Injured Patients & Families Comp. Fund	10/31/1993	$ 1,636	2.27	6.65	6.79	2.03	4.04
IP&FC Benchmark			2.07	6.12	6.32	1.80	3.56
Excess			+0.20	+0.53	+0.47	+0.23	+0.48
UW System Long Term Fund	3/31/2018	$ 707	7.76	16.23	12.42	6.73	8.61
UW System Benchmark			7.66	16.11	12.31	6.63	8.43
Excess			+0.10	+0.13	+0.11	+0.11	+0.18
UW Cash Management Fund	4/30/2022	$ 816	2.65	7.04	7.75	N/A	5.86
UW Cash Management Benchmark			2.66	7.08	7.78	N/A	5.90
Excess			(0.01)	(0.04)	(0.03)	N/A	(0.04)

Periods greater than 1 yr show annualized return; since inception returns shown for strategies with less than 10-year history

Excess returns may contain rounding differences
Refer to the disclosure section for additional details

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Leverage Performance

as of June 30, 2026

STATE OF WISCONSIN INVESTMENT BOARD

CTF Policy Leverage Performance
as of June 30, 2026

	Net of All Fees and Expenses Return %			
Core Trust Fund	**YTD**	**1 Year**	**3 Year**	**5 Year**
Unlevered Returns (as estimated):				
Portfolio[1]	5.45	11.83	10.61	6.26
CTF Benchmark Return[1]	5.23	11.66	9.80	5.62
Excess	+0.22	+0.17	+0.82	+0.64
Portfolio Return (Unlevered)	5.45	11.83	10.61	6.26
Absolute Return from Leverage[1,2]	0.32	0.84	0.56	0.09
Implementation (+) or (-)	**(0.00)**	**(0.01)**	**(0.01)**	**(0.00)**
Levered Returns (as reported):				
Portfolio	5.77	12.67	11.17	6.35
CTF Benchmark Return	5.55	12.50	10.36	5.71
Excess	+0.22	+0.17	+0.81	+0.64

Periods greater than 1 yr show annualized return

Notes

[1] The Unlevered Portfolio Return, Unlevered CTF Benchmark Return, Absolute Return from Leverage and Implementation (+) or (-) are estimated.

[2] Policy leverage was first introduced into the CTF and the benchmark at the end of April 2012.

- Policy leverage at SWIB is implemented passively. Therefore, it generally does not contribute to active risk or excess returns[1]
- Policy leverage amplifies absolute returns (whether positive or negative), which is an important component in SWIB's strategy to meet the 6.8% actuarial target over the long-term
- The CTF benchmark return is levered to create an apples-to-apples comparison for evaluating relative performance of the CTF (i.e., excess return)

Excess returns may contain rounding differences
Refer to the disclosure section for additional details

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

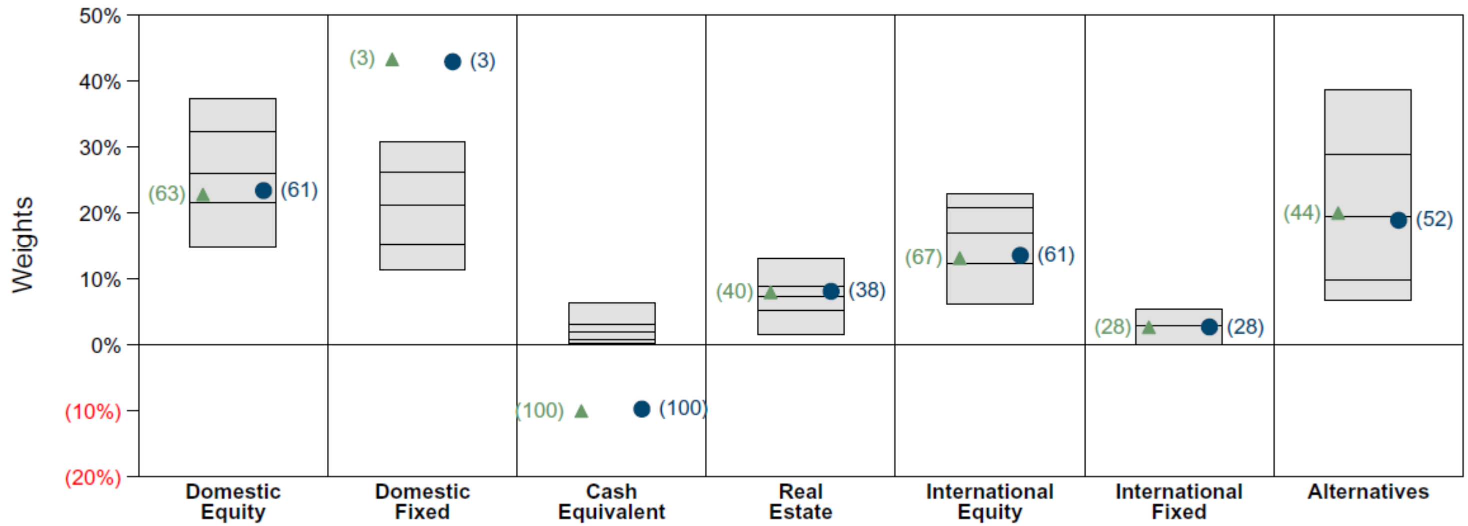
Callan Quarterly Report Summary

as of June 30, 2026

Callan Peer Rank Update (6.30.2026)

CTF Asset Allocation Comparison to Peer Group

Asset Class Weights vs Callan Public Fund Spons- V Lg DB (>10B)



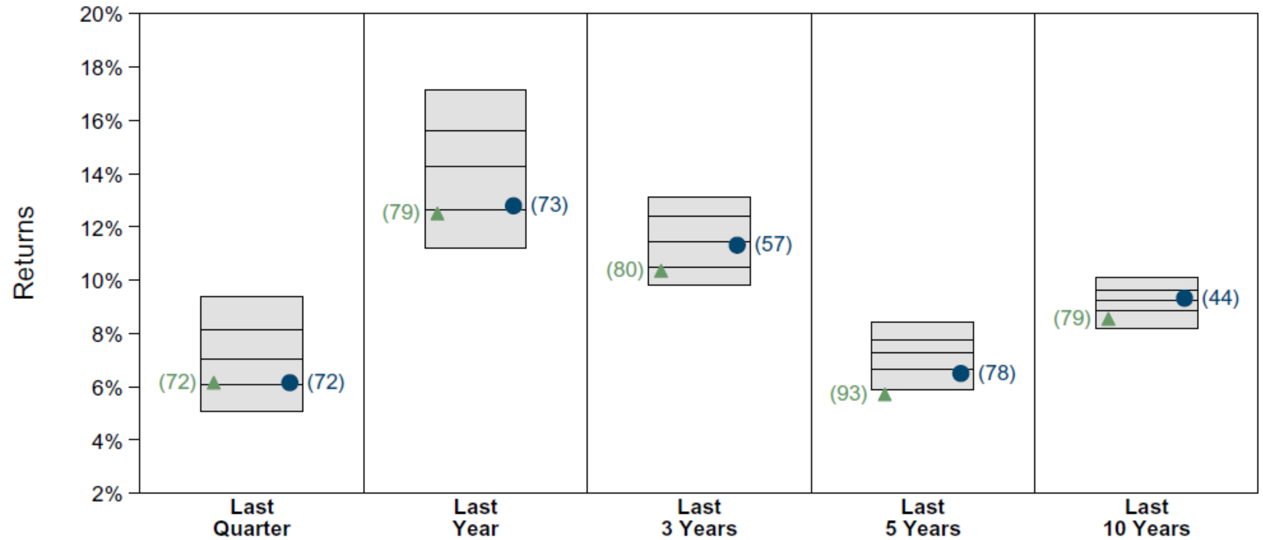
	Domestic Equity	Domestic Fixed	Cash Equivalent	Real Estate	International Equity	International Fixed	Alternatives
10th Percentile	37.38	30.87	6.43	13.08	23.00	5.52	38.72
25th Percentile	32.37	26.27	3.21	8.92	20.79	2.85	28.90
Median	26.05	21.18	1.99	7.43	16.94	0.13	19.41
75th Percentile	21.54	15.14	0.84	5.16	12.37	0.00	9.76
90th Percentile	14.92	11.32	0.23	1.58	6.26	0.00	6.73
Fund ●	23.40	42.93	(9.71)	8.13	13.59	2.73	18.91
Target ▲	22.81	43.30	(10.00)	8.00	13.19	2.70	20.00

- SWIB's use of financial leverage (policy target of 10%) enables more risk reducing / diversifying assets without sacrificing growth assets.

Callan Peer Rank Update (6.30.2026)

CTF Performance vs. Peer Group Universe

Callan Public Fund Spons- V Lg DB (>10B)



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	9.40	17.13	13.14	8.44	10.10
25th Percentile	8.15	15.63	12.40	7.74	9.64
Median	7.05	14.25	11.46	7.25	9.21
75th Percentile	6.09	12.66	10.49	6.65	8.85
90th Percentile	5.08	11.19	9.82	5.88	8.18
Total Fund ●	6.15	12.79	11.31	6.50	9.32
Policy Target ▲	6.15	12.50	10.36	5.72	8.55

- CTF return meets or exceeds Policy Target over all time periods.
- 10-year is 2nd quartile; Last Quarter, 1-, and 3-year returns are 3rd quartile and the 5-year return is 4th quartile.

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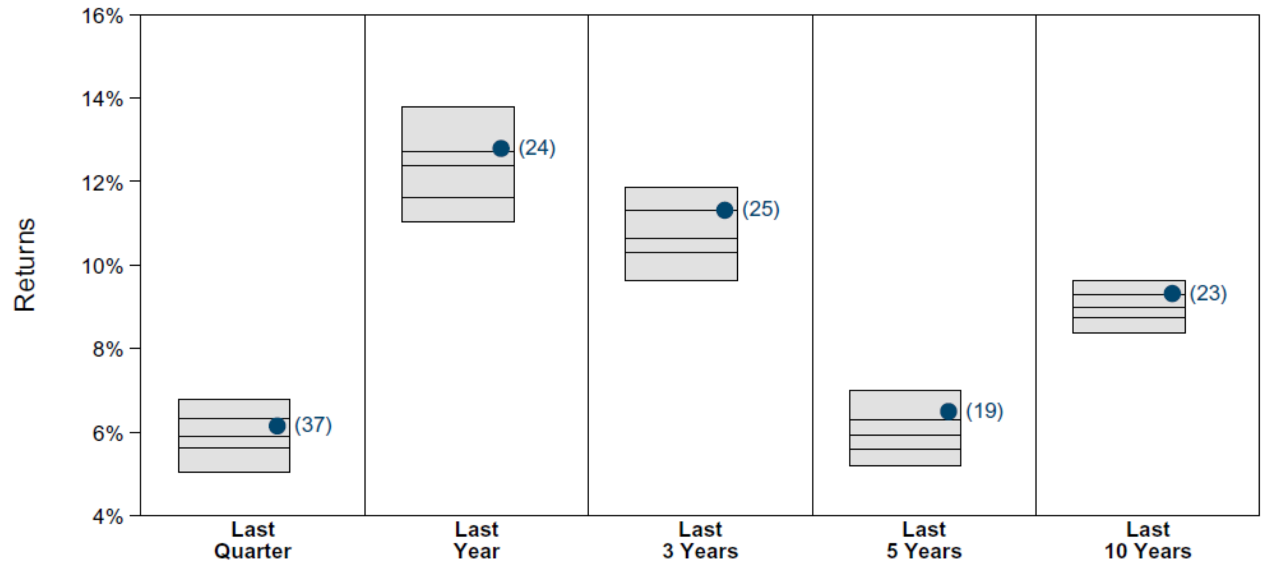
Callan Peer Rank Update (6.30.2026)

CTF Performance on Asset Allocation Adjusted Basis vs. Peer Group

Asset Allocation Adjusted Ranking



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	6.80	13.78	11.85	7.00	9.62
25th Percentile	6.33	12.72	11.30	6.31	9.28
Median	5.89	12.39	10.63	5.93	9.00
75th Percentile	5.62	11.62	10.29	5.60	8.73
90th Percentile	5.05	11.03	9.63	5.19	8.37
Total Fund ●	6.15	12.79	11.31	6.50	9.32

- Peer universe returns are adjusted to match the CTF risk-balanced allocation.
- CTF achieved 1st quartile results for the 1-, 3-, 5-, and 10-year periods and 2nd quartile results for the Last Quarter.

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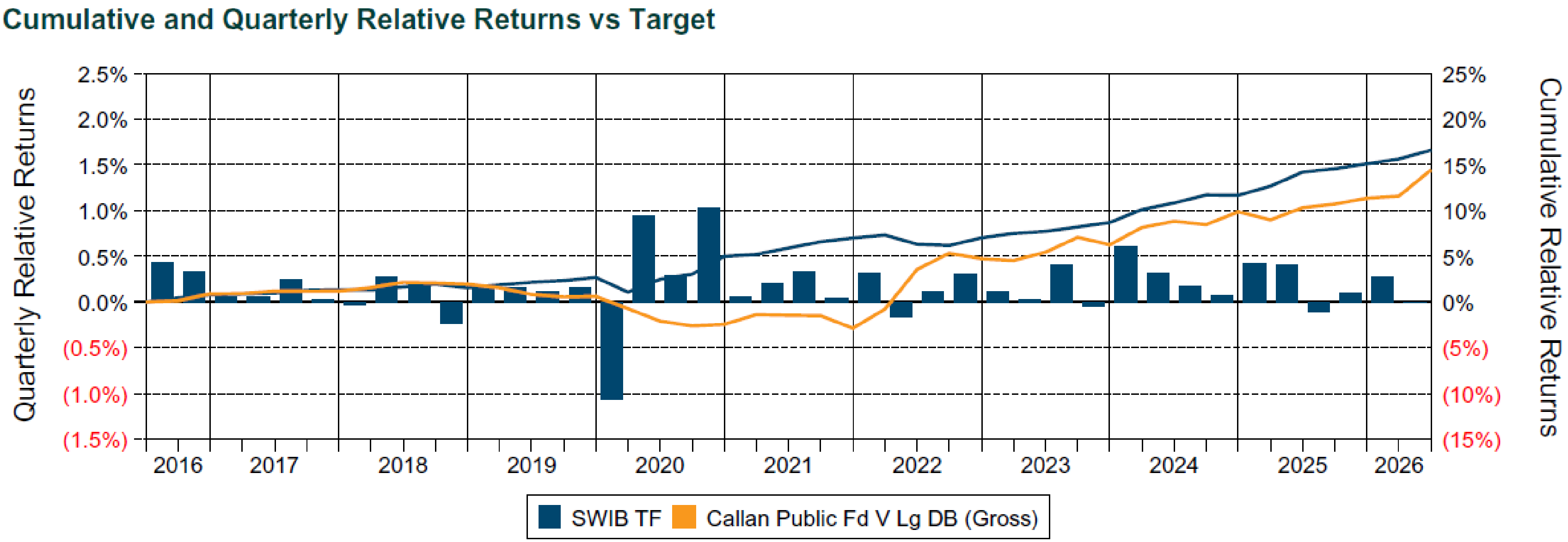
Callan Peer Rank Update (6.30.2026)

10 Year Return Consistency vs. > $10B Peer Group (Gross Returns)



- The CTF exhibits low tracking error relative to its peers and produces stable, ascending cumulative performance over 10 years.
- CTF Qtrly relative returns vs. Policy Benchmark are generally positive over the 10-year period.

STATE OF WISCONSIN INVESTMENT BOARD

Report Disclosures

Glossary, Definitions & Data Sources

STATE OF WISCONSIN INVESTMENT BOARD

Report Disclosures

Return Measurement Description / Definitions			
30 Year - Gross of Fee Return %	Fund Return	Gross Benchmark	Excess
Core Trust Fund	8.02	7.51	+0.50
Variable Trust Fund	9.32	8.98	+0.34

Gross of Fee Return ("GoF Return")	The total investment fund, composite or investment portfolio return that reflects a reduction for: (i) transaction expenses, (ii) cost of implementing leverage expense (if applicable) (iii) all fees and expenses attributable to externally managed, pooled funds where expenses are included in the fund Net Asset Value ("NAV"). GoF Return is used by SWIB for long-term history (> 20 years), internal analytics and to fulfill consultant data submissions where GoF returns are requested. SWIB's primary reported return types are NoF Return and NoA Return.
Net Return Types	**Net of External Manager Fee Return ("NoF Return")** The GoF return plus additional deductions for external management fees, performance fees and any identifiable carried interest incurred in investment portfolios. SWIB has portfolio-level records to support NoF return history over approximately 20 years. **Net of All Fees and Expenses Return ("NoA Return")** The NoF return plus additional deductions for administrative expenses, categorized by SWIB as either Direct or Indirect expenses, that are permitted to be charged directly to the Trust Funds under statutory authority. SWIB's performance agent has Independently calculated NoA return since July 2017.
NoA Return History and Methodology Details	**Externally Calculated NoA Return** has been recorded and calculated at the fund and portfolio-level since July 2017. Starting in 2026, SWIB began to calculate NoA Return for the CTF and VTF Funds using a monthly data series extending back to January 2005. **Internally Calculated NoA Return:** NoA return is calculated by adjusting BNY-calculated NoF Return for the direct and indirect expenses identified in the WRS audited financial statements and workpapers. The incremental expenses captured to support the NoA Return calculation include Consulting Fees, Legal Fees, Research and Data Fees, Custodial Fees, Investment Operations Fees, and SWIB Agency Overhead costs. From 2005 – 2017, calendar year expenses were evenly allocated by month. The NoA expense contribution to return was calculated to facilitate a deduction from monthly BNY-calculated NoF Return to yield the SWIB internally-calculated NoA Return . SWIB developed calculations to geometrically link the NoA Return data series and archived the results in its data warehouse (UDM platform). With this calculation, annualized NoA Return may be reported for 10-, 15-,and 20-year periods for the CTF and VTF.
Excess Return % ("Excess")	Portfolio return or security level return minus the benchmark return. Portfolio or Composite Returns are generally compared against benchmarks with a similar level of risk. It is widely used as a measure of the value added by the portfolio or investment manager or the manager's ability to outperform the market.

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STATE OF WISCONSIN INVESTMENT BOARD

Report Disclosures

Key Terms	Return Measurement Description / Definitions
Net Excess Value Add $ ("NEVA")	NEVA calculates the portfolio's performance NoA return in total dollars relative to a benchmark. NEVA is a measure used to assess the value-add dollars that a particular investment strategy or team generated over specified time periods. NEVA is also used to monitor the return objectives set forth in the annual Active Risk Budget which is prepared for the Core Trust Fund ("CTF") and Variable Trust Fund ("VTF") managed by SWIB.
Cumulative Return Calculation	SWIB uses the cumulative return calculation ("cumulative basis") to reflect the aggregate amount an investment has gained or lost over time for portfolios and benchmarks. This measurement shares aspects of the annualized return calculation, however, it excludes the geometric averaging. **Cumulative Return = $((1 + r^1) \times (1 + r^2) \times (1 + r^3) \ldots) - 1$;** $r^{(n)}$ = series of holding period returns
Compound rate of growth of $100	The cumulative and compounded rate of growth of portfolio and benchmark returns may also be presented on an indexed basis over time (measurement may be calculated using any return type). **Compound rate of growth of $100** = $(\$100 \times (1 + r^1) \times (1 + r^2) \times (1 + r^3) \ldots)$; r(n) = series of holding period returns
SWIB Inception To Date Reporting	The Quarterly Performance Summary discloses a reporting period described as **10 years or ITD**. The return disclosed in this reporting field yields either 10-year annualized returns for funds or portfolios with at least 10 years of return history or the data field may revert to the return since inception for portfolios with less than 10 years of history. The quarterly report provides a performance start date for those portfolios with the abbreviated return history.
Performance Start Date	The date denotes the initial period of a portfolio or composites' return data series that is stored and calculated by the SWIB Performance Measurement Service Agent.
Time-weighted Rate of Return	A method of calculating period-by-period returns that reflects the change in value and negates the effects of external cash flows. This methodology is applied to portfolios that are processed with daily frequency and where daily valuation updates of the underlying instruments are available.
Annualized Return Calculation	SWIB reports containing portfolio and benchmark return calculations for time periods greater than 1 year generally utilize a geometric averaging calculation. Returns shown for periods of less than 1 year are not presented utilizing the annualization calculation method. In this instance, compound returns are reported for the specified calendar period (e.g., month to date, quarter to date or year to date). ***Annualized Return* = $((1 + r^1) \times (1 + r^2) \times (1 + r^3) \ldots)$ ^ *(calendar units / time interval measured)* – 1**; $r^{(n)}$ = series of holding period returns and calendar units are often expressed as days, months or years
Modified Dietz Total Rate of Return	A measurement that evaluates a portfolio's return based on a weighted calculation of its cash flow. The method considers the timing of cash flows and assumes a constant rate of return over the specified time period. This methodology is applied to portfolios and composites that are processed with monthly frequency (and where only monthly valuation updates are available).

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Key Term	Benchmark Descriptions / Definitions
Policy Benchmark	The Fund level Benchmark as approved by the Benchmark Committee. The Benchmark is composed of multiple indices that reflect the Fund's exposure to a diverse set of investment strategies. (can also be referred to as "Policy Target" as implemented through SWIB's Asset Allocation plan).
Reference Portfolio	Hypothetical global portfolio comprised of 60% MSCI World Net (using a SWIB custom net variant as of 2010) and 40% Bloomberg Barclays Government Credit Index. The return is presented on a gross of fee basis and assumes no contributions or withdrawals.
Zero or No Benchmark (for Official Measurement purposes)	**Zero Benchmark**: This designation applies to the CTF Alpha Pool Overlay. Since 1/1/2019, the benchmark associated with the Alpha Pool Overlay has been set to zero. The Cost of Implementation (which includes an estimate of financing costs) is directly allocated to the underlying strategies that make up the Alpha Pool Overlay and the effect of the cost allocation will usually result in a deduction from the strategy's return. **No Benchmark:** In certain instances, a benchmark is not assigned for the purpose of measuring excess performance. For example, the State Life Insurance Fund ("SLIF"), has no assigned benchmark for its investment mandate due to the limitations placed on SWIB's investment activities by the SLIF. The SLIF portfolio invests in fixed income securities that approximate the expected life of the Fund's insurance contracts, and SWIB is directed to hold all securities to maturity other than in extraordinary circumstances.
Reported Benchmark Returns	The SWIB Benchmark and Performance Committee and its designated benchmark consultant follow the parameters set forth in the SWIB Benchmarking Philosophy. Under the Philosophy, selected benchmarks should exhibit the characteristics described in the *Benchmark Qualities* criteria to ensure portfolio and benchmark attributes are closely aligned. **Net Total Return Benchmarks:** are commonly used for publicly-traded portfolio strategies. The benchmark returns reflect the price performance, plus the net amount of all special and regular dividends after applying an assumed foreign tax withholding rate (as determined by the benchmark data provider.) **SWIB Custom Net Benchmark for non-U.S. Public Equity Strategies:** SWIB's custodian bank customizes SWIB's non-U.S. equity benchmarks to reflect the actual, historical reinvestment of withholding tax rates rather than index provider's assumption for varying countries. **Net of External Manager Fee-based Benchmarks:** benchmark type most frequently used to gain better alignment when the measured SWIB portfolio return is inclusive of external management fees, performance fees and carried interest charges (e.g., private market investments.) **Gross Policy Benchmarks** (limited use, 30-year annualized return): the benchmark is constructed using gross return index inputs with deductions for foreign withholding taxes. Prior to January 1, 2021, the CTF's Gross Benchmark private market inputs incorporated management fee gross-up adjustments to ensure consistency with fund's gross return calculations.
Custom Weighted Calculated Benchmarks	Managed funds and portfolios may require the construction of custom benchmarks that are created through applying static or asset weighted calculations to achieve a blended benchmark that is representative of the investment strategy. When feasible, SWIB will request its third-party benchmark data provider(s) to blend benchmarks as a part of the market data service. If this option is not available, SWIB will calculate the benchmark using market data inputs. In certain cases, SWIB may customize a benchmark to more accurately reflect the SWIB-managed Fund's actual tax rate experience in non-U.S jurisdictions with investment portfolio withholding taxes applicable to dividends and capital gains. This type of custom benchmark is designated as "SWIB Custom Net".

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Key Term	Market Value and Exposure Descriptions / Definitions
Total Exposure	For SWIB managed funds governed by the Wisconsin Retirement System (“WRS”) Investment Policy, this measure reflects the total value of the fund’s exposure to investable markets by asset class and sub asset class. Total Exposure is inclusive of those instruments utilized under the WRS Leverage Use Policy to achieve the asset exposures approved under the asset allocation strategy and active risk target.
Market Value	The price at which the fund investor can buy or sell the underlying investment instruments held in the portfolio at a given time multiplied by the quantity held, plus any accrued income. **Gross Market Value:** the market value of a portfolio or composite without any deduction for SWIB expenses. **Net Market Value:** the market value of a portfolio or composite as adjusted for the effect of expense transactions as recorded on the balance sheet.
Illiquid Investments	Those investments that may be difficult to sell or be sold quickly because of a lack of market or ready or willing investors.
WRS Asset Classifications	**Internally Managed:** Portfolios managed by SWIB investment professionals without the substantial use of external asset manager investment vehicles. Each internal portfolio is assigned compulsory investment guidelines and is also assigned “soft risk parameters.” Soft risk parameters refer to desired characteristics and/or risk exposures. **Externally Managed:** Portfolios managed by third-party investment managers hired by SWIB. External active and passive managers operate under contractual investment guidelines approved by SWIB’s Investment Committee or by SWIB’s investment management staff, as designated in the Investment Committee Charter. **Actively Managed:** Portfolios that have the objective of out-performing their respective benchmarks (or generating alpha) by using investment insights or quantitative tools to deploy buy, hold, and sell decisions. This style of management will result in portfolio positioning decisions that will add active risk and generate higher tracking error. Actively managed portfolios are governed through investment guidelines and soft risk parameters. **Passively Managed:** Portfolios that have the objective of closely tracking the returns and risk of their respective benchmarks. This style of management usually involves mirroring the benchmark security holdings (or constituents) to closely replicate the benchmark risk and return.

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Key Term	Market Value and Exposure Descriptions / Definitions
WRS Market Value Reporting **Calculations & Methodologies**	Rationale for market value reporting changes adopted as of March 2026: SWIB's borrowing techniques to implement leverage have evolved over recent years and these enhancements prompted SWIB management to review current market value reporting practices. Market value reporting is executed by assigning market value classifications (Internal / External / Active / Passive) to individual WRS portfolios. In most cases, this assignment process is simple and produces transparent reporting results. However, new borrowing methods and legacy custom classification practices were reviewed to confirm if current calculation techniques and reporting accuracy could be improved. Calculation and methodology changes now in effect: • Leverage implementation techniques have begun to generate larger borrowing balances (liabilities) that are deducted from investment assets to calculate market value. Previously, the borrowing balance assignment was linked to a single source account assigned an Internal / Active classification. To improve this process, data and report processing enhancements were executed to facilitate a more precise allocation technique across all market value classifications based on the source of borrowings. • Previously, Private Market non-fee paying investment holdings were reclassified to the Internally Managed asset category. This approach added approximately 2 percentage points to the Internally Managed category from 2012 – 2025. This practice has been discontinued given that these non-fee paying investments may be sourced via external asset managers. • Previously, third party managed cash sweep holdings inside Internally Managed portfolios were reclassified to the Externally Managed asset category. This approach added approximately 0.1 percentage point to the Externally Managed category from 2012 – 2025. This practice has been discontinued. • Calculation and methodology changes have been applied over the entire reporting period.

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Performance Report Data Sources and Processing Notes

Return Calculation Processing

Bank of New York (BNY), an independent 3rd party, provides services related to custodial records, accounting and performance return calculations for SWIB managed funds. BNY also serves as the source for certain standard, market-based benchmarks and static weight blended benchmarks.

Return Calculations Prepared on a Notional or Unlevered Basis (CTF only)

SWIB uses leverage to help achieve the CTF's diversification objectives. A description of the Leverage Use Policy is contained in the WRS Investment Committee Investment Guidelines. For those accounts and composites deploying leverage, the calculation of notional or unlevered returns (using gross asset exposure) is required to achieve a comparable return vs. market indices. BNY performed the unlevered return calculation from 7/1/2017 – 9/30/2024. Beginning 10/1/2024, this calculation was processed using the SWIB IBOR. Consistent with Leverage Use Policy guidelines, this calculation is processed inside the reported composites that contain US Large Cap Equity, US Small Cap Equity, MSCI World x US Equity, US TIPS and US Treasury exposures.

State Investment Fund ("SIF") Commingled Fund Processing

The SIF pools the cash of the State of Wisconsin and its agencies, WRS, and various local government units (Local Government Investment Pool) into a commingled fund with the investment objectives of safety of principal and liquidity while earning a competitive money market rate of return. For purposes of calculating earnings to each participant , all investments are valued at amortized cost. SIF returns are calculated using the monthly net earnings distributed to all commingled fund participants. SIF returns are presented net of all allocated SWIB administrative costs and State Controller's Office costs that are allocated to the participants of the Local Government Investment Pool.

Benchmark Market Data and Selection Process

The data source for this information is provided by multiple investment industry market data vendors and analytics firms depending on the investment strategy. The SWIB Benchmark and Performance Committee governs the benchmark selection process. An independent consultant (selected by the Board of Trustees or "Board") makes recommendations to initially select or change benchmarks.

Peer Rank Return Comparison Data

This information is provided and processed by industry consultants that consume return information for SWIB managed funds and then provide investor universe return comparisons and analytics using proprietary databases. When consultant info is included in the Quarterly Performance Summary the preparer of the work is identified.

SWIB Annual Reports: Additional WRS disclosures can be found in the Annual Reports, available at https://www.swib.state.wi.us/list-of-investments.

BNY ABOR and SWIB IBOR Processing

BNY ABOR is the primary data source for fund-level return calculations and market values for CTF and VTF. SWIB IBOR is used for SIF, SWIB-managed separately managed funds, and CTF strategies that report unlevered returns. During 2026, CTF Public Equity sub-strategy reporting will begin to use SWIB IBOR as BNY ABOR account consolidation is implemented. Minor rounding differences may occur due to differences between the BNY ABOR and SWIB IBOR data sources.

This report contains unlevered return calculations that are processed using Total Exposure (Notional-based) Assets for accounts with substantial derivative positions that generate leverage for the CTF. The objective of this calculation is to generate meaningful returns that can be compared to the account or composite's benchmark. CTF impacted composites include Public Equities (pg. 9), Global Developed (pg. 9), Public Fixed Income (pg. 10), US Treasuries (pg. 10), and Inflation Sensitive (pg. 11).

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Leverage Disclosures

Calculation formulas to estimate impact

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Leverage Disclosures

Notes on CTF Leverage Analysis

Term	Description / Definitions
Portfolio Return (Unlevered)	This is an estimated-only CTF return because SWIB does not implement a CTF unlevered portfolio to calculate actual performance against. Leverage is used to expand the CTF's entire asset base. All definitions that include (unlevered) are ESTIMATES only for this reason. It is estimated by: 1) Excess Return (Levered) is first subtracted from the Portfolio Return (Levered)[1]; 2) The result of Step 1 is then divided by the Policy Leverage Factor; then 3) Excess Return (Levered) is added back to the result of Step 2 and that number is then adjusted to account for the cost of financing (i.e., the expense of acquiring leverage, which would not be applicable to an unlevered portfolio). $\textit{Portfolio Return (Unlevered)} = \left(\frac{\textit{Portfolio Return (Levered)} - \textit{Excess Return (Levered)}}{\textit{Policy Leverage Factor}}\right) + \textit{Excess Return (Levered)} - \textit{cost of implementation}$ [1] Note, because Excess Return (Levered) is the difference between two similarly "levered" portfolios (Portfolio Return (Levered) and Benchmark Return (Levered)), it represents outperformance that is not attributable to leverage. Accordingly, it is subtracted first as it would be inaccurate to reduce such amount by the Policy Leverage Factor for purposes of this calculation. Policy Leverage Factor is the amount of the approved Policy Leverage during any given period, time weighted for multi-year periods. Policy Leverage was first introduced into the CTF Portfolio and Benchmark at the end of April 2012 and was raised from 10% to 15%, effective Calendar Year 2021.
CTF Benchmark Return (Unlevered)	Estimated by the Benchmark Return (Levered) divided by the Policy Leverage Factor for the period.

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Leverage Disclosures

Notes on CTF Leverage Analysis

Term	Description / Definitions
Excess Return (Unlevered)	The Excess Return (Unlevered) is the excess return that it is estimated SWIB would have achieved if it did not implement leverage for the CTF. Estimated as <u>Portfolio Return (Unlevered)</u> minus <u>Benchmark Return (Unlevered).</u> Can also be estimated by taking the actual <u>Excess Return (Levered)</u> minus <u>Implementation (+) or (-)</u> (see below for definition).
Absolute Return from Leverage	Estimated by the <u>Portfolio Return (Levered)</u> minus <u>Portfolio Return (Unlevered)</u> minus <u>Implementation (+) or (-).</u>
Implementation (+) or (-)	The relative cost of financing (i.e., the actual cost of financing minus the CTF benchmark cost of financing). The CTF benchmark cost of financing is the CTF cash benchmark, previously LIBOR plus 30 bps and now BSBY plus 30 bps. Implementation (+) or (-) can also result from outperformance or underperformance relative to how efficiently SWIB replicates the index in connection with policy leverage (this is called basis risk). Can either be positive or negative. When the leverage implementation is achieved at a cost saving compared to the CTF cash benchmark (i.e., less than the CTF cash benchmark), it is positive (+); but when it is achieved with additional cost compared to the CTF cash benchmark (i.e., more than the CTF cash benchmark), it is negative (-). Cost savings can generate minor excess returns for the CTF. Basis risk can also generate minor contributions to or detractions from relative performance with respect to policy leverage.
Portfolio Return (Levered)	Actual performance of the CTF Portfolio for the period presented, from all strategies including Policy Leverage.
CTF Benchmark Return (Levered)	Actual performance of the CTF Benchmark for the period, taking into account the use of Policy Leverage.
Excess Return (Levered)	Actual excess return of the CTF. Portfolio Return (Levered) minus Benchmark Return (Levered).

STATE OF WISCONSIN INVESTMENT BOARD

Board Meeting

Tab 6 – Committee Open Session Business

A. Amendments to WRS Investment Committee Investment Guidelines

B. Approved Open Session Investment Committee Meeting Minutes of May 26, June 23, and July 28, 2026

C. Final Open Session Investment Committee Agenda for August 25, 2026, and Draft Open Session Agendas for September 22 and October 27, 2026

D. Draft Open Session Minutes of May 21, 2026 Enterprise Risk and Compliance Committee Meeting

SWIB Investment Committee

WISCONSIN RETIREMENT SYSTEM INVESTMENT GUIDELINES

Revised as of

~~April 28~~ August 25, 2026

b. The Private Equity Asset Class will rebalance on a 1 for 1 basis to Public Equities. Accordingly, in connection with any rebalancing, for any percentage increase in Private Equity there will be a corresponding 1% reduction to Public Equities. The rebalancing does not have to be proportional through the sub-asset classes.

V. DRAWDOWN PROCEDURES

1. On an annual basis, the Investment Committee shall approve the active risk budget for the next calendar year and the relative drawdown limits per strategy (based on percentage of assets under management (AUM)) for the Core Fund. The relative drawdowns are measured against the benchmark for each strategy on a monthly basis by the Risk Management Division. Relative drawdown limits are intended to protect the Core Fund from large relative drawdowns. Given the active risk that each strategy is expected to take and achieve, the Investment Committee acknowledges that (1) the relative drawdown limits may be reached in any given market environment, and (2) the probability of reaching the drawdown limits is not remote for the levels of active risk approved in the active risk budget.
2. If and when 60% of the relative drawdown limit is reached during the calendar year for any given strategy, the division head, the strategy head, the head of Risk Management, and the ED/CIO will all meet to discuss the relative drawdown limit, attribution, and outlook for the calendar year. The meeting will be documented by email confirmation sent to the Chief Legal Counsel and the head of Compliance.
3. If and when 90% of the relative drawdown limit is reached during the calendar year for any given strategy, the division head, strategy head, the head of Risk Management, and the ED/CIO will all meet to create a plan to address the drawdown for the strategy. The plan may require the strategy to reduce risk, stay the course until a given set of market conditions exist, make certain trades, and/or provide timing for implementation of the plan. A copy of the plan will be presented to the Investment Committee, generally at the next scheduled meeting.

VI. WRS GENERAL AND PORTFOLIO GUIDELINES – INTERNAL MANAGEMENT

Each internal portfolio is assigned compulsory investment guidelines. Portfolio managers are generally not allowed to deviate from compulsory guidelines. If a deviation from compulsory guidelines occurs or is expected to occur, the staff member who becomes aware of it must immediately notify the head of the Compliance and Risk Management divisions, ED/CIO, and the division head of the asset class in which the deviation occurred. Upon receiving notice of a deviation or potential deviation, the ED/CIO and relevant division head will either take action to correct the deviation or obtain a waiver approved by the ED/CIO. If the ED/CIO is not available, then the waiver may be granted by any division head (other than the division head of the portfolio that is requesting the waiver) and the Deputy Executive Director, in consultation with the head of Risk Management. All waivers will be reported to the Investment Committee and documented in the Investment Committee's meeting minutes.

All internal portfolios are also assigned "soft risk parameters." Soft risk parameters refer to desired characteristics and/or risk exposures. Portfolio managers are allowed, however, to deviate from soft parameters in pursuit of excess return or efficiency, subject to Investment Committee inquiry, discussion and concurrence of the continued exposure. Soft risk parameters for each portfolio are detailed in *Appendix 2.*

The following general compulsory guidelines ("General Guidelines") are applicable to all internally managed portfolios. Individual portfolio guidelines appear subsequently.

1. All portfolios must be managed in accordance with the fiduciary standards set forth in section 25.15(2) of the Wisconsin Statutes.
2. Credit quality rating requirements refer to an entire rating level, e.g., "A or better" includes "A-" and better ratings. The lower of split ratings is used. Investment grade securities are those rated "BBB-" or better (or the equivalent rating agency rating). Portfolios may invest in unrated securities, provided that the unrated securities have been assigned an internal SWIB rating by portfolio management staff using similar rating methodologies as the rating agencies.[2]
3. Fixed income securities backed by the full faith and credit of the U.S. government will be classified as U.S. government securities for purposes of these guidelines.
4. Any sovereign debt obligation (or the issuer in the event the obligation is unrated) in which SWIB invests must be rated "B3/B-" or above, unless otherwise approved in advance by the Investment Committee based on its guidelines for individual business case determinations.
5. Public equity investments in markets designated as "developed" or "emerging" are investments in entities that are incorporated or organized in countries included in the MSCI World Index or the MSCI Emerging Market Index, respectively. Public fixed income investments in markets designated as "emerging" are investments in the debt of countries (or of companies incorporated or organized in countries) included in the JP Morgan Emerging Markets Diversified Index. Public fixed income investments in the debt of countries (or of companies incorporated or organized in countries) not included in the JP Morgan Emerging Markets Diversified Index (other than frontier markets) will be designated as "developed."
6. The Board approves the benchmarks for the Core Fund and Variable Fund, which are listed in *Appendix 3.* When new benchmarks are approved by the Board or modified by the Board, *Appendix 3* shall be updated without amendment to these IC Guidelines.
7. The Risk Management Division will monitor the risk exposures of all WRS portfolios. The head of Risk Management may recommend modifications to portfolio exposures to manage risk exposures. With the ED/CIO's concurrence, the manager of a portfolio will make changes as recommended by the head of Risk Management. In addition to such recommendations, drawdown control procedures for all active internal WRS portfolios

[2] Using ratings models that are reviewed by Risk and Compliance staff.

will be implemented and monitored by the Risk Management Division and adhered to by the portfolios.

8. Portfolios may utilize cash instruments or derivatives in their investment strategy. All investments used will be subjected to the risk analysis and monitoring processes at the portfolio, asset class and fund levels. New derivative and investment instruments will be reviewed with and approved by the Investment Committee prior to implementation.
9. Exposure limits and credit quality exposure limits are to be applied at the time of purchase. Unless otherwise indicated, “value” shall mean market value including un-invested cash.
10. Covered Agency Transactions as defined in FINRA Rule 4210[3] may be traded only with a counterparty with which SWIB has a current Master Securities Forward Transaction Agreement (MSFTA), and the settlement of any such transaction shall not be more than 90 days from the date of the trade.
    a. The counterparty, or its guarantor, must, on each date on which a transaction is initiated, have a credit rating of not less than “Baa2/BBB” on long-term debt from S&P or Moody’s.
    b. If the counterparty is not rated, then its parent must have such a rating and must guarantee the obligations of the counterparty.
    c. If a counterparty or its parent is downgraded to a credit rating below “Baa2/BBB” after the initiation of a trade, then trades may be initiated with that same counterparty only to reduce the existing exposure to that downgraded counterparty.

11. Internally managed portfolios, including separately managed funds, are prohibited from investing in commercial paper or other securities issued by SWIB.

12. “Centrally Arranged Leverage” means leverage sourced or provided by the LMBI Division including Temporary Leverage and leverage created by shorting any securities by a portfolio which requires posting of Treasuries, including TIPS, as collateral.

13. “Fixed Income Portfolios” means the internally managed active public fixed income portfolios, including the Investment Grade Credit Portfolio, the Mortgage-Backed Securities Portfolio, the High-Yield Bond Portfolio, the Leveraged Loan Portfolio, and the TBA Strategy Portfolio.

A. Small Cap Portfolio

The Small Cap Portfolio is invested primarily in publicly traded equity securities that are registered with the Securities and Exchange Commission, including common stocks, preferred stocks, ETFs, American Depository Receipts (ADRs), American Depository Shares (ADSs), convertible bonds, securities issued in initial public offerings, and when-issued securities. The

[3] “Covered Agency Transactions” include certain to-be-announced (TBA) transactions, specified pooled transactions and collateralized mortgage obligations (CMOs).

Small Cap Portfolio may also be invested in equity securities that are publicly traded on stock exchanges in other developed countries, or that are issued through private placements.

1. No more than 5% (long or short) of outstanding shares of any single issuer, excluding shares held in commingled funds and ETFs, may be held.
2. No single issuer's equity securities may represent (long or short) more than the greater of (a) 7% of the total market value of the Small Cap Portfolio, or (b) 5% over the percentage of such issuer's equity securities in the portfolio's benchmark. Shares held in commingled funds and ETFs are excluded from this guideline.
3. Up to 10% of the portfolio's market value may be invested in international and emerging markets companies through common stocks, ADRs, ADSs, or country-specific ETFs.
4. The portfolio may use exchange-traded futures contracts or ETFs to equitize cash and receivables.
5. The portfolio may sell short any securities that may be purchased under applicable guidelines and may then use the proceeds from the short sale to purchase additional approved securities. The total value of the short sales in the portfolio may not exceed 50% of the portfolio's net market value.
6. The portfolio's aggregate ex-ante tracking error will not exceed 10% as measured by SWIB's standard model used at any given time by SWIB's Risk Management Division. If market conditions (compared to active management actions) cause the portfolio's ex-ante tracking error to exceed this limit, then the portfolio will not be deemed to be out of compliance with these guidelines and this guideline will not be deemed to be violated; except that, if the portfolio's ex-ante tracking error exceeds 10% then the portfolio may not trade or take any other action which is predicted to increase the ex-ante tracking error of the portfolio.
7. Except as provided in 3 above, securities must be issued by an entity (a) that is incorporated in the United States or (b) incorporated outside the United States if (1) the company's headquarters are located in the U.S. or (2) the primary exchange for the issuer's securities is located in the U.S. The issuers in (b) shall not count toward the 10% limit in 3 above.
8. The aggregate notional value of long or short puts and calls is limited to 5% of the market value of the portfolio.
9. Gross exposure for the portfolio shall not exceed 205% of the portfolio's market value, and net exposure for the portfolio shall not exceed 105% of the portfolio's market value, in each case unless approved by the ED/CIO.

B. LMBI Passive Internal Portfolios

This guideline section pertains to all internally managed passive investment strategies, unless otherwise separately discussed in other sections. This includes, but is not limited to: passive physical equities, passive U.S. TIPS, passive U.S. Treasuries, synthetic liquidity, synthetic leverage, and overlay strategies. The objective of the passive portfolios is to closely track the returns and risk of their respective benchmarks.

1. The universe for inclusion in the portfolio shall be the full respective benchmark for each portfolio. Non-benchmark securities may be held from time to time as a result of corporate actions, purchases or sales in advance of expected changes to the benchmark in order to optimize trading costs or to provide synthetic/derivative exposure to the underlying benchmark. Retention of physical non-benchmark securities will only occur if the portfolio manager deems it beneficial to fund (Core Fund/Variable Fund) performance and not significantly detrimental to tracking error. Portfolios that provide liquidity or leverage may hold primarily non-benchmark securities in the form of derivatives that replicate the underlying target beta exposure.
2. Securities offered or sold to U.S. investors pursuant to Regulation D or Rule 144A under the Securities Act of 1933 may be purchased if they are publicly traded on a stock exchange in a developed country.
3. Portfolios may use physical securities or synthetic instruments, including exchange-traded futures contracts, ETFs, swaps, or other Investment Committee-reviewed derivative instruments to equitize cash and receivables, to achieve Policy Leverage within Trustee-approved limits; for liquidity purposes; to replicate beta for the alpha-beta overlay; or for other passive investment strategies. Passive portfolios used to achieve Policy Leverage shall be monitored by the ARA Division so that the Policy Leverage does not exceed Board-approved limits.
4. Portfolios may sell short from time to time as a result of corporate actions, benchmark changes or other similar events. Short positions are also permitted to more closely, more efficiently and/or more cost effectively track the returns and risk of their respective benchmarks if the portfolio manager deems it beneficial to Core Fund/Variable Fund performance and not significantly detrimental to tracking error. Short positions are intended to be used opportunistically to enhance efficient beta management (e.g., transitions or rebalancing), but not solely to increase active risk. The portfolios may short any securities that may be purchased under Guidelines #1-3 and may then use the proceeds from the short sale to purchase additional approved securities.

C. LMBI Passive External Managers

The LMBI Passive External Managers will be comprised primarily of direct or commingled passive investments in strategies of external managers that are intended to generate a beta or SWIB policy benchmark return.

1. Investments in LMBI Passive External Managers will be comprised of the following investment vehicles:
   a. *Separately Managed Accounts* ("SMAs"): SWIB intends for its portfolio to be comprised primarily of direct investments in various strategies via SMAs, the assets of which would reside at SWIB's custodial bank.

b. *Commingled Investments or Fund Investments*: Investments can be made in commingled funds or in a Fund-of-One structure where SWIB is the sole investor, the assets of which may not reside at SWIB's custodial bank.

2. Investment Strategies and Broad Guidelines for LMBI External Managers:
   a. *Equities* –Strategies will be invested in traditional long only portfolios and other public equity securities approaches across various geographies and market cap weights. Derivatives may be used and will be set forth in the individual manager guidelines.

   b. *Fixed Income* –Strategies will primarily be invested in traditional long only portfolios across the credit quality spectrum, varying geographies, including emerging and frontier market debt, high yield and structured securities. Derivatives may be used and will be set forth in the individual manager guidelines.

   c. *Levered Strategies* – Strategies that are designed to provide fund-level leverage will be subject to both the external manager guidelines in this section, as well as the applicable Leverage Use Policy guidelines in Section II above. The individual managers will also be subject to any additional guidelines outlined in the investment management agreement with respect to strategy and/or leverage management tool.

3. Approvals: LMBI Passive External Manager allocations are subject to the following approvals:

Investment	Head of LMBI	ED/CIO
New Manager Relationship	Up to $1.75 billion	More than $1.75 billion
Additional Allocations to Existing Manager	Up to $2 billion	More than $2 billion
Includes all LMBI investments aggregated with the Manager, regardless of vehicle, strategy or portfolio, but excludes allocations to existing strategies managed by existing Managers as part of routine rebalancing activity.		

4. Other guideline limitations notwithstanding, the head of LMBI or other staff authorized by the head of LMBI may modify, amend or waive terms of LMBI Passive External Manager investment management agreements and generally take any and all other actions that are necessary and reasonable to protect, maintain, or enhance the value of SWIB's position in the investments.

5. All redemptions, terminations or reductions of capital will be at the discretion of the head of LMBI for rebalancing, liquidity management, leverage management and/or policy benchmark exposure consideration.

D. LMBI Strategies

The LMBI Division has the authority to engage in the following strategies:

1. Active Cash Strategy
    a. The Active Cash Strategy is an investment strategy of short-term investments.
    b. The Active Cash Strategy Portfolio shall be invested in cash equivalents and short duration (defined as a maturity of 37 months or less) fixed income securities including Treasury bills/notes, commercial paper, corporate notes, certificates of deposit, time deposits, and reverse repurchase agreements.
    c. The strategy weighted average maturity will not exceed one year (the weighted average maturity of floating rate securities is based on interest rate reset dates or earliest call date).
    d. The minimum rating of a security or instrument (or the issuer in the event the security or instrument is unrated) shall be A-2/P-2 or BBB/Baa2.
2. Basis Trades

    The LMBI portfolios can implement basis trades by combining long physical assets with short, nearly identical synthetic assets in order to extract a financing spread. The universe of these trades will be limited to U.S. equity indices and Treasuries. The ED/CIO will set the maximum exposure level for these types of trades. Current positions in these trades will be reported to the Investment Committee quarterly.

E. ~~D.~~ Investment Grade Credit Portfolio

The Investment Grade Credit Portfolio is primarily invested in publicly traded and Rule 144A investment grade corporate bonds or other fixed income instruments, primarily in the United States and other developed markets. Subject to the limitations set forth below, the portfolio may also invest in bank loans, convertible, and equity securities.

1. Maximum single issuer concentration is limited to 8% of the portfolio's market value on a net basis for developed markets investment grade issuers and 3% for all other issuers, in each case, excluding Treasuries, Treasury futures and ETFs.
2. Positions may be purchased long and sold short, and the use of leverage will be incorporated in ex-ante risk assessments and active risk/tracking error contributions. The portfolio may take short exposure by shorting individual securities, including cash bonds and equity securities, utilizing single name CDS and CDX index securities, and shorting ETFs that have been approved by Compliance and included on an approved ETF trading list (including put or call options thereon).
3. Derivatives use is permitted as allowed by the Derivatives Use Policy for the purposes of credit, duration, yield curve exposure, and volatility management. Derivatives use is permitted through the use of (a) exchange-traded and over-the-counter interest rate instruments, including forwards, futures and options, (b) interest rate swaps and

swaptions, (c) total return swaps (TRS) with index or underlying basket of permitted instruments, (d) options on permitted ETFs and indices, (e) other volatility derivatives (including options), (f) credit index swaps (e.g., CDX) and single-name CDS, including options on these instruments, and (g) options on equity securities, indices and ETFs for purposes of tail hedging.

4. Effective duration of the portfolio shall remain within two years of the assigned benchmark's duration.
5. Emerging market (EM) debt investment is limited to securities rated "B-" or above and:
   a. EM sovereign debt must be of countries in the JP Morgan Emerging Market Bond Index Global Diversified ("JP Morgan EM Bond Index").
   b. EM corporate debt must be denominated in U.S. Dollars.
   c. Gross EM debt shall not exceed 15% of the portfolio's market value on a long or short basis (i.e., long % + short %). EM FX forwards used to hedge currency risk will not be counted against the EM debt exposure threshold.
6. Further limits:
   a. Non-investment grade securities shall not exceed 20% of the portfolio's market value on a gross basis.
   b. Exposure to bank loans, including CLOs, shall not exceed 15% of the portfolio's market value on a net basis.
   c. Exposure to convertible securities shall not exceed 10% of the portfolio's market value on a net basis.
   d. Equity exposure shall not exceed 2% of the portfolio's market value on a net basis.
7. Ex-ante tracking error shall not exceed 2.5% as measured by SWIB's standard model used at any given time by SWIB's Risk Management Division. If market conditions (compared to active management actions) cause the portfolio's ex-ante tracking error to exceed this limit, then the portfolio will not be deemed to be out of compliance with these guidelines and this guideline will not be deemed to be violated; except that, if the portfolio's ex-ante tracking error exceeds 2.5% then the portfolio may not trade or take any other action which is predicted to increase the ex-ante tracking error of the portfolio.
8. Gross exposure for the portfolio shall not exceed 300% of the portfolio's market value, and net exposure for the portfolio shall not exceed 200% of the portfolio's market value, in each case unless approved by the ED/CIO. The portfolio may create leverage through the use of derivatives, securities lending, and repurchase agreement transactions, as well as Centrally Arranged Leverage. Centrally Arranged Leverage in the aggregate across the Fixed Income Portfolios shall not exceed 15% of such portfolios' aggregate market value.

F. ~~E.~~ Exposure Management Portfolios

Portfolios may be established at the asset class level for multi-asset, public equity and public fixed income asset classes to provide for adjustment and management of the Core Fund and Variable

Fund exposures and to utilize or adjust active risk of the Core Fund and Variable Fund. In determining portfolio investments, exposures held in both internally and externally managed portfolios will be considered. These portfolios may also be used to express investment strategies and ideas where the sizing of the investment requires it to be outside of an individual internal portfolio.

The head of ARA or their designee may approve strategies and/or investment ideas in the portfolios up to an ex-ante contribution to overall Core Fund active risk of 0.20% (excluding investments in PMFA overage portfolios), as measured by SWIB's standard model used at any given time by SWIB's Risk Management Division. If, at the time of investment, the portfolios' ex-ante contribution to active risk exceeds 0.20%, then the strategy and/or investment idea must be approved by the ED/CIO. Portfolio management , oversight and reporting to the Investment Committee will be the responsibility of the ARA Division. Current positions in these trades will be reported to the Investment Committee quarterly. These portfolios may invest in any instrument approved for the relevant asset class portfolios described elsewhere in these guidelines. The portfolios may use derivative instruments. Portfolios will not have a separate benchmark or risk target, but will be included within the benchmark and risk parameters for the applicable aggregated asset class. The portfolios may include, for example, investments strategies to adjust aggregate equity beta, the allocations between specific sectors or sub-asset class exposures, currency exposures, volatility exposure, or credit exposure or duration.

G. ~~F.~~ Multi-Strat Portfolio

1. The Multi-Strat portfolio is authorized to invest in or short any instrument or derivative, subject to guidelines 5 and 6 below and the general guidelines contained herein.
2. Strategies may be managed either by internal investment staff or by an external manager.
3. Leverage and derivatives may be used to implement individual strategies and to adjust the market exposure of the Multi-Strat portfolio.
4. The Multi-Strat portfolio's aggregate ex-ante tracking error will not exceed 21% as measured by SWIB's standard model used at any given time by SWIB's Risk Management Division. If market conditions (compared to active management actions) cause the portfolio's ex-ante tracking error to exceed this limit, then the portfolio will not be deemed to be out of compliance with these guidelines and this guideline will not be deemed to be violated; except that, if the portfolio's ex-ante tracking error exceeds 21% then the portfolio may not trade or take any other action which is predicted to increase the ex-ante tracking error of the portfolio.
5. The ED/CIO and Head of Risk Management must be informed prior to the launch of a new strategy within the Multi-Strat portfolio. New strategies must be reported to the Investment Committee reasonably promptly following the launch.
6. ED/CIO approval, along with notice to the Head of Risk Management, is required prior to the Multi-Strat portfolio investing in an investment instrument or derivative that was previously approved by the Investment Committee for use by other asset class portfolios. Investment in such instruments must be reported reasonably promptly to the Investment

Committee. Investment Committee review and approval is required prior to the Multi-Strat portfolio investing in any new investment instruments or derivatives not previously approved by the Investment Committee for any asset class portfolios.

H. ~~G.~~ Mortgage-Backed Securities Portfolio

The Mortgage-Backed Securities (MBS) portfolio is primarily invested in Agency-issued mortgage-related securities, including MBS pools, collateralized mortgage obligations (CMOs), credit risk transfer (CRT) securities, as well as other securities in the structured products sector such as TBA MBS, commercial mortgage-backed (CMBS), asset-backed (ABS), and private label mortgage-related securities. It may also invest in other fixed income securities, certain ETFs, and certain derivatives as outlined below.

1. Securities other than agency-issued mortgage-related securities (e.g., pools, CMOs, CRTs), mortgage TBAs, and mortgage ETFs, but otherwise permitted in these portfolio guidelines and with effective duration of greater than one year, may not exceed 25%, in the aggregate, of the portfolio's market value.
2. Effective duration of the portfolio shall remain within two years of the assigned benchmark's duration.
3. Private label MBS may not exceed 10% of the portfolio's market value. Private label mortgage securities backed by borrower collateral other than prime may not exceed 5% of the portfolio's market value.
4. The portfolio may invest long or short in ETFs that invest primarily in U.S. MBS and that have been approved by Compliance and included on an approved trading list (including put or call options thereon).
5. The portfolio's aggregate ex-ante tracking error will not exceed 5% as measured by SWIB's standard model used at any given time by SWIB's Risk Management Division. If market conditions (compared to active management actions) cause the portfolio's ex-ante tracking error to exceed this limit, then the portfolio will not be deemed to be out of compliance with these guidelines and this guideline will not be deemed to be violated; except that, if the portfolio's ex-ante tracking error exceeds 5% then the portfolio may not trade or take any other action which is predicted to increase the ex-ante tracking error of the portfolio.
6. Except for TBA MBS, US Treasuries and ETFs, no single issue may exceed 5% of the portfolio's market value. No single BBB-rated issue may exceed 2% of the portfolio's market value. The average rating of securities covered by these limits will be "Baa2/BBB" or better. No single issue rated below investment grade may exceed 1% of the portfolio's market value. Each tranche of a securitized product is considered a separate issue. Total exposure to issues rated below investment grade may not exceed 20% of the portfolio's market value, in the aggregate.
7. Fixed income securities with an effective duration of one year or less will have an average credit rating of "A" or better. The portfolio may also use repurchase agreements and reverse repurchase agreements for cash management.

8. Derivatives use is permitted as allowed by the Derivatives Use Policy for the purposes of duration, interest rate, yield curve, mortgage and structured products credit, prepayment and volatility management. Derivatives use is permitted through the use of (a) exchange-traded interest rate instruments, including forwards, futures and options, (b) interest rate swaps and swaptions, (c) total return swaps (TRS) with index or underlying basket of permitted instruments, (d) options on permitted ETFs and indices, (e) other volatility derivatives (including options), (f) MBS options, (g) credit index swaps (e.g., CMBX, CDX and similar instruments) and options, and (h) options on equity indices and ETFs for purposes of tail hedging.

9. All instruments permitted in these guidelines may be traded long or short. Excluding the TBA Strategy, gross exposure for the portfolio shall not exceed 300% of the portfolio's market value, and net exposure for the portfolio shall not exceed 200% of the portfolio's market value, in each case unless approved by the ED/CIO. The portfolio may create leverage through the use of derivatives, securities lending, and repurchase agreement transactions, as well as Centrally Arranged Leverage. Centrally Arranged Leverage in the aggregate across the Fixed Income Portfolios shall not exceed 15% of such portfolios' aggregate market value.

10. CLOs collateralized by corporate bank loans may not exceed 15% of the portfolio's market value.

I. ~~H.~~ High-Yield Bond Portfolio

The High-Yield Bond Portfolio is eligible to invest in any instruments included in the assigned benchmark — primarily U.S. dollar denominated publicly-traded and Rule 144A high-yield corporate bonds or other fixed income instruments rated between BB+/Ba1 and B-/B3. Subject to the limitations set forth below, the portfolio may also invest in non-U.S. dollar denominated bonds of issuers located outside of the United States, as well as convertible, preferred securities and equity securities.

1. The portfolio shall maintain at minimum a weighted average rating of B-. Subject to the foregoing, the portfolio may hold fixed income instruments rated below B-/B3.

2. Effective duration of the portfolio shall remain within +/- five years of the assigned benchmark's effective duration.

3. Positions may be purchased long and sold short, and the use of leverage will be incorporated in ex-ante risk assessments and active risk/tracking error contributions. The portfolio may take short exposure by shorting individual securities, cash bonds, buying single name CDS, shorting the CDX index, shorting high-yield and equity ETFs that have been approved by Compliance and included on an approved ETF trading list (including put or call options thereon), as well as shorting the underlying equity of a leveraged issuer.

4. Instruments not included in the benchmark, but otherwise permitted in these portfolio guidelines, may not exceed 25% of the portfolio's market value on a long or short basis (i.e., long % + short %). For the avoidance of doubt, any instrument that is subsequently removed from the portfolio's benchmark due solely to the instrument's maturity falling

below the benchmark's stated thresholds shall not be deemed to be out of benchmark for purposes of the 25% limitation described in this Guideline #4.

5. Maximum single issuer active concentration is limited to 5%, excluding Treasuries, Treasury futures and holdings of ETFs, of the portfolio's market value on a net basis.
6. Gross exposure to non-U.S. Dollar denominated instruments shall not exceed 10% of the portfolio's market value on a long or short basis (i.e., long % + short %).
7. Gross exposure to emerging market corporate debt is limited to (a) securities that are rated "B-/B3" or above and (b) issuers incorporated or organized in countries included in the JP Morgan Emerging Markets Diversified Index, and in aggregate shall not exceed 5% of the portfolio's market value on a net basis.
8. Exposure to any single industry sector shall remain within 20% of the assigned benchmark's industry sector weighting on a net basis.
9. Exposure to high-yield bank loans shall not exceed 10% of the portfolio's market value on a net basis.
10. Ex-ante tracking error shall not exceed 5% as measured by SWIB's standard model used at any given time by SWIB's Risk Management Division. If market conditions (compared to active management actions) cause the portfolio's ex-ante tracking error to exceed this limit, then the portfolio will not be deemed to be out of compliance with these guidelines and this guideline will not be deemed to be violated; except that, if the portfolio's ex-ante tracking error exceeds 5% then the portfolio may not trade or take any other action which is predicted to increase the ex-ante tracking error of the portfolio.
11. Derivatives use is permitted as allowed by the Derivatives Use Policy for the purposes of duration, yield curve exposure, and volatility management. Derivatives use is permitted through the use of (a) exchange-traded and over-the-counter interest rate instruments, including forwards, futures and options, (b) interest rate swaps and swaptions, (c) total return swaps (TRS) with index or underlying basket of permitted instruments, (d) options on permitted ETFs and indices, (e) other volatility derivatives (including options), (f) credit index swaps (e.g., CDX) and single-name CDS, including options on these instruments, and (g) options on equity securities, indices and ETFs for purposes of tail hedging.
12. Gross exposure for the portfolio shall not exceed 300% of the portfolio's market value, and net exposure for the portfolio shall not exceed 200% of the portfolio's market value, in each case unless approved by the ED/CIO. The portfolio may create leverage through the use of derivatives, securities lending, and repurchase agreement transactions, as well as Centrally Arranged Leverage. Centrally Arranged Leverage in the aggregate across the Fixed Income Portfolios shall not exceed 15% of such portfolios' aggregate market value.
13. The portfolio may invest in debt instruments and loans and may include senior financing, subordinated or mezzanine financing, and "bridge" financing. Debt instruments and loans may be syndicated or privately issued credit. Debt instruments and loans may be of public or private company issuers. Strategies may include, without limitation, specialty and alternative credit opportunities, distressed and opportunistic strategies, or dislocated

credit opportunities. Debt instruments and loans may include credit opportunities alongside SWIB external managers. In the aggregate, exposure to special or alternative opportunity financings described in this guideline shall not exceed 5% of the portfolio.

J. ~~I.~~ Leveraged Loan Portfolio

The Leveraged Loan Portfolio is eligible to invest in any instruments included in the assigned benchmark — primarily U.S. dollar denominated publicly-traded and senior secured syndicated leveraged loans. Subject to the limitations set forth below, the portfolio may also invest in non-U.S. dollar denominated loans and/or bonds of issuers located outside of the United States, as well as collateralized loan obligations (CLOs), derivatives, convertible, preferred securities and equity securities.

1. No less than 75% of the portfolio's market value can be invested in single-name first-lien bank loans, total return swaps on first-lien bank loans and first-lien bank loan indices, and/or ETFs with a diversified portfolio of first-lien bank loans, in aggregate.
2. The portfolio shall maintain at minimum a weighted average rating of B. Subject to the foregoing, the portfolio may hold fixed income instruments rated below B-/B3 as well as unrated securities, provided the unrated securities have been assigned an internal SWIB rating by portfolio management staff using similar rating methodologies as the rating agencies.
3. Positions may be purchased long and sold short, and the use of leverage will be incorporated in ex-ante risk assessments and active risk/tracking error contributions. The portfolio may take short exposure by shorting individual securities, including cash bonds and equity securities, utilizing single name CDS and CDX index securities, and shorting ETFs that have been approved by Compliance and included on an approved ETF trading list (including put or call options thereon).
4. Excluding U.S. Treasuries, total return swaps and CDS on first-lien loans, and Compliance approved ETFs with a diversified portfolio of first-lien bank loans, investments in instruments not included in the broad Morningstar LSTA US Leveraged Loan index, but otherwise permitted in these portfolio guidelines, may not exceed 25% of the portfolio's market value on a long or short basis (i.e., long % + short %).
5. Maximum single issuer active concentration is limited to 5%, excluding Treasuries, Treasury futures and holdings of ETFs, of the portfolio's market value on a net basis.
6. Gross exposure to non-U.S. Dollar denominated instruments shall not exceed 10% in the aggregate of the portfolio's market value on a long or short basis (i.e., long % + short %).
7. Aggregate exposure to second-lien loan instruments is limited to 15% of the portfolio's market value on a long or short basis (i.e., long % + short %), and maximum exposure to a single second-lien loan instrument is limited to 2.5% of the portfolio's market value on a long or short basis (i.e., long % + short %).
8. Ex-ante tracking error shall not exceed 5% as measured by SWIB's standard model used at any given time by SWIB's Risk Management Division. If market conditions (compared

to active management actions) cause the portfolio's ex-ante tracking error to exceed this limit, then the portfolio will not be deemed to be out of compliance with these guidelines and this guideline will not be deemed to be violated; except that, if the portfolio's ex-ante tracking error exceeds 5% then the portfolio may not trade or take any other action which is predicted to increase the ex-ante tracking error of the portfolio.

9. Derivatives use is permitted as allowed by the Derivatives Use Policy for the purposes of duration, yield curve exposure, and volatility management. Derivatives use is permitted through the use of (a) exchange-traded and over-the-counter interest rate instruments, including forwards, futures and options, (b) interest rate swaps and swaptions, (c) total return swaps (TRS) with index or underlying basket of permitted instruments, (d) options on permitted ETFs and indices, (e) other volatility derivatives (including options), (f) credit index swaps (e.g., CDX) and single-name CDS, including options on these instruments and (g) options on equity securities, indices and ETFs for purposes of tail hedging.

10. Gross exposure for the portfolio shall not exceed 300% of the portfolio's market value, and net exposure for the portfolio shall not exceed 200% of the portfolio's market value, in each case unless approved by the ED/CIO. The portfolio may create leverage through the use of derivatives, securities lending, and repurchase agreement transactions, as well as Centrally Arranged Leverage. Centrally Arranged Leverage in the aggregate across the Fixed Income Portfolios shall not exceed 15% of such portfolios' aggregate market value.

11. Leveraged loans may include senior financing, subordinated or mezzanine financing, and "bridge" financing. Loans may be syndicated or private credit loans. Loans may be of public or private company issuers. Strategies may include, without limitation, specialty and alternative credit opportunities, distressed and opportunistic strategies, or dislocated credit opportunities. Loans may include credit opportunities alongside SWIB external managers. In the aggregate, exposure to special or alternative opportunity financings described in this guideline shall not exceed 5% of the portfolio.

K. **~~J.~~ TBA Strategy Portfolio**

The TBA Strategy portfolio is invested primarily in Agency TBA mortgages, as well as Agency MBS pools. It may also invest in ABS, CMBS and other fixed income securities and certain derivatives as outlined below.

1. The portfolio's aggregate ex-ante tracking error will not exceed 25% as measured by SWIB's standard model used at any given time by SWIB's Risk Management Division. If market conditions (compared to active management actions) cause the portfolio's ex-ante tracking error to exceed this limit, then the portfolio will not be deemed to be out of compliance with these guidelines and this guideline will not be deemed to be violated; except that, if the portfolio's ex-ante tracking error exceeds 25% then the portfolio may not trade or take any other action which is predicted to increase the ex-ante tracking error of the portfolio.

2. Derivatives use is permitted as allowed by the Derivatives Use Policy for the purposes of yield curve, mortgage, credit, and volatility management. Derivatives use is permitted through the use of (a) exchange-traded interest rate instruments, including forwards,

futures, and options, (b) interest rate swaps and swaptions, (c) volatility derivatives (including options), (d) CDX, and (e) MBS options.

3. The portfolio may invest long and short in any permitted security as described herein.
4. In the event of an Agency MBS trade failure, the head of strategy or designee will promptly notify Risk Management and Compliance.
5. Except for TBA and Agency pass-through MBS, and US Treasuries, no single issue may exceed 8% of the portfolio's market value. Other fixed income securities are allowed with an effective duration of five years or less and must be investment grade. The average rating of these securities will be "A" or better. Each tranche of a securitized product is considered a separate issue. The portfolio may also use repurchase agreements and reverse repurchase agreements for cash management.
6. Effective duration of the portfolio, determined on the gross value of the portfolio, shall be within 0.5 years of the portfolio's benchmark.
7. Gross notional exposure of the portfolio shall not exceed $20 Billion and net notional exposure of the portfolio shall not exceed $4 Billion, in each case without the approval of the ED/CIO. The portfolio may create leverage through the use of derivatives, securities lending, and repurchase agreement transactions, as well as Centrally Arranged Leverage. Centrally Arranged Leverage in the aggregate across the Fixed Income Portfolios shall not exceed 15% of such portfolios' aggregate market value.

~~K. Short Term Credit Portfolio~~

~~The Short-Term Credit Portfolio is an investment vehicle of cash and short-term investments of the WRS. Its investment objectives are: 1) Safety of principal; 2) Return Objective; and 3) Liquidity.~~

~~Portfolio Allocation~~

~~(Percent of Portfolio at Par Value)~~

~~Treasuries, Agencies, and FDIC Insured Bank Deposits~~	~~0-100%~~
~~Repurchase Agreements~~	~~0-100%~~
~~Commercial Paper~~	~~0-100%~~
~~Corporate Notes~~	~~0-100%~~
~~Certificates of Deposit/Time Deposits~~	~~0-50%~~
~~Bankers' Acceptances~~	~~0-50%~~
~~Yankee/Euro Certificates of Deposit/Time Deposits (U.S. Dollars)~~	~~0-50%~~

~~Maturity Guidelines~~

~~(Maximum)~~

~~Consistent with the portfolio purpose and objectives, the portfolio weighted average maturity will not exceed one year (the weighted average maturity of floating rate securities is based on interest rate reset dates).~~

~~Repurchase Agreements~~	~~1 year~~
~~Reverse Repurchase Agreements~~	~~1 year~~
~~U.S. Treasuries and Agencies~~	~~5 years~~
~~Commercial Paper/Bankers' Acceptances~~	~~1 year~~
~~Corporate Notes – Fixed Rate~~	~~3.1 years~~
~~Corporate Notes – Floating Rate~~	~~5.1 years~~
~~Certificates of Deposit/Time Deposits~~	~~5 years~~
~~Yankee/Euro Certificates of Deposit/Time Deposits~~	~~5 years~~

~~Issuer Exposure~~

~~(Percent of Portfolio at Par Value)~~

~~The maximum exposure for each issuer/guarantor/counterparty shall be in the aggregate as follows:~~

~~U.S. Treasury Bills and U.S. Agency Discount Notes~~	~~No limit~~
~~Repurchase Agreements (Gov't/Agency Collateral)~~	~~25%~~
~~Repurchase Agreements (Other Collateral)~~	~~5%~~
~~Commercial Paper and Corporate Notes~~	~~5%~~
~~Certificates of Deposit/Time Deposits~~	~~5%~~
~~Bankers' Acceptances~~	~~5%~~
~~Yankee/Euro Certificates of Deposit/Time Deposits (U.S. Dollars)~~	~~5%~~
~~Wisconsin CD Program – individual bank (unless a higher limit from another category applies.)~~	~~$20MM or 3% of bank assets, whichever is less~~

~~Bank Deposits~~ ~~Up to the amount guaranteed by the FDIC or the amount allowable for a bank instrument, whichever is higher~~

~~CREDIT QUALITY~~

~~The minimum rating of an issuer/counterparty shall be the lowest in the event of a split rating and shall be as follows:~~

~~U.S. Treasury Bills and U.S. Agency Discount Notes~~	~~No minimum~~
~~Repurchase Agreements~~	~~BBB~~
~~Commercial Paper~~	~~A-2/P-2~~
~~Unrated Wisconsin Company Commercial Paper (maximum maturity of 90 days and percentage of the portfolio in unrated CP cannot exceed 15%)~~	~~Unrated~~
~~Corporate Notes, Bankers' Acceptances, Certificates of Deposit/ Time Deposit, Bank Deposits and Yankee/Euro Certificates of Deposit/Time Deposits (U.S. Dollars) greater than 1 year~~	~~A~~
~~Corporate Notes, Bankers' Acceptances, Certificates of Deposit/ Time Deposit, Bank Deposits and Yankee/Euro Certificates of Deposits (U.S. Dollars) less than 1 year (the percentage of the portfolio in BBB cannot exceed 15%).~~	~~BBB~~
~~Wisconsin CD Program – individual bank~~	~~Unrated~~

L. General Guidelines specific for Private Markets and Funds Alpha Portfolios

1. The portfolio manager shall be responsible for notifying the ED/CIO of any referrals or significant contacts by or on behalf of SWIB Trustees regarding consideration of an investment opportunity.
2. The Private Markets & Funds Alpha (PMFA) staff shall report to the Trustees all portfolio commitments to non-public investments.
3. Each portfolio manager shall obtain written confirmation from legal counsel (which may be external legal counsel) that documentation has been satisfactorily completed prior to

STATE OF WISCONSIN INVESTMENT BOARD
Investment Committee Meeting–Open Session

Tuesday, May 26, 2026

Offices of the Investment Board
4703 Madison Yards Way, Madison, Wisconsin

Committee Members Present:

Edwin Denson, Executive Director/Chief Investment Officer (Chair)
Sara Chandler, Interim Head of PMFA and Chief of Staff & Strategy
Todd Mattina, Head Economist & Asset and Risk Allocation Chief Investment Officer
Mike Shearer, Head of Fixed Income Strategies
Nick Stanton, Head of Liquidity Management and Beta Implementation
Derek Bloom, Senior Portfolio Manager–Asset & Risk Allocation
Derek Drummond, Head of Funds Alpha
Jeff Lucas, Senior Portfolio Manager–Fixed Income Strategies
Sunil Nair, Portfolio Manager–Liquidity Management and Beta Implementation
Chase Nicholson, Senior Portfolio Manager–Multi-Asset Strategies
Jason Rector, Senior Portfolio Manager–Funds Alpha
Andrea Ruiz, Senior Portfolio Manager–Liquidity, Inflation & Rates Management

Eric Barber, Chief Legal Counsel (non-voting)
Hassan Chehime, Head of Risk Management (non-voting)
Rochelle Klaskin, Deputy Executive Director/Chief Operating Officer (non-voting)

Also in Attendance:

John Voelker, Trustee
Chelsey Barczak, GPMS Business Director
Kevin Blank, Senior Analyst–Funds Alpha
Brandon Brickner, Head of Internal Audit
Adam Brown, Senior Analyst–Asset & Risk Allocation
Kate Burkart-Paulson, Senior Legal Counsel
John Burkhartzmeyer, Senior Trader
Bridget Chen, Portfolio Manager–MBS
Christian Comito, Senior Portfolio Manager–MBS
Tunc Dayioglu, Senior Portfolio Manager–Funds Alpha
Trey Edgerle, Compliance Analyst
Greg Fletcher, Performance Director
Tom Freeman, Director of Quantamental Research
Max Garcia, Analyst–Funds Alpha
Jameson Greenfield, Chief Financial Officer
Thomas Gregg, PMFA Operations Manager
Dan Gyorog, Internal Auditor
Mark Haak, Senior Portfolio Manager–High Yield and Leveraged Loans
Syed Haider, Quantitative Analyst–Multi-Asset Strategies
Sean Hamner, Legal Counsel
Tori Hassler, Internal Auditor

Vince Janecky, Internal Audit Manager
Ryan Johnston, Senior Analyst–Funds Alpha
Jason Kowalke, PMFA Operations Manager
Dylan Krivoshein, Investment Operations Analyst
Jason Krueger, Compliance Analyst
Alex Kubiak, Investment Operations Analyst
Lisa Lange, Director of Compliance & Senior Legal Counsel
Alex Li, Senior Analyst–Asset & Risk Allocation
Diane Linn, Senior Portfolio Manager–Multi-Asset Strategies
Shan Lo, Senior Portfolio Manager–Multi-Asset Strategies
Jon Loboda, Performance Measurement Operations Manager
Bill Luetzow, Senior Legal Counsel
Charles Maloney, Trader
Michael Mandarino, Senior Analyst–High Yield and Leveraged Loans
Matt Marek, Portfolio Engineer–Asset & Risk Allocation
Ed Martinez, PMFA Business Director
Lin Maung, Senior Portfolio Manager–Private Equity
Frank Mazzucco, Senior Legal Counsel
Jason Mirr, Senior Portfolio Manager–U.S. Small Cap Strategy
Megan Moede, Trader
Nick Mokha, Portfolio Manager–High Yield and Leveraged Loans
Joy Mukherjee, Senior Portfolio Manager–U.S. Small Cap Strategy
Scott Nichols, Head of Trading
Matt Notzon, Performance Analyst
Hunter Olson, Analyst–High Yield and Leveraged Loans
Scott Parrish, Head of Private Equity
Dan Perik, Portfolio Engineer–Multi-Asset Strategies
Cale Pleak, Fixed Income Credit Intern–High Yield and Leveraged Loans
Chris Prestigiacomo, Head of Private Debt & Venture Capital
Cefe Quesada, Chief Technology Officer
Anand Rakesh, Director of Risk Analytics & Financial Engineering Systems
Vishnu Reddy, Senior Trader–MBS
Tom Robinson, Head of Corporate Governance
Michelle Rudman, Senior Analyst–Liquidity, Inflation & Rates Management
Harsh Shah, Investment Operations Analyst
Sam Shibilski, Investment Operations Analyst
Hannibal Smith, Operational Risk Analyst
Gabriel Souza, Investment Operations Analyst
Mike Stamm, Portfolio Manager–Financing & Collateral Management
Lyle Tang, Quantitative Analyst–Asset & Risk Allocation
Mark Taylor, Senior Portfolio Manager–Quantitative Research
Matt Terpstra, Operational Risk Manager
Rob Thornton, ARA Business Director
Dawn Tuescher, Executive Administrative Assistant
Ping Wong, Portfolio Manager–Liquidity, Inflation & Rates Management
Ivy Zhang, Senior Portfolio Manager–Asset & Risk Allocation
Joe Nankof, NEPC
(Some individuals may have attended only portions of the meeting.)

OPEN SESSION

With a quorum present, Edwin Denson, Chair of the Investment Committee, called the meeting to order at 1:00 p.m.

1. <u>Approval of the Minutes</u>

Mr. Denson asked if there were any comments on either the open or closed session minutes of the April 28, 2026, Investment Committee ("Committee") meeting. Hearing no comments, Mr. Denson stated that the Committee could approve both the open and closed session minutes in open session.

<u>Motion</u>: A motion was made by Mr. Mattina and seconded by Mr. Bloom to approve both the open session and the closed session minutes of April 28, 2026, as presented. The motion passed unanimously.

2. <u>Global Public Market Strategies Division Update</u>

Mike Shearer, Head of Fixed Income Strategies, reported on performance from the Global Public Market Strategies ("GPMS") division in the *Global Public Market Strategies Quarterly Update, Q1 2026*, included on pages 10-12 in the meeting materials. He commented that the multi-strat portfolio performed well in Q1 2026, while all other GPMS portfolios underperformed relative to their benchmarks in the first quarter.

3. <u>Q1 2026 Quarterly Updates</u>

A. <u>Multi-Strat</u>

Chase Nicholson, Senior Portfolio Manager–Multi-Asset Strategies, presented the *Multi-Strat Portfolio Review*, included on pages 13-16 in the meeting materials. He reported that the multi-strat portfolio outperformed its benchmark by 415 basis points ("bps") in Q1 2026, with strong performance from systematic and fundamental arbitrage strategies only partially offset by negative performance from fundamental security selection strategies. Mr. Nicholson discussed the market environment for multi-asset trend systems, noting that oil and gas had strong trend performance and that equity trend efficacy was concentrated in Asia and Western Europe but muted in the U.S. Lastly, he confirmed that the portfolio remained in compliance with its guidelines.

B. <u>Fixed Income Strategies</u>

Mr. Shearer presented the *Fixed Income Strategies Review*, included on pages 17-29 in the meeting materials. He reviewed the positioning of the portfolios, noting that the small yield-curve steepener remains on and the portfolios overall are slightly long beta, with increased tracking error quarter-over-quarter for three of the portfolios. With respect to the performance of the benchmarks in Q1 2026, he noted that mortgage-backed securities ("MBS") performed well while credit underperformed.

Mr. Shearer then provided commentary on the fixed income markets generally, stating that **(a)** market pricing of expected cumulative Federal Reserve interest rate cuts over the next twelve months moved sharply from 65 bps of cuts expected at the end of February to 15 bps of hikes by the end of March, **(b)** U.S. Treasuries rallied in February but sold off in March, with U.S. Treasury yields and the yield curve shifting in response to geopolitical events and the price of oil, **(c)** MBS nominal spreads widened in connection with rates volatility from the war, and **(d)** higher-tier consumer credit remains strong and securitized non-prime and subprime consumer credit also continue to perform well. Lastly, he confirmed that the portfolios were in compliance with their guidelines in Q1 2026.

C. Small Cap Strategy

Joy Mukherjee, Senior Portfolio Manager–U.S. Small Cap Strategy, presented the *U.S. Small Cap Strategy Review*, included on pages 30-38 in the meeting materials. He noted that the portfolio underperformed its benchmark by 136 bps in Q1 2026 but maintained positive excess returns for the three- and five-year periods. Mr. Mukherjee then provided public equity market commentary for Q1 2026, noting that **(a)** small-cap equities entered the year with strong momentum relative to large-cap equities, and small-cap equities outperformed large cap on a relative basis in the first quarter despite disruptions from geopolitical events, **(b)** the performance gap between the MSCI small-cap index and the Russell 2000 in Q1 2026 was largely driven by the inclusion of SanDisk in the MSCI small-cap index and its increasing weight in that index, and **(c)** the energy sector significantly outperformed in the first quarter, while the average small-cap manager was underweight energy. He noted that the average core small-cap manager underperformed in Q1 2026, with only 43% beating their benchmark, largely driven by a structural underweight to energy.

Mr. Mukherjee then reviewed the small-cap portfolio's first quarter performance, noting that the outperformance from micro-cap stocks negatively impacted the portfolio. Lastly, he **(i)** provided sector commentary for the portfolio, noting that industrials was the top performing sector, led by aerospace and defense, while financials and information technology were the biggest detractors, and **(ii)** confirmed that the portfolio remained in compliance with its guidelines.

4. Convene in Closed Session

Motion: A motion to go into closed session as authorized pursuant to sections 19.85(1)(e) and 19.36(5) of the Wisconsin Statutes to consider confidential strategies for the investment of public funds, including **(a)** the review of active risk profiles and positioning of portfolio investments and the Core and Variable Trust Funds, **(b)** the review of specific proprietary investment strategies and investment instruments related to global public market strategies, multi-strat, fixed income, small cap equities, private markets and funds alpha, and exposure management, and **(c)** discussion of the impact of recent events on portfolio positioning, was made by Mr. Shearer and seconded by Ms. Ruiz.

Mr. Denson called for a roll call vote.

Denson-Aye	Chandler-Aye	Mattina-Aye	Shearer-Aye
Bloom-Aye	Drummond-Aye	Lucas-Aye	Nair-Aye
Nicholson-Aye	Rector-Aye	Ruiz-Aye	

There being eleven ayes and no nays, Mr. Denson declared the motion passed. The Committee convened in closed session at 1:15 p.m. and reconvened in open session at 2:31 pm.

5. Announcement of Committee Actions Relating to Items Taken Up in Closed Session

Mr. Denson announced that, while in closed session, the Committee **(i)** reviewed active risk profiles and positioning of portfolio investments and the Core and Variable Trust Funds, **(ii)** reviewed specific proprietary investment strategies and investment instruments related to global public market strategies, multi-strat, fixed income, small cap equities, private markets and funds alpha, and exposure management, and **(iii)** discussed the impact of recent events on portfolio positioning.

6. Private Markets & Funds Alpha Division Performance Update

Scott Parrish, Head of Private Equity, reminded the Committee that benchmark returns for the private equity and current return portfolios were not yet available when Q1 2026 quarterly updates were provided at the prior Committee meeting. He then presented a performance update for the private equity and current return portfolios, included on pages 143-145 in the meeting materials, highlighting that **(a)** the private equity portfolio outperformed its benchmark by 43 bps in Q1 2026, led by performance from small- and mid-buyout managers, and **(b)** the current return portfolio outperformed its benchmark by 30 bps in the quarter, driven by managers capitalizing on opportunities from dislocations in the market. Lastly, he answered questions about each portfolio's exposure to the information technology sector relative to its benchmark.

7. Soft Risk Parameters

Hassan Chehime, Head of Risk Management, noted that the report *Soft Risk Parameters–Asset Class and Portfolio*, as of April 30, 2026, was included on pages 146-147 in the meeting materials for the Committee's review. He noted that there were no new discussion triggers this month and that no discussion triggers had been dropped.

8. Future Meeting Topics

Mr. Denson noted that draft agendas for the June 23, 2026, and July 28, 2026, Committee meetings were included on pages 148-151 in the meeting materials for the Committee's review.

9. Adjournment

Motion: A motion to adjourn the meeting was made by Mr. Shearer and seconded by Ms. Chandler. The motion passed unanimously, and the meeting adjourned at 2:34 p.m.

Date of Committee Approval: 06/23/26

Signed: */s/ Eric Barber*
Eric Barber, Secretary
Investment Committee

STATE OF WISCONSIN INVESTMENT BOARD
Investment Committee Meeting–Open Session

Tuesday, June 23, 2026

Offices of the Investment Board
4703 Madison Yards Way, Madison, Wisconsin

Committee Members Present:

Edwin Denson, Executive Director/Chief Investment Officer (Chair)
Sara Chandler, Interim Head of PMFA and Chief of Staff & Strategy
Todd Mattina, Head Economist & Asset and Risk Allocation Chief Investment Officer
Mike Shearer, Head of Fixed Income Strategies
Nick Stanton, Head of Liquidity Management and Beta Implementation
Derek Bloom, Senior Portfolio Manager–Asset & Risk Allocation
Derek Drummond, Head of Funds Alpha
Jeff Lucas, Senior Portfolio Manager–Fixed Income Strategies
Sunil Nair, Portfolio Manager–Liquidity Management and Beta Implementation
Chase Nicholson, Senior Portfolio Manager–Multi-Asset Strategies
Jason Rector, Senior Portfolio Manager–Funds Alpha
Andrea Ruiz, Senior Portfolio Manager–Liquidity, Inflation & Rates Management

Eric Barber, Chief Legal Counsel (non-voting)
Hassan Chehime, Head of Risk Management (non-voting)
Rochelle Klaskin, Deputy Executive Director/Chief Operating Officer (non-voting)

Also in Attendance:

Chelsey Barczak, GPMS Business Director
Kevin Blank, Senior Analyst–Funds Alpha
Brandon Brickner, Head of Internal Audit
Adam Brown, Senior Analyst–Asset & Risk Allocation
Sam Brown, Portfolio Engineer–Liquidity Management and Beta Implementation
Kate Burkart-Paulson, Senior Legal Counsel
John Burkhartzmeyer, Senior Trader
Bridget Chen, Portfolio Manager–MBS
Christian Comito, Senior Portfolio Manager–MBS
Jack Drew, Trader–High Yield and Leveraged Loans
Trey Edgerle, Compliance Analyst
Greg Fletcher, Performance Director
Mark Haak, Senior Portfolio Manager–High Yield and Leveraged Loans
Sean Hamner, Legal Counsel
Alex Hansen, Investment Operations Analyst
Logan Hash, Investment Associate–Funds Alpha
Tori Hassler, Internal Auditor
Vince Janecky, Internal Audit Manager
Ryan Johnston, Senior Analyst–Funds Alpha
Salah Khalaf, Senior Portfolio Engineer–Private Markets & Funds Alpha

Dylan Krivoshein, Investment Operations Analyst
Jason Krueger, Compliance Analyst
Lisa Lange, Director of Compliance & Senior Legal Counsel
Alex Li, Senior Analyst–Asset & Risk Allocation
Shan Lo, Senior Portfolio Manager–Multi-Asset Strategies
Jon Loboda, Performance Measurement Operations Manager
Bill Luetzow, Senior Legal Counsel
Charles Maloney, Trader
Michael Mandarino, Senior Analyst–High Yield and Leveraged Loans
Ed Martinez, PMFA Business Director
Megan Moede, Trader
Nick Mokha, Portfolio Manager–High Yield and Leveraged Loans
Scott Nichols, Head of Trading
Sarah Noronha, Senior Portfolio Manager–U.S. Small Cap Strategy
Matt Notzon, Performance Analyst
Hunter Olson, Analyst–High Yield and Leveraged Loans
Cefe Quesada, Chief Technology Officer
Anand Rakesh, Director of Risk Analytics & Financial Engineering Systems
Vishnu Reddy, Senior Trader–MBS
Robby Richlen, Analyst–Funds Alpha
Joe Roth, Transition Management and Portfolio Support Manager
Michelle Rudman, Senior Analyst–Liquidity, Inflation & Rates Management
Sam Shibilski, Investment Operations Analyst
Hannibal Smith, Operational Risk Analyst
Mike Stamm, Portfolio Manager–Financing & Collateral Management
Mark Stockley, Senior Trader–High Yield and Leveraged Loans
Lyle Tang, Quantitative Analyst–Asset & Risk Allocation
Mark Taylor, Senior Portfolio Manager–Quantitative Research
Matt Terpstra, Operational Risk Manager
Rob Thornton, ARA Business Director
Dawn Tuescher, Executive Administrative Assistant
Ivy Zhang, Senior Portfolio Manager–Asset & Risk Allocation
Sarah Zhao, Investment Operations Analyst
Jack Klaus, ETF–Intern
Joe Nankof, NEPC
(Some individuals may have attended only portions of the meeting.)

OPEN SESSION

With a quorum present, Edwin Denson, Chair of the Investment Committee, called the meeting to order at 1:00 p.m.

1. Approval of the Minutes

Mr. Denson asked if there were any comments on either the open or closed session minutes of the May 26, 2026, Investment Committee ("Committee") meeting. Hearing no comments, Mr. Denson stated that the Committee could approve both the open and closed session minutes in open session.

Motion: A motion was made by Mr. Nicholson and seconded by Ms. Ruiz to approve both the open session and the closed session minutes of May 26, 2026, as presented. The motion passed unanimously.

2. LMBI Division Update

Nick Stanton, Head of Liquidity Management and Beta Implementation, presented the *Liquidity Management and Beta Implementation (LMBI)* quarterly update, included on pages 10-15 in the meeting materials. He provided an overview of the division's infrastructure scorecard projects, including the review and revision of the framework for calculating the fleet rate/cost of implementation leverage ("COIL"). Sunil Nair, Portfolio Manager–Liquidity Management and Beta Implementation ("LMBI"), then discussed in detail the division's progress on **(i)** liquidity forecasting, **(ii)** the leverage framework, and **(iii)** LMBI's role as a clearinghouse to facilitate the exchange of cash and collateral subject to applicable constraints. Lastly, Sam Brown, Portfolio Engineer–LMBI, discussed the division's technological infrastructure accomplishments.

3. Q1 2026 Quarterly Updates

A. LIRM

Andrea Ruiz, Senior Portfolio Manager–Liquidity, Inflation & Rates Management, presented the *Investment Strategies: Liquidity, Inflation, and Rates Management* quarterly update, included on pages 16-20 in the meeting materials. With respect to the market, she noted that **(a)** money market fund net assets continued to rise during Q1 2026 and reached a new all-time high, **(b)** U.S. Treasury bills outstanding remained elevated during Q1 2026, and **(c)** the overnight reverse repurchase agreement balance remains low and is expected to stay low due to the increase in U.S. Treasury bill issuance. Ms. Ruiz then reviewed performance for the State Investment Fund ("SIF"), noting that the SIF returned positive absolute and relative performance for the year-to-date, one-, three- and five-year periods, and she confirmed that the portfolio remained in compliance with its guidelines.

4. Transition Update (Q1 2026)

Joe Roth, Transition Management and Portfolio Support Manager, presented the *Transition Management Summary, Q1 2026*, included on page 21 in the meeting materials, and reviewed the two transition events during the first quarter. Both transitions effectuated active-to-passive rebalances of small cap assets, with the first transition of U.S. assets managed internally and the second transition of international assets managed by BlackRock. He highlighted that both of the transitions cost less than expected.

5. Convene in Closed Session

Motion: A motion to go into closed session as authorized pursuant to sections 19.85(1)(e) and 19.36(5) of the Wisconsin Statutes to consider confidential strategies for the investment of public funds, including **(i)** the review of active risk profiles and positioning of portfolio investments and the Core and Variable Trust Funds, **(ii)** the review of specific proprietary investment strategies and investment instruments related to liquidity management and beta implementation, LIRM, and exposure management, **(iii)** the review of broker information, and **(iv)** discussion of the impact of recent events on portfolio positioning, was made by Mr. Drummond and seconded by Mr. Nair.

Mr. Denson called for a roll call vote.

Denson-Aye	Chandler-Aye	Mattina-Aye	Shearer-Aye
Stanton-Aye	Bloom-Aye	Drummond-Aye	Lucas-Aye
Nair-Aye	Nicholson-Aye	Rector-Aye	Ruiz-Aye

There being twelve ayes and no nays, Mr. Denson declared the motion passed. The Committee convened in closed session at 1:19 p.m. and reconvened in open session at 2:27 p.m.

6. <u>Announcement of Committee Actions Relating to Items Taken Up in Closed Session</u>

Mr. Denson announced that, while in closed session, the Committee **(i)** reviewed active risk profiles and positioning of portfolio investments and the Core and Variable Trust Funds, **(ii)** reviewed specific proprietary investment strategies and investment instruments related to liquidity management and beta implementation, LIRM, and exposure management, **(iii)** reviewed broker information, and **(iv)** discussed of the impact of recent events on portfolio positioning.

7. <u>Research Task Force Report</u>

A. <u>June Investment Forum Debrief</u>

Mr. Stanton presented the *Research Task Force Update*, which was a recap of the June Investment Forum. He reported that the June Investment Forum was held this year as part of the June Board meeting and that the format changed from prior years to allow for more direct engagement with the Trustees and attendees. The two in-person speakers discussed the global macro outlook and recent academic research on issues impacting pension plans, respectively.

8. <u>Quarterly Performance Review (Q1 2026)</u>

Mr. Denson noted that the *Investment Performance Report*, as of March 31, 2026, was included on pages 105-137 in the meeting materials for the Committee's information.

9. <u>Soft Risk Parameters</u>

Hassan Chehime, Head of Risk Management, noted that the report *Soft Risk Parameters–Asset Class and Portfolio*, as of May 29, 2026, was included on pages 138-139 in the meeting materials for the Committee's review. He noted that no discussion triggers had been dropped and that there were three new discussion triggers this month relating to the fixed income portfolios' use of centrally arranged leverage and the multi-strat portfolio's ex ante spread equivalent exposure beta and ex ante rate equivalent exposure beta.

10. Future Meeting Topics

Mr. Denson noted that draft agendas for the July 28, 2026, and August 25, 2026, Committee meetings were included on pages 140-143 in the meeting materials for the Committee's review.

11. Adjournment

Motion: A motion to adjourn the meeting was made by Mr. Shearer and seconded by Ms. Chandler. The motion passed unanimously, and the meeting adjourned at 2:33 p.m.

Date of Committee Approval: 07/28/26

Signed: */s/ Eric Barber*
Eric Barber, Secretary
Investment Committee

STATE OF WISCONSIN INVESTMENT BOARD
Investment Committee Meeting–Open Session

Tuesday, July 28, 2026

Offices of the Investment Board
4703 Madison Yards Way, Madison, Wisconsin

Committee Members Present:

Edwin Denson, Executive Director/Chief Investment Officer (Chair)
Sara Chandler, Interim Head of PMFA and Chief of Staff & Strategy
Todd Mattina, Head Economist & Asset and Risk Allocation Chief Investment Officer
Mike Shearer, Head of Fixed Income Strategies
Nick Stanton, Head of Liquidity Management and Beta Implementation
Derek Bloom, Senior Portfolio Manager–Asset & Risk Allocation
Derek Drummond, Head of Funds Alpha
Jeff Lucas, Senior Portfolio Manager–Fixed Income Strategies
Sunil Nair, Portfolio Manager–Liquidity Management and Beta Implementation
Chase Nicholson, Senior Portfolio Manager–Multi-Asset Strategies
Jason Rector, Senior Portfolio Manager–Funds Alpha
Andrea Ruiz, Senior Portfolio Manager–Liquidity, Inflation & Rates Management

Eric Barber, Chief Legal Counsel (non-voting)
Hassan Chehime, Head of Risk Management (non-voting)
Rochelle Klaskin, Deputy Executive Director/Chief Operating Officer

Also in Attendance:

J. Michael Collins, Trustee
Kevin Blank, Senior Analyst–Funds Alpha
Brandon Brickner, Head of Internal Audit
Adam Brown, Senior Analyst–Asset & Risk Allocation
Kate Burkart-Paulson, Senior Legal Counsel
John Burkhartzmeyer, Senior Trader
Bridget Chen, Portfolio Manager–MBS
Christian Comito, Senior Portfolio Manager–MBS
Tunc Dayioglu, Senior Portfolio Manager–Funds Alpha
Jack Drew, Trader–High Yield and Leveraged Loans
Trey Edgerle, Compliance Analyst
Matt Engelhardt, Internal Audit Manager
Greg Fletcher, Performance Director
Megan Gall, Investment Operations Analyst
Jameson Greenfield, Chief Financial Officer
Thomas Gregg, PMFA Operations Manager
Dan Gyorog, Internal Auditor
Mark Haak, Senior Portfolio Manager–High Yield and Leveraged Loans
Syed Haider, Quantitative Analyst–Multi-Asset Strategies
Sean Hamner, Legal Counsel
Alex Hansen, Investment Operations Analyst

Logan Hash, Investment Associate–Funds Alpha
Tori Hassler, Internal Auditor
Vince Janecky, Internal Audit Manager
Ryan Johnston, Senior Analyst–Funds Alpha
Salah Khalaf, Senior Portfolio Engineer–Private Markets & Funds Alpha
Jason Kowalke, PMFA Operations Manager
Dylan Krivoshein, Investment Operations Analyst
Jason Krueger, Compliance Analyst
Alex Kubiak, Investment Operations Analyst
Katie Kuryla, Senior Paralegal/Records Specialist
Alex Li, Senior Analyst–Asset & Risk Allocation
Diane Linn, Senior Portfolio Manager–Multi-Asset Strategies
Jon Loboda, Performance Measurement Operations Manager
Bill Luetzow, Senior Legal Counsel
Charles Maloney, Trader
Matt Marek, Portfolio Engineer–Asset & Risk Allocation
Lin Maung, Senior Portfolio Manager–Private Equity
Frank Mazzucco, Senior Legal Counsel
Megan Moede, Trader
Scott Nichols, Head of Trading
Matt Notzon, Performance Analyst
Sadi Ozelge, Senior Portfolio Manager–Multi-Asset Strategies
Scott Parrish, Head of Private Equity
Chris Prestigiacomo, Head of Private Debt & Venture Capital
Cefe Quesada, Chief Technology Officer
Anand Rakesh, Director of Risk Analytics & Financial Engineering Systems
Vishnu Reddy, Senior Trader–MBS
Robby Richlen, Analyst–Funds Alpha
Jay Risch, Communications Manager and Government Relations Liaison
Jason Rothenberg, Head of Real Estate
Dan Schally, Senior Analyst–Real Estate
Harsh Shah, Investment Operations Analyst
Sam Shibilski, Investment Operations Analyst
Hannibal Smith, Operational Risk Analyst
Gabriel Souza, Investment Operations Analyst
Mike Stamm, Portfolio Manager–Financing & Collateral Management
Lyle Tang, Quantitative Analyst–Asset & Risk Allocation
Mark Taylor, Senior Portfolio Manager–Quantitative Research
Matt Terpstra, Operational Risk Manager
Rob Thornton, ARA Business Director
Dawn Tuescher, Executive Administrative Assistant
Jim Vander Meer, Senior Portfolio Manager–Private Debt & Venture Capital
Barrett Wiencek, Senior Analyst–Private Debt & Venture Capital
Ned Willig, Legal Counsel
Kirk Wolff, Portfolio Manager–Private Equity

Ping Wong, Portfolio Manager–Liquidity, Inflation & Rates Management
Feng Zhao, Senior Portfolio Manager–Multi-Asset Strategies
Sarah Zhao, Investment Operations Analyst
(Some individuals may have attended only portions of the meeting.)

OPEN SESSION

With a quorum present, Edwin Denson, Chair of the Investment Committee, called the meeting to order at 1:00 p.m.

1. Approval of the Minutes

Mr. Denson asked if there were any comments on either the open or closed session minutes of the June 23, 2026, Investment Committee ("Committee") meeting. Hearing no comments, Mr. Denson stated that the Committee could approve both the open and closed session minutes in open session.

Motion: A motion was made by Mr. Shearer and seconded by Ms. Ruiz to approve both the open session and the closed session minutes of June 23, 2026, as presented. The motion passed unanimously.

2. Private Markets & Funds Alpha Division Update

Sara Chandler, Interim Head of Private Markets & Funds Alpha ("PMFA") and Chief of Staff & Strategy, presented the *Private Markets & Funds Alpha Division Update*. She discussed the division's investment pacing for the second quarter along with economic factors affecting the PMFA division, including the impact of artificial intelligence ("AI") and recent volatile markets. She also highlighted the team's ongoing discussions with the Liquid Management and Beta Implementation("LMBI") division regarding liquidity and financing.

3. Q2 2026 Quarterly Updates

A. Funds Alpha

Derek Drummond, Head of Funds Alpha, presented the *Funds Alpha Q2 2026 Update*, included on pages 9-15 in the meeting materials. He highlighted that the hedge fund and beta one portfolios all generated positive excess value added ("EVA") for the second quarter and year to date. With respect to second quarter performance, he commented that **(a)** in the beta one fixed income portfolio, emerging market debt outperformed while U.S. credit had mixed performance, **(b)** the beta one equity portfolio had positive idiosyncratic returns and managers tactically reduced exposure to AI-related investments, and **(c)** in the hedge funds portfolio, underperforming commodities and rates trades from Q1 2026 reverted to the mean and multi-strategy managers performed particularly well.

Mr. Drummond then provided an update on portfolio positioning and the market environment, noting that **(i)** in beta one equities, the portfolio's active exposure to quality increased, while beta one fixed income remained underweight beta, and **(ii)** the focus on AI and related themes continued in the second quarter. Lastly, he confirmed that all portfolios were in compliance with their guidelines for Q2 2026.

B. Private Equity & Current Return

Scott Parrish, Head of Private Equity, presented the *Quarterly Activity Report – Private Equity*, included on pages 16-43 in the meeting materials. He provided a private equity market update for Q2 2026, noting that **(a)** U.S. private equity fundraising dollars and the number of new funds increased in the first half of 2026 relative to the first half of 2025, with more smaller funds raised this year, **(b)** approximately half of the available dry powder is from vintage year 2024 and 2025 funds, with limited capital available to support portfolio companies in pre-2022 vintage year funds, **(c)** purchase price and leverage multiples are at their highest levels since 2021 and 2022, respectively, **(d)** deal and exit values dropped in the second quarter following a robust first quarter, and **(e)** the number of portfolio company exits was split 40% to strategic acquisitions, 30% to sponsor-to-sponsor transactions, and 30% to IPO activity.

Mr. Parrish then reported that, as of June 30, 2026, the market value of the private equity and current return portfolios, excluding the venture capital and private debt portfolios, was approximately $23.3 billion and made up 15.8% of the Core Trust Fund ("CTF"). He commented that the portfolio is continuing to see good distributions and was cash-flow positive for the year to date.

With respect to performance, Mr. Parrish highlighted that, as of March 31, 2026, **(i)** the private equity portfolio achieved first quartile performance for vintage years 2023-2025, and outperformed its benchmark for the three- and five-year time periods despite relative underperformance for the one-year period, and **(ii)** the current return portfolio achieved first quartile performance for seven of the past twelve vintage years, and outperformed its benchmark for the one-, three- and five-year time periods. He noted that **(a)** the main contributors to second-quarter performance in the private equity portfolio were small- and mid-buyout sub-strategies, while large, distressed/turnaround, growth, and mega sub-strategies detracted, and **(b)** in the current return portfolio, structured and opportunistic sub-strategies were the largest contributors for the quarter, while secondaries and distressed debt were the biggest detractors.

He then **(i)** discussed the portfolios' sub-asset class diversification, **(ii)** noted that public company exposure remained limited, and **(iii)** answered questions regarding subscription lines and the geographic diversification of the current return portfolio. Lastly, Mr. Parrish reviewed the commitments made in Q2 2026, discussed the pipeline for the third quarter, and confirmed that the portfolio remained in compliance with all investment guidelines.

C. Private Debt

Chris Prestigiacomo, Head of Private Debt & Venture Capital, presented the *Private Debt Portfolio Investment Committee Quarterly Report*, included on pages 44-58 in the meeting materials. He provided a private debt market update, noting that **(a)** loan origination declined quarter over quarter by 40%, to the lowest level since Q2 2023, **(b)** private debt deal count, sponsor-backed lending and buyout activity all fell to multi-year lows, **(c)** within Fitch's privately monitored rating portfolio of direct loans to mid-market companies, default rates have risen steadily over the past five years, reaching a record high in the second quarter,

(d) healthcare continues to be the leading sector for direct lending capital, and **(e)** the market has expanded materially since 2016 and elevated dry powder levels should support deployment.

Mr. Prestigiacomo noted that six loans paid off and five new loans were added to the portfolio during the quarter. He then reviewed the portfolio's **(i)** characteristics, noting that duration and average life were flat quarter over quarter, **(ii)** quarter-over-quarter 3% increase in below investment grade ("BIG") holdings, which now make up 13% of the portfolio, **(iii)** sector mix, which remained slightly underweight industrial relative to the benchmark, and **(iv)** originations within and outside Wisconsin, noting that the portfolio is currently split 30% to Wisconsin and 70% to non-Wisconsin loans.

With respect to performance, Mr. Prestigiacomo highlighted that the portfolio outperformed its benchmark over the one-, three-, and five-year periods. Finally, he discussed the pipeline under review, confirmed that the portfolio remained in compliance with its guidelines, and answered questions regarding default rates and the portfolio's benchmark.

D. <u>Real Estate</u>

Jason Rothenberg, Head of Real Estate, presented the *Quarterly Activity Report – Real Estate*, included on pages 59-72 in the meeting materials. He provided a market overview, noting that **(a)** transaction activity rebounded in the second half of 2025 and first quarter of 2026, with a positive outlook for the remainder of 2026 subject to interest rate and geopolitical volatility, **(b)** overall real estate returns have been mostly positive recently, primarily driven by income, **(c)** commercial real estate debt markets remain healthy, **(d)** forecasts for the next several years are optimistic as constrained supply is expected to support appreciation, and **(e)** return dispersion by sector is tightening across the major property types following five years of abnormal dispersion.

Mr. Rothenberg then reviewed the real estate portfolio, noting that the portfolio's market value of approximately $12.0 billion represented 8.1% of the CTF as of June 30, 2026, and that the portfolio is cash-flow positive for the year to date. He discussed the portfolio's exposure by property type, highlighting the team's focus on credit strategies and the decreased exposure to retail due to recent disposition opportunities. He also reviewed the portfolio's performance, noting **(i)** outperformance relative to the benchmark for the year-to-date, three-, five-, and ten-year periods with negative relative performance for the one-year period, and **(ii)** performance dispersion across property types, with strong performance from senior housing but recent underperformance from the office and diversified sub-strategies. Lastly, Mr. Rothenberg reviewed the commitments made in the second quarter, discussed the pipeline under review, and confirmed that the portfolio remained in compliance with its investment guidelines.

4. <u>Convene in Closed Session</u>

<u>Motion</u>: A motion to go into closed session as authorized pursuant to sections 19.85(1)(e) and 19.36(5) of the Wisconsin Statutes to consider confidential strategies for the investment of public funds, including **(a)** the review of active risk profiles and positioning of portfolio investments and the Core and Variable Trust Funds, **(b)** the review of specific proprietary investment strategies and investment instruments related to funds alpha, private equity, venture capital, private debt, real estate, and exposure management, and **(c)** discussion of the impact of recent events on portfolio positioning, was made by Mr. Nicholson and seconded by Ms. Ruiz.

Mr. Denson called for a roll call vote.

Denson-Aye	Chandler-Aye	Mattina-Aye	Shearer-Aye
Stanton-Aye	Bloom-Aye	Drummond-Aye	Lucas-Aye
Nair-Aye	Nicholson-Aye	Rector-Aye	Ruiz-Aye

There being twelve ayes and no nays, Mr. Denson declared the motion passed. The Committee convened in closed session at 1:37 p.m. and reconvened in open session at 3:30 p.m.

5. Announcement of Committee Actions Relating to Items Taken Up in Closed Session

Mr. Denson announced that, while in closed session, the Committee **(i)** reviewed active risk profiles and positioning of portfolio investments and the Core and Variable Trust Funds, **(ii)** reviewed specific proprietary investment strategies and investment instruments related to funds alpha, private equity, venture capital, private debt, real estate, and exposure management, and **(iii)** discussed the impact of recent events on portfolio positioning.

6. Soft Risk Parameters

Hassan Chehime, Head of Risk Management, noted that the report *Soft Risk Parameters–Asset Class and Portfolio*, as of June 30, 2026, was included on pages 164-165 in the meeting materials for the Committee's review. He noted that there were no new discussion triggers this month and that no discussion triggers had been dropped.

7. Future Meeting Topics

Mr. Denson noted that draft agendas for the August 25, 2026, and September 22, 2026, Committee meetings were included on pages 166-169 in the meeting materials for the Committee's review.

8. Adjournment

Motion: A motion to adjourn the meeting was made by Mr. Shearer and seconded by Ms. Ruiz. The motion passed unanimously, and the meeting adjourned at 3:31 p.m.

Date of Committee Approval: 08/25/26

Signed: */s/ Eric Barber*
Eric Barber, Secretary
Investment Committee

AGENDA / NOTICE

Name of Meeting: Staff Investment Committee Meeting
Date/Time: Tuesday, August 25, 2026 1:00 pm
Room: 7th Floor Conference Room - 7022
Address: 4703 Madison Yards Way, Madison, WI 53705

Est. Time Minutes	Action Item	Topic	Presenter
		OPEN SESSION	
	Motion	1. Approval of the Minutes – Open Session A. July 28, 2026	
10	Motion	2. Amendments to Investment Committee WRS Investment Guidelines	Lisa Lange
5		3. October Board Workshop Preview	Sara Chandler
5		4. Global Public Market Strategies Division Update	Mike Shearer
20		5. Q2 2026 Quarterly Updates A. Fixed Income B. Small Cap C. Multi-Strat	 Mike Shearer Jason Mirr Sarah Noronha Chase Nicholson
	Motion	**CLOSED SESSION***	
	Motion	**RECONVENE IN OPEN SESSION**	
		6. Announcement of Committee Actions Relating to Items Taken Up in Closed Session	
		7. Soft Risk Parameters (No presentation unless requested)	
		8. Future Meeting Topics	
	Motion	9. Motion to Adjourn	

* A motion to go into closed session at this meeting is authorized pursuant to sections 19.85(1)(e) and 19.36(5) of the Wisconsin Statutes (a) to consider confidential strategies for the investment of public funds, including (i) the review of active risk profiles and positioning of portfolio investments and the Core and Variable Trust Funds, (ii) the review of specific proprietary investment strategies and investment instruments related to global public market strategies, fixed income, small cap equities, multi-strat, and exposure management, and (iii) discussion of the impact of recent events on portfolio positioning, and (b) to discuss and approve prior closed session minutes that discuss the same. The Committee may convene in additional closed sessions or announce additional closed session items at the meeting in accordance with the procedure outlined in the Attorney General's Opinion reported at 66 OAG 106 (1977). Whenever a closed session is held, the committee will subsequently reconvene in open session to cover remaining agenda items.

		NOTES: Items may be taken in order other than listed. *The meeting site is physically accessible. Upon prior request, reasonable accommodations will be provided.*	

Future Meetings 9/22/26 – September Committee Mtg. 10/27/26 – October Committee Mtg. 11/24/26 – November Committee Mtg. 12/22/26 – December Committee Mtg.	**Voting Committee Members:** **Edwin Denson (Chair)**, Executive Director/Chief Investment Officer **Sara Chandler**, Interim Head of PMFA **Todd Mattina**, Head Economist, Asset & Risk Allocation–CIO **Mike Shearer**, Head of Fixed Income Strategies **Nick Stanton**, Head of Liquidity Management & Beta Implementation **Derek Bloom**, Senior Portfolio Manager–Asset & Risk Allocation **Derek Drummond**, Head of Funds Alpha **Jeff Lucas**, Senior Portfolio Manager–Fixed Income Strategies **Sunil Nair**, Portfolio Manager–Liquidity Management & Beta Implementation **Chase Nicholson**, Senior Portfolio Manager–Multi-Asset Strategies **Jason Rector**, Senior Portfolio Manager–Funds Alpha **Andrea Ruiz**, Senior Portfolio Manager–Liquidity, Inflation & Rates Management **Non-voting Committee Members:** **Rochelle Klaskin**, Deputy Executive Director/Chief Operating Officer **Eric Barber (Secretary)**, Chief Legal Counsel **Hassan Chehime**, Head of Risk Management

AGENDA / NOTICE

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Name of Meeting: Staff Investment Committee Meeting
Date/Time: Tuesday, September 22, 2026 1:00 pm
Room: 7th Floor Conference Room – 7022
Address: 4703 Madison Yards Way, Madison, WI 53705

Est. Time Minutes	Action Item	Topic	Presenter
		OPEN SESSION	
	Motion	1. Approval of the Minutes – Open Session A. August 25, 2026	
10	Motion	2. Amendments to Investment Committee WRS Investment Guidelines	Lisa Lange
10		3. LMBI Division Update	Nick Stanton
10		4. Q2 2026 Quarterly Updates A. LIRM	 Andrea Ruiz
5		5. Transition Update (Q2 2026)	Joe Roth
	Motion	**CLOSED SESSION***	
	Motion	**RECONVENE IN OPEN SESSION**	
		6. Announcement of Committee Actions Relating to Items Taken Up in Closed Session	
15		7. Separately Managed Funds Update	Bridget Chen Rob Thornton
10		8. Corporate Governance Update	Tom Robinson
5		9. Research Task Force Report	Nick Stanton
		10. Quarterly Performance Review (Q2 2026) (No presentation unless requested)	

* A motion to go into closed session at this meeting is authorized pursuant to sections 19.85(1)(e) and 19.36(5) of the Wisconsin Statutes (a) to consider confidential strategies for the investment of public funds, including (i) the review of active risk profiles and positioning of portfolio investments and the Core and Variable Trust Funds, (ii) the review of specific proprietary investment strategies and investment instruments related to liquidity management and beta implementation, LIRM, asset and risk allocation, and exposure management, (iii) the review of broker information, and (iv) discussion of the impact of recent events on portfolio positioning, and (b) to discuss and approve prior closed session minutes that discuss the same. The Committee may convene in additional closed sessions or announce additional closed session items at the meeting in accordance with the procedure outlined in the Attorney General's Opinion reported at 66 OAG 106 (1977). Whenever a closed session is held, the committee will subsequently reconvene in open session to cover remaining agenda items.

		11. Soft Risk Parameters (No presentation unless requested)	
		12. Fair Value Measurement Review of WRS Investments (No presentation unless requested)	
		13. Future Meeting Topics	
	Motion	14. Motion to Adjourn	
		NOTES: Items may be taken in order other than listed. *The meeting site is physically accessible. Upon prior request, reasonable accommodations will be provided.*	

Future Meetings 10/27/26 – October Committee Mtg. 11/24/26 – November Committee Mtg. 12/22/26 – December Committee Mtg.	**Voting Committee Members:** **Edwin Denson (Chair)**, Executive Director/Chief Investment Officer **Sara Chandler**, Interim Head of PMFA **Todd Mattina**, Head Economist, Asset & Risk Allocation–CIO **Mike Shearer**, Head of Fixed Income Strategies **Nick Stanton**, Head of Liquidity Management & Beta Implementation **Derek Bloom**, Senior Portfolio Manager–Asset & Risk Allocation **Derek Drummond**, Head of Funds Alpha **Jeff Lucas**, Senior Portfolio Manager–Fixed Income Strategies **Sunil Nair**, Portfolio Manager–Liquidity Management & Beta Implementation **Chase Nicholson**, Senior Portfolio Manager–Multi-Asset Strategies **Jason Rector**, Senior Portfolio Manager–Funds Alpha **Andrea Ruiz**, Senior Portfolio Manager–Liquidity, Inflation & Rates Management **Non-voting Committee Members:** **Rochelle Klaskin**, Deputy Executive Director/Chief Operating Officer **Eric Barber (Secretary)**, Chief Legal Counsel **Hassan Chehime**, Head of Risk Management

AGENDA / NOTICE

STATE OF WISCONSIN INVESTMENT BOARD

Name of Meeting: Staff Investment Committee Meeting
Date/Time: Tuesday, October 27, 2026 1:00 pm
Room: 7th Floor Conference Room – 7022
Address: 4703 Madison Yards Way, Madison, WI 53705

Est. Time Minutes	Action Item	Topic	Presenter
		OPEN SESSION	
	Motion	1. Approval of the Minutes – Open Session A. September 22, 2026	
15	Motion	2. Annual Benchmark Presentation	Joe Nankof, NEPC
5		3. Private Markets & Funds Alpha Division Update	Sara Chandler
45		4. Q3 2026 Quarterly Updates A. Funds Alpha B. Private Equity & Current Return C. Private Debt D. Real Estate	 Derek Drummond Scott Parrish Chris Prestigiacomo Jason Rothenberg
	Motion	**CLOSED SESSION***	
	Motion	**RECONVENE IN OPEN SESSION**	
		5. Announcement of Committee Actions Relating to Items Taken Up in Closed Session	
5		6. October Board Workshop Debrief	Todd Mattina
		7. Soft Risk Parameters (No presentation unless requested)	
		8. Future Meeting Topics	
	Motion	9. Motion to Adjourn	

* A motion to go into closed session at this meeting is authorized pursuant to sections 19.85(1)(e) and 19.36(5) of the Wisconsin Statutes (a) to consider confidential strategies for the investment of public funds, including (i) the review of active risk profiles and positioning of portfolio investments and the Core and Variable Trust Funds, (ii) the review of specific proprietary investment strategies and investment instruments related to funds alpha, private equity, venture capital, private debt, real estate, and exposure management, and (iii) discussion of the impact of recent events on portfolio positioning, and (b) to discuss and approve prior closed session minutes that discuss the same. The Committee may convene in additional closed sessions or announce additional closed session items at the meeting in accordance with the procedure outlined in the Attorney General's Opinion reported at 66 OAG 106 (1977). Whenever a closed session is held, the committee will subsequently reconvene in open session to cover remaining agenda items.

		NOTES: Items may be taken in order other than listed. *The meeting site is physically accessible. Upon prior request, reasonable accommodations will be provided.*	

Future Meetings	**Voting Committee Members:**
11/24/26 – November Committee Mtg. 12/22/26 – December Committee Mtg.	**Edwin Denson (Chair)**, Executive Director/Chief Investment Officer **Sara Chandler**, Interim Head of PMFA **Todd Mattina**, Head Economist, Asset & Risk Allocation–CIO **Mike Shearer**, Head of Fixed Income Strategies **Nick Stanton**, Head of Liquidity Management & Beta Implementation **Derek Bloom**, Senior Portfolio Manager–Asset & Risk Allocation **Derek Drummond**, Head of Funds Alpha **Jeff Lucas**, Senior Portfolio Manager–Fixed Income Strategies **Sunil Nair**, Portfolio Manager–Liquidity Management & Beta Implementation **Chase Nicholson**, Senior Portfolio Manager–Multi-Asset Strategies **Jason Rector**, Senior Portfolio Manager–Funds Alpha **Andrea Ruiz**, Senior Portfolio Manager–Liquidity, Inflation & Rates Management **Non-voting Committee Members:** **Rochelle Klaskin**, Deputy Executive Director/Chief Operating Officer **Eric Barber (Secretary)**, Chief Legal Counsel **Hassan Chehime**, Head of Risk Management

STATE OF WISCONSIN INVESTMENT BOARD
Enterprise Risk and Compliance Committee-Open Session

Thursday, May 21, 2026

Offices of the Investment Board
4703 Madison Yards Way, Madison, Wisconsin

Committee Members Present:

Lisa Lange, Director of Compliance & Senior Legal Counsel (Co-Chair)
Hassan Chehime, Head of Risk Management (Co-Chair)
Jameson Greenfield, Chief Financial Officer (Vice Chair)
Eric Barber, Chief Legal Counsel (Secretary)
Edwin Denson, Executive Director/Chief Investment Officer
Rochelle Klaskin, Deputy Executive Director/Chief Operating Officer
Todd Mattina, Head Economist, Asset & Risk Allocation CIO
Cefe Quesada, Chief Technology Officer

Brandon Brickner, Head of Internal Audit *(non-voting)*

Others Present:

Trey Edgerle, Compliance Analyst
Dan Gyorog, Internal Auditor
Tori Hassler, Internal Auditor
Vince Janecky, Internal Audit Manager
Jason Krueger, Compliance Analyst
Alyssa Moore, Compliance Analyst
Hannibal Smith, Operational Risk Analyst
Nicholas Stanton, Head of Liquidity Management and Beta Implementation
Christopher Stover, Security Engineer
Matt Terpstra, Operational Risk Manager
Dawn Tuescher, Executive Administrative Assistant
Madeline Warkins, Legal Counsel
Ted Zwieg, Security and Reliability Manager

Open Session

Lisa Lange, Co-Chair of the Enterprise Risk and Compliance Committee ("ERCC"), declared that a quorum was present and called the meeting to order at 10:02 a.m.

1. Approval of Minutes

Ms. Lange confirmed that there were no questions or comments on either the open session or closed session minutes of November 11, 2025, which were included on pages 4-6 in the meeting materials.

Motion: A motion was made by Rochelle Klaskin, Deputy Executive Director/Chief Operating Officer, and seconded by Todd Mattina, Head Economist, Asset & Risk Allocation CIO, to approve the open session and closed session minutes of November 11, 2025, as presented. The motion passed unanimously.

2. Operational Risk Management

Eric Barber, Chief Legal Counsel, introduced Matt Terpstra, the new Operational Risk Manager. Mr. Barber provided an update on the progress and anticipated operational risk priorities for the remainder of 2026, which were included on pages 7-11 in the meeting materials. Among the priorities discussed were more clearly defining the function's scope and role and developing a right-sized approach that adds value to the organization. Mr. Barber also highlighted current efforts, including engaging with internal teams and industry peers, researching best practices, establishing processes for identifying and evaluating risks and controls, and developing near-term deliverables, such as an updated business continuity planning template. Mr. Barber also answered questions from Committee members.

3. Compliance Update

Ms. Lange presented the *Compliance Update* for Q4 2025 and Q1 2026, included on pages 12-24 in the meeting materials.

A. Q4 2025

Ms. Lange reported that the fourth quarter of 2025 had a slightly higher number of personal trading requests than the prior quarter, with the approval rate slightly lower. There was one personal trading violation in the quarter, which Ms. Lange reviewed and discussed, and no guideline violations or waivers. There were no employees with late affirmations.

B. Q1 2026

Ms. Lange noted that the first quarter of 2026 had a lower number of personal trading requests than the prior quarter, with a higher approval rate. There were no personal trading violations in the quarter and no guideline violations or waivers. There were no employees with late affirmations.

Ms. Lange then provided a list of 2026 Compliance Initiatives and Projects. She highlighted the successful completion of SWIB's order management system upgrade and related compliance testing, as well as an investment guidelines audit that concluded with no recommendations. Other items included collaboration with PMFA on the Hedging Framework, investment vetting and readiness ("IVAR") new instruments and related agency initiatives, and an efficiency tool for external manager annual due diligence questionnaire review. Ms. Lange also discussed support for the account consolidation project, ongoing data initiatives, and remaining priorities for 2026.

4. ERCC Charter

Mr. Barber noted that the Committee annually reviews its Charter, which was included on pages 25-27. He outlined that the changes include (i) changing the chair of the Committee, (ii) adding the Head of Liquidity Management and Beta Implementation ("LMBI") and the Operational Risk Manager as Committee members, and (iii) making other minor clarifying changes throughout. A motion to move to recommend to the Board of Trustees that it approve the revised ERCC Charter, as presented in the meeting materials, was made by Ms. Klaskin and seconded by Mr. Barber.

5. Convene in Closed Session

Motion: A motion to go into closed session pursuant to section 19.85(1)(d) of the Wisconsin Statutes to consider confidential strategies for crime detection and prevention relating to SWIB's information technology systems and pursuant to sections 19.85(1)(e) and 19.36(5) of the Wisconsin Statutes to consider confidential strategies for the investment of public funds, including the review of proprietary credit counterparty and broker information, was made by Mr. Mattina and seconded by Ms. Klaskin.

Mr. Barber called for a roll call vote.

Barber-Aye	Chehime-Aye	Denson-Aye	Greenfield-Aye
Klaskin-Aye	Lange-Aye	Mattina-Aye	Quesada-Aye

There being eight ayes and no nays, Mr. Barber declared the motion passed. The Committee convened in closed session at 10:37 a.m. and reconvened in open session at 10:49 a.m.

6. Announcement of Matters Taken Up in Closed Session

Ms. Lange announced that, while in closed session, the Committee reviewed a Chief Technology Officer update.

7. Future Meeting Topics

No future meeting topics were discussed.

8. Adjournment

Motion: A motion to adjourn was made by Ms. Klaskin and seconded by Mr. Greenfield. The motion passed unanimously, and the ERCC meeting was adjourned at 10:50 a.m.

Date of Committee Approval: ____________________________

Signed: ____

Eric Barber, Secretary
Enterprise Risk and Compliance Committee

Board Meeting

Tab 7 – Quarterly Investment Update, Q2 2026

SWIB

Quarterly Investment Update

Board Meeting

September 9, 2026

STATE OF WISCONSIN INVESTMENT BOARD

Key Insights

- The 5-year annualized investment return through end-June 2026 fell below the 6.8% actuarial rate as strong 2021 returns began rolling out of the 5-year look-back window.

- Following a strong 14.4% Net of All (NoA) return in 2025, a negative dividend adjustment can be avoided in 2026 with an investment return of 1.8% this year.

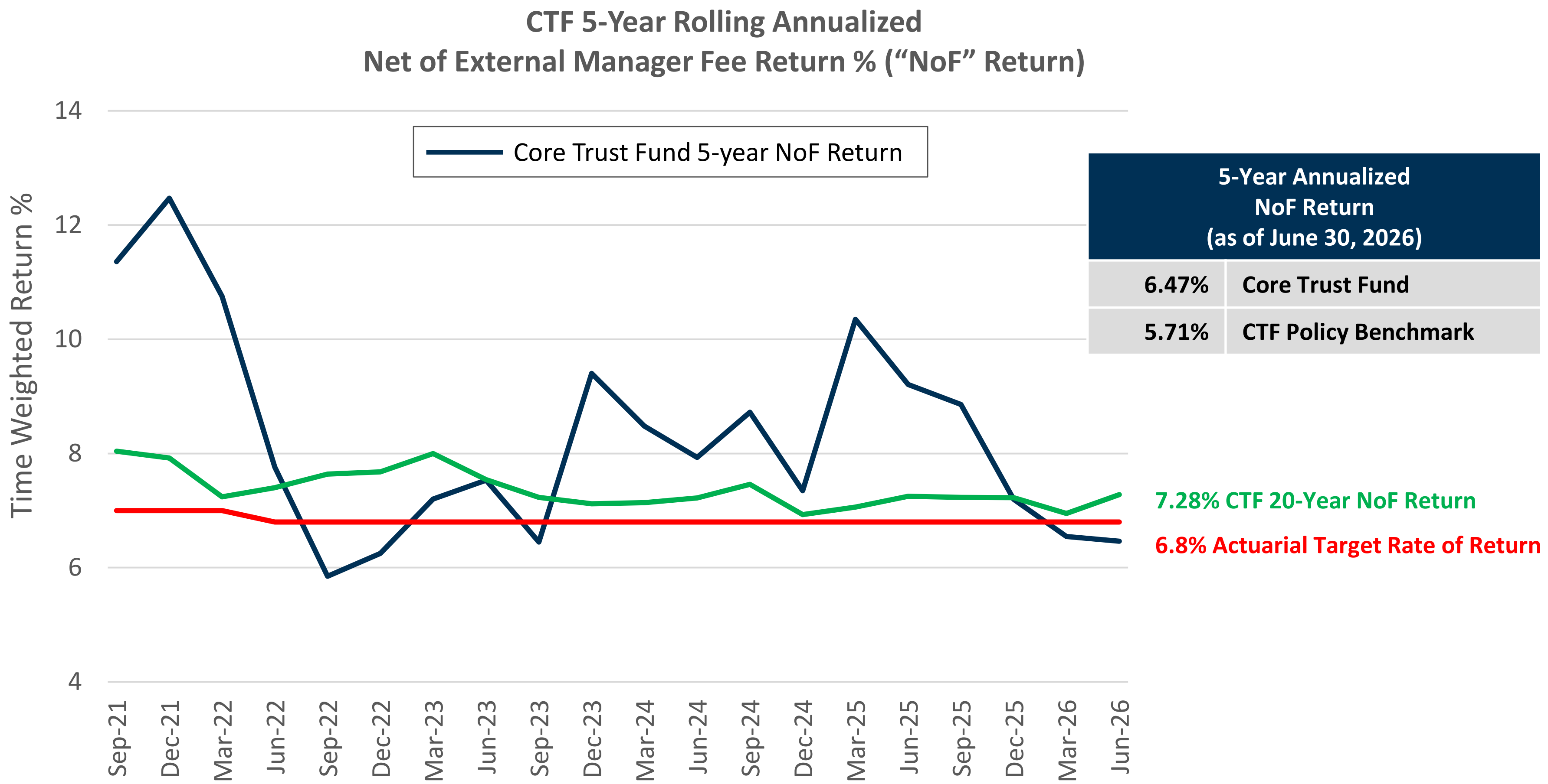
- CTF active management contributed approximately 0.76% (Net of External Manager Fees (NoF)) to the 5-year annualized portfolio return over this period.

- Resilient growth and AI productivity upside are supportive, but inflation and fiscal imbalances point to higher-for-longer rates, making the source of growth and the path of adjustment important for asset valuations:
  - Growth remains near potential and labor markets are solid, while AI-related investment may lift productivity and support future cash-flow growth.
  - At the same time, inflation remains above target and large fiscal and external deficits are increasing reliance on foreign capital, creating continued pressure on long-term rates.
  - U.S. equities appear increasingly expensive, concentrated, and extended, leaving less valuation cushion if discount rates remain elevated or earnings disappoint.
  - By contrast, higher Treasury and TIPS yields have improved the relative attractiveness of high-quality public fixed income, while the over-valued Dollar is vulnerable to shifts in capital flows and policy.

Performance Trends & Outlook

CTF 5-Year Rolling NoF Return Trend

Quarter-end Results Through June 30, 2026



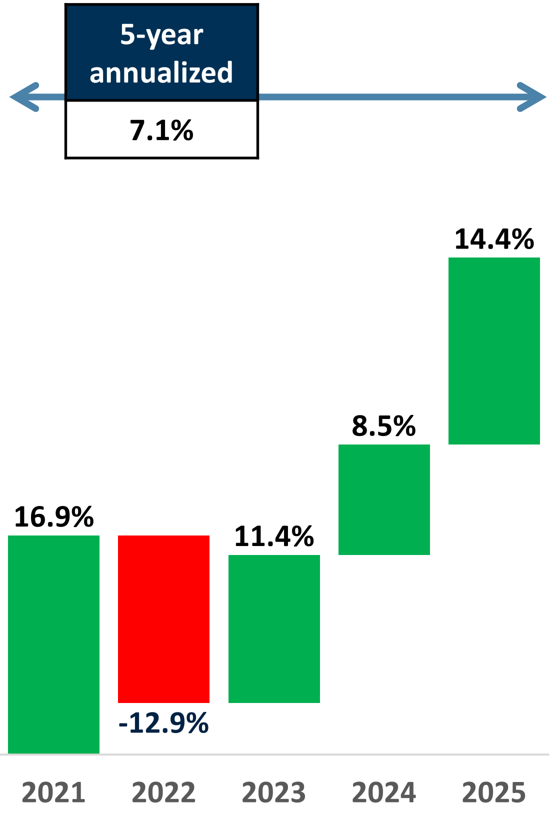
5-Year Annualized NoF Return (as of June 30, 2026)	
6.47%	Core Trust Fund
5.71%	CTF Policy Benchmark

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

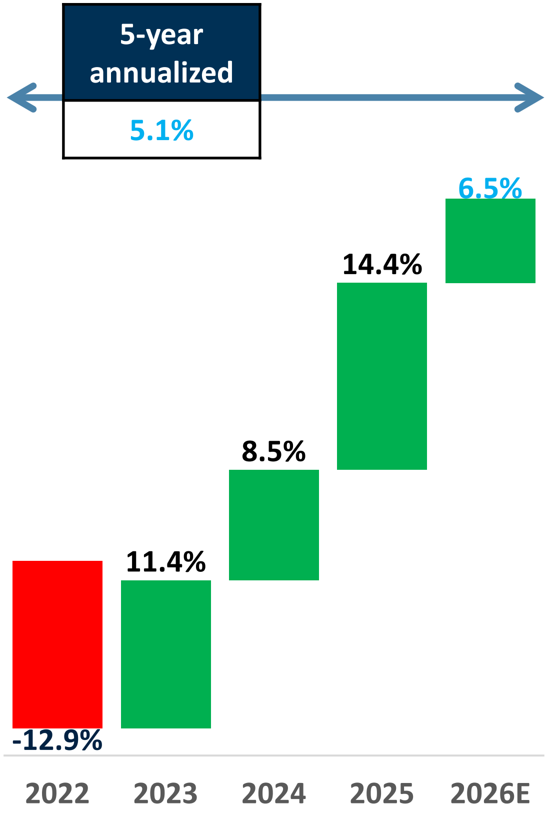
CTF 5-Year Net of All (NoA) Return Estimate

Calendar year and 5-year annualized returns

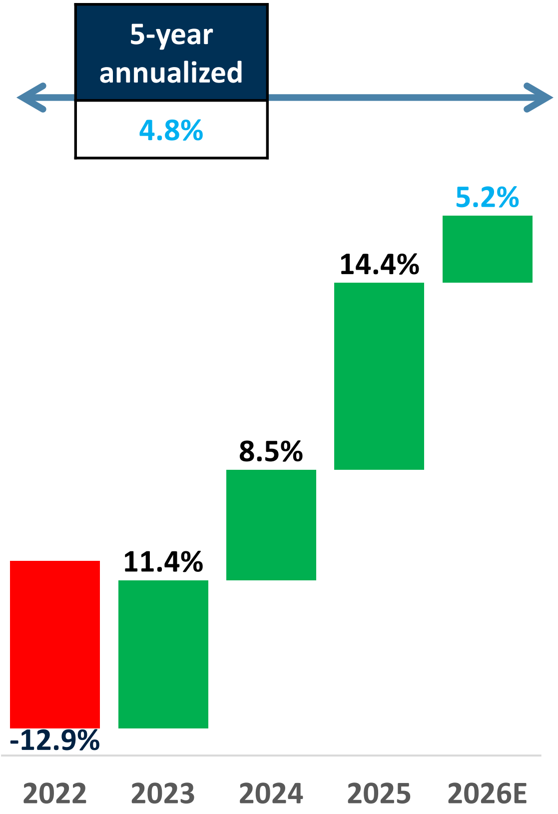
Actual CTF NoA Return



Estimated CTF NoA Return Using NEPC LT Assumption for 2026[1]



Estimated CTF NoA Return Using Prelim. July YTD Returns for 2026



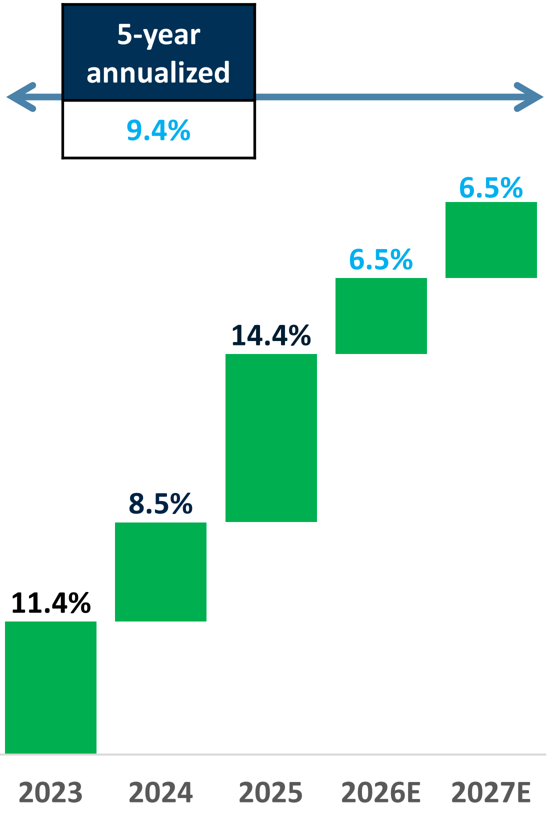
[1] 6.5% is NEPC's 10-year expected return for SWIB's 2026 policy portfolio and is used to estimate future year performance through 2029. SWIB's asset allocation process balances risk and expected return to set its asset allocation. The 10-year expected return does not always equal or exceed the WRS assumed rate of return, currently 6.8%. SWIB's actual results may be more or less than the NEPC 10-year expected return.

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

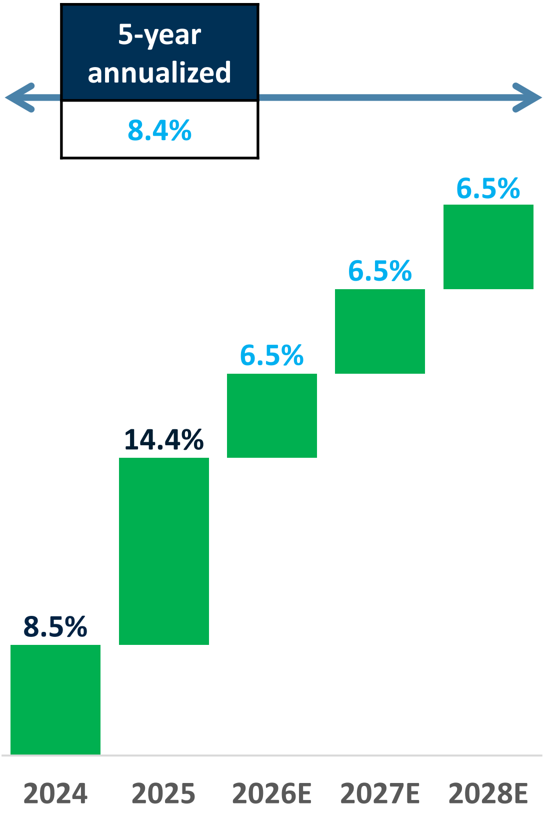
CTF 5-Year NoA Return Forward Estimate

Calendar year and 5-year annualized returns

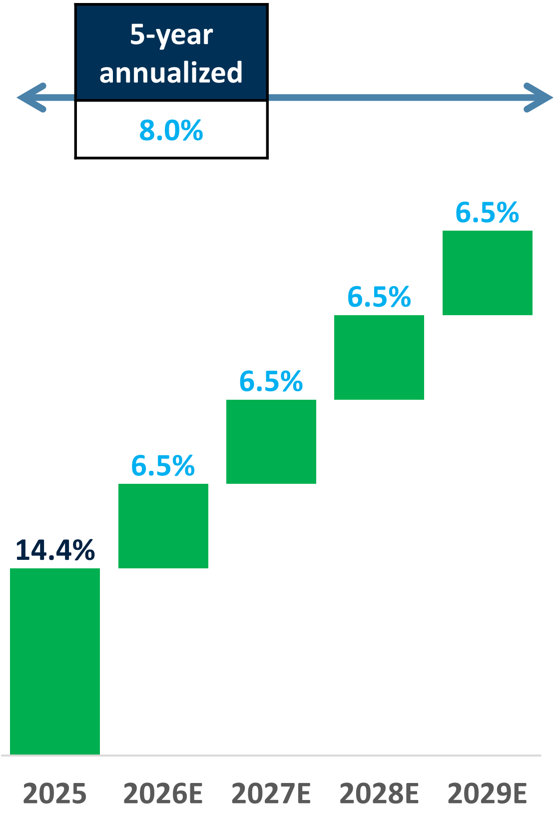
Estimated CTF NoA Return Using NEPC LT Assumption through 2027[1]



Estimated CTF NoA Return Using NEPC LT Assumption through 2028[1]



Estimated CTF NoA Return Using NEPC LT Assumption through 2029[1]

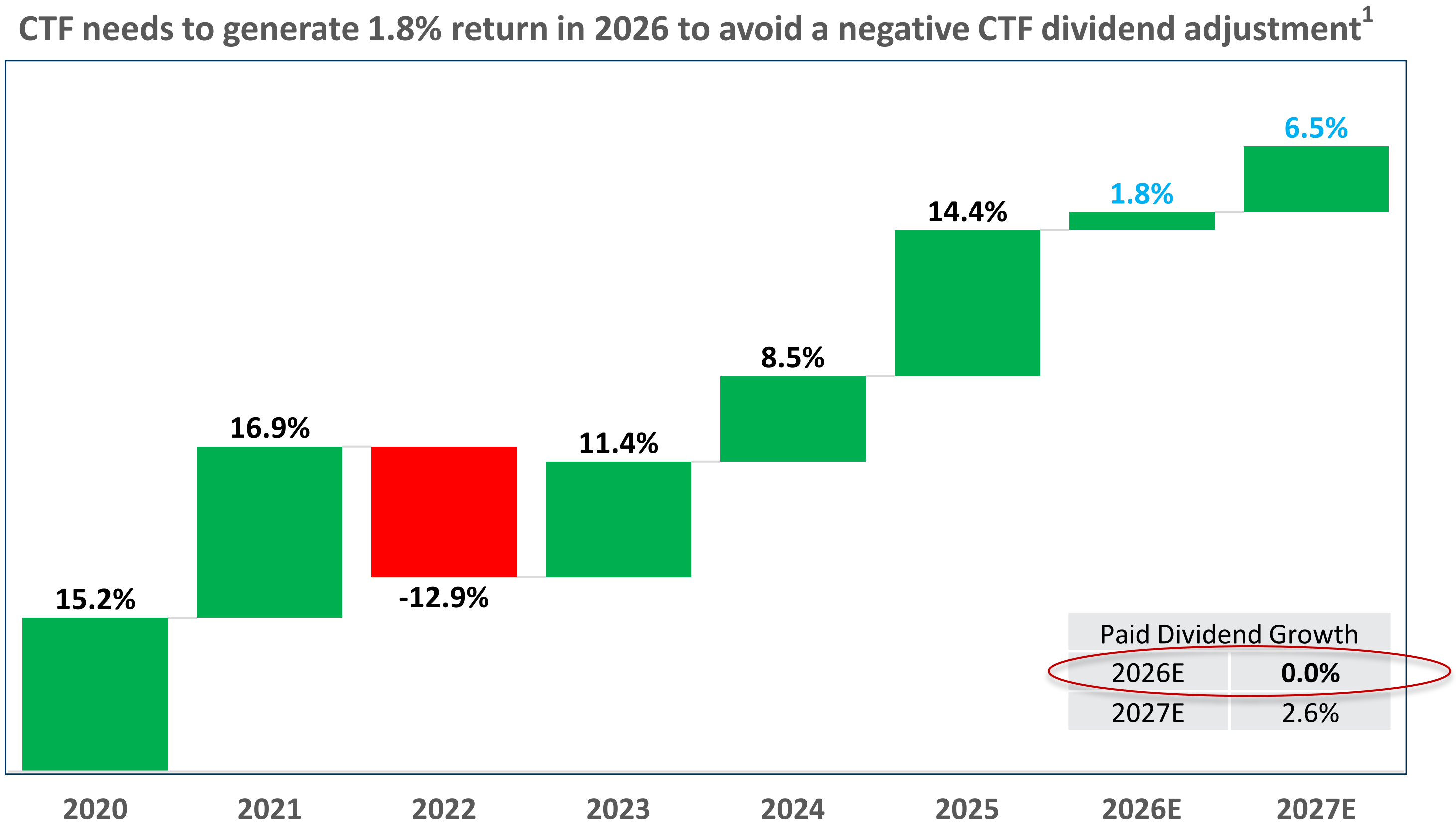


[1] 6.5% is NEPC's 10-year expected return for SWIB's 2026 policy portfolio and is used to estimate future year performance through 2029. SWIB's asset allocation process balances risk and expected return to set its asset allocation. The 10-year expected return does not always equal or exceed the WRS assumed rate of return, currently 6.8%. SWIB's actual results may be more or less than the NEPC 10-year expected return.

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Return Required for No Dividend Cut

CTF NoA Return and Paid Dividend Growth



[1] Based on ETF's calculations, calendar year return of 1.8% in 2026E is required to avoid a negative dividend adjustment. 6.5% is NEPC's 10-year expected return for SWIB's 2026 policy portfolio and is used to estimate future year performance in 2027.

STATE OF WISCONSIN INVESTMENT BOARD

CTF Policy Benchmark & Other Indices

July 31, 2026: Total Rate of Return %, Annualized					
Index Name (Gross Return Basis, unless noted)	YTD	1yr	5yr	10yr	10yr volatility
CTF Policy Benchmark (Net)	5.1	11.5	5.3	8.1	8.5
MSCI USA	10.0	19.1	12.4	15.1	15.6
MSCI USA Small Cap	17.2	28.9	8.3	11.6	20.0
MSCI World ex US Equities (Net)	11.4	25.0	9.6	9.5	15.0
MSCI World ex US Equities (Net) (Local)	12.8	25.3	11.8	10.4	11.8
MSCI EAFE Small Cap	10.1	20.3	5.9	8.7	16.9
MSCI Emerging Markets ex China	30.9	53.1	13.0		
MSCI China	(7.2)	(1.0)	(2.0)	5.0	24.0
MSCI ACWI	11.6	22.6	11.4	12.9	14.7
MSCI ACWI (Local)	12.1	22.9	12.2	13.3	13.5
Bloomberg US Gov't / Credit	(0.8)	2.2	(0.6)	1.4	5.2
ICE BOFA High Yield BB/B	1.8	5.5	3.8	20.8	6.9
Bloomberg U.S. TIPs	0.5	2.6	0.3	2.4	4.9

Source: Factset, SWIB

STATE OF WISCONSIN INVESTMENT BOARD

Economic and Market Update

“Higher-for-Longer” Rates: AI Upside, Macro Imbalances, and Asset Valuations

STATE OF WISCONSIN INVESTMENT BOARD

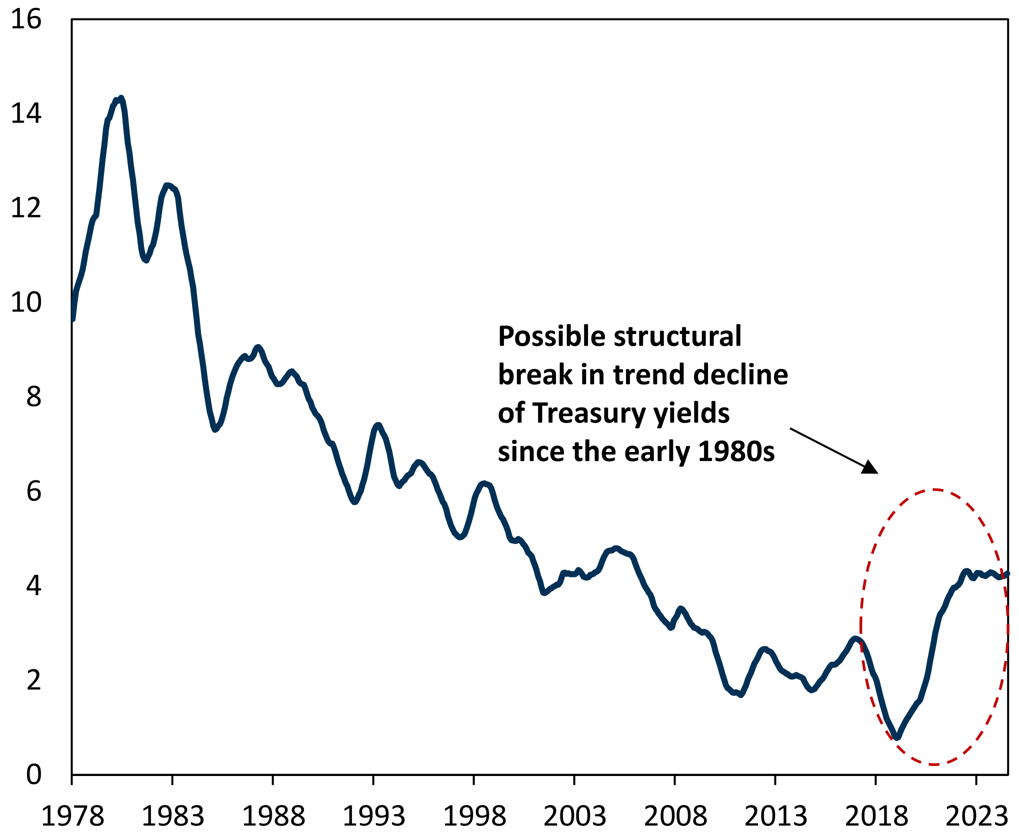
Why Rates May Stay "Higher for Longer" and Why the Drivers Matter

- **Higher rates can reflect stronger productivity or greater inflation/fiscal risk**
  - Central question is whether higher long-term interest rates are being driven primarily by stronger productivity and growth, or by inflation and fiscal risk
  - The answer has very different implications for asset valuations

- **Today's economy is solid, but structural imbalances are building**
  - Growth and labor market activity have been solid and labor productivity has picked up
  - But sticky inflation has been above target for over 5 years and rapid growth in Treasury and U.S. foreign debt is on a trajectory that cannot continue indefinitely

- **The adjustment path will affect valuations through both cash flows and discount rates**
  - Valuations move with expected changes in discount rates and cash flows
  - Macro adjustment path impacts discount rates through changes in long-term interest rates and inflation
  - AI-led productivity may drive long-term growth

Regime Change? "Higher-for-Longer" Interest Rates
(10-year Treasury)



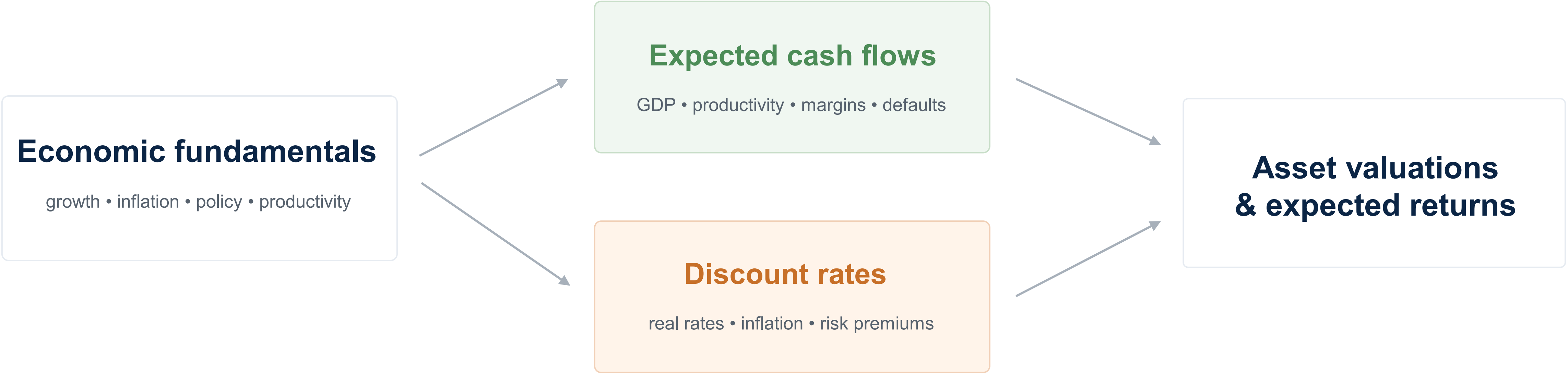
Sources: Bloomberg for market data, Bureau of Labor Statistics for CPI data. Chart plots 12-month moving averages for smoothing purposes.

SWIB STATE OF WISCONSIN INVESTMENT BOARD

The Valuation Lens: Cash Flows and Discount Rates

Macro conditions affect valuations through two channels

VALUATION FRAMEWORK:
Discounted cash flows drive fair value



The path from today's imbalances toward a more balanced economy will affect both channels.

Two Channels to Watch: Cash Flows and Discount Rates

Key issues are stronger AI-driven cash flows versus persistent pressure on discount rates

Cash-flow risks

- AI disappointment
- Margin pressure
- Energy shock
- Growth slowdown

Discount-rate risks

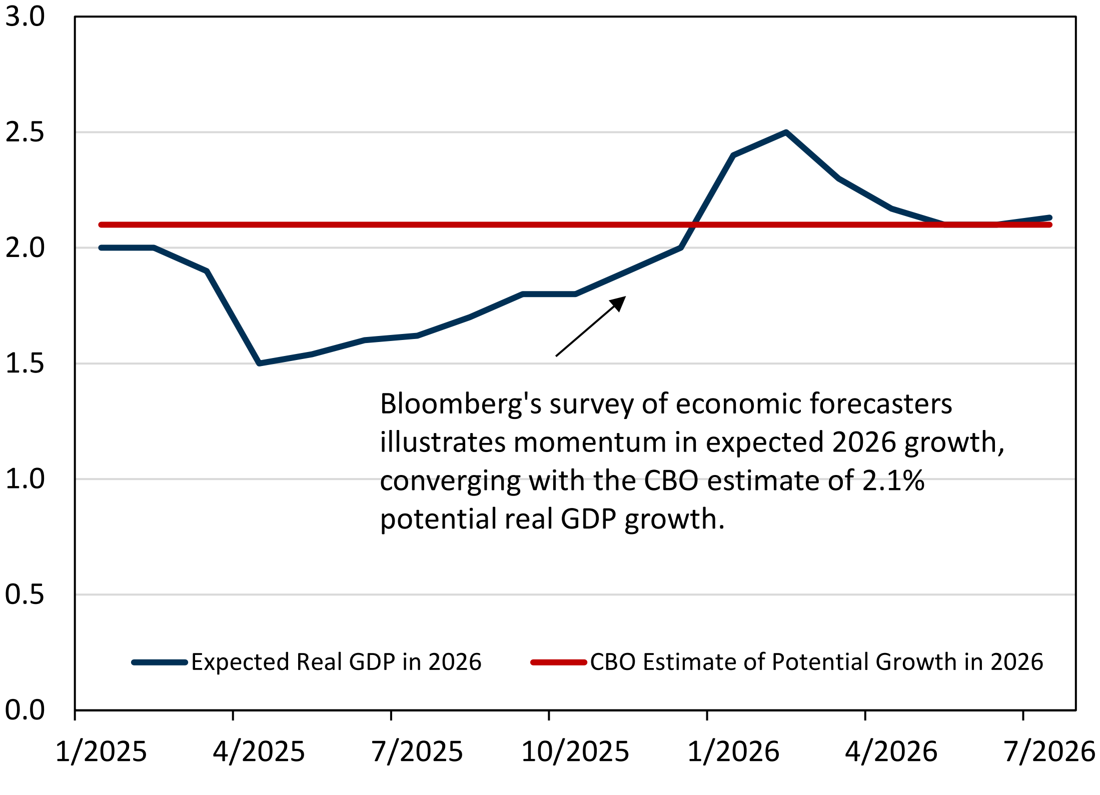
- Sticky inflation
- Fed hikes / "higher for longer"
- Term premium / fiscal risk
- Treasury market dislocation

Some shocks hit multiple channels simultaneously: energy and geopolitics can lower cash flows while raising inflation and risk premia.

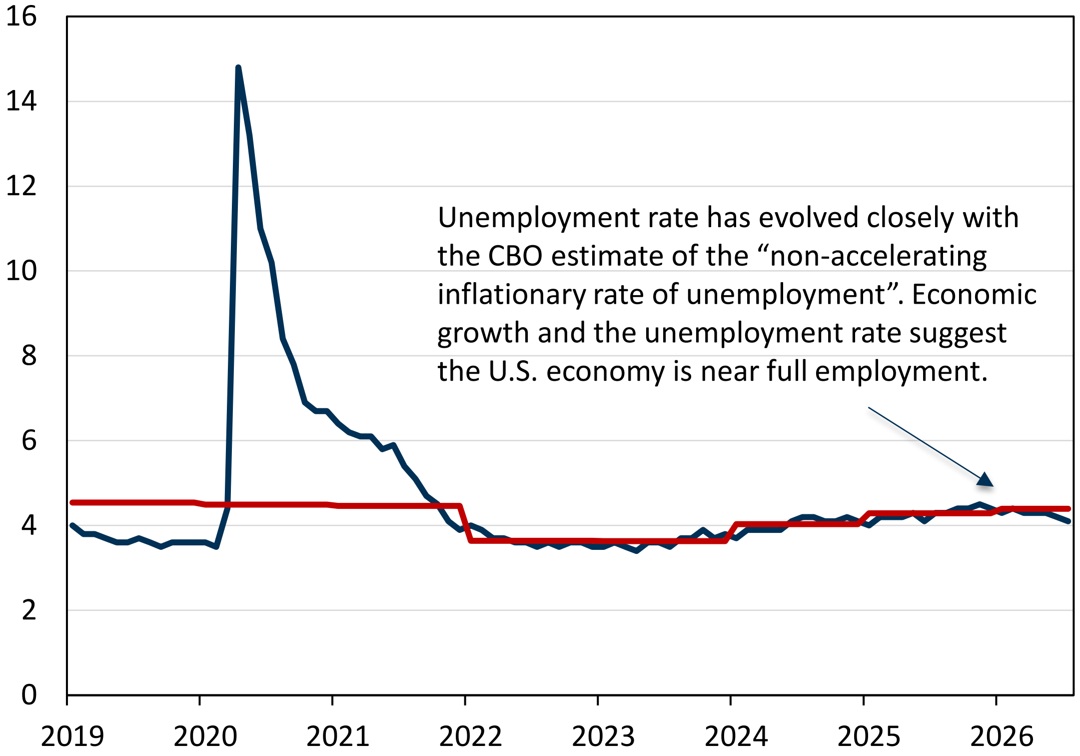
The Starting Point Is Resilient: Growth and Employment Near Potential

Economic growth and the labor force are close to long-term potential

Expected 2026 Real GDP Growth at Long-term Potential
(Bloomberg consensus forecast of 2026 real GDP growth in %)



Stable Unemployment Rate
(% of labor force)



Source: Consensus survey of leading economic forecasters provided by Bloomberg.
Data as of August 16, 2026.

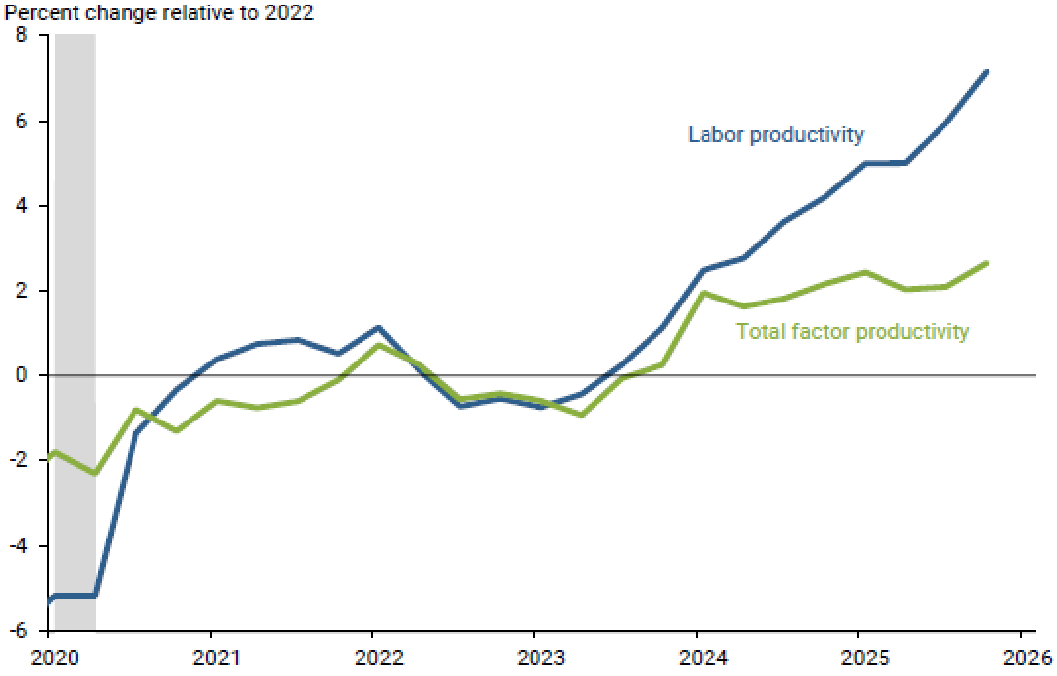
SWIB
STATE OF WISCONSIN INVESTMENT BOARD

AI Investment May Be Lifting Productivity: "TFP" Is the Key Test

Sustained gains support stronger growth and cash flows even with structurally higher rates

Will AI-driven investment raise "total factor productivity" (TFP), which captures how efficiently the economy uses all inputs together, including labor and capital? Higher TFP growth could sustainably raise both interest rates and future growth.

Recent Data Points to Rising Labor Productivity
(%-change relative to 2022)



Note: Estimates for the U.S. business sector, based on Fernald (2014). Total factor productivity is adjusted for variations in factor utilization.

Labor Productivity Also Dominated in 1990s Tech Boom
(%-change relative to 1994)

Note: Estimates for the U.S. business sector, based on Fernald (2014). Total factor productivity is adjusted for variations in factor utilization.

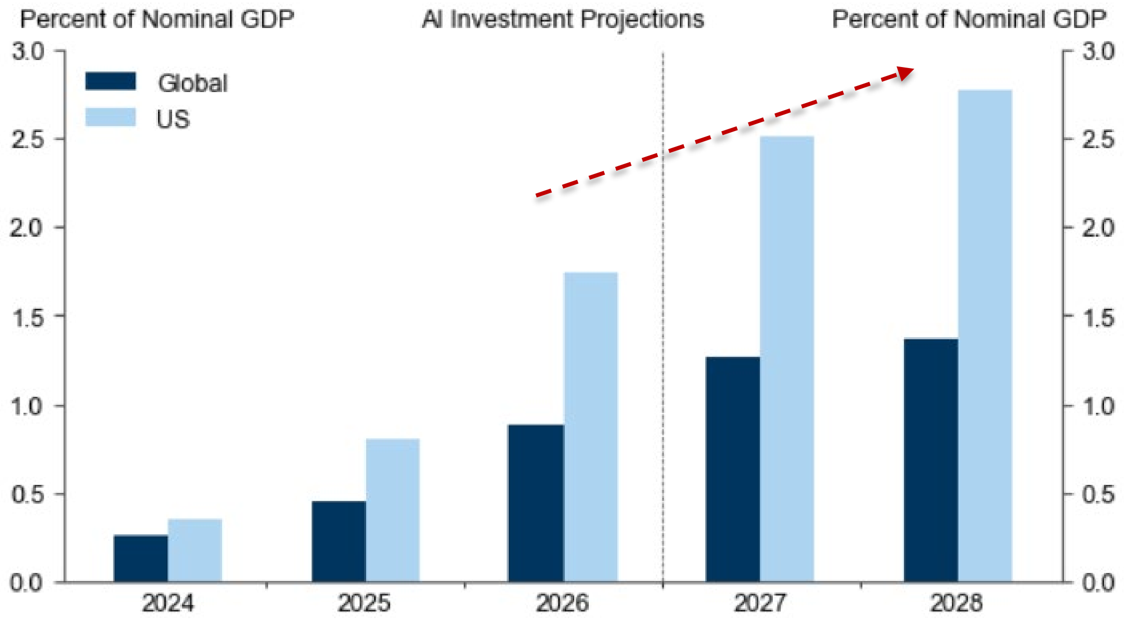
STATE OF WISCONSIN INVESTMENT BOARD

Source: Abdelrahman and Foerster, FRBSF Economic Letter 2026-14, May 26, 2026. [Have We Entered an Era of High Productivity Growth? - San Francisco Fed]

Rapid Increase in AI-Related Investment Competing for Capital

Large debt issuance in 2026 to fund AI-related investment

Estimated AI-Related Capital Expenditures Rising Sharply
(% of GDP)



Source: Goldman Sachs Global Investment Research

- Consensus projections imply AI-related capex will rise to 2.8% of U.S. GDP by 2028 from 1.8% of GDP in 2026.
- Global AI-related investment in 2026 is estimated to exceed $1 trillion with $581 billion in the U.S.
- Financing the AI investment boom has included almost $500 billion in AI-related corporate debt issuance this year, based on estimates by Goldman Sachs Research.
- The combination of rising private investment for AI and high government budget deficits increases competition for global savings, putting upward pressure on real interest rates, a key component of the discount rate for asset valuation.

Source. J. Biggs and S. Dong. Assessing the Current Pace of AI Investment, August 2, 2026. Goldman Sachs Global Economics. [Global AI Investment Is Forecast to Exceed $1 Trillion in 2026 | Goldman Sachs]

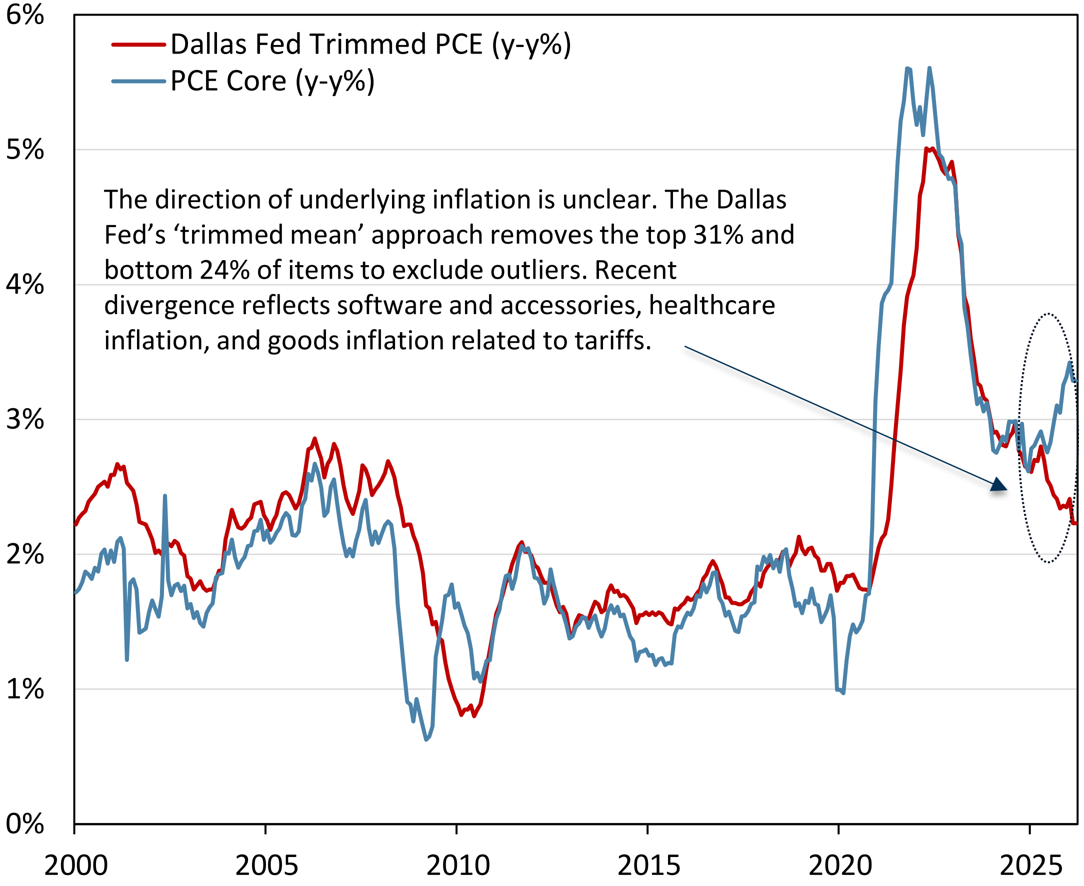
STATE OF WISCONSIN INVESTMENT BOARD

Sticky Inflation Remains Above Target, Maintaining Interest Rate Risk

Five years above target leave the adjustment path back to 2% uncertain

Core Inflation Broadly Trending Lower But Still Above 2%

(Core PCE and 'Trimmed Mean' PCE, annualized %)



- PCE Core inflation has been trending gradually lower since 2022 but has remained above the 2% target for five years.
- The new Fed Chair, Kevin Warsh, has referred to "trimmed-mean" inflation as a notably more important part of his assessment of "underlying" inflation (see chart).
- PCE inflation has been more positively skewed compared to history, so trimming may have a stronger downward impact than usual.
- Markets are currently discounting about 1.5 Fed rate hikes through end-2027, expecting a greater Fed priority on inflation.
- The path of disinflation, whether driven by further rate tightening or a gradual easing of price pressures, will influence both discount rates and cyclical cash flows.

Sources: Data provided by Bloomberg. Headline PCE price inflation: U.S. Bureau of Economic Analysis, Personal Consumption Expenditures (PCE) Price Index. Dallas Fed Trimmed Mean PCE: Federal Reserve Bank of Dallas, Trimmed Mean PCE Inflation Rate.

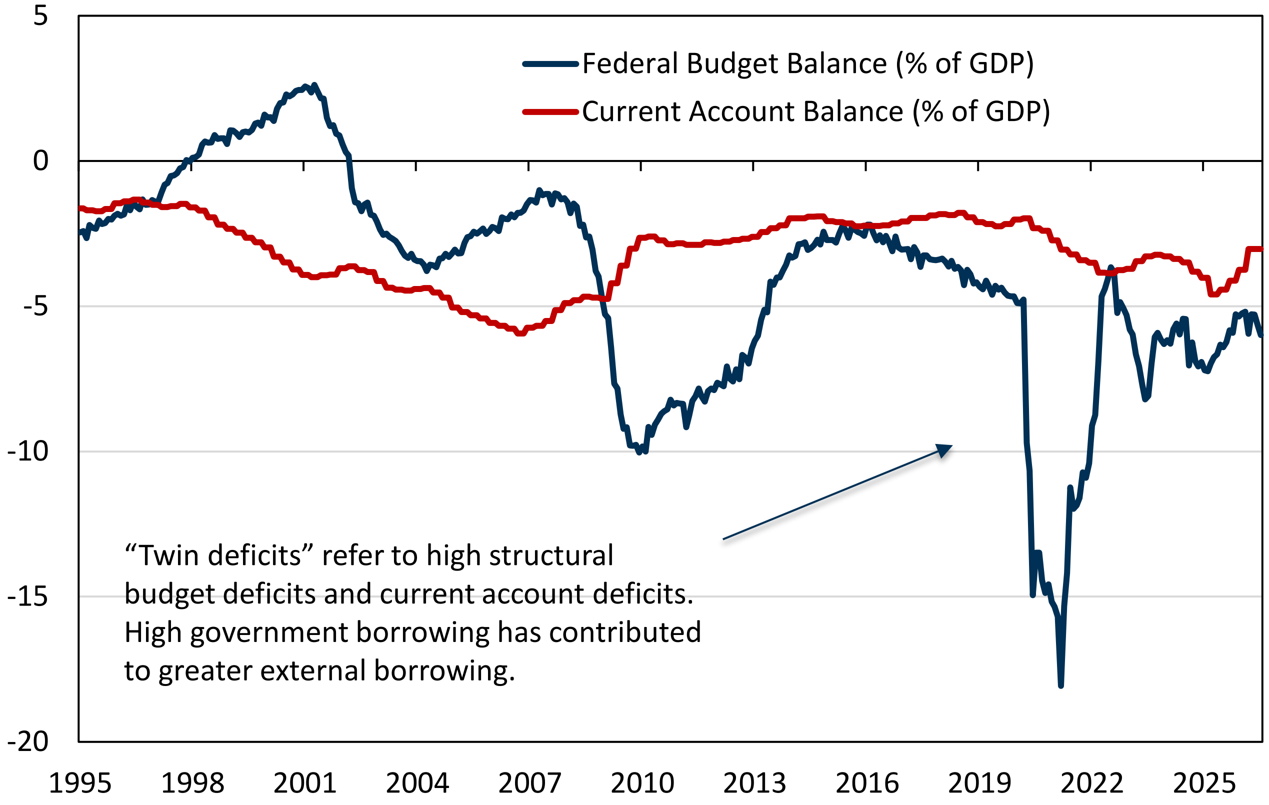
SWIB STATE OF WISCONSIN INVESTMENT BOARD

Large Fiscal Deficits Are Increasing Reliance on Foreign Capital

The "twin deficits" add a structural source of pressure to the macro adjustment

Structural Twin Deficits: High Fiscal and External Borrowing

(federal budget balance and external current account balance in % of GDP)



- Recent federal budget deficits of about 6% of GDP are fueling both higher Treasury and U.S. external debt.
- Treasury debt held by the public is about 100% of GDP, approaching the World War 2 peak. Net external debt is about 65% of GDP (previously about 90% before a recent revision).
- While the U.S. has operated twin deficits for many years, partly due to the Dollar's reserve currency role, the recent pickup has renewed concerns about "global imbalances."
- Global imbalances may contribute to financial fragility as surplus countries allocate into Treasuries that cannot continue growing at the current pace and richly valued U.S. equities.
- Past episodes of global imbalances contributed to the protectionism of the 1980s before the Plaza Accord, and those of the 2000s were unwound abruptly during the 2008 crisis.

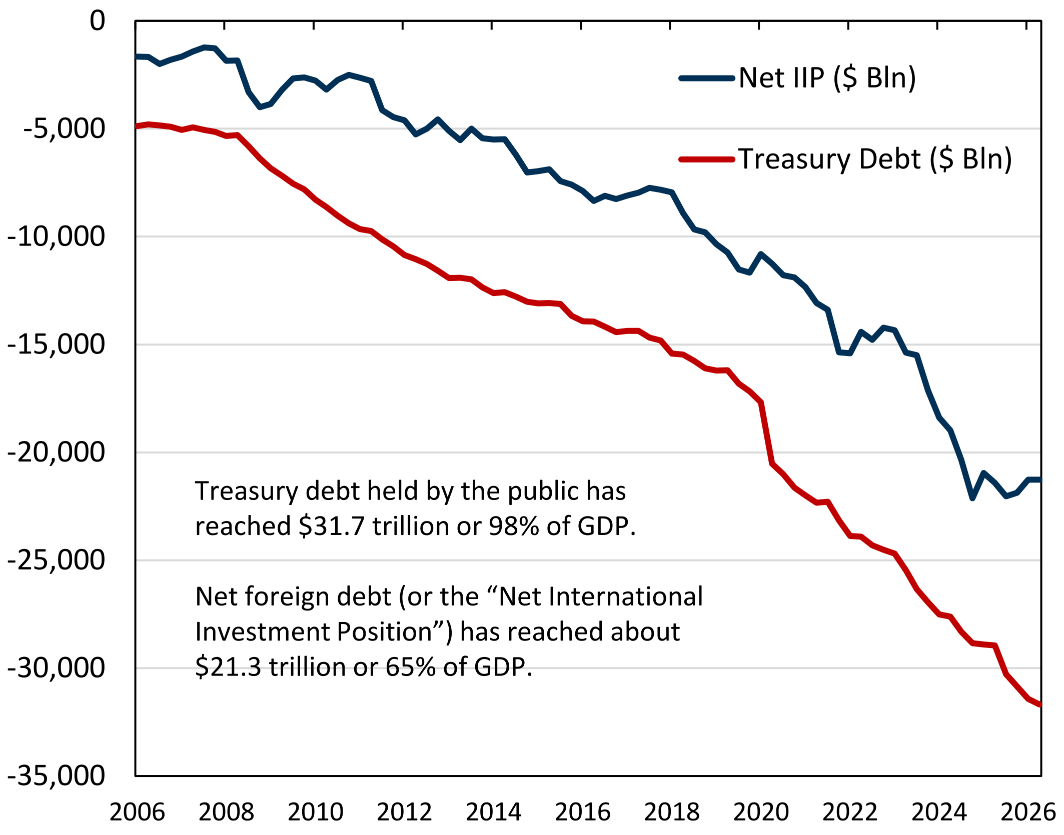
Sources: Data provided by Bloomberg. Quarterly current account data are sourced from U.S. Bureau of Economic Analysis as of Aug. 16, 2026. Monthly federal budget balance data are sourced from U.S. Treasury, Bureau of Fiscal Service.

STATE OF WISCONSIN INVESTMENT BOARD

Debt Stocks Are Rising Rapidly, The Pace of Change Is the Risk

Rapid debt accumulation increases sensitivity to rates, the Dollar, and foreign demand

U.S. Net Foreign Debt ("Net IIP") and Treasury Debt
($ Bln)



- Levels of Treasury and U.S. net foreign debt are not the main issue. The rates of change are the main challenge.
- Reducing budget deficits would be a direct approach to stabilize both Treasury debt and external borrowing, but a fiscal adjustment is unlikely in the near term.
- Additional Fed rate hikes to reduce inflation may attract additional foreign savings, potentially strengthening the U.S. Dollar further and increasing the trade deficit.
- How these challenges are ultimately resolved may have important implications for asset discount rates and expected cash flows, such as interest rates, cyclical growth, and the U.S. Dollar.

Sources: Data provided by Bloomberg. Net IIP: U.S. Bureau of Economic Analysis (BEA), U.S. International Investment Position. Treasury Debt: U.S. Treasury, Bureau of Fiscal Service.

SWIB STATE OF WISCONSIN INVESTMENT BOARD

How the Macro Adjustment Path Could Reprice Assets

Absent meaningful fiscal consolidation, the more plausible adjustment paths imply higher-for-longer interest rates

Current Account Balance = Net Foreign Lending/Borrowing

$$= \underbrace{\text{Private Savings}}_{\text{Household savings and corporate surpluses}} + \underbrace{\text{Budget Balance}}_{\text{Large negative gov. budget balance is the main driver of national dis-savings}} - \underbrace{\text{Investment}}_{\text{AI capex boom also draws on available savings, increasing the need for foreign capital}}$$

Policy logic and potential market reactions

The desired policy adjustment is not lower sustainable output; it is less government absorption of national savings, more sustainable external borrowing, and 2% inflation.

The choice of future policy adjustments impacts interest rates, growth, and the Dollar:

- **Fiscal consolidation** → slower cyclical growth → lower rates → weaker Dollar → stronger external balance
- **Fed rate hikes** → slower cyclical growth → lower inflation → stronger Dollar → increased foreign capital
- **AI investment/Productivity** → stronger long-term growth → higher return on capital → higher interest rates → more near-term financing demand

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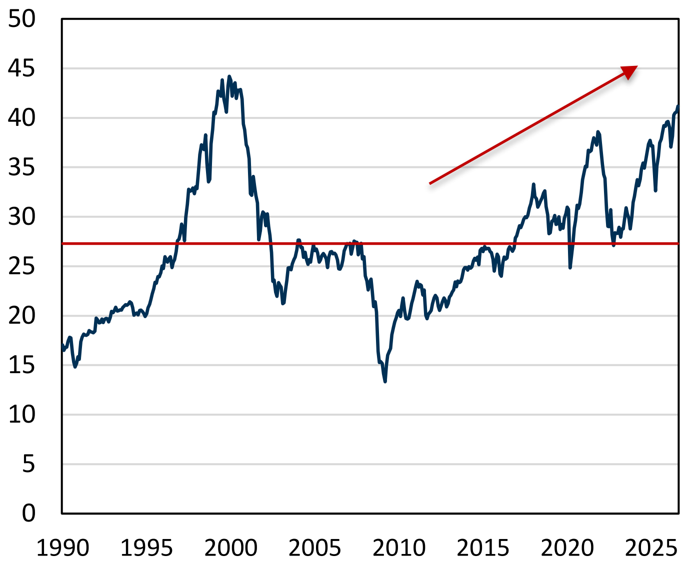
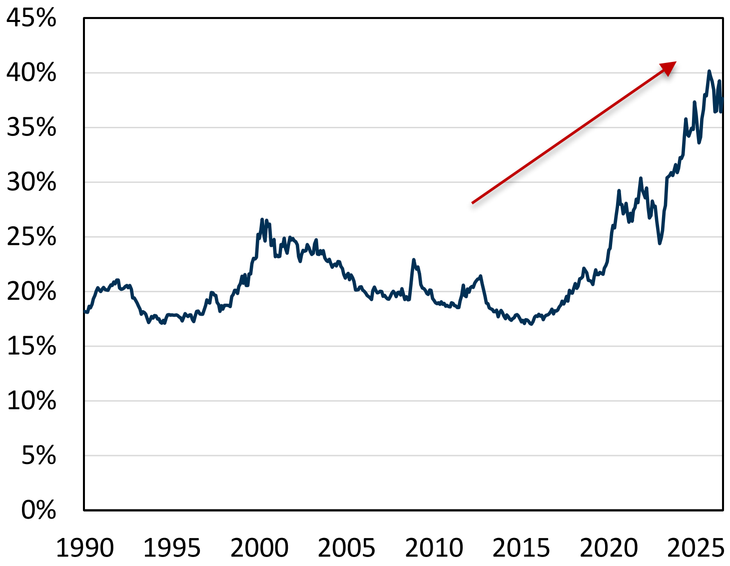
U.S. Equities Are Rich, Concentrated, and Extended

Higher valuations and concentration leave a smaller risk-premium cushion

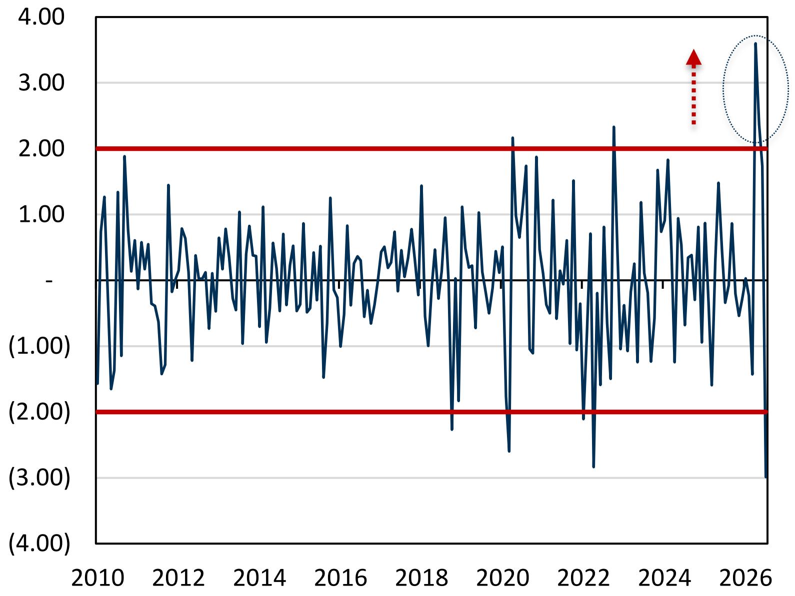
Shiller's Cyclically-Adjusted P/E Ratio
(10-year average inflation-adjusted earnings / Current S&P500 level)



S&P500 Concentration
(market value share of top 10 securities in S&P500)



S&P500 Momentum
(standardized z-score of monthly returns vs +/- 2 std. deviations)



U.S. equity risk premium compressed by rich valuation, greater concentration risk, and over-extended momentum.

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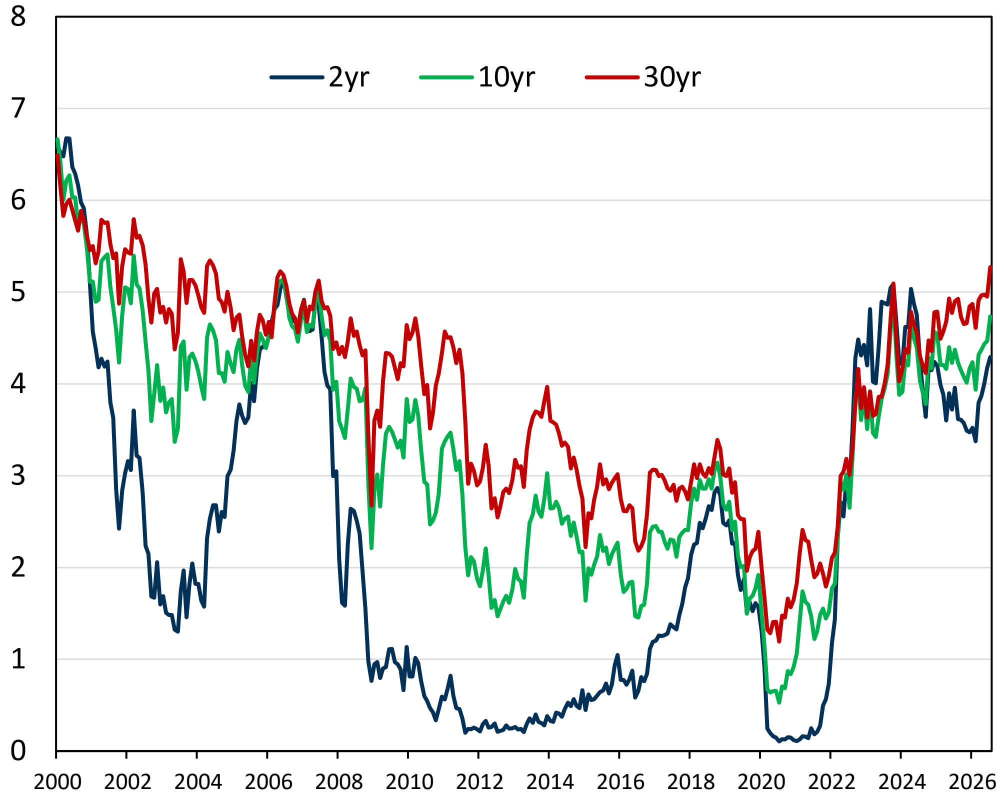
Sources: Market data for the S&P500 provided by Bloomberg as of August 16, 2026. Shiller's CAPE obtained from: https://shillerdata.com/

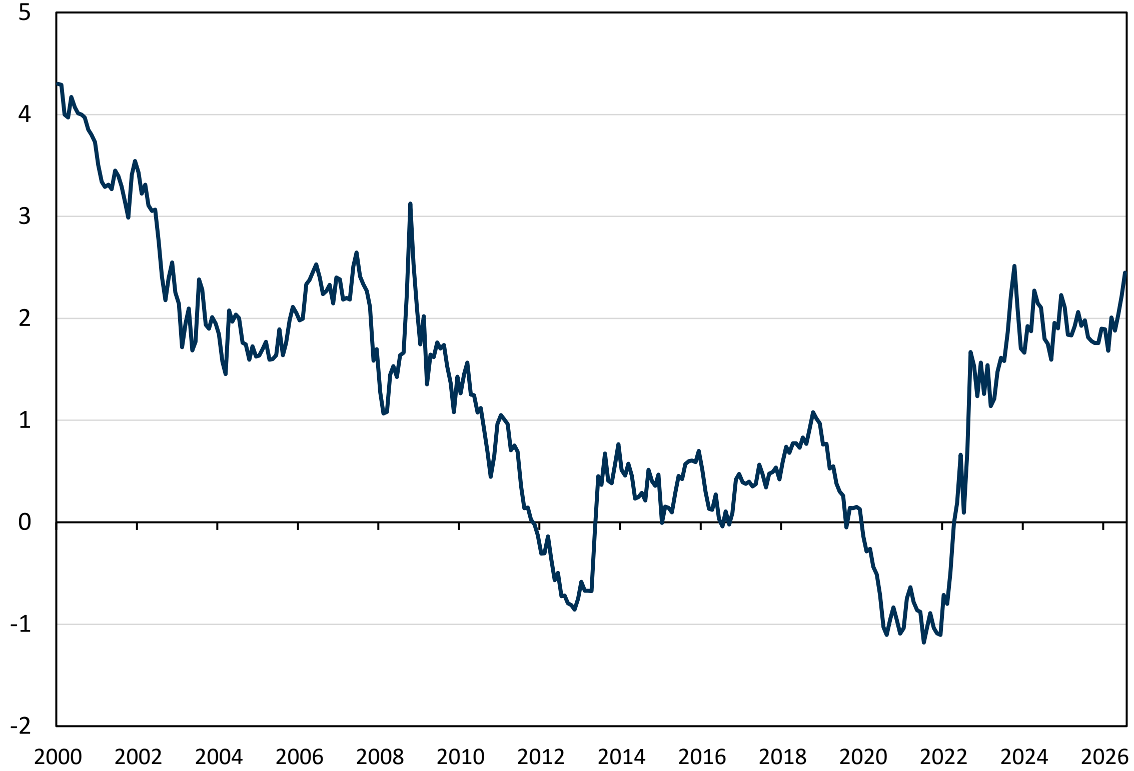
Higher Rates Have Restored the Relative Appeal of Public Fixed Income

Treasury and TIPS yields are near their highest levels in roughly two decades

U.S. Treasury Yields for 2yr, 10yr, and 30yr
(Yield to Maturity, %)



TIPS Real Yields
(inflation-adjusted 'real' yield in %)



STATE OF WISCONSIN INVESTMENT BOARD

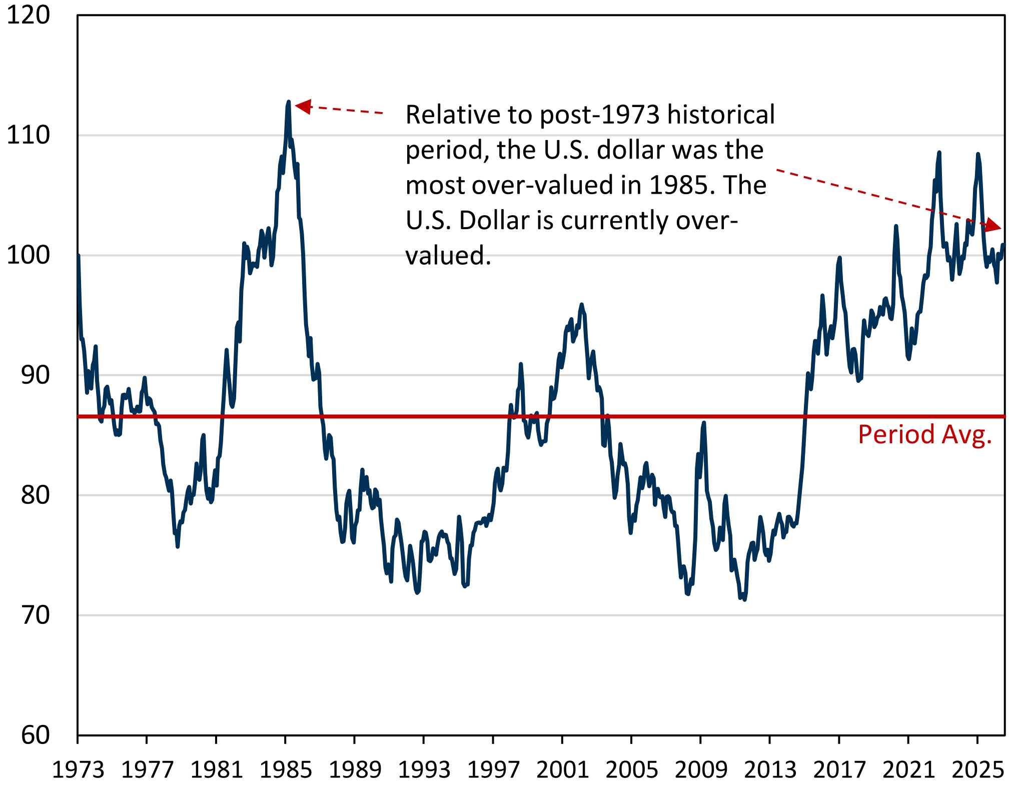
Sources: Market data provided by Bloomberg as of August 16, 2026.

U.S. Dollar: Expensive and Supported by the Same Forces Keeping Rates High

High carry and portfolio inflows support the Dollar but increase sensitivity to Treasury-market pressure

U.S. Dollar is Significantly Over-Valued

(BIS Real Effective Exchange Rate index with 1973=100)



- While the U.S. Dollar has not reached its 1985 extreme, the Dollar remains highly over-valued relative to its post-Bretton Woods history.
- Key drivers of the over-valuation include portfolio inflows attracted by the tech-led equity rally and relatively high U.S. interest rates.
- A recent coordinated FX intervention by the Treasury and Bank of Japan (BoJ) supported the Yen after it reached a 40-year low. The coordinated FX intervention highlighted:
  - Concern that BoJ would become a net seller of Treasuries just when yields were already rising
  - Concern the weakening Yen would trigger competitive FX depreciations across Asia, especially of the Chinese Yuan, raising the prospect of multiple Treasury holders becoming net sellers
  - Treasury sold Euros instead of Dollars to buy the Yen, suggesting they wanted to sidestep the "strong dollar policy."
- The over-valued Dollar and recent FX intervention highlights sensitivity to further pressure on Treasury yields.

Sources: Data provided by Bloomberg. Bank for International Settlements (BIS), Effective Exchange Rate Indices — United States, real, narrow index (2020 = 100).

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Summary

- The U.S. economy continues performing well: real GDP is expected to grow in line with its potential and the labor force is near full employment.

- However, sticky U.S. inflation remains above target, and its future direction is uncertain. The external sector is also unbalanced with large foreign borrowing to finance the "twin deficits."

- Policy and macro adjustments may affect asset class discount rates and expected cash flows that anchor valuations.
  - Fed rate hikes to control inflation could further strengthen the U.S. Dollar and amplify external deficits.
  - Fiscal adjustment combined with Fed *easing* would be ideal to slow the pace of government and U.S. foreign borrowing and create more room for private investment.
  - The AI-led capex boom may raise total productivity growth. A sustained boost in productivity could play an important part in addressing macro challenges and support currently high asset valuations.

- Rich equity valuations have compressed expected returns, and the U.S. Dollar is also generally over-valued. High-quality public fixed income is relatively more attractive, offering the highest yields in about two decades.

- **Implications:** The current environment reinforces the value of diversification as U.S. equity valuations remain elevated and high-quality fixed income offers more attractive yields. SWIB continues to monitor whether AI-driven productivity can offset inflation and fiscal pressures that may keep long-term interest rates elevated.

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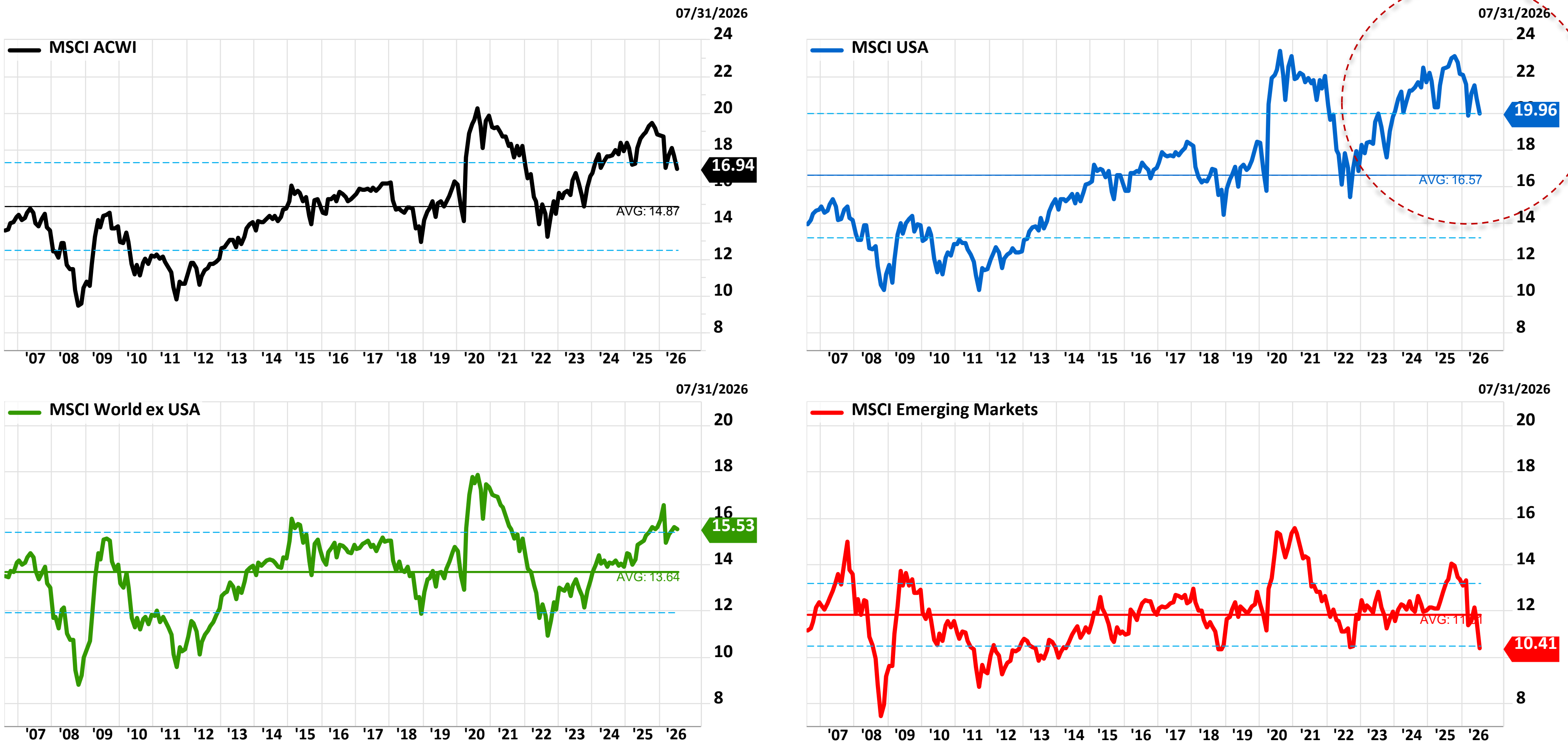
INVESTMENT BOARD

Asset Class Review

Global Equities - Valuation

P/E ratios have moved about one standard deviation from their 20-year averages

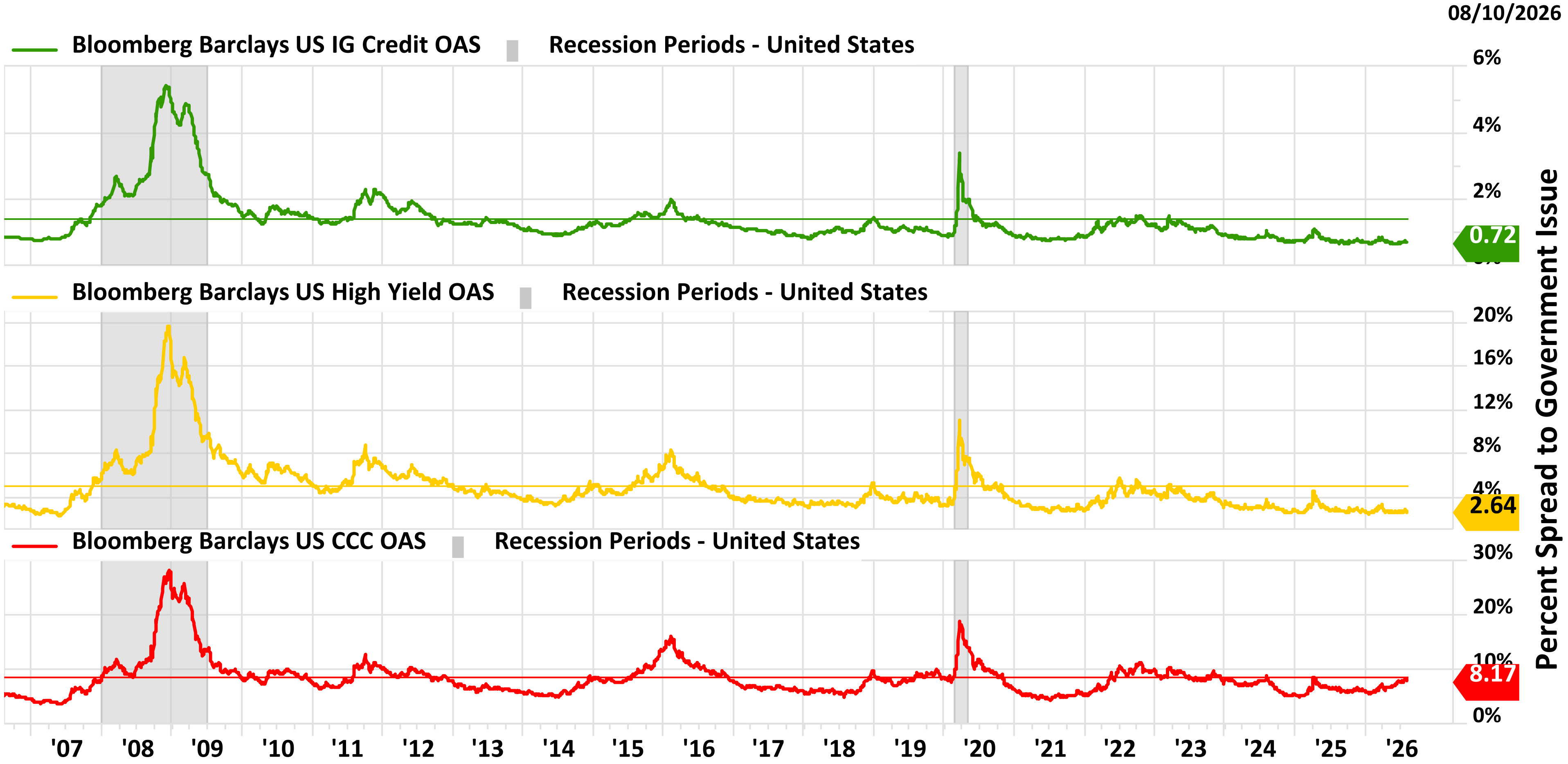


Source: FactSet Market Aggregates - Next Twelve Month P/E Ratio, monthly, 20-year Average with 1 Std. Dev. Bands

STATE OF WISCONSIN INVESTMENT BOARD

Credit Sectors

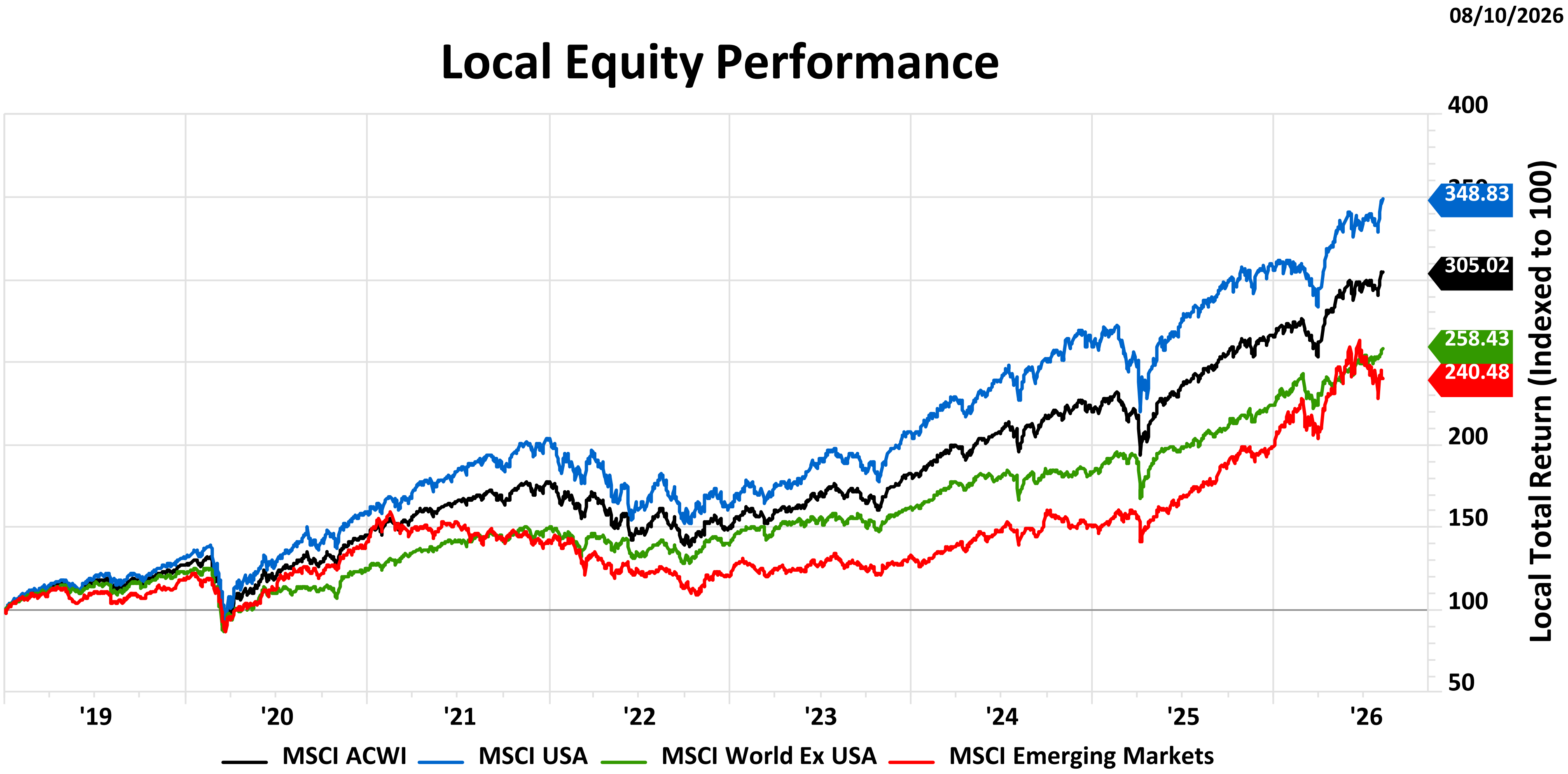
Spreads are below long-term averages



Source: FactSet

Global Equities - Performance

DM ex-U.S. has increased by 5.7% since June, while EM has declined by 6.1%

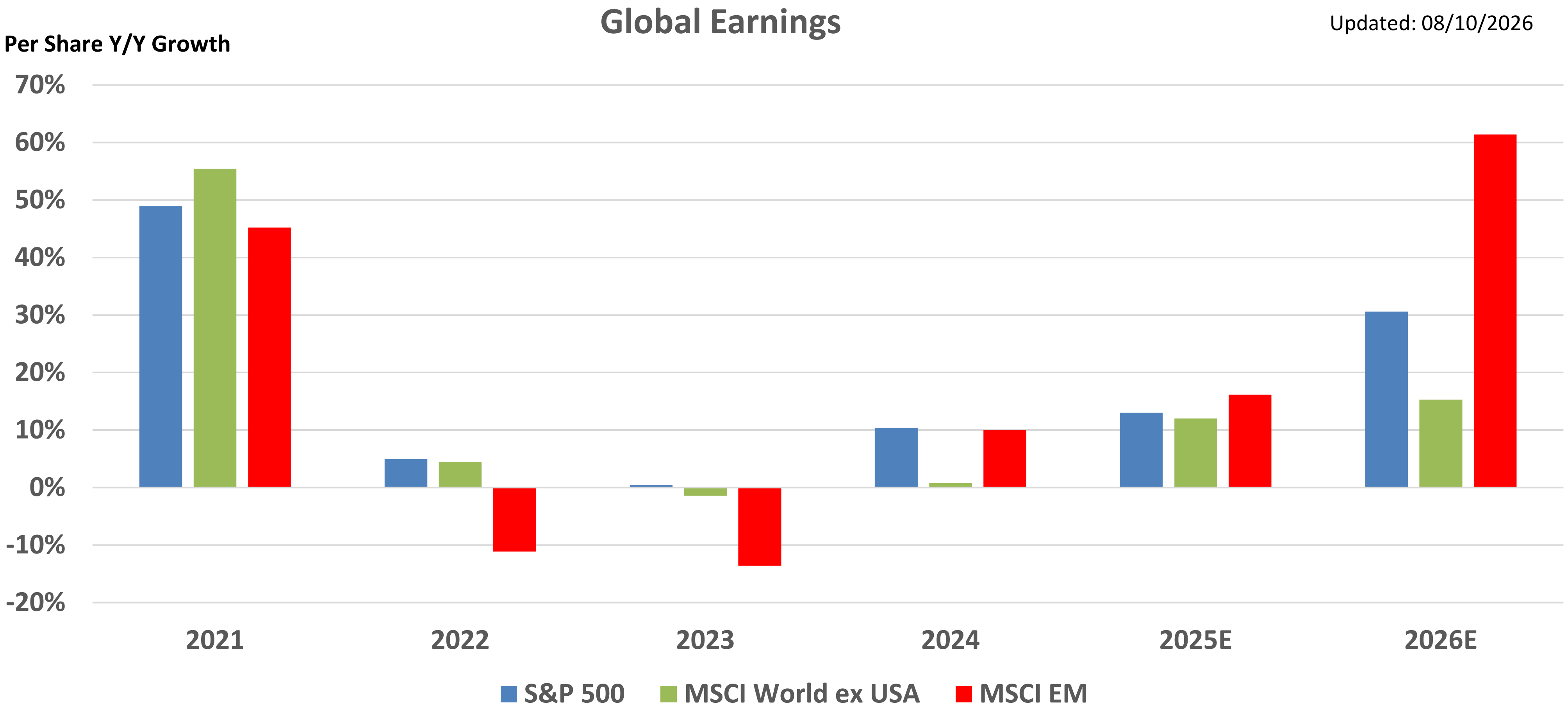


Source: FactSet

STATE OF WISCONSIN INVESTMENT BOARD

Earnings Growth

EM leads expectations for earnings growth



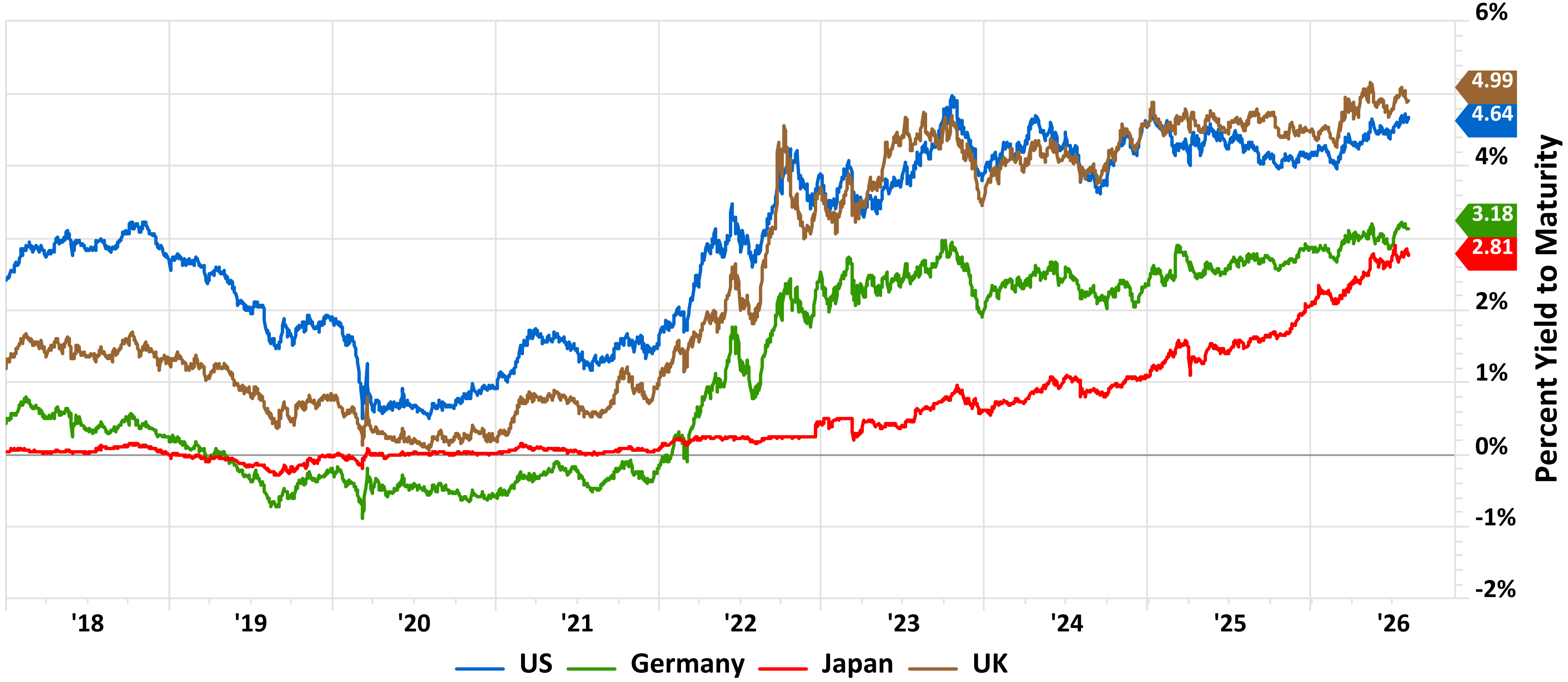
Source: Analyst Consensus, FactSet

Global Bonds

DM yields have generally increased with JGB yields continuing to normalize this year

08/10/2026

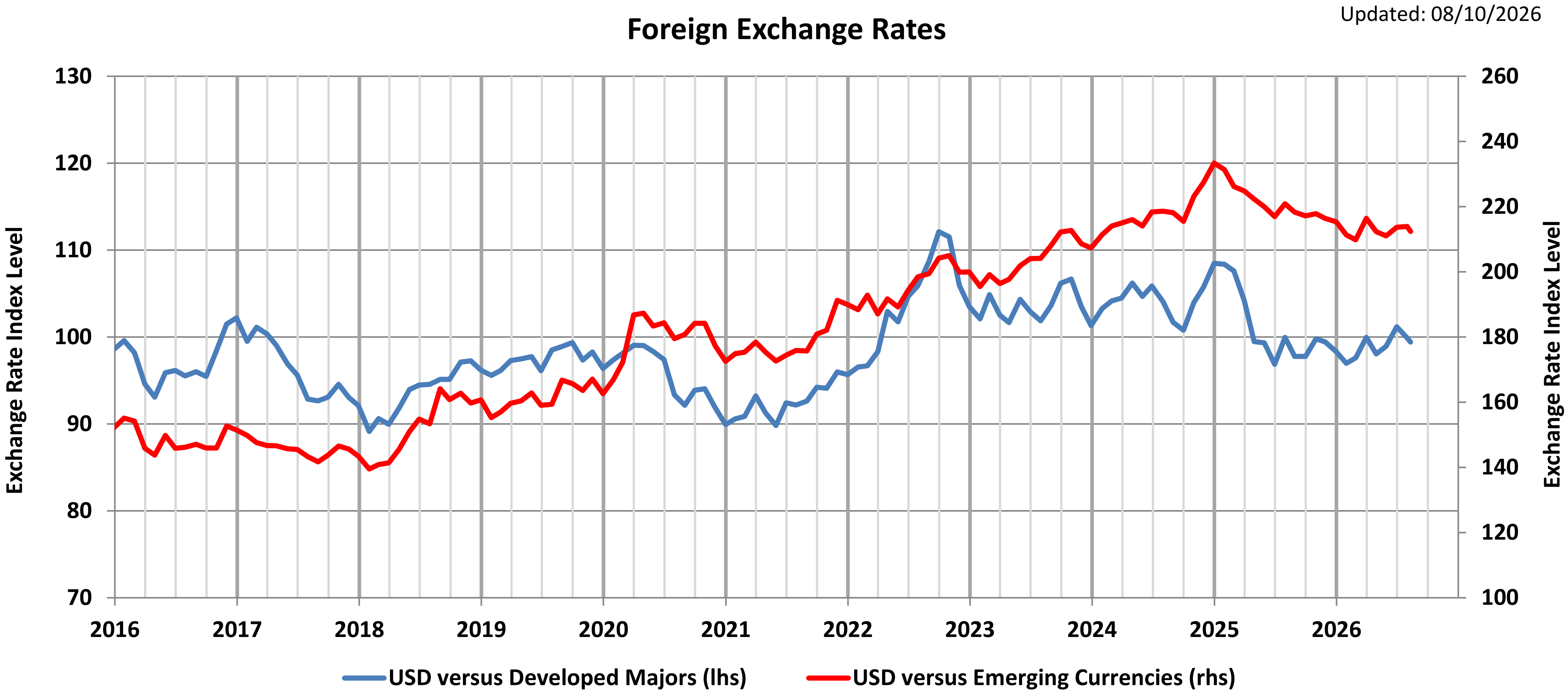
10-Year Government Bond Yields



Source: FactSet

Currency Performance

US Dollar trading in range year to date



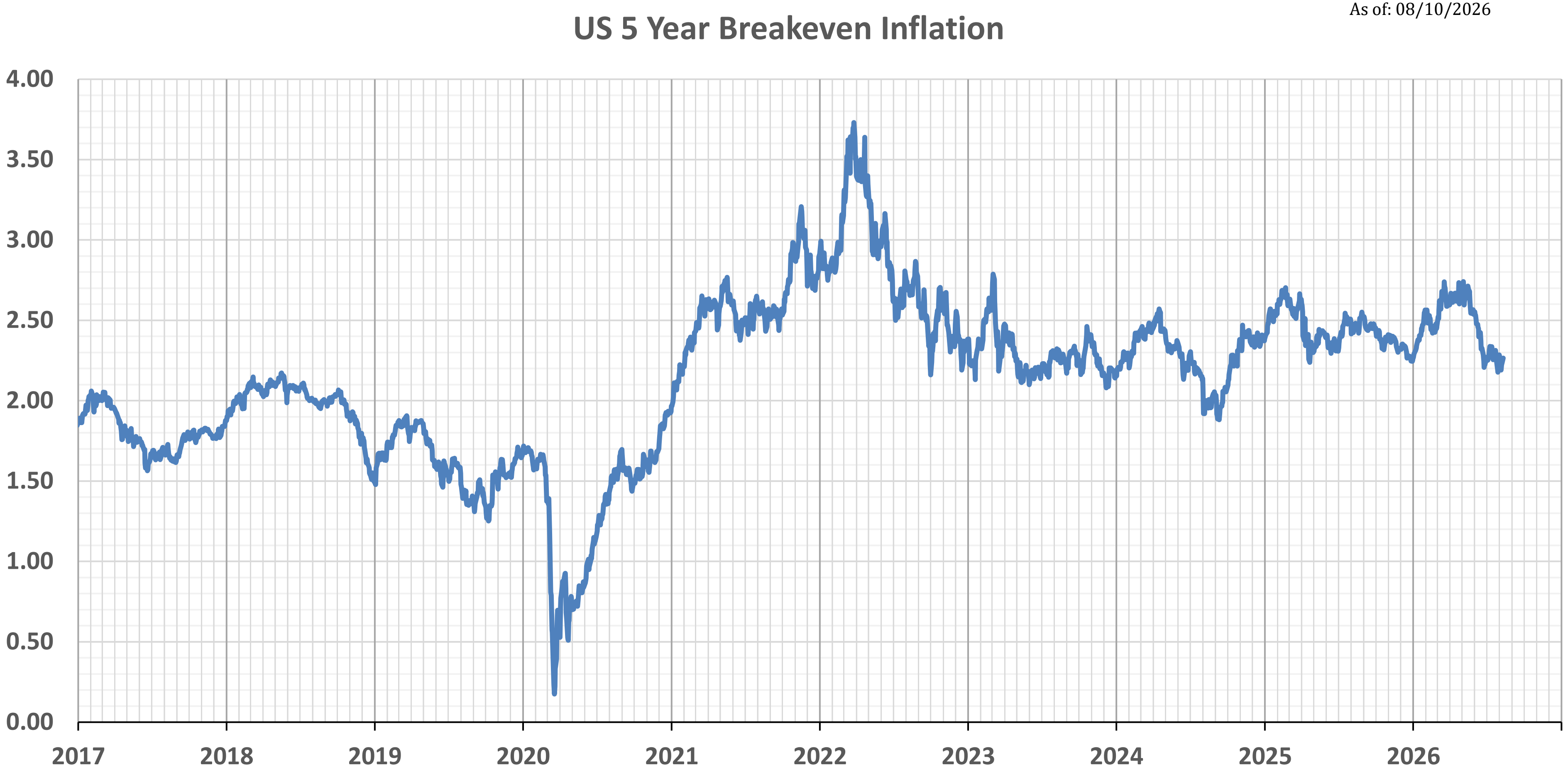
Source: Bloomberg, DXY Index, JPM Emerging Markets Currency Index (Inverted)

SWIB STATE OF WISCONSIN INVESTMENT BOARD

U.S. Inflation

Inflation expectations have cooled in recent weeks

As of: 08/10/2026



Source: Bloomberg

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Board Meeting

Tab 8 – Announcement of Matters Taken Up in Closed Session

Board Meeting

Tab 9 – In the absence of questions, the following reports will be filed without comment (for informational purposes):

A. Quarterly Charges to Funds Reports, Q2 2026

B. Private Markets and Funds Alpha Commitments, Q2 2026

C. Board Contact Log

D. Updated Committee Assignments

August 12, 2026

Senator Howard Marklein, Co-Chair
Joint Committee on Finance
P.O. Box 7882
Madison, WI 53707

Representative Mark Born, Co-Chair
Joint Committee on Finance
P.O. Box 8952
Madison, WI 53708

Senator Eric Wimberger, Co-Chair
Joint Legislative Audit Committee
P.O. Box 7882
Madison, WI 53707

Representative Robert Wittke, Co-Chair
Joint Legislative Audit Committee
P.O. Box 8953
Madison, WI 53708

Secretary Kathy Blumenfeld
Department of Administration
101 East Wilson Street
P.O. Box 7864
Madison, WI 53707

Dear Senator Marklein, Senator Wimberger, Representative Born, Representative Wittke and Secretary Blumenfeld:

State statutes require the State of Wisconsin Investment Board (SWIB) to report all expenses charged to the trust funds under management and the number of full-time equivalent positions created or abolished during the quarter [1]. The information contained in this report is for the quarter ended June 30, 2026.

Total Cost of Management Summary	3Q 2025	4Q 2025	1Q 2026	2Q 2026	Trailing 4 Qtr Total	% of Total
Internal Operating Expenses						
Operating Budget Expenses	$ 21,796,031	$ 17,691,911	$ 18,506,070	$ 56,268,541	$ 114,262,553	67.1%
Investment Research, Data & Consulting	10,217,743	10,461,680	9,521,599	9,992,616	40,193,638	23.6%
Custodial, Investment Operations & Banking	1,529,906	1,638,936	1,719,613	1,625,462	6,513,917	3.8%
Legal	770,424	1,478,417	483,474	660,685	3,393,000	2.0%
Total Internal Operating Expenses	**$ 34,314,103**	**$ 31,270,944**	**$ 30,230,757**	**$ 68,547,303**	**$ 164,363,107**	**96.5%**
Total Securities Lending Agent Expenses	**$ 1,227,404**	**$ 1,593,830**	**$ 1,698,910**	**$ 1,414,245**	**$ 5,934,389**	**3.5%**
Total SWIB Operating Costs	**$ 35,541,507**	**$ 32,864,774**	**$ 31,929,667**	**$ 69,961,548**	**$ 170,297,495**	**100.0%**
Supplemental Info - External Investment Management Fees						
Hedge Funds [1]	$ 56,887,256	$ 96,869,183	$ 64,786,726	$ 84,452,039	$ 302,995,204	33.4%
Beta One & Other - External Funds	3,845,924	66,555,527	81,728,583	71,139,735	223,269,769	24.6%
Private Equity	51,936,175	57,553,732	47,006,906	56,280,166	212,776,979	23.5%
Real Estate	23,315,652	21,832,269	24,872,582	23,699,130	93,719,633	10.3%
Venture Capital	9,873,604	9,900,812	11,036,567	10,972,656	41,783,638	4.6%
Current Return	8,858,242	8,326,735	6,886,991	8,491,072	32,563,039	3.6%
Total External Investment Management Fees	**$ 154,716,853**	**$ 261,038,258**	**$ 236,318,353**	**$ 255,034,799**	**$ 907,108,263**	**100.0%**
Grand Total Cost of Management	**$ 190,258,359**	**$ 293,903,032**	**$ 268,248,020**	**$ 324,996,347**	**$ 1,077,405,758**	

[1] The 1Q 2026 amount was revised from the $57.2 million included in the May 14, 2026 report due to updated information being received after the prior reporting date.

[1] Wisconsin Statutes Section 25.17 (13m): Investment-related costs and expenses charged to the WRS Trust Funds, State Investment Fund, State Life Insurance Fund, Historical Society Endowment Fund, Injured Patients and Families Compensation Fund and UW Trust Fund. Investment transaction expenses, such as trading commissions and interest expense, are included in investment returns, and therefore not included in this report.

SWIB operating costs are charged to the trust funds under management. Externally managed fund fees for commingled assets are netted against investment returns generated by SWIB's external fund holdings. It is important to consider costs in the context of value-added investment returns. For example, during the five years ended December 31, 2025, after consideration of all expenses, costs, and fees, SWIB generated approximately $3.8 billion in additional profits beyond what would have been generated by the benchmark portfolio SWIB is measured against. These profits all go directly into the Wisconsin Retirement System for the benefit of its beneficiaries.

Attachment A provides a breakdown of the amount and percentage of assets managed under each type of dedicated and commingled account or partnership, and the change in the amount and percentage from the prior calendar quarter. As of June 30, 2026, SWIB's total authorized full-time equivalent positions are 298 as shown in the table below.

Assets Under Management & Positions		
	3/31/2026	**6/30/2026**
Internal Management	52.1%	53.2%
External Management	47.9%	46.8%
Total SWIB Positions	**298**	**298**

In addition, Attachment B provides details of the services provided to SWIB and their associated quarterly costs. For definitions of the expense categories presented in the Total Cost of Management Summary table, please refer to Attachment C.

As new investment strategies are implemented and markets continue to evolve, SWIB will continue evaluating the most efficient means to manage the trust fund assets. Please contact us if you have any questions or comments about this report.

Sincerely,

Edwin Denson

Edwin Denson
Executive Director/Chief Investment Officer

Attachments
cc: Members, Joint Committee on Finance
Members, Joint Committee on Audit
Robert Lang, Legislative Fiscal Bureau
Joe Chrisman, Legislative Audit Bureau

Total Assets Under Management	9/30/2025		12/31/2025		3/31/2026		6/30/2026	
Wisconsin Retirement System (WRS)	Amount (in millions)	%	Amount (in millions)	%	Amount (in millions)	%	Amount (in millions)	%
Internally Managed Assets	**$63,104**	**41.4%**	**$72,442**	**46.8%**	**$71,011**	**46.5%**	**$78,094**	**48.3%**
Externally Managed Dedicated Assets	**35,057**	**23.0%**	**25,723**	**16.6%**	**9,709**	**6.4%**	**9,832**	**6.1%**
Externally Managed Commingled Assets [1]	**54,257**	**35.6%**	**56,461**	**36.5%**	**71,853**	**47.1%**	**73,692**	**45.6%**
1. Passive Index	*773*	*0.5%*	*593*	*0.4%*				
2. Limited Partnerships	*36,718*	*24.1%*	*36,944*	*23.9%*				
3. Active Managed Commingled	*16,766*	*11.0%*	*18,925*	*12.2%*				
Total WRS Assets	**$152,417**	**100.0%**	**$154,626**	**100.0%**	**$152,574**	**100.0%**	**$161,618**	**100.0%**
Other Funds								
State Investment Fund - Internally Managed	$20,252		$20,340		$21,036		$20,392	
Separately Managed Funds - Internally Managed	$94		$93		$92		$92	
Separately Managed Funds - Externally Managed	$3,100		$3,090		$3,063		$3,195	
Total Other Funds	**$23,446**		**$23,523**		**$24,191**		**$23,679**	
Total Assets Under Management	**$175,863**		**$178,149**		**$176,764**		**$185,297**	
Supplemental AUM Breakout								
Total Internal Assets Under Management	**$83,450**	**47.5%**	**$92,875**	**52.1%**	**$92,139**	**52.1%**	**$98,577**	**53.2%**
Total External Asset Under Management	**$92,413**	**52.5%**	**$85,274**	**47.9%**	**$84,625**	**47.9%**	**$86,719**	**46.8%**

[1] In the first quarter of 2026, Externally Managed Commingled Assets were combined to align with other SWIB external reporting. In addition, hedge funds were reclassified from Externally Managed Dedicated Assets to Externally Managed Commingled Assets. These changes reflect a reporting methodology update and do not affect the total AUM reported.

ATTACHMENT B

STATE OF WISCONSIN INVESTMENT BOARD
Expenses for All Funds Under Management
Quarter Ending June 30, 2026

EXPENSE CATEGORY		EXPENSES
Internal Expenses [1]		
Staff Compensation	$	43,720,717
Fringe Benefits		8,633,626
Staff Travel		392,768
Total Internal Expenses	**$**	**52,747,111**
Supplies, Services, and Facilities		
Advanced Systems Concepts	$	15,609
AE Business Solutions		4,638
Ahern Fire		751
Allegiant Network, LLC		493
Amazon.com		1,411
AT&T Landline		7,369
Bloomberg BusinessWeek		1,891
Building Service, Inc.		1,490
Bull Market Gifts		152
Capital Data Inc.		90,917
Carahsoft Technology Corp		84,328
CDS MY Block 1 Office, LLC		837,325
CDW-G		2,040
Centurylink		58
CFA Institute		799
Charter Communications (Spectrum Business)		7,003
Ciphereus LLC		3,000
CleanMark		35,052
Coffee Werks Machine Service and Sales		900
Complex Security Solutions Inc.		605
COMPLY Technologies, Inc.		15,234
Datacamp Inc		8,100
dbt Labs, Inc.		19,600
Dell Marketing LP		28,513
Department of Administration (DOA)		116,803
Department of Employee Trust Funds (ETF)		63,068
Department of Workforce Development (DWD)		2,574
Depreciation Expense		1,064,676
Disa Global Solutions, Inc		6,459
efilemyforms.com		8
Fed Ex		597
Forte		15,965
Gordon Flesch		13,711
Harvard Business Review		115
Historical Society of WI State		3,845
Indeed		16,538
Info-Tech Research Group		41,892
Infogram		1,788
Institutional Investor		1,798
JetBrains Americas Inc.		1,295
KeyStone Peer Review Organization Inc		1,097
Klein-Dickert Glass		1,635
Lee Hecht Harrison		3,600
Legislative Audit Bureau (LAB)		192,864
LinkedIn		17,205
Litera Corp		5,385
Madison Gas and Electric Company		49,431
Microsoft, Inc.		(55,976)

Milwaukee Journal Sentinel	$	215
mxtoolbox.com		297
National Institute on Retirement Security		10,100
NCC Group Escrow Associates LLC		1,155
New York Times		241
Next Electric		7,100
NRI		31,297
OpenAI LLC		26,100
Packerland Rent-A-Mat, Inc.		729
Planeteria Media LLC		24,150
Reuters.com		45
SailPoint Technologies, Inc.		18,423
ServerCentral, LLC		9,886
Shred-it		385
Software House Intl		598,480
Staples Advantage		1,256
The Alphabet Shop		180
Thomson Reuters		9,119
US Bank		1,048
Verizon Wireless		2,631
Wheeler Reports Inc		2,160
Wisconsin Independent Network		1,350
Wisconsin State Journal		182
WorldBridge Partners Inc		41,250
Total Supplies, Services, and Facilities	**$**	**3,521,430**
Total Operating Budget Expenses	**$**	**56,268,541**
<u>Investment Research, Data & Consulting</u>		
12358433 Canada Inc.	$	81,036
22V Research LLC		10,000
AE Business Solutions		59,480
Aksia LLC		362,706
Alex Solutions		46,250
Apex Systems, LLC		85,993
Arcana Analytics, Inc.		25,000
Axonomy Limited		15,160
BackStop Solutions Group		9,901
BCA Research Inc		31,917
BITA Risk Limited		55,854
Blackrock Financial Management Inc		133,144
Bloomberg Finance LP		1,375,488
Bridge Consulting Partners Ltd		84,480
Callan Associates Inc		8,750
Canoe Software Inc.		16,500
Capital Economics LTD		15,965
Carahsoft Technology Corp		63,444
CBJL Incorporated		104,140
CBOE Global Markets, Inc.		1,635
CEM Benchmarking Inc		21,000
CFRA Research		18,750
Charles River System Inc		465,601
CLO Research Group		4,040
Coloso AI Solutions Co.		40,000
Consensus Economics Inc		42,190
CoStar Portfolio Strategy		24,574
CUSIP Global Services		5,417
Dacheng Xiu		62,475
DiatomC LLC		18,400
DTCC EPN		4,800
DTCC ITP LLC		3,301
EFront Financial Solutions Inc		230,050

Elevation LLC	$	8,750
EquiLend Holdings LLC		29,158
Ernst & Young LLP		54,544
Exchange Analytics Inc		3,000
F.T. Specialist Inc		5,710
FactSet Research Systems Inc		1,052,632
FBN Securities, Inc.		9,000
Finadium LLC		6,500
Finarch LLC		11,520
FIS Data Systems Inc.		46,159
Fitch Solutions Inc		21,499
Focus Consulting Group, Inc		2,500
FocusEconomics S.L.U		42,023
Funston Advisory Services LLC		14,500
Gallagher		88,969
Green Street Advisor		34,875
Haver Analytics		25,180
Hawking LLC		4,331
Humber, Mundie & McClary, LLP		2,000
Ice Data Derivatives, Inc.		3,036
ICE Data Indices, LLC		26,370
ICE Data Pricing & Reference Data, LLC		189,132
IHS Markit KY3P LLC		16,832
Institutional Investor		19,500
Institutional Shareholder Services Inc		55,812
Intex Solutions, Inc.		38,100
Investment Research Expense Accrual		174,100
IPC Systems Inc		673
JP Morgan		90,000
JPSB Consulting Limited		76,160
KeyStone Consulting Inc		83,360
Makor Securities London LTD		6,000
Manalo Advisors Limited		3,863
McLagan Partners Inc		27,000
Moody's Investors Service Inc.		(40,000)
Moodys Analytics		124,736
MorningStar Inc		16,385
MSCI - Barra		58,333
MSCI Inc - Risk Metrics Solutions		332,367
MSCI, Inc.		168,260
My Data Outlet International, LLC		56,420
NEPC LLC		91,250
New Issue IQ, Inc		12,500
Newsfile		195
NYSE Market Inc		5,872
Octus Intelligence, Inc.		60,833
OptionMetrics		20,250
Options Price Reporting Authority		1,481
Oxford Economics USA INC		18,298
Pacific Pension & Investment Institute		14,000
Pitchbook Data Inc		21,625
Preyer		164,983
Private Equity Women Investor Network		100
Private Placements Investors Association		500
RavenPack International S.L.U.		30,000
Refinitiv		359,826
RIMES Technologies Corporation		41,520
Russell Investment Group		10,036
S&P Dow Jones Indices		68,385
S&P Global Limited (Markit Group Limited)		82,715
S&P Global Market Intelligence		156,550
S&P Global Valuations Limited		221,476

SailPoint Technologies, Inc.	$	10,000
Seaport Global Holdings, LLC		9,220
SEI Investments		23,006
Sharp Decisions Inc		141,420
Simcorp USA, Inc.		1,201,469
Snowflake Inc		121,581
SPACInsider		3,400
State Street		25,000
Stepstone Group		1,167
Stepstone Group Real Estate		63,853
SWIFT SC		1,165
TechVest Global Solutions Inc.		125,606
The Financial Times Limited		10,695
The Nasdaq Stock Market, LLC		3,570
The Yield Book Inc		8,040
Toronto Stock Exchange		12,762
TradeWeb		11,481
Trepp, LLC		58,590
UFP Research SA		12,500
V-Soft Consulting Group Inc		16,485
Verity LLC		16,958
Verus Advisory Inc		2,500
Virtu ITG Analytics LLC		28,000
Wolverine Execution Services LLC		1,628
Workday, Inc.		116,837
WorldBridge Partners Inc		66,560
Total Investment Research, Data & Consulting	**$**	**9,992,616**
Custodial, Investment Operations and Banking Fees		
Albourne America LLC	$	212,500
BNY Asset Servicing - Custody		774,107
BNY Asset Servicing - Investment Operations		420,430
Markit NA		4,788
S&P Global Limited (Markit Group Limited)		213,637
Total Custodial, Investment Operations and Banking Fees	**$**	**1,625,462**
Legal Fees		
Axiom Global Inc	$	92,461
Axley Brynelson, LLP		19,195
Chapman & Cutler LLP		22,946
Cox Castle & Nicholson LLP		17,620
DLA Piper LLP (US)		108,080
Godfrey and Kahn SC		8,661
Legal Services Expense Accrual		144,429
Morgan, Lewis & Bockius LLP		7,766
Neal Gerber Eisenberg		12,892
Quarles & Brady		156,569
Vedder Price PC		65,894
Winston & Strawn LLP		4,173
Total Legal Fees	**$**	**660,685**
Total Internal Operating Expenses	**$**	**68,547,303**
Securities Lending Agent Fees		
Securities Lending Agent Fees	$	1,414,245
Total Securities Lending Agent Fees	**$**	**1,414,245**
TOTAL QUARTERLY CHARGES TO FUNDS	**$**	**69,961,548**

[1] All costs reported are on an accrual basis except for internal expenses which are on a cash basis of accounting. Negative expense amounts are due to accrual adjustments and/or other miscellaneous adjustments.

Explanation of Expenses

Internal Operating Expenses

Internal operating expenses consist primarily of staff compensation and fringe benefits. SWIB employs a staff of professional investment and support staff to manage trust fund assets. Other internal operating expenses consist of office equipment, supplies, business travel, information technology equipment and services, and general services.

Investment Research, Data & Consulting

Current law gives SWIB the authority to employ investment counsel in any matters arising out of the scope of its investment authority. Investment research and services provided include global market, industry, economic and company information, financial and performance analytics, news information, pricing and exchange data, credit ratings, financial modeling, economic forecasting, trading services, and a variety of Board consultations. These services enable SWIB to perform due diligence on current and future holdings and assist in monitoring investments.

Custodial, Investment Operations & Banking

Wisconsin Certificate of Deposit Program: Under a contract with SWIB, Bankers' Bank administers the program under which the State Investment Fund (SIF) purchases certificates of deposit from Wisconsin-based banks and thrifts. Most administrative costs are paid by the participating banks. SWIB's expenses help underwrite other administrative costs, such as insurance that SWIB requires to be purchased. There are currently no investments in Bankers' Bank certificates of deposit and no fees were incurred.

BNY: Provides master custodial and administrative services (safekeeping of assets, income collection, valuations and accounting) for public and private domestic and foreign securities in the Wisconsin Retirement System (WRS), the SIF, and the other separately managed trust funds. In addition, SWIB receives performance measurement and analytical services through its contract with BNY, which serves as the official book of record for SWIB's accounting and performance measurement functions. BNY provides data and analytical tools used by SWIB for compliance and risk management. These include global collateral management, data management, and hosting services. Fees for these services are established by contract.

US Bank: The State of Wisconsin contracted with US Bank to be the state's working bank. The fees paid to US Bank by the SIF reflect bank service charges that are not directly applicable to the fund participants.

Legal

Under authority delegated by the Attorney General, pursuant to s. 25.18 (1) (a) Statutes, SWIB may employ legal counsel for any matters arising out of the scope of its investment authority. This includes legal services relating to bankruptcies, class actions, private markets transactions, fiduciary advice, securities law, investment litigation, and other similar matters.

Securities Lending Agent Expenses

Securities lending programs generally earn income through the reinvestment of cash collateral posted by borrowers and through the collection of fees for loans where non-cash collateral is posted. SWIB's securities lending income is shared with the agent to pay the costs associated with the administration of the program. Securities lending agent fees are reported as expenses.

External Investment Management Fees

Some external asset managers have been granted delegated authority to determine investment strategy and purchase securities in SWIB's name in accordance with approved investment guidelines. These investment vehicles are known as separately managed accounts (SMAs). Fees for managing SMAs are typically assessed as a percentage of the market value of assets under management and in some cases, fees are based on investment performance. These costs are actual expenses to SWIB that are, in accordance with accounting guidelines generally accepted in the U.S., recognized as expenses on the WRS Statement of Changes in Net Investment Position.

SWIB also invests in separate legal entities managed by external investment managers to gain exposure to select strategies including Public Markets, Private Markets[1], and Hedge Funds. These investment vehicles are known as "commingled" accounts. In exchange for their investment management services, the external managers charge a fee within the entity they manage. These fees generally do not require SWIB to remit payment. Fees are typically assessed as a percentage of the market value of assets under management, commitments, and in some cases are based on investment performance. While the fees charged to these external vehicles do not meet the statutory definition of a cost or expense to SWIB, they are included in SWIB's total cost of management reporting as a supplemental reporting item that falls outside the statutory requirements of this report.

[1] External Investment Management Fees for private markets, encompassing Private Equity, Venture Capital, Current Return and Real Estate asset classes, are reported on a net of fee basis rather than gross. Net fees reflect fee offsets, waivers, and deferrals.

Private Equity Commitments*

April 2026 – June 2026

Investment	*Commitment (millions)*
Align Capital Partners IV	$75.0
Align Collaborate Fund II	$18.75
Ares Global Structured Solutions	$50.0
Blackstone Tactical Opportunities Fund W (Surge)	$75.0
Flexpoint Special Assets III	$75.0
Glendon Opportunities Fund IV	$100.0
Kingswood Capital Opportunities Fund IV	$40.0
Kingswood Capital Opportunities Small Cap Fund I	$10.0
Pantheon Senior Debt IV	$50.0
PSG Europe III	€125.0
Waterland Private Equity Fund X	€60.0
Water Street Healthcare Partners VI	$50.0

**Includes Current Return Portfolio and Co-Investments.*

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Private Equity Commitments*

April 2026 – June 2026

Investment	*Commitment (millions)*
Information Technology Co-Investment (add-on)	$2.67
Industrial Co-Investment	$21.2
Industrial Co-Investment	$30

**Includes Current Return Portfolio and Co-Investments.*

Private Debt Investments/Commitments

April 1, 2026 to June 30, 2026 (Second Quarter)

Investment	*Investment/Commitment*
Real Estate/Industrial	$10,000,000
Entertainment	$20,000,000
Consumer Products	$15,000,000
Commercial Finance	$10,000,000
Total	**$55,000,000**

Real Estate Commitments

April 2026 – June 2026

Investment	*Commitment (millions)*
AKRA/Wilson Joint Venture, LP	$100
LMI Wilson Retail JV, LLC	$100
Heitman Construction Finance, LP	$100
Total	**$300**

STATE OF WISCONSIN INVESTMENT BOARD

Funds Alpha Commitments*

April 1 – June 30, 2026

Manager	Commitment (Millions)
Blackrock ACO	$ 60
DE Shaw WAE CTF	$ 353
DE Shaw WAE (VTF to CTF)	$ 118
CC&L CTF	$ 200
CC&L (VTF to CTF)	$ 277
Taula	$ 50
Dockside I-94	$ 105
Blackrock GAO	$ 200
Artisan International CTF	$ 250
Altriarch Specialty Finance	$ 50
Altriarch Receivables Opportunities	$ 50
BH CoInvest	$ 6
Total	**$ 1,719**

**Includes Hedge Funds and Beta One*

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Board Contact Log – September 2026 Board Meeting

DATE OF INBOUND COMMUNICATION	DATE COMMUNICATED TO THE BOARD	COMMUNICATION SOURCE	TOPIC	WRS PARTICIPANT*
June 25, 2026	September 4, 2026	Sawyer Hanson	Fossil fuel divestment and systematic climate risks	Yes
June 25, 2026	September 4, 2026	Renae Essenmacher	Fossil fuel divestment and systematic climate risks	Yes
June 27, 2026	September 4, 2026	Brian Yanke	Fossil fuel divestment and systematic climate risks	Yes

* Comment submitters indicate whether they are WRS participants.

SWIB STATE OF WISCONSIN INVESTMENT BOARD

September 9, 2026

Pursuant to each Committee Charter, the Board Chair shall appoint members of each Committee and appoint members to serve as Committee chair, vice chair and secretary for terms not to exceed one year.

Audit and Finance Committee

Robert Scott, Chair
Tom Merfeld, Vice Chair & Secretary
Kathy Blumenfeld
Barb Bolens
Diana Felsmann
State Controller, ex-officio
State Auditor, ex-officio

Benchmark and Performance Committee

Jeff DeAngelis, Chair
J. Michael Collins, Vice Chair & Secretary
Esther Ancel
Diana Felsmann

Compensation and Workforce Development Committee

Barb Bolens, Chair
Jeff DeAngelis, Vice Chair & Secretary
Tom Merfeld
Clyde Tinnen

Strategic Planning and Corporate Governance Committee

Tom Merfeld, Chair
Esther Ancel, Vice Chair & Secretary
Kathy Blumenfeld
J. Michael Collins
Robert Scott

*If a member has not been appointed, the Board Chair reserves the right to appoint additional Committee members on a temporary or permanent basis.

Board Meeting

Tab 10 – Future Items for Discussion

2026 Board Meeting and Agenda Plan

March 2026	
Audit & Finance	**Open Session** • Annual Charters Review • Open Audit Issues Report(s) • Approval of Draft Audit Report(s) • 2026 Internal Audit Plan Status • 2026 Internal Audit Goals • Compliance and Operational Risk Updates • Financial Reporting • Administrative Reports **Executive Closed Session** • Evaluation of Head of Internal Audit • Head of Internal Audit Compensation Recommendation
Compensation & Workforce Development	**Open Session** • Annual Committee Charter Review • Strategic Results Scorecard Approval • Incentive Compensation Program Review and Division Scorecards Results • Incentive Compensation Award Recommendations • Talent Acquisition Update and People Metrics **Executive Closed Session** • Incentive Compensation Award Recommendations for Specific Individuals • Long-Term Incentive Plan Awards • Deputy Executive Director/Chief Operating Officer Incentive Compensation Award Recommendation • ED/CIO Evaluation and Compensation
SPCG	**Open Session** • Corporate Governance Program Update • June Investment Forum Preview • Innovation and Projects Update **Executive Closed Session** • ED/CIO Goals Review
Board Meeting	**Open Session** • Committee Reports • Election of Secretary and Assistant Secretary • Annual Committee Assignments • Proposed Meeting Dates for Next Year • Investment Performance and Market Updates; Callan Annual Report • Committee Open Session Business • Quarterly Investment Update (Economic Update) • Q4 Direct Charges to Funds / PMFA Commitments / Board Contact Log **Closed Session** • Risk Management Update • Committee Closed Session Business

2026 Board Meeting and Agenda Plan

June 2026	
Audit & Finance	**Open Session** • WRS Audited Financial Statements • Open Audit Issues Report(s) • Approval of Draft Audit Report(s) • Annual Affirmations and Disclosures • 2026 Internal Audit Plan Status • Five-Year Audit Summary • Financial Reporting • Administrative Reports **Executive Closed Session** • LAB Review of Statements of Economic Interest
Compensation & Workforce Development	**Open Session** • Human Resources Update
SPCG	**Executive Closed Session** • ED/CIO Goals Review
INVESTMENT FORUM	
Board Meeting	**Open Session** • Committee Reports • Investment Performance and Market Updates; Callan Quarterly Report • Committee Open Session Business • Quarterly Investment Update (Private Markets Strategy Reports and Market Outlook) • Q1 Direct Charges to Funds / PMFA Commitments / Board Contact Log **Closed Session** • Risk Management Update • Committee Closed Session Business

2026 Board Meeting and Agenda Plan

September 2026	
Audit & Finance	**Open Session** • Open Audit Issues Report(s) • Approval of Draft Audit Report(s) • 2026 Internal Audit Plan Status and Plan Update • 2027 Internal Audit Plan Preview • Financial Reporting • Administrative Reports
Benchmark & Performance	**Open Session** • Benchmark Consultant Annual Benchmark Review Process
SPCG	**Open Session** • Annual Corporate Governance Policy Review and Corporate Governance 2026 Proxy Voting Review • October Workshop Preview • Trustee Manual and Board Policies Review **Closed Session** • Data Management and Information Technology Update **Executive Closed Session** • ED/CIO Goals Review
Board Meeting	**Open Session** • Committee Reports • Investment Forum Recap • Fiduciary & Public Records Topics • Investment Performance and Market Updates; Callan Quarterly Report • Committee Open Session Business • Quarterly Investment Update (Economic Update) • Q2 Direct Charges to Funds / PMFA Commitments / Board Contact Log **Closed Session** • Risk Management Update • Board/Staff Consultant Annual Reporting • Committee Closed Session Business **Executive Closed Session** • Board Self-Evaluation with Governance Consultant

OCTOBER BOARD WORKSHOP
• Outside Speakers • Asset Allocation Review

2026 Board Meeting and Agenda Plan

<table>
<tr><th colspan="2">December 2026</th></tr>
<tr><td>Audit & Finance</td><td>Open Session
SIF Audited Financial Statements
Open Audit Issues Report(s)
Approval of Draft Audit Report(s)
2026 Internal Audit Plan Status
Proposed 2026 Internal Audit Plan
Annual Presentation on Cost Benchmarking
Financial Reporting, including Budget and Position Request
Administrative Reports
Executive Closed Session
LAB Review of Statements of Economic Interests</td></tr>
<tr><td>Benchmark & Performance</td><td>Open Session
Annual Committee Charter, Policies, and Benchmarking Philosophy Review
Benchmark Consultant Report and Annual Benchmark Review and Recommendation</td></tr>
<tr><td>Compensation & Workforce Development</td><td>Open Session
Annual RPM Review
Compensation Philosophy Review
Compensation Consultant Report
Incentive Compensation Plan Changes for Next Performance Year
Incentive Compensation Projections
Human Resources Update
Executive Closed Session
Succession Planning</td></tr>
<tr><td>SPCG</td><td>Open Session
Annual Committee Charter Review
Executive Closed Session
Targeted Strategic Planning
ED/CIO Goals Review</td></tr>
<tr><td>Board Meeting</td><td>Open Session
Committee Reports
Investment Performance and Market Updates; Callan Quarterly Report
Asset Allocation Recommendation
Quarterly Investment Update (Funds Alpha Strategy Reports and Market Outlook)
Committee Open Session Business
Q3 Direct Charges to Funds / PMFA Commitments / Board Contact Log
Closed Session
Asset Allocation Discussion
Annual Review of Expected Tail Loss Analysis
Risk Management Update
Committee Closed Session Business</td></tr>
</table>