

## SWIB Board of Trustees Meeting of June 16 & June 17, 2026

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**Name of Meeting:** Regular Meeting of the Board of Trustees

***Educational Session of State of Wisconsin Investment Board  
Board of Trustees\****

**Date/Time:** Tuesday, June 16, 2026 1:30 pm

**Room:** 1<sup>st</sup> Floor Conference Room

**Address:** 4703 Madison Yards Way, Madison, WI 53705

**Virtual:** [Join the meeting now](#) ; 608-267-3179, code 609068329#

<i>Topic</i>	<i>Speaker</i>
Introductions	Clyde Tinnen, Chair Edwin Denson, Executive Director/Chief Investment Officer
U.S. Economic Outlook	David Mericle, Chief U.S. Economist in Global Investment Research, Goldman Sachs
Recent Academic Research in Defined Benefits	Nicole Boyson, Professor of Finance, Northeastern University
Closing Remarks	Clyde Tinnen, Chair

*\*The Educational Session is open to the public. For further details on virtual format of meeting, please contact Dawn Tuescher (608-261-9341 or [dawn.tuescher@swib.state.wi.us](mailto:dawn.tuescher@swib.state.wi.us)).*

**Name of Meeting:** Regular Meeting of the Board of Trustees  
**Date/Time:** Wednesday, June 17, 2026 9:00 am  
**Room:** 1<sup>st</sup> Floor Conference Room  
**Address:** 4703 Madison Yards Way, Madison, WI 53705  
**Virtual:** [Join the meeting now](#) ; 608-267-3179, code 609068329#

<b>OPEN SESSION</b>	
1.	Committee Reports – Open Session Items <ul style="list-style-type: none"> <li>A. Audit and Finance</li> <li>B. Compensation and Workforce Development</li> <li>C. Strategic Planning and Corporate Governance</li> </ul>
2.	Consent Agenda <ul style="list-style-type: none"> <li>A. Open Session Minutes of March 18, 2026</li> <li>B. Recommended Actions from Committee Agendas – Open Session Items</li> </ul>
3.	Investment Performance and Market Updates <ul style="list-style-type: none"> <li>A. Board Investment Performance Report, Q1 2026</li> <li>B. Callan Quarterly Report</li> </ul>
4.	Committee Open Session Business <ul style="list-style-type: none"> <li>A. Amendments to WRS Investment Committee Investment Guidelines</li> <li>B. Approved Open Session Investment Committee Meeting Minutes of February 24, March 31, and April 28, 2026</li> <li>C. Final Open Session Investment Committee Agenda for May 26, 2026 and Draft Open Session Agendas for June 23 and July 28, 2026</li> </ul>
5.	Quarterly Investment Update, Q1 2026 <ul style="list-style-type: none"> <li>A. Private Markets Strategy Reports and Market Outlook</li> <li>B. Quarterly Investment Update (no presentation unless requested)</li> </ul>
<b>CLOSED SESSION*</b>	

\* 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.

<b>RECONVENE IN OPEN SESSION</b>
6. Announcement of Matters Taken Up in Closed Session
7. ERCC Charter Amendments
8. In the Absence of Questions, the Following Reports will be Filed Without Comment (For informational purposes): <ul style="list-style-type: none"> <li>A. Quarterly Charges to Funds Reports, Q1 2026</li> <li>B. Private Markets and Funds Alpha Commitments, Q1 2026</li> <li>C. Board Contact Log</li> </ul>
9. Future Items for Discussion <ul style="list-style-type: none"> <li>A. 2026 Board Meeting and Agenda Plan</li> </ul>
10. Motion to Adjourn
<p><i>NOTES: Items may be taken in order other than listed.</i></p> <p><i>Estimated times are for planning purposes only. Agenda items will last until discussion is concluded.</i></p> <p><i>The meeting site is physical accessible. Upon prior request, reasonable accommodations will be provided.</i></p>

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

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## David A Mericle

Global Investment Research  
*New York*



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**D**avid is chief US economist in Global Investment Research. He joined Goldman Sachs in 2012 as an associate and was named managing director in 2017.

David earned an AB in Economics and History and an AM in Statistics in 2005 from Harvard University. He earned a PhD and completed a postdoctoral fellowship in Economics at Harvard University in 2012.



# US Economic Outlook

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## Risks to the US Economy from the War with Iran

June 2026

David Mericle

Goldman, Sachs & Co.  
Chief US Economist

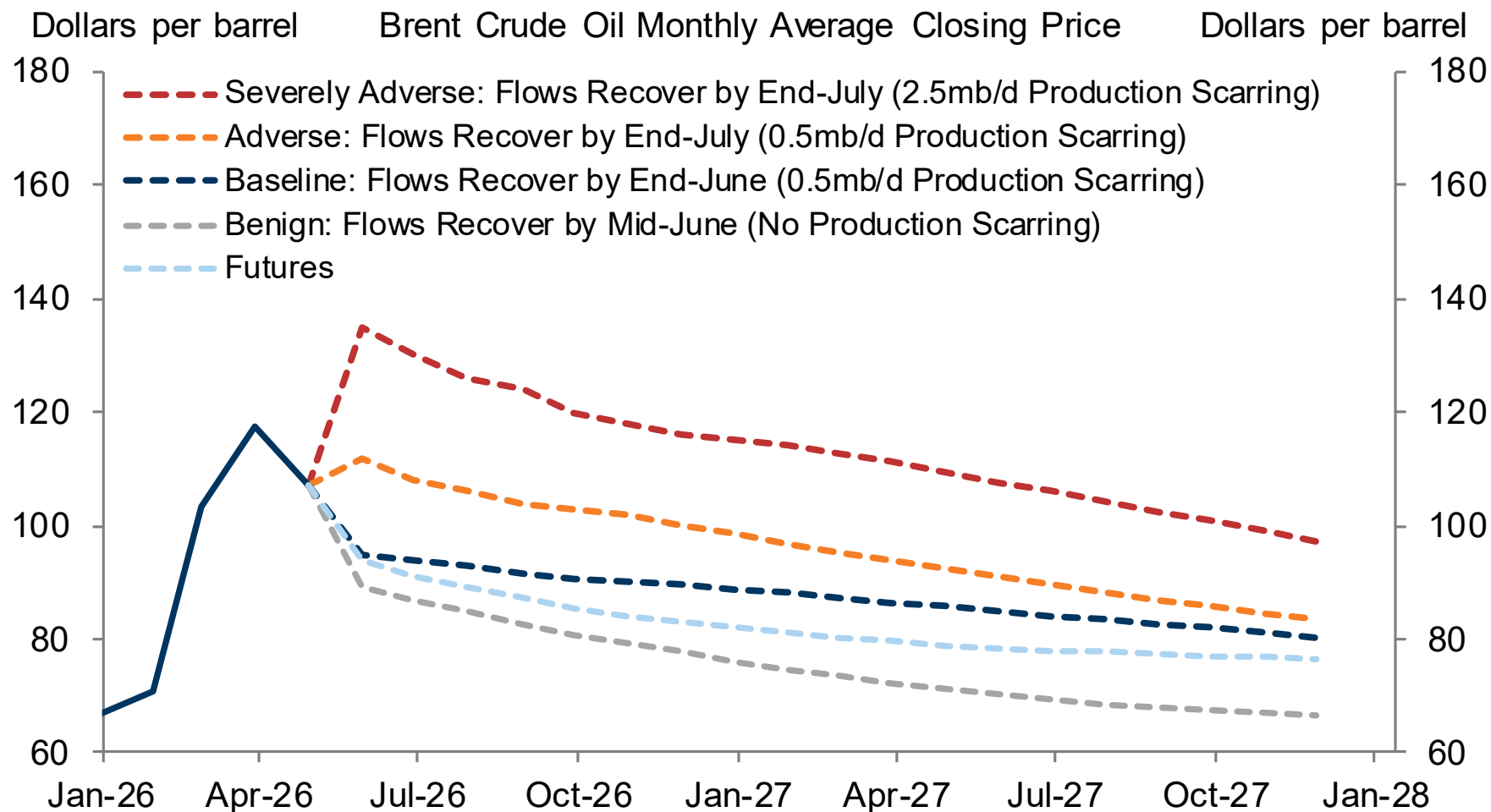
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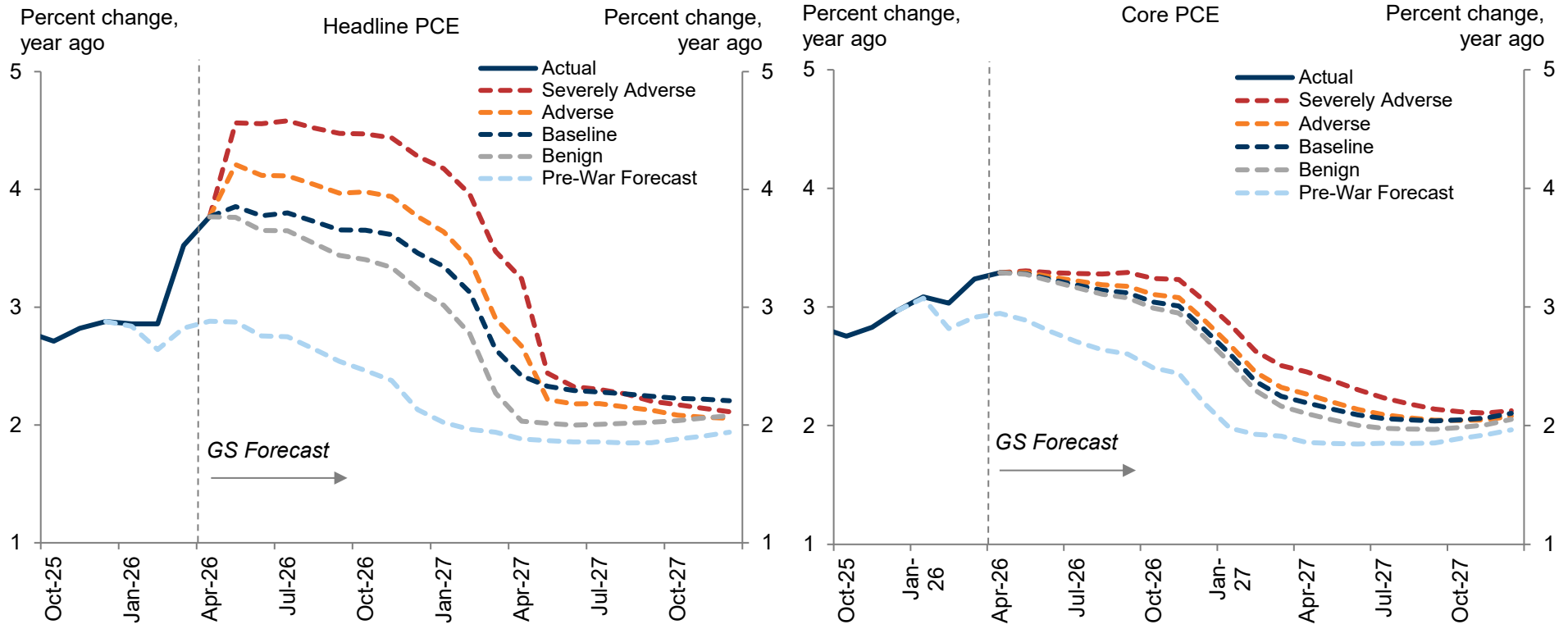
[research.gs.com/USEconomics](https://research.gs.com/USEconomics)

Investors should consider this report as only a single factor in making their investment decision. For Reg AC certification and other important disclosures, see the Disclosure Appendix, or go to [www.gs.com/research/hedge.html](https://www.gs.com/research/hedge.html).

# Our Economic Forecasts Assume Our Baseline Oil Price Forecast, Which Is Close to Market Pricing, but the Risks Are Tilted Higher



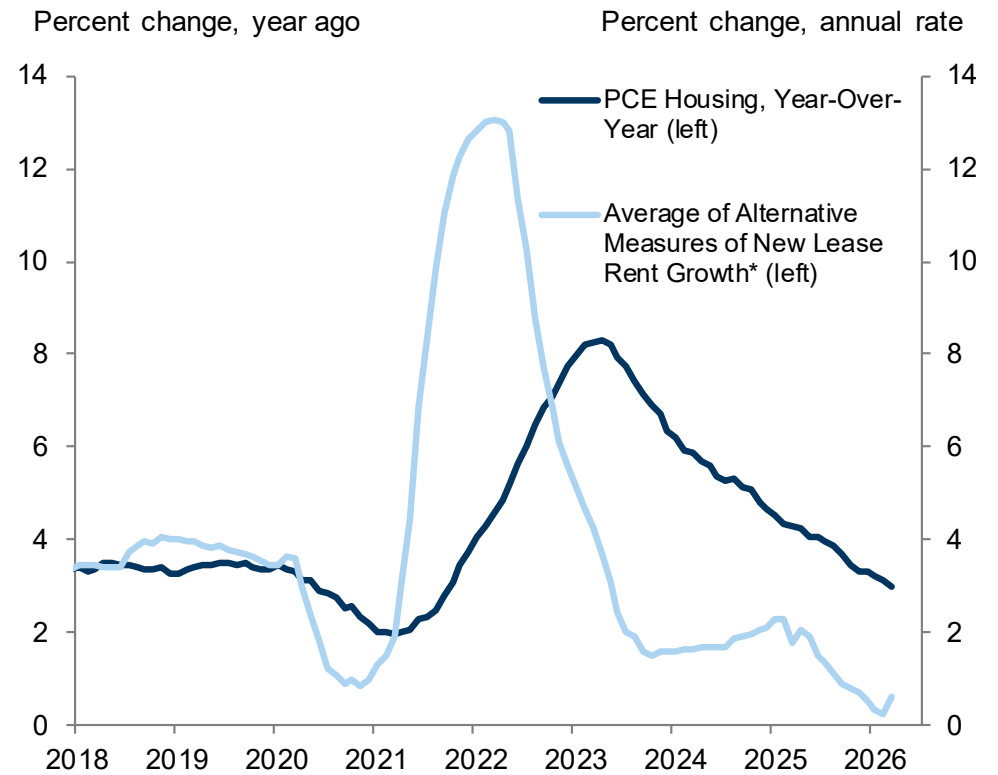
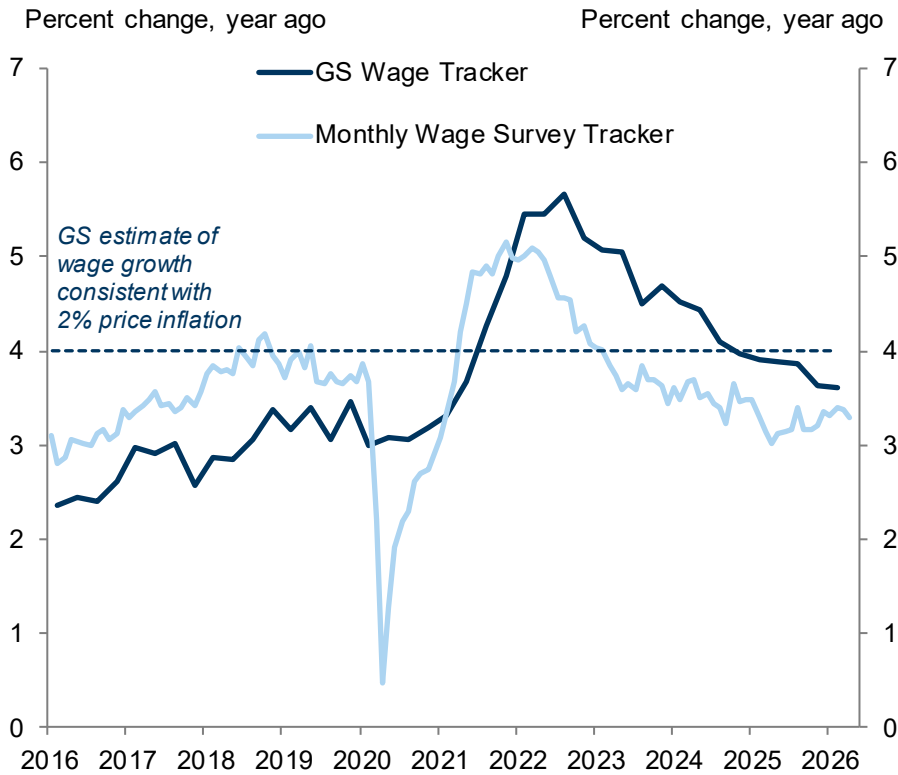
# Inflation: Headline PCE Inflation Is Likely to Remain Just Below 4% and Core Near 3% in 2026, but We Still Expect Them to Decline Toward 2% in 2027



Note: Baseline assumes oil prices average \$100 in May before declining to \$90 by 2026Q4. Benign scenario assumes oil prices average \$100 in May before declining to \$80 by 2026Q4. Adverse scenario assumes oil prices average \$125 in May before declining to \$100 by 2026Q4. Severely adverse scenario assumes oil prices average \$145 in May before declining to \$120 by 2026Q4.

Source: Goldman Sachs Global Investment Research.

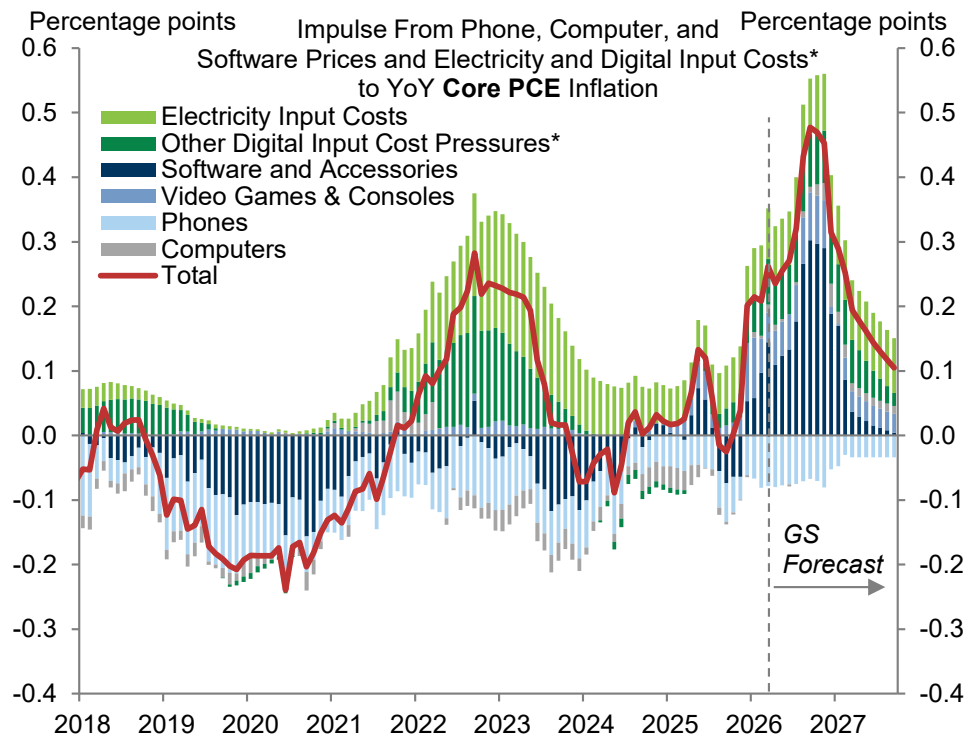
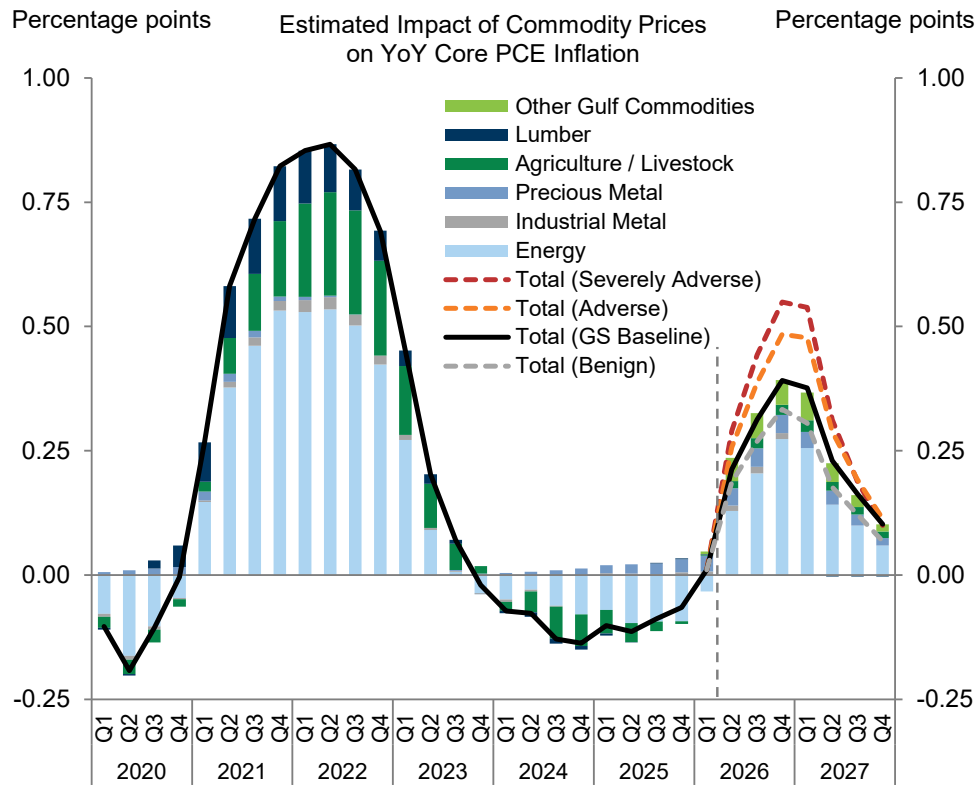
# Wage and Rent Growth Still Look Compatible with 2% or Lower Inflation



\*Average of Costar, Yardi, and Zillow measures of rent growth.

Source: Goldman Sachs Global Investment Research.

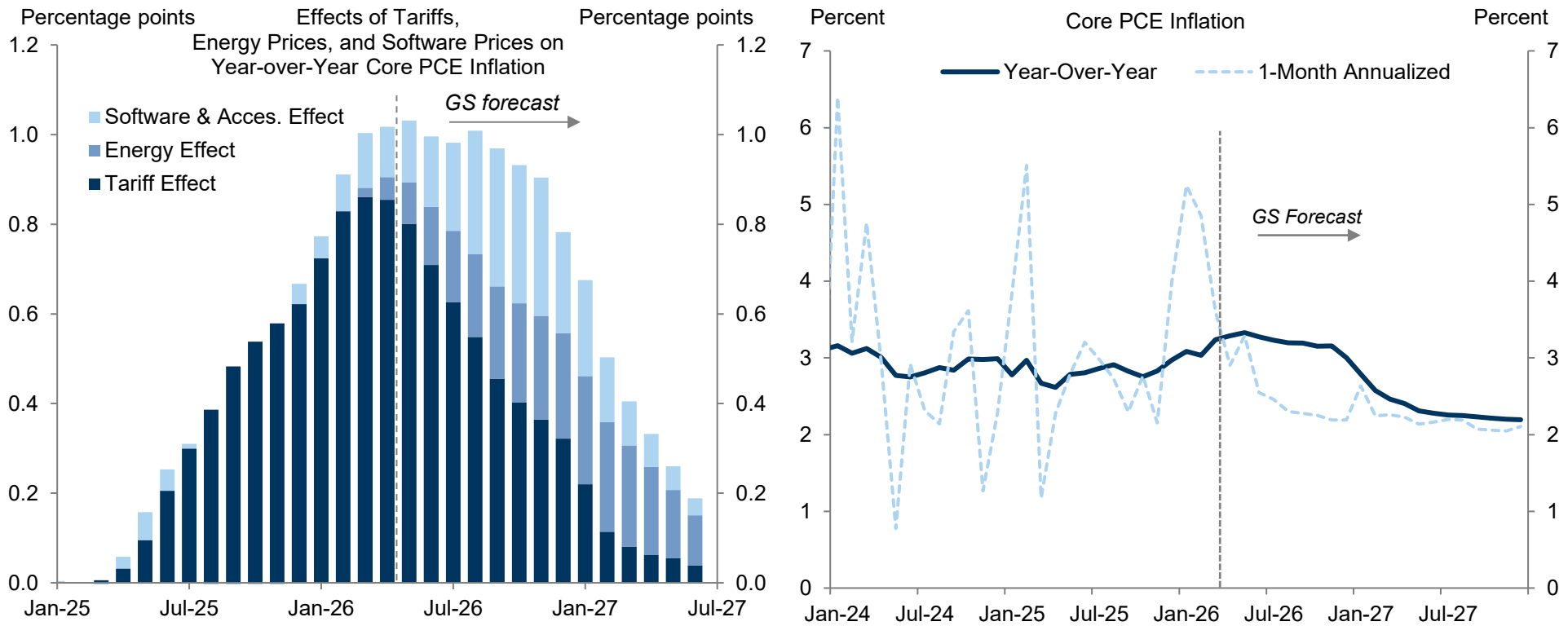
# But Oil Passthrough and Other Effects of the War and the Impact of AI Demand—Greatly Magnified by Mismeasurement—Provide Large Boosts



\* Estimated effect of changes in digital memory, storage, computer terminals and other peripherals costs on consumer prices throughout the supply chain, based on PPI, import prices, and input-output linkages.

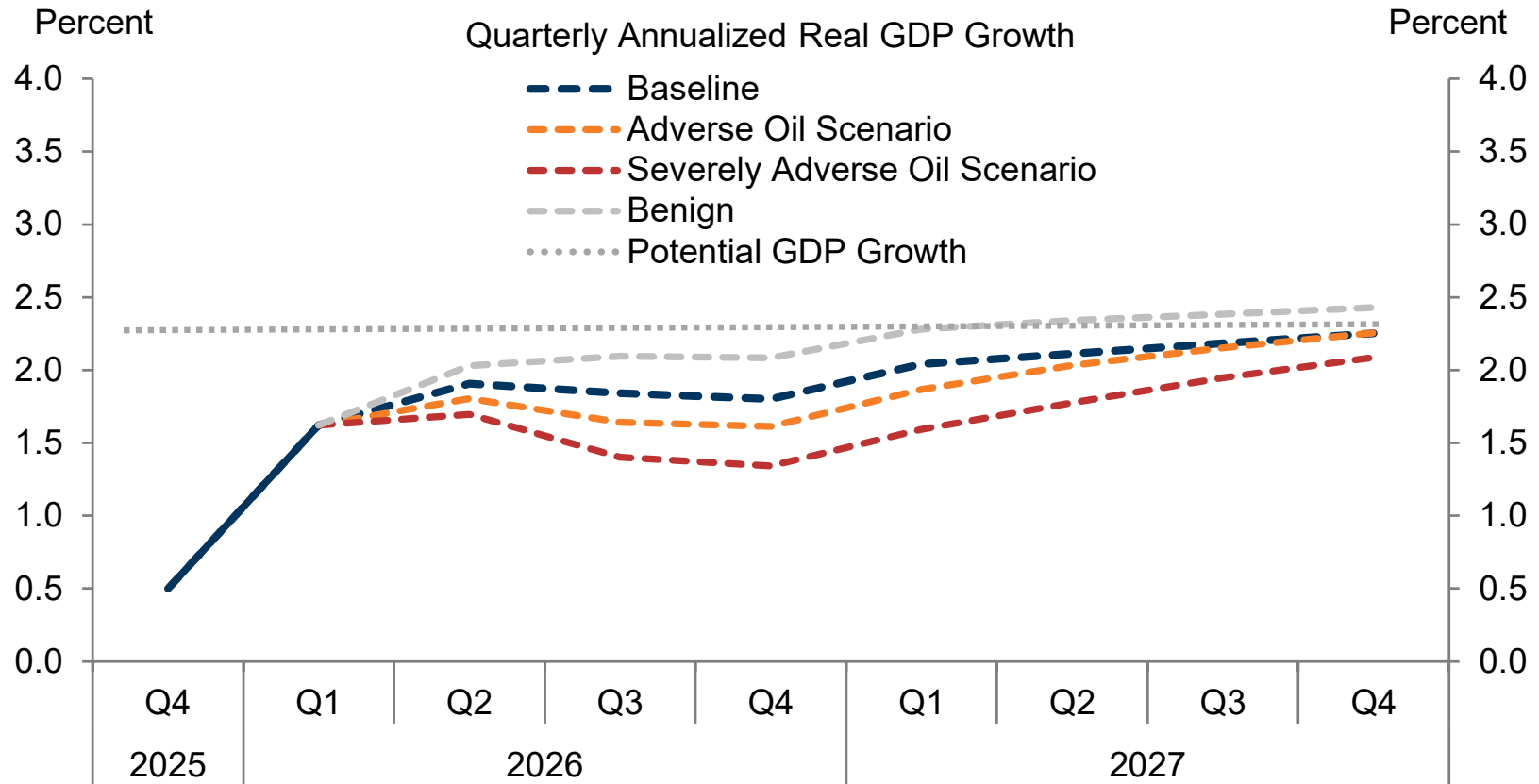
Source: Goldman Sachs Global Investment Research.

# Even as Tariff Effects Fade, the Combined Impact on Core PCE Inflation of Tariffs, Higher Energy Prices, and the Spike in Memory Prices Holds Steady



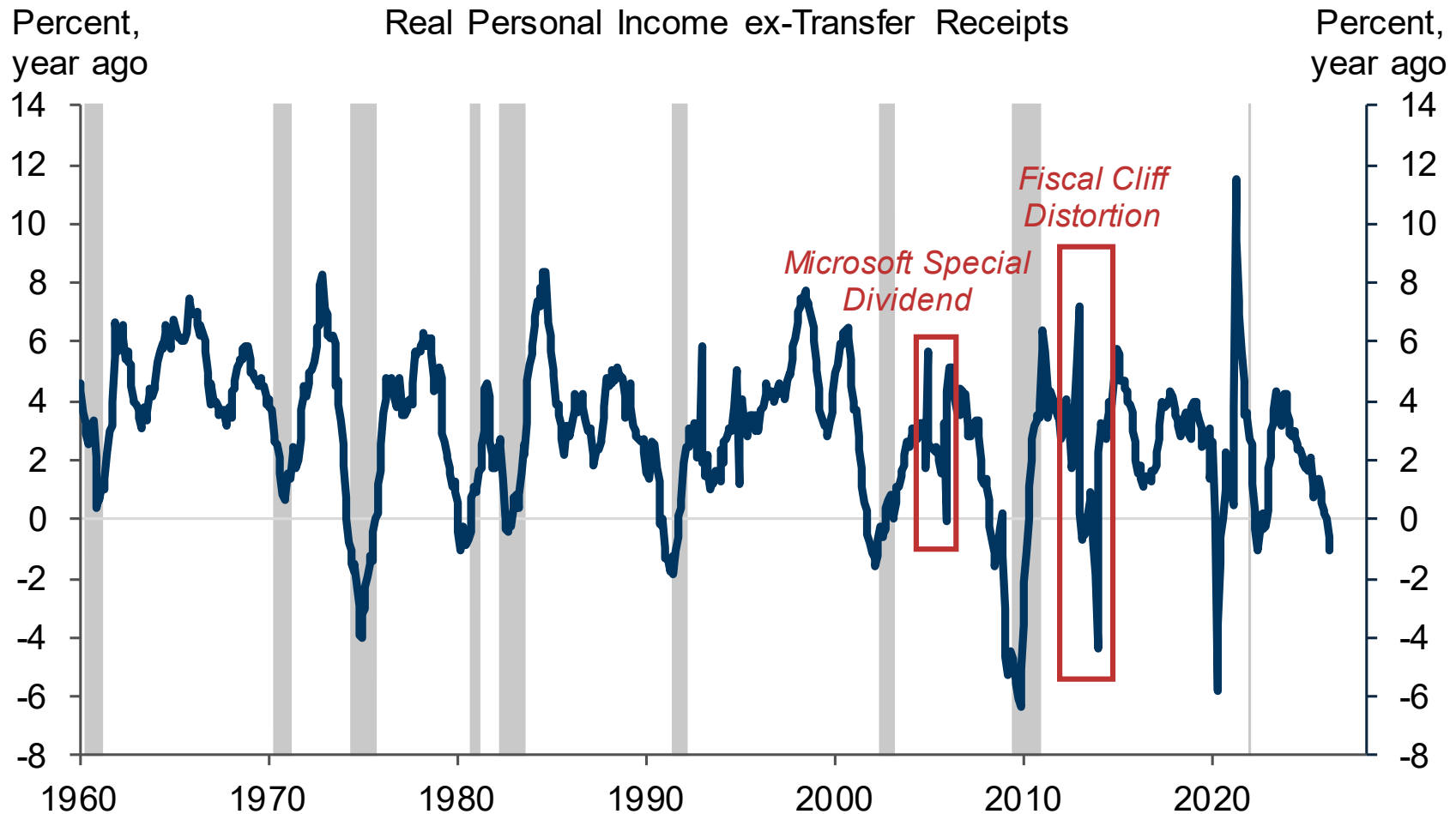
Source: Goldman Sachs Global Investment Research.

# GDP Growth: We Expect 1.8% GDP Growth in 2026 ...



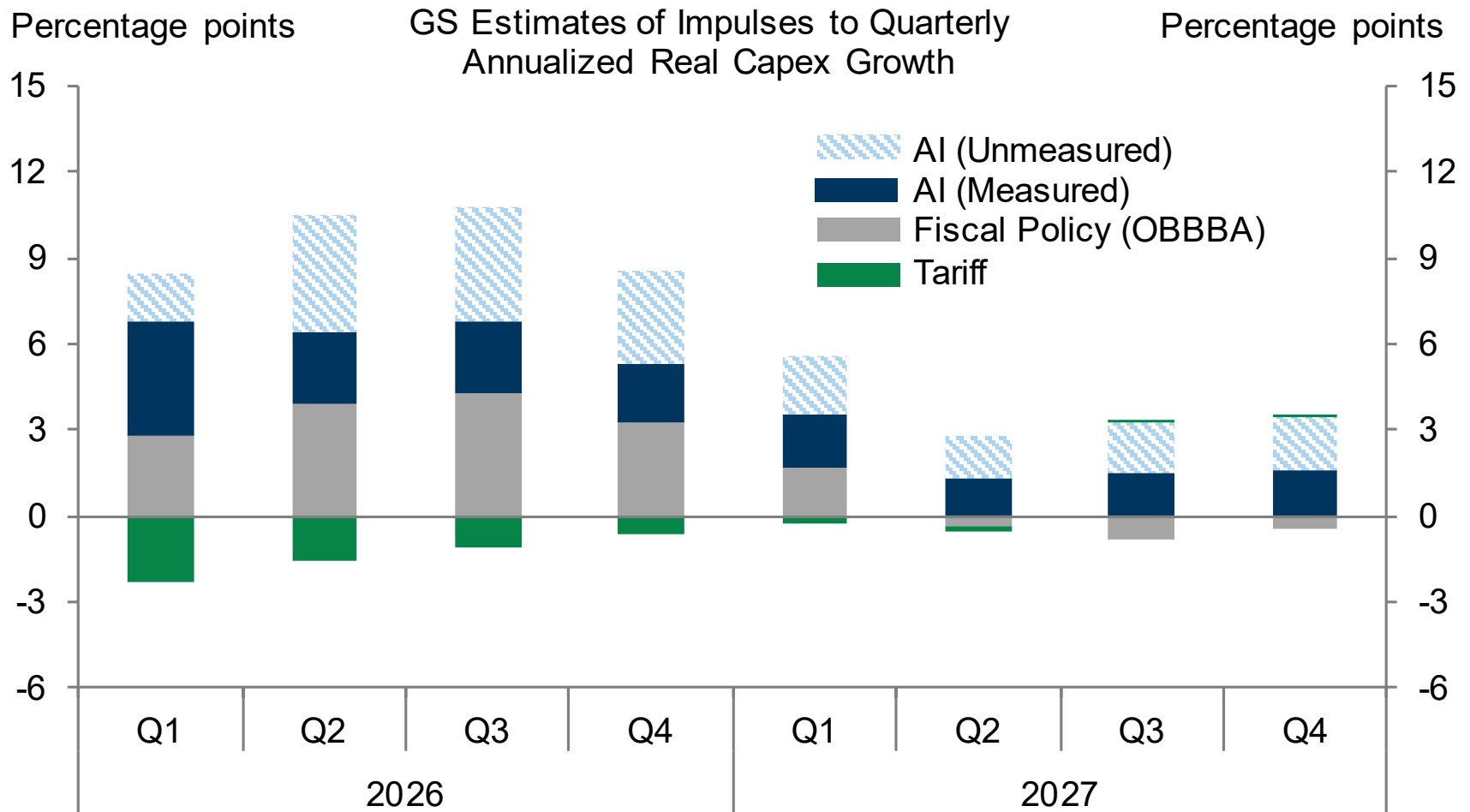
Note: Baseline assumes oil prices average \$105 in May before declining to \$90 by 2026Q4. Benign scenario assumes oil prices average \$100 in May before declining to \$78 by 2026Q4. Adverse scenario assumes oil prices average \$125 in May and fall to \$100 by 2026Q4. Severely adverse scenario assumes oil prices average \$145 in May before declining to \$116 by 2026Q4.

# Real Income Growth Has Been Weak, in Part Due to Higher Oil Prices, Which Is Likely to Weigh on Consumer Spending Growth This Year



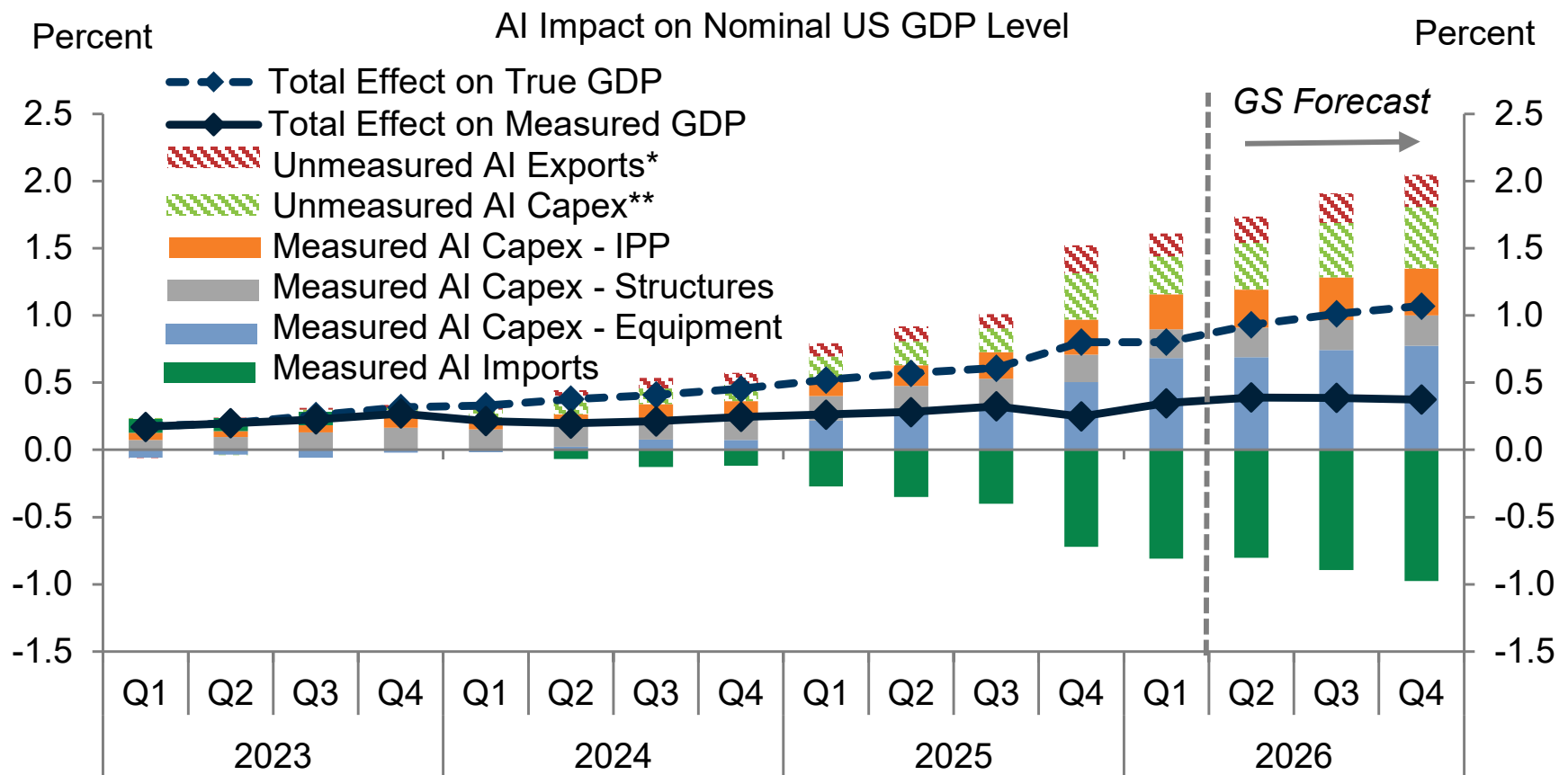
Source: Goldman Sachs Global Investment Research.

# Business Investment Should Again Be the Bright Spot, Supported by AI Investment, New Tax Incentives, and the Fading of the Tariff Drag



Source: Goldman Sachs Global Investment Research.

# Little of the AI Investment Boom Passes Through to GDP Growth, As 1) Most AI Equipment Is Imported and 2) Semiconductors Aren't Counted

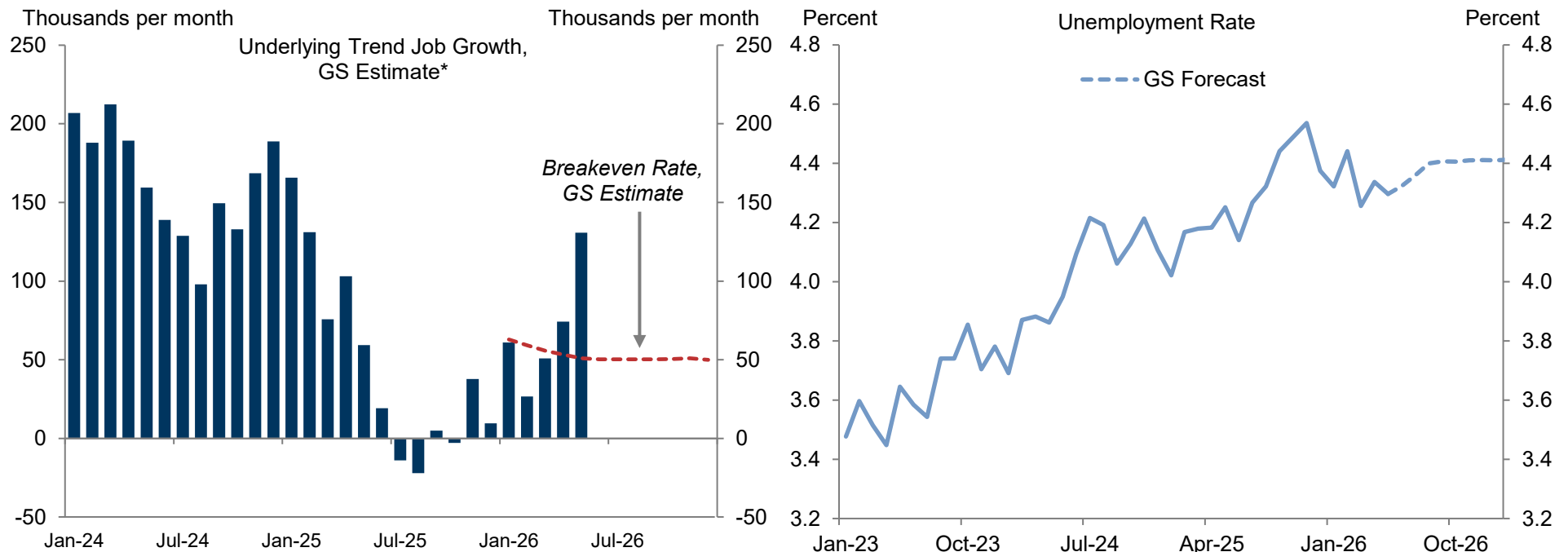


\*Undermeasurement of tech-related intellectual property service exports.

\*\*Undermeasurement of semiconductor investment.

Source: Goldman Sachs Global Investment Research.

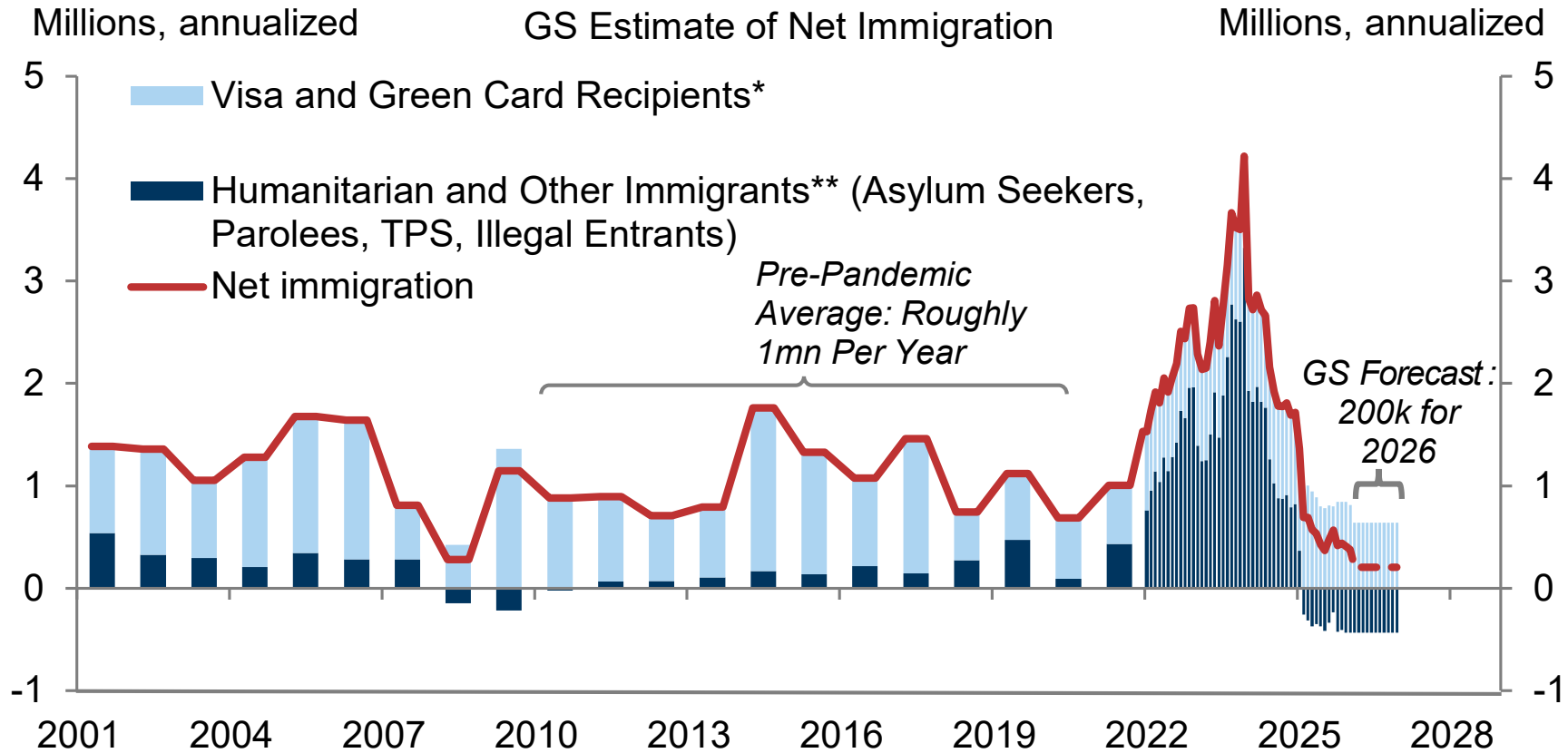
# Labor Market: Following a Series of Much Stronger Payrolls Numbers, We Now Expect the Unemployment Rate to Rise to Just 4.4% This Year



\* We estimate underlying trend job growth as  $0.75 \times 3\text{-month average payroll growth} + 0.25 \times 9\text{-month average household employment growth}$ ; see our report "How to Read the Employment Report."

Source: Goldman Sachs Global Investment Research.

# With Immigration Well Below Normal Levels, the Breakeven Rate Is Lower

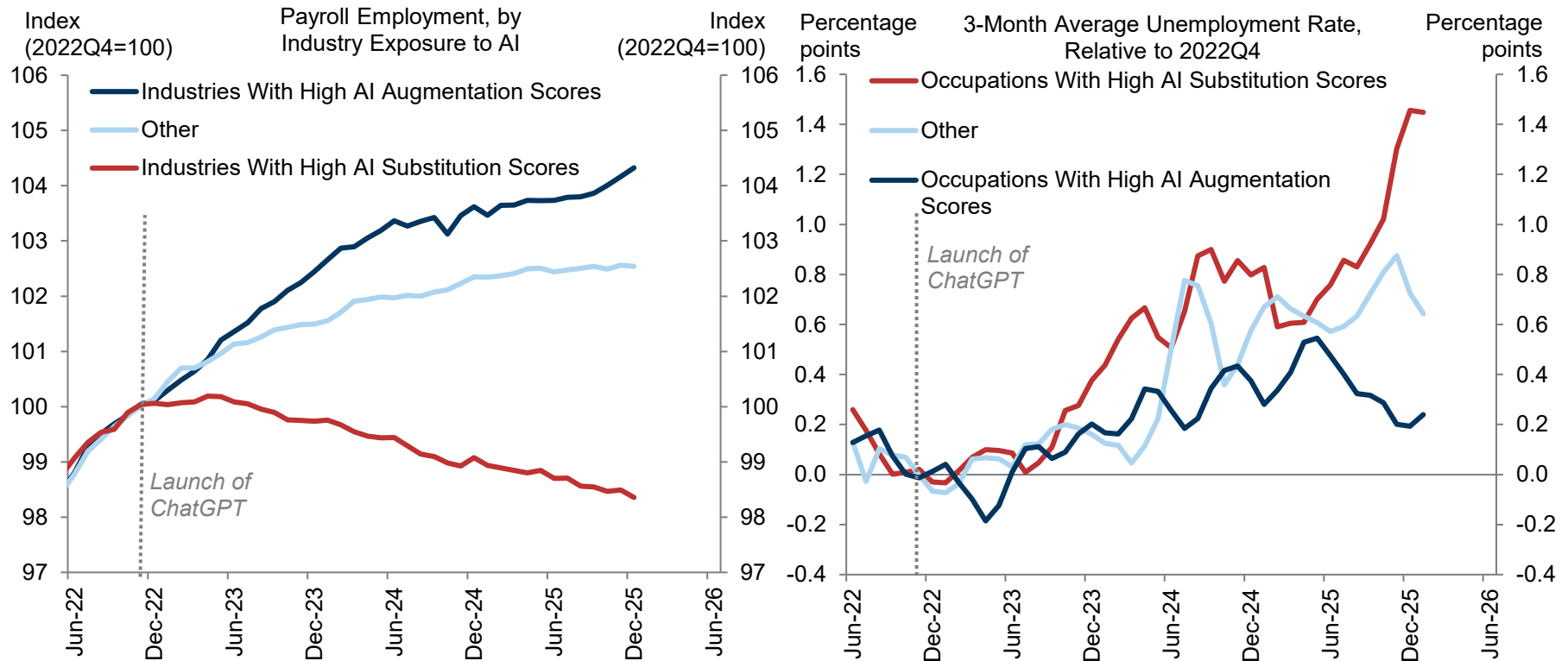


\*Based on CBO estimates and USCIS visa statistics.

\*\*Based on immigration court cases and immigration enforcement data from the DHS, CBP, and ICE.

Source: Goldman Sachs Global Investment Research.

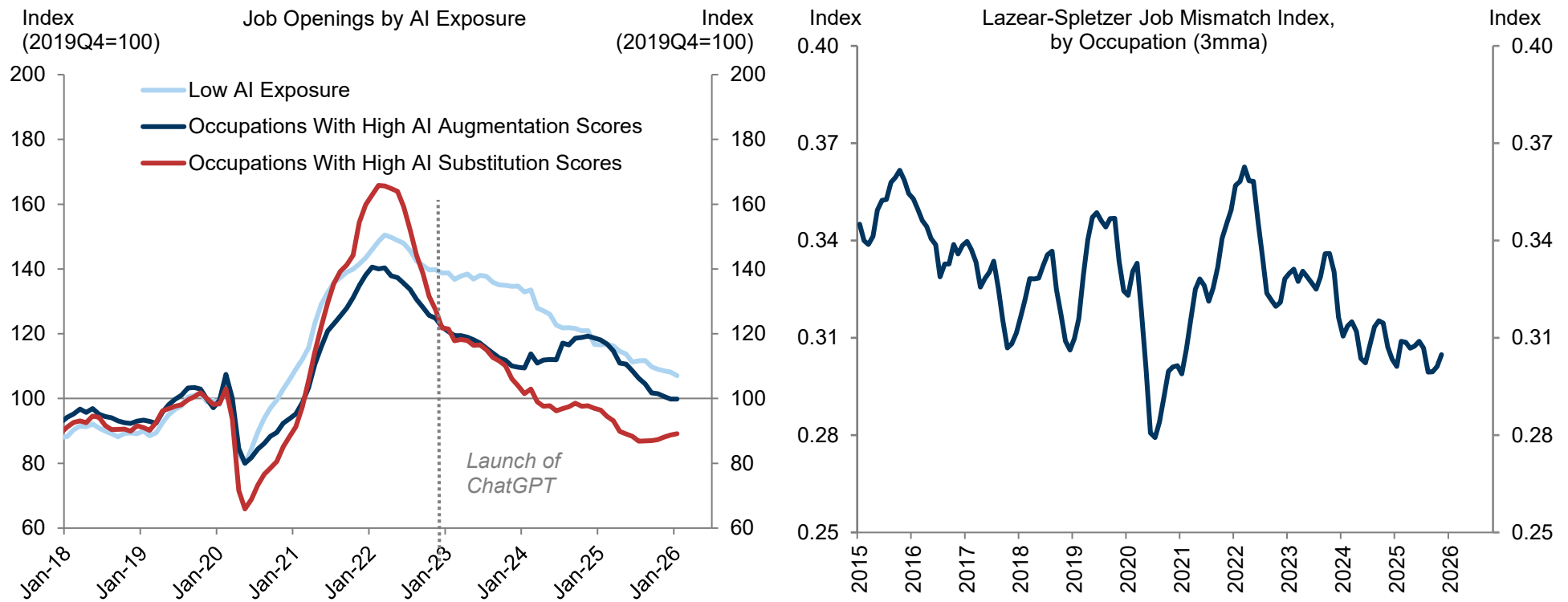
# AI Effects on the Labor Market Are Visible but Still Modest on Net



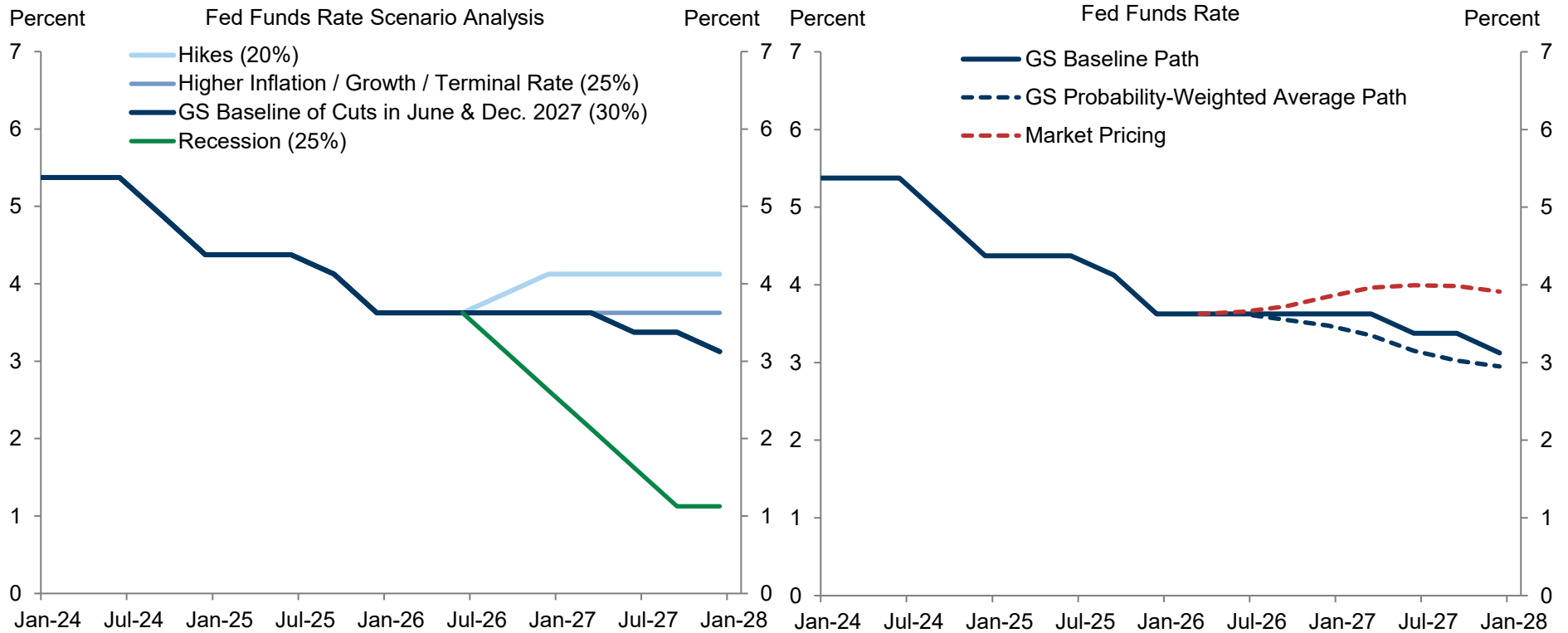
Note: We exclude healthcare, education services, and government industries, which saw strong job growth due to post-pandemic catch-up effects.

Source: Goldman Sachs Global Investment Research.

# Labor Demand in AI Substitution-Prone Occupations Has Fallen from a High Starting Point; the Next Phase Will Require More Adaptation by Workers

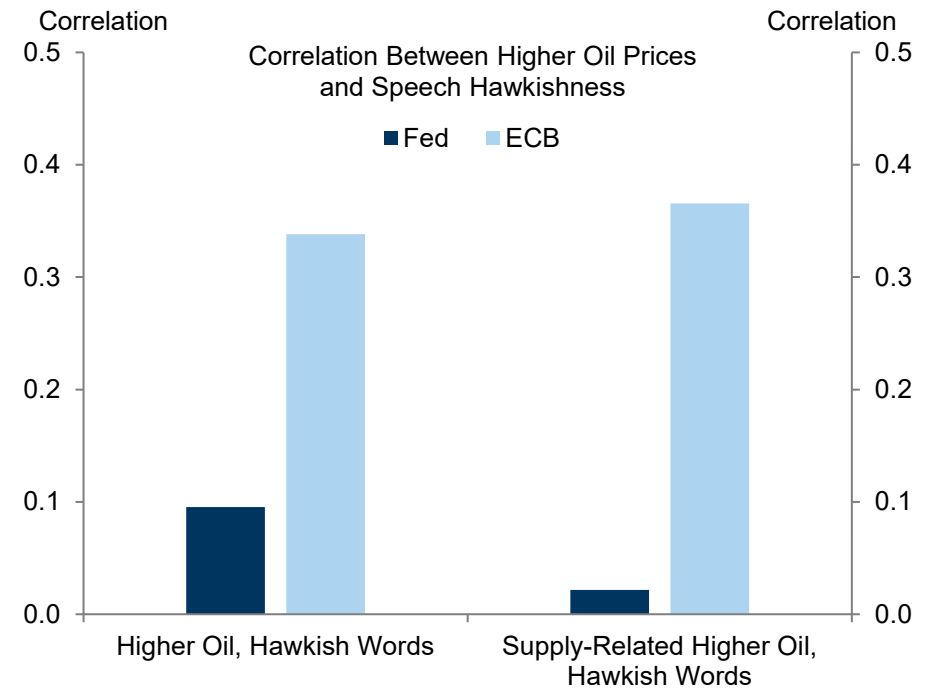
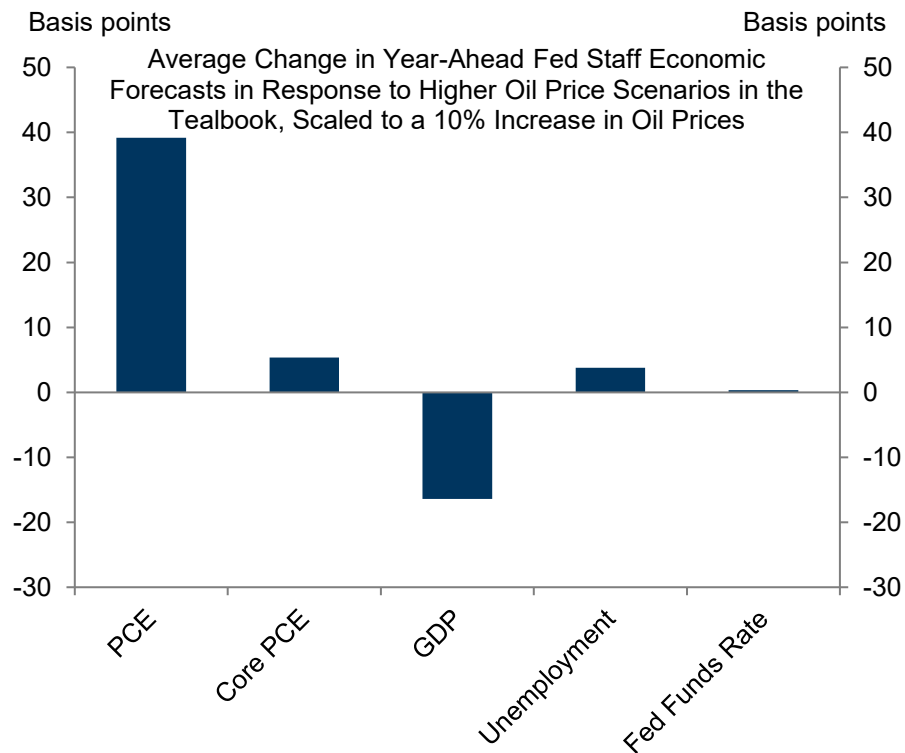


# Fed: No More Cuts in 2026 but Two Final 25bp Cuts to 3.0-3.25% in 2027, Though a Longer Delay Makes It Possible the FOMC Will Stay at 3.5-3.75%



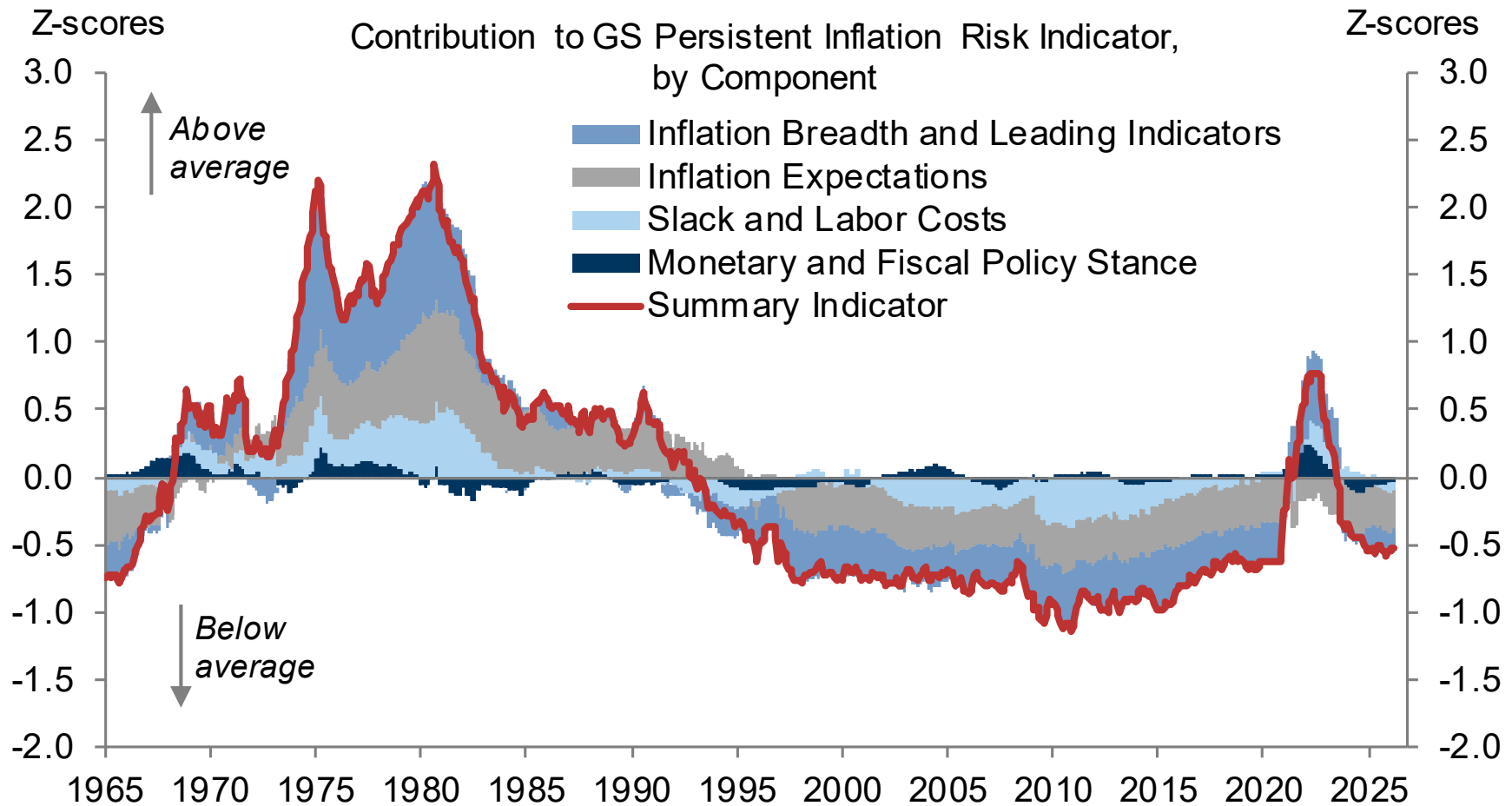
Source: Goldman Sachs Global Investment Research.

# We See Rate Hikes as Less Likely Than Market Pricing Implies Because the Fed Tends Not to Respond to Oil Price Spikes the Way the ECB Does

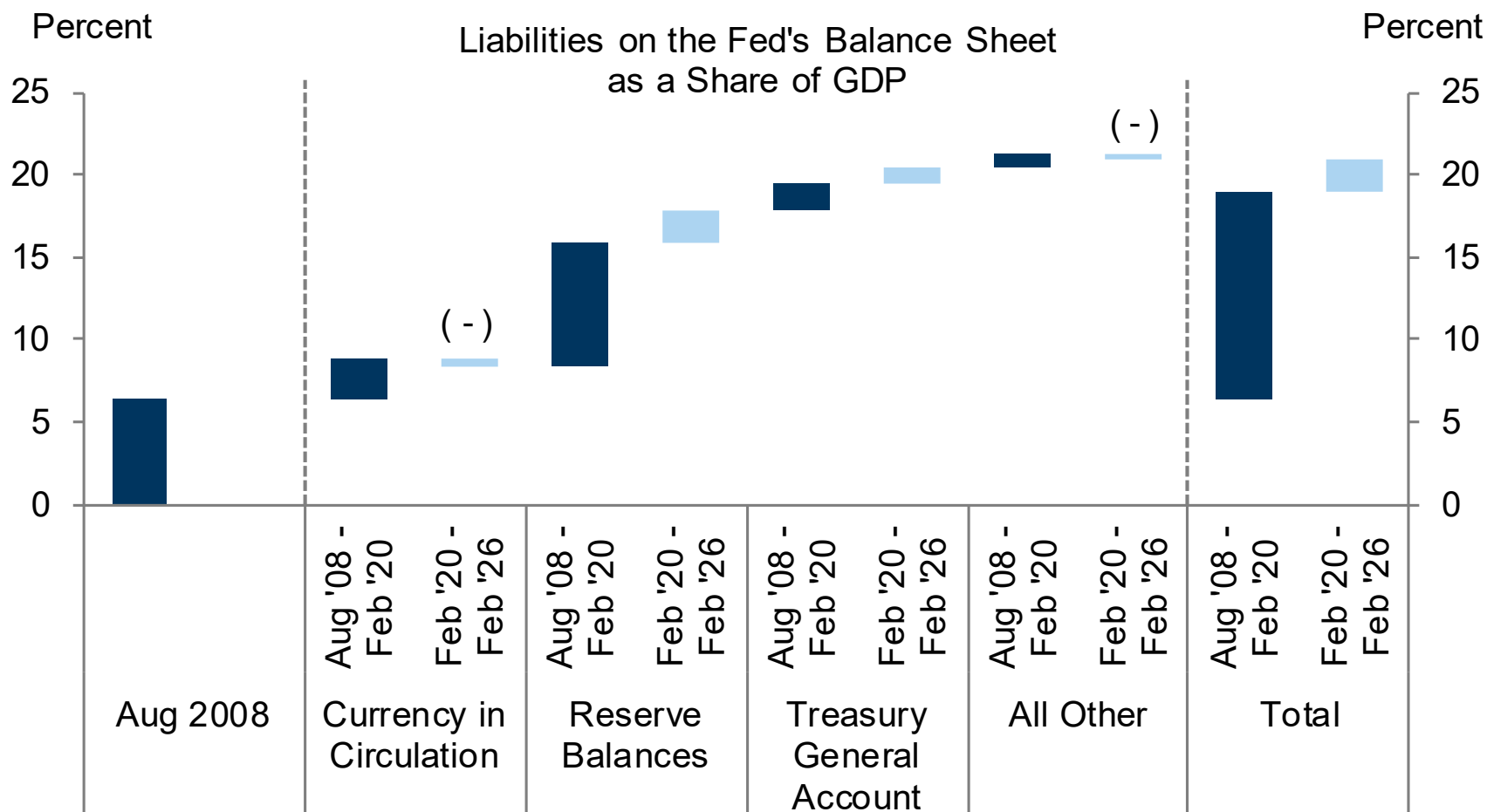


Source: Goldman Sachs Global Investment Research.

# Hikes Would Become More Likely If 2022-Type Concerns Reemerged: Rising Inflation Expectations, Inflation Contagion, or a Wage-Price Feedback Loop

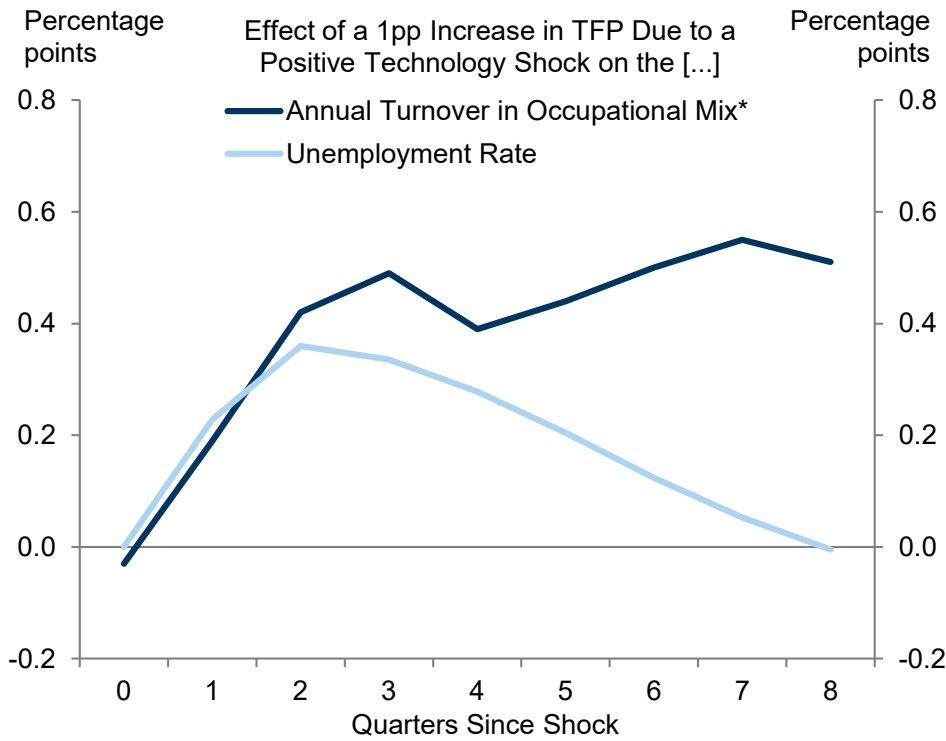


# While Warsh Has Argued for a Smaller Fed Balance Sheet, We Do Not See Much Room or Support on the FOMC for a Substantial Reduction

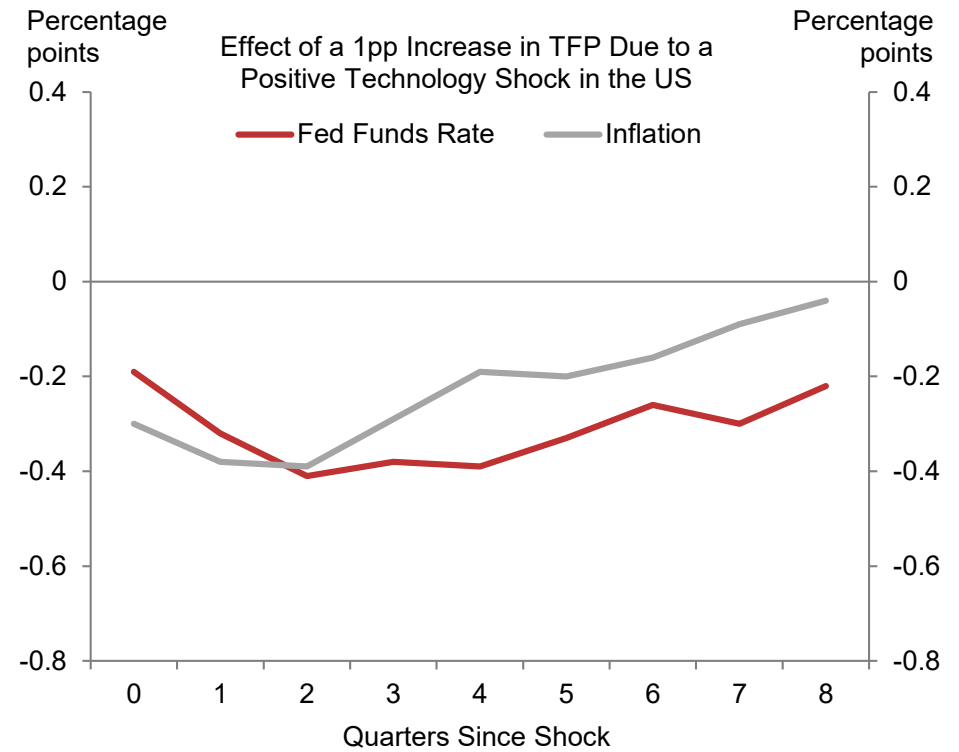


Source: Goldman Sachs Global Investment Research.

# AI: Faster Technological Change Has Tended to Produce Higher Frictional Unemployment, Lower Inflation, and a Lower Fed Funds Rate as a Result

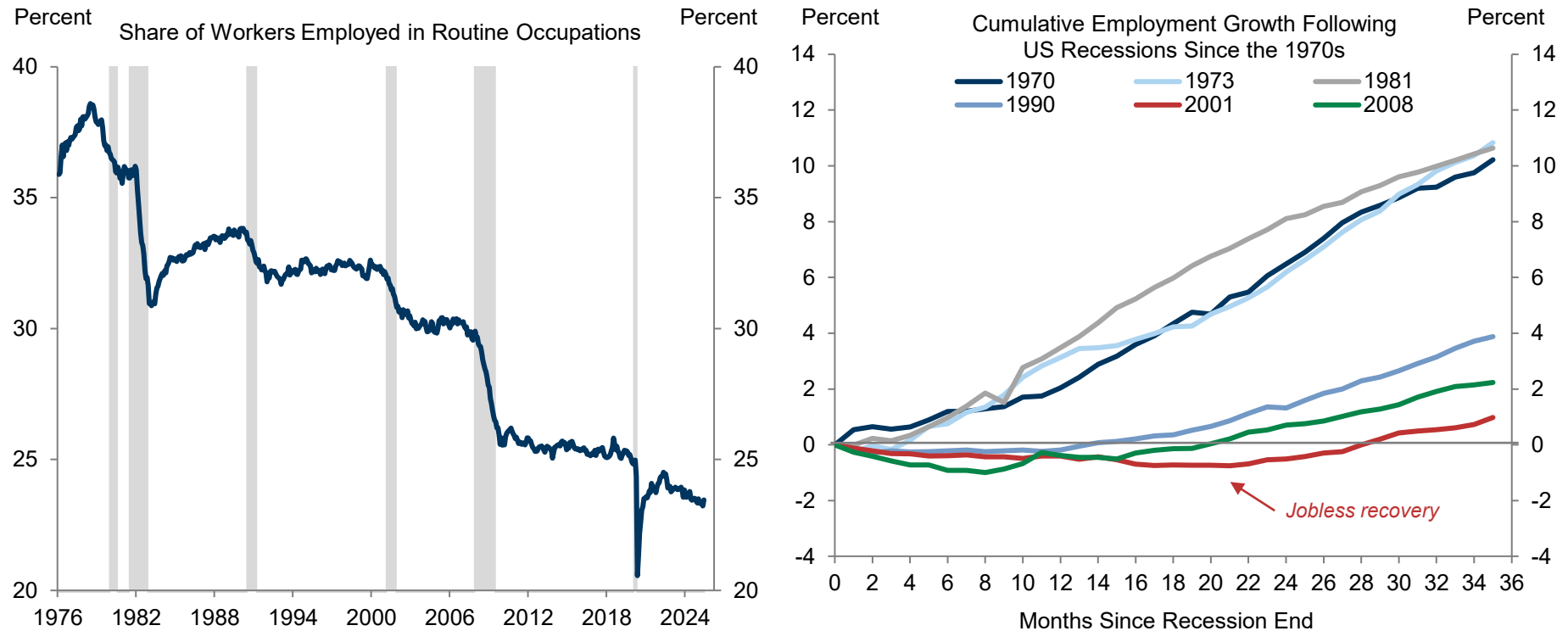


\* Share of workers changing occupation in a given quarter (Yale Budget Lab data).



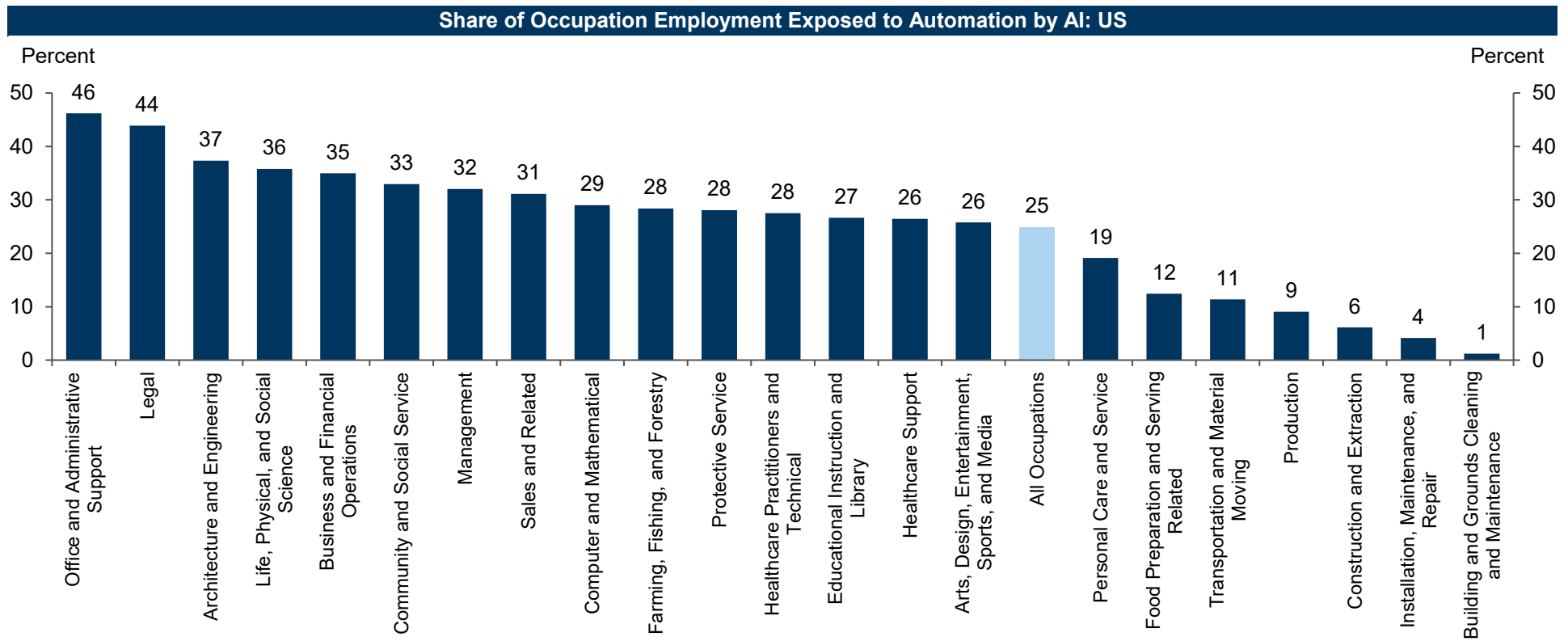
Source: Goldman Sachs Global Investment Research.

# The Full Impact of Technological Disruption of the Labor Market Usually Only Becomes Clear in Recessions, When Companies Cut More Aggressively



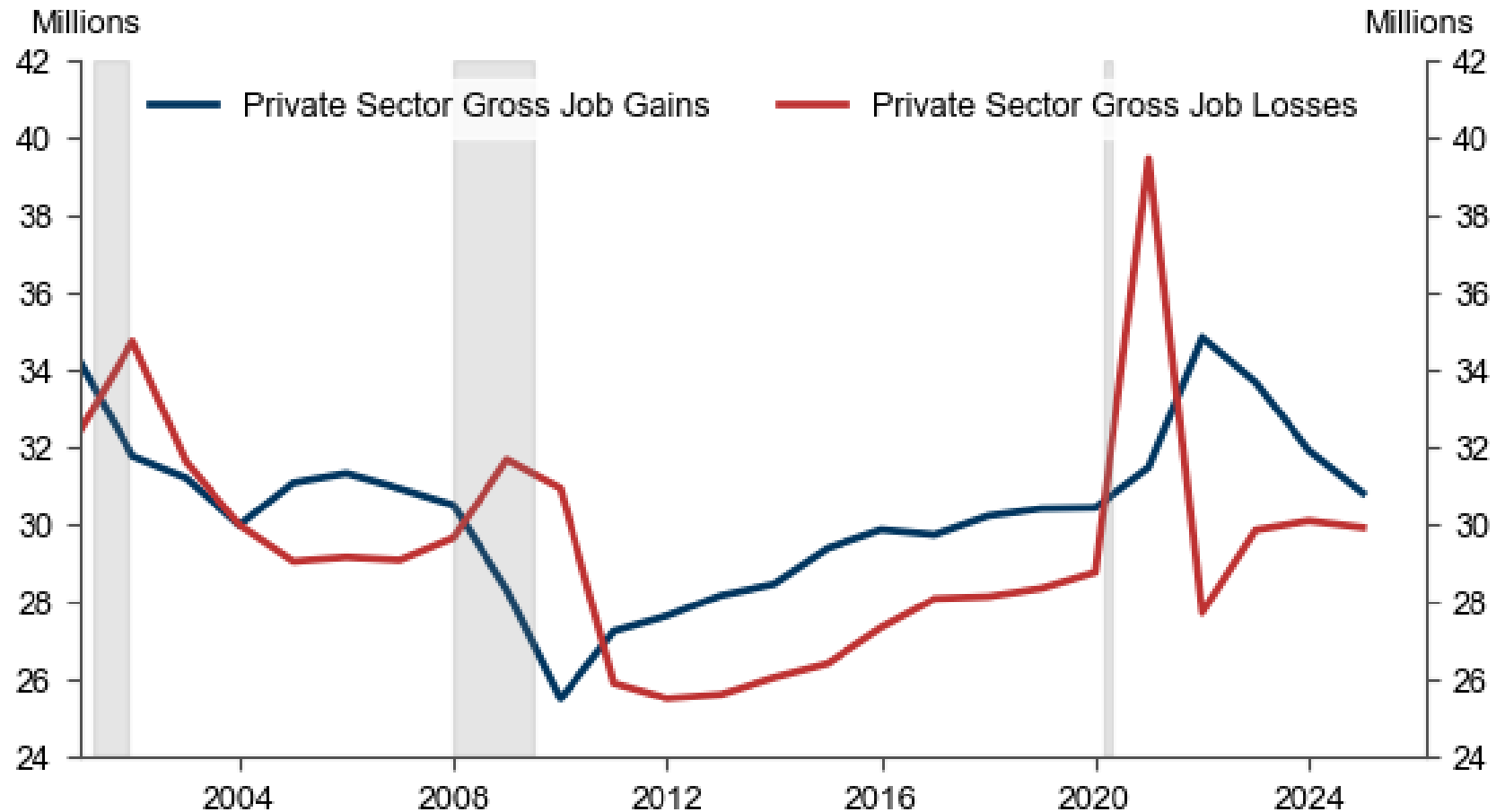
Source: Goldman Sachs Global Investment Research.

# AI Could Replace 25% of Current Work Tasks Over the Next Decade



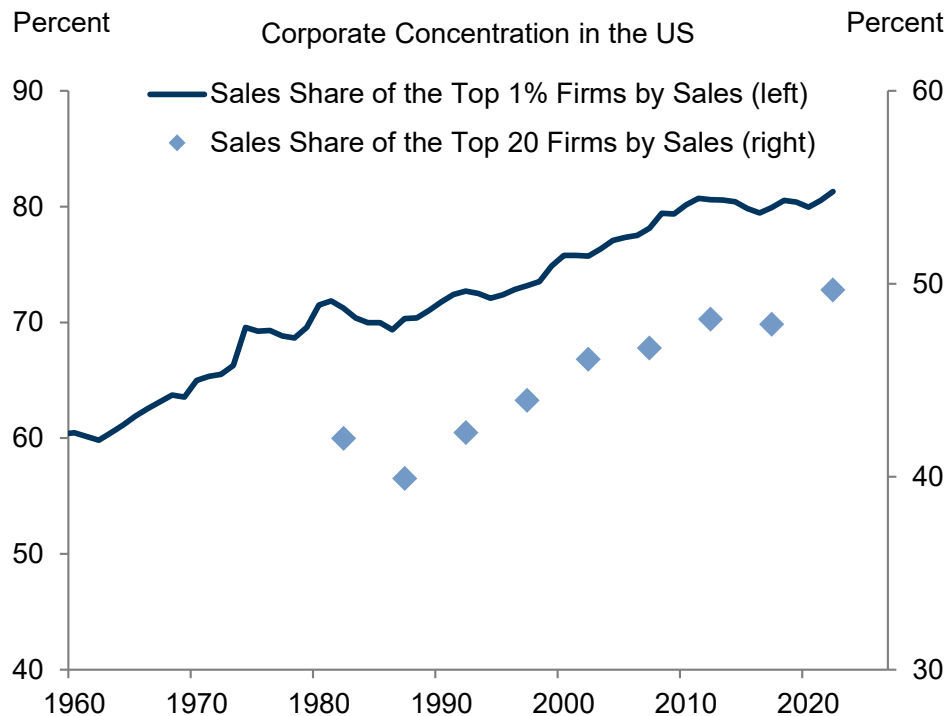
Source: Goldman Sachs Global Investment Research.

# Potential AI Job Displacement Looks Less Daunting in the Context of the Tens of Millions of Gross Job Gains and Losses That Occur Each Year

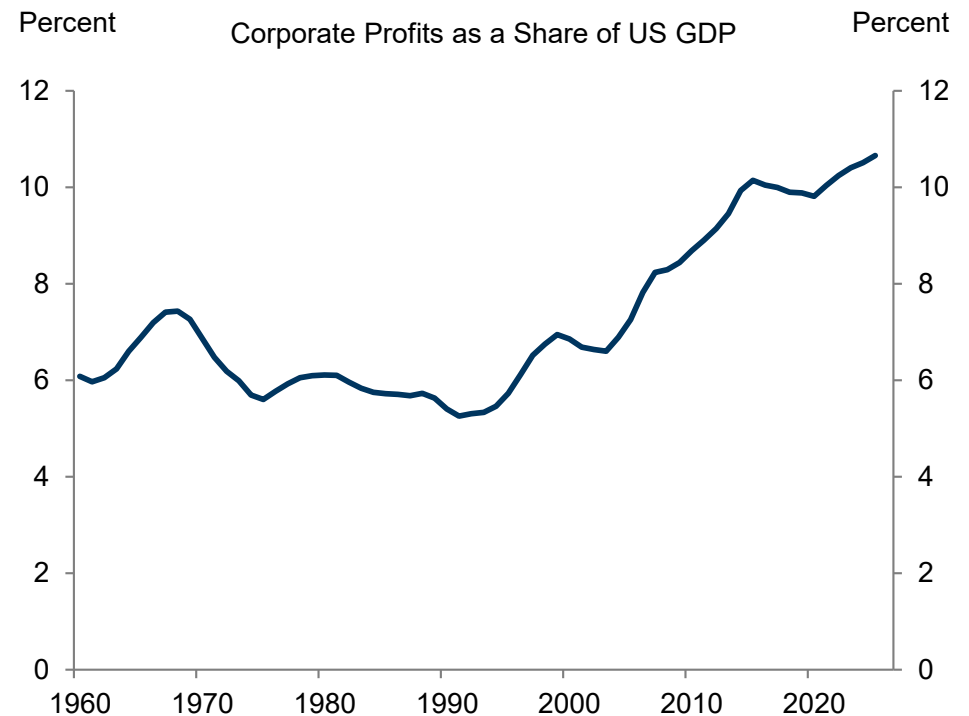


Source: Business Employment Dynamics, Goldman Sachs Global Investment Research.

# Corporate Concentration and Profit Margins Are Already Historically High, and Faster Technological Progress Usually Increases Concentration

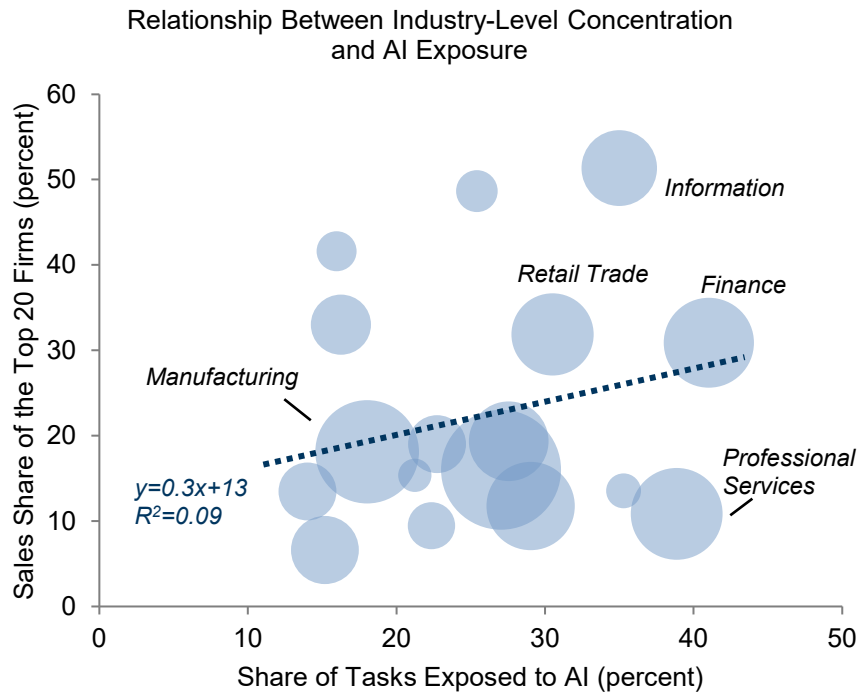


Note: The sales share of the top 1% firms is from Ma et al. (2026); industry-level sales shares of the top 20 firms are from the Census and are aggregated using industry GDP.

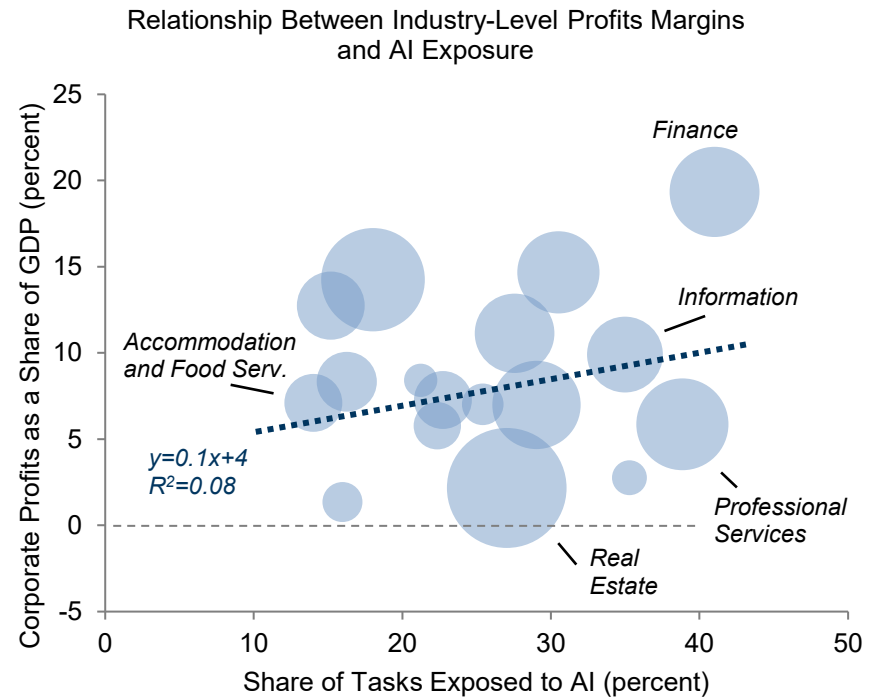


Note: 5-year moving average of the ratio between after-tax corporate profits from the US national accounts and GDP.

# But the Industries Most Exposed to AI Are More Concentrated and Have Higher Margins Today, Which Makes the Impact of AI Disruption Ambiguous

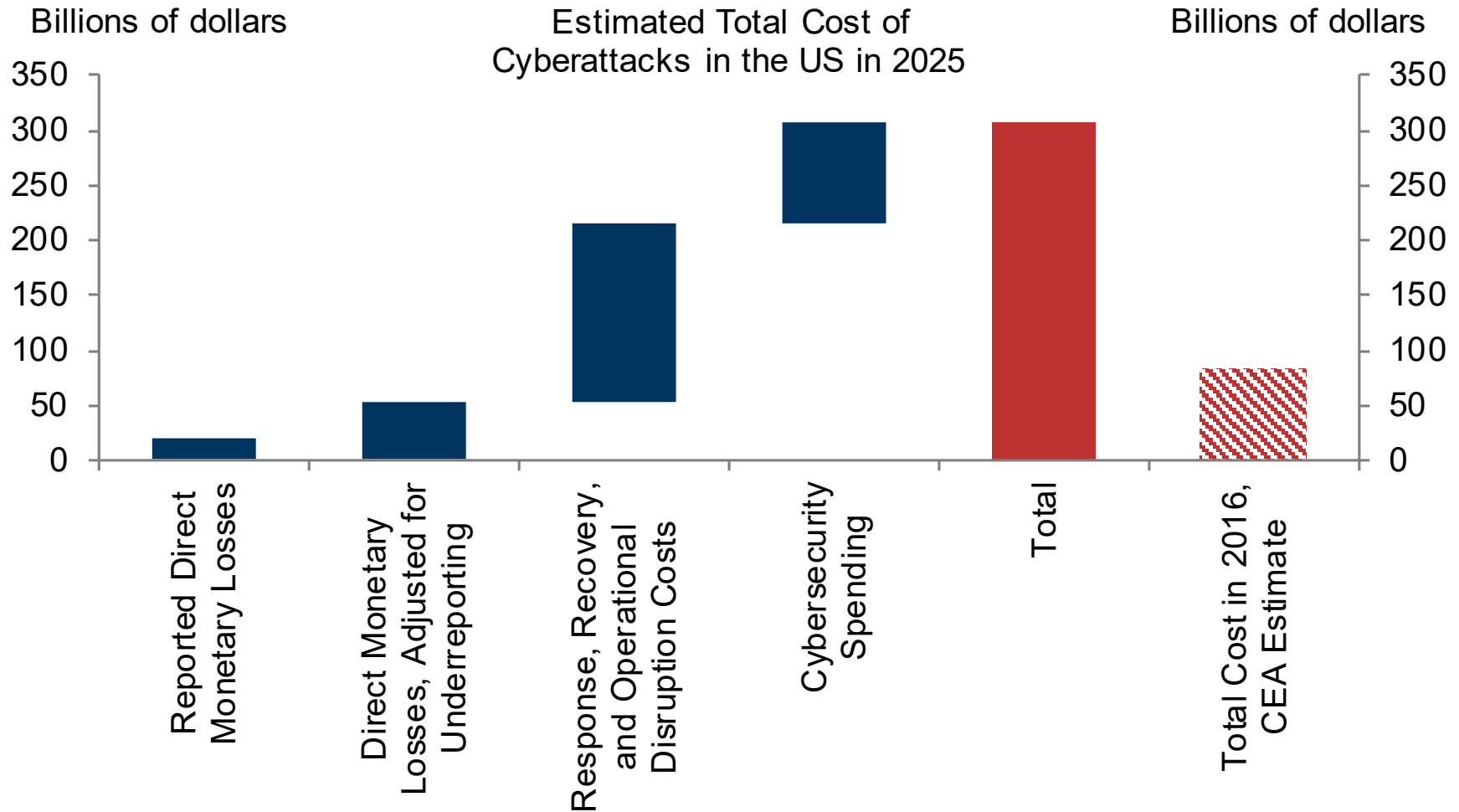


Note: Average sales share of the top 20 firms in the 2017 and 2022 Census.

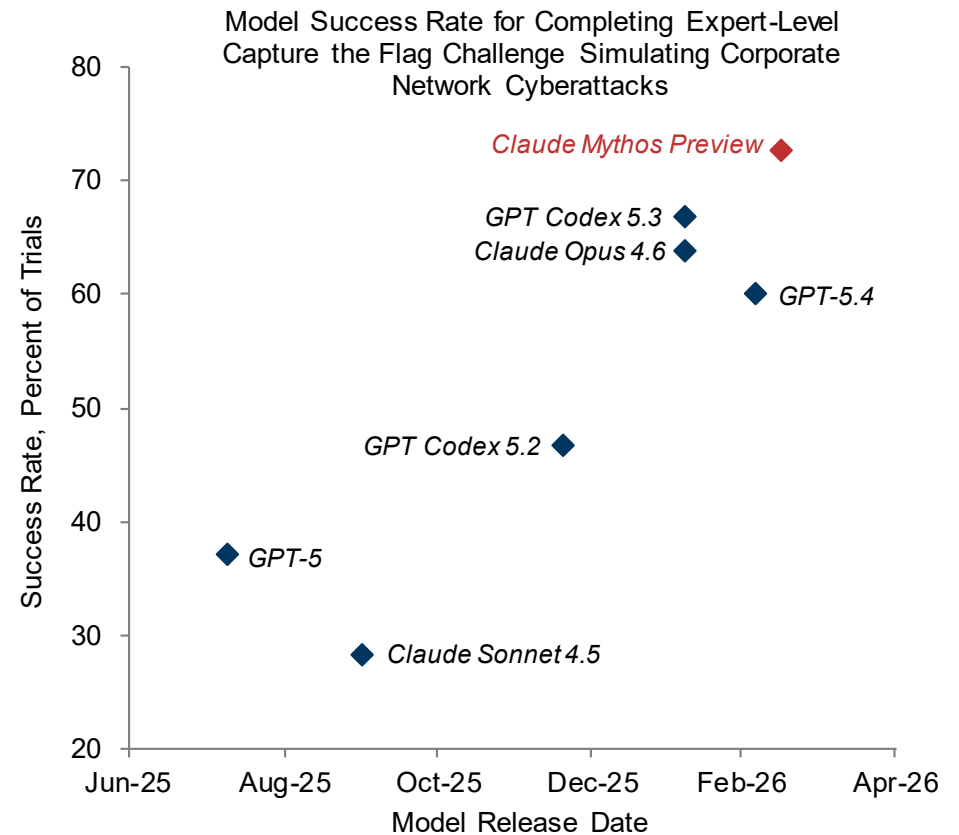
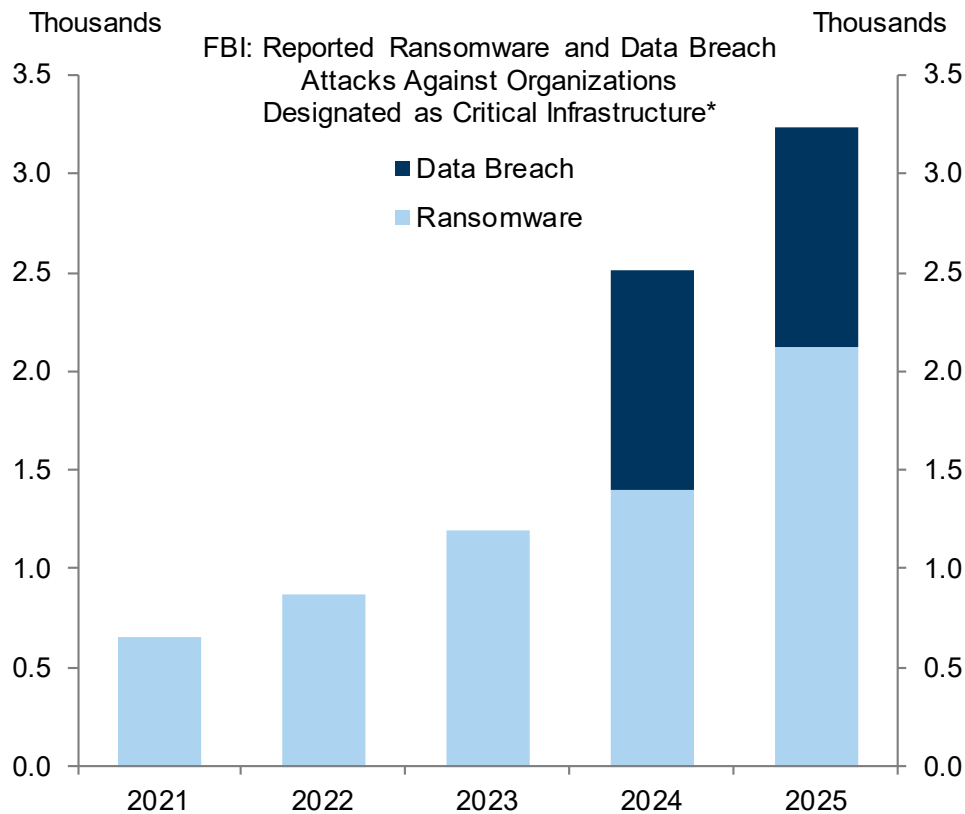


Note: Average of the 2019-2024 after-tax corporate profit margins excluding 2020.

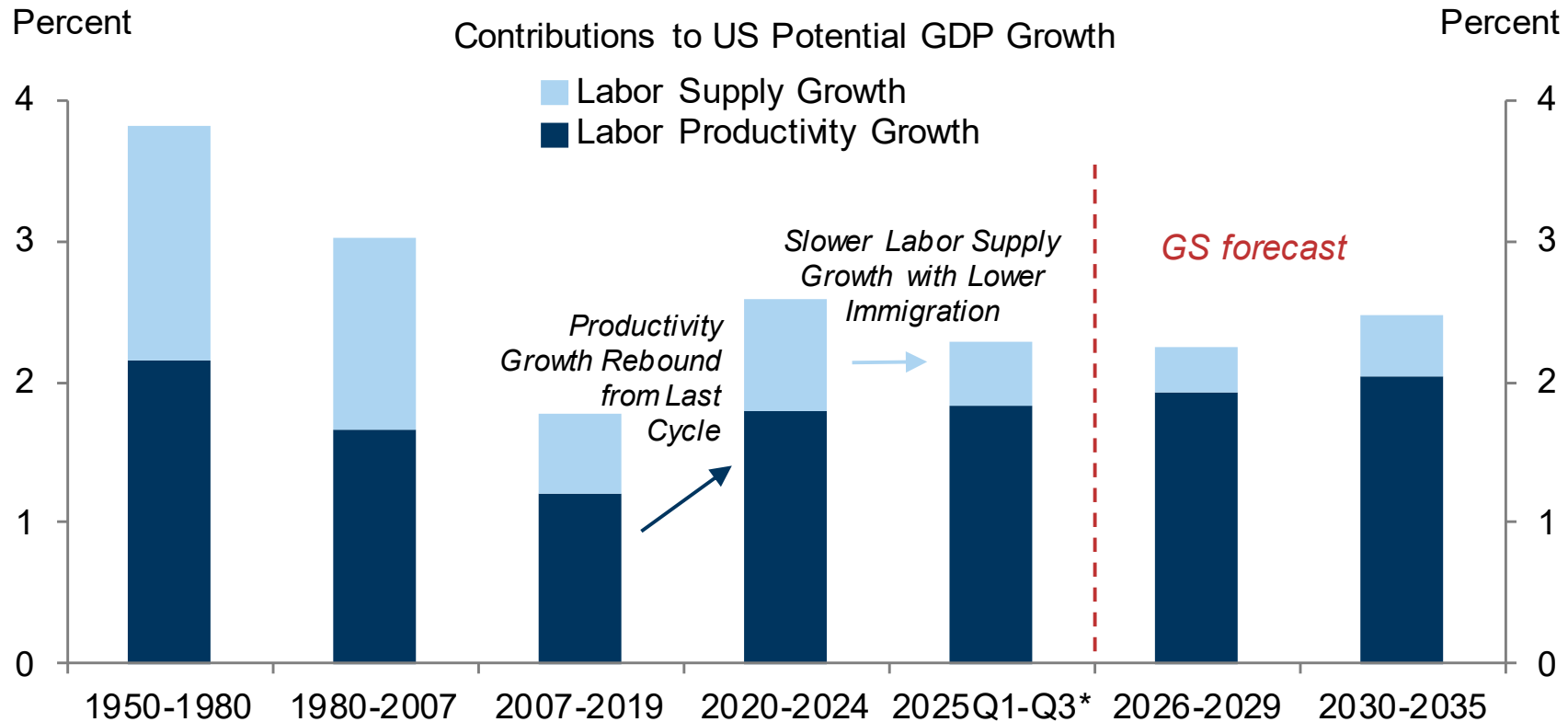
# Cyber Risk: We Estimate the Annual Total Cost of Cyberattacks in the US Was Roughly \$300bn in 2025, Accounting for Underreporting of Attacks



# Cyberattacks on Critical Infrastructure Have Already Been Rising Quickly, and the Latest AI Models Provide Much Stronger Capabilities for Attacks



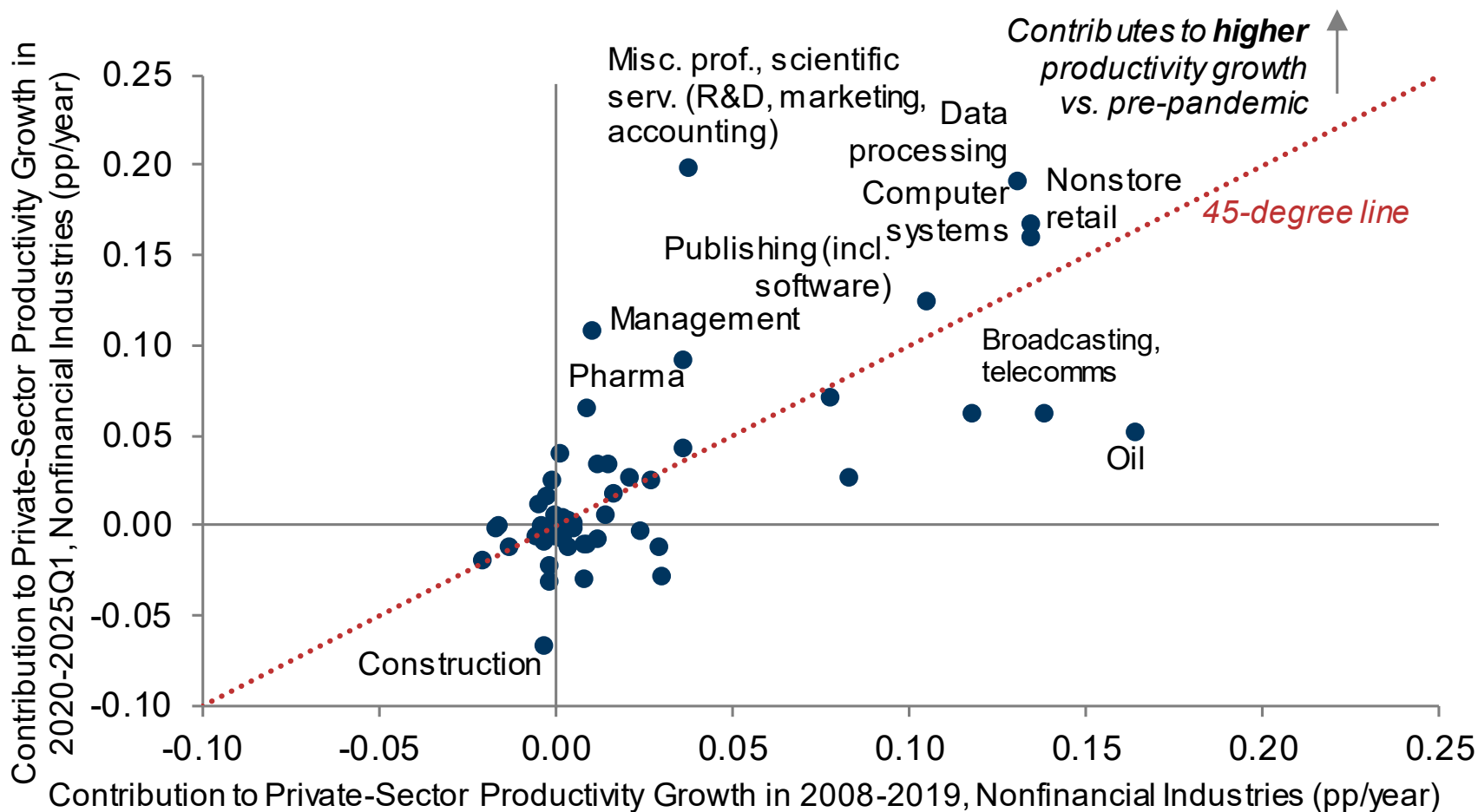
# Productivity and Potential Growth: Productivity Growth Is Back at Its Historical Average Pace of 2%, Offsetting the Slowdown in Labor Supply Growth



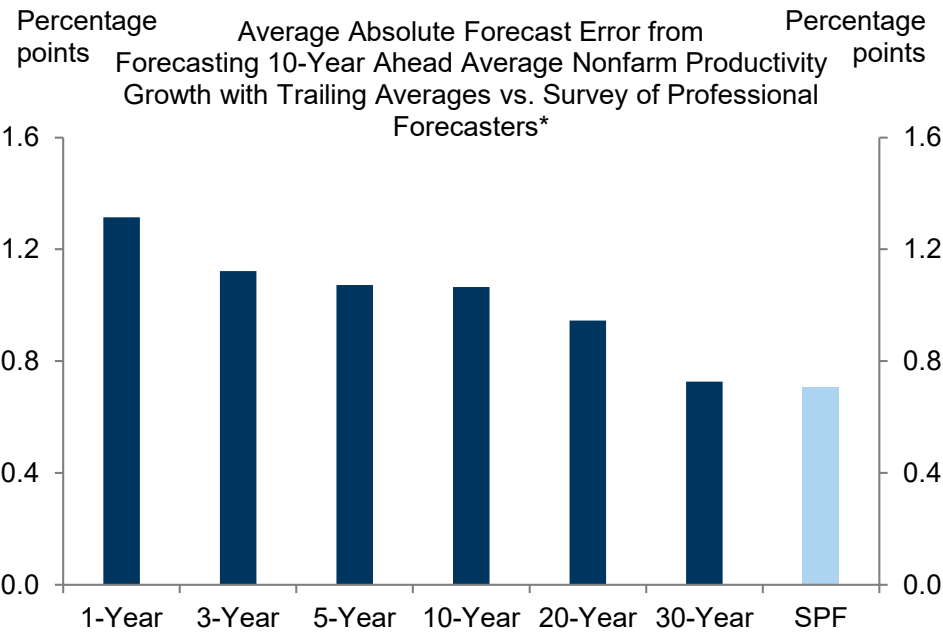
\* Includes our estimates of the contributions from undermeasured AI investment in GDP, the impact of the QCEW revisions on hours, and the undermeasurement of hours in the productivity statistics.

Source: Goldman Sachs Global Investment Research.

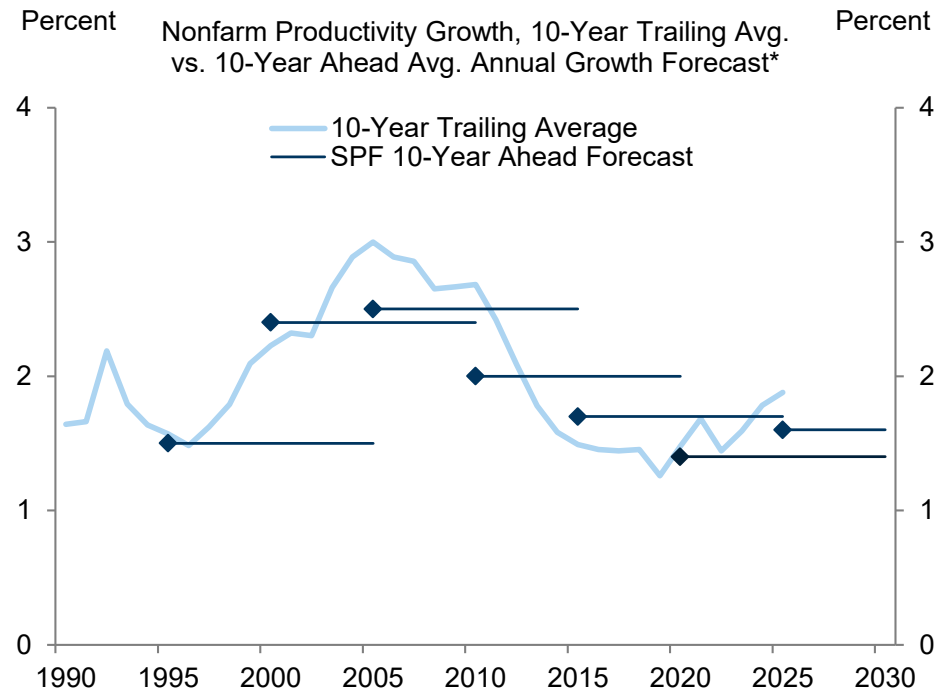
# Technology and Other High-Skilled Industries Have Led the Rebound in Productivity Growth, Which AI Should Push Even Higher in Coming Years



# Forecasting Productivity Growth Has Proven Quite Difficult Historically, and Economists Have Tended to Extrapolate Too Much from Recent Trends



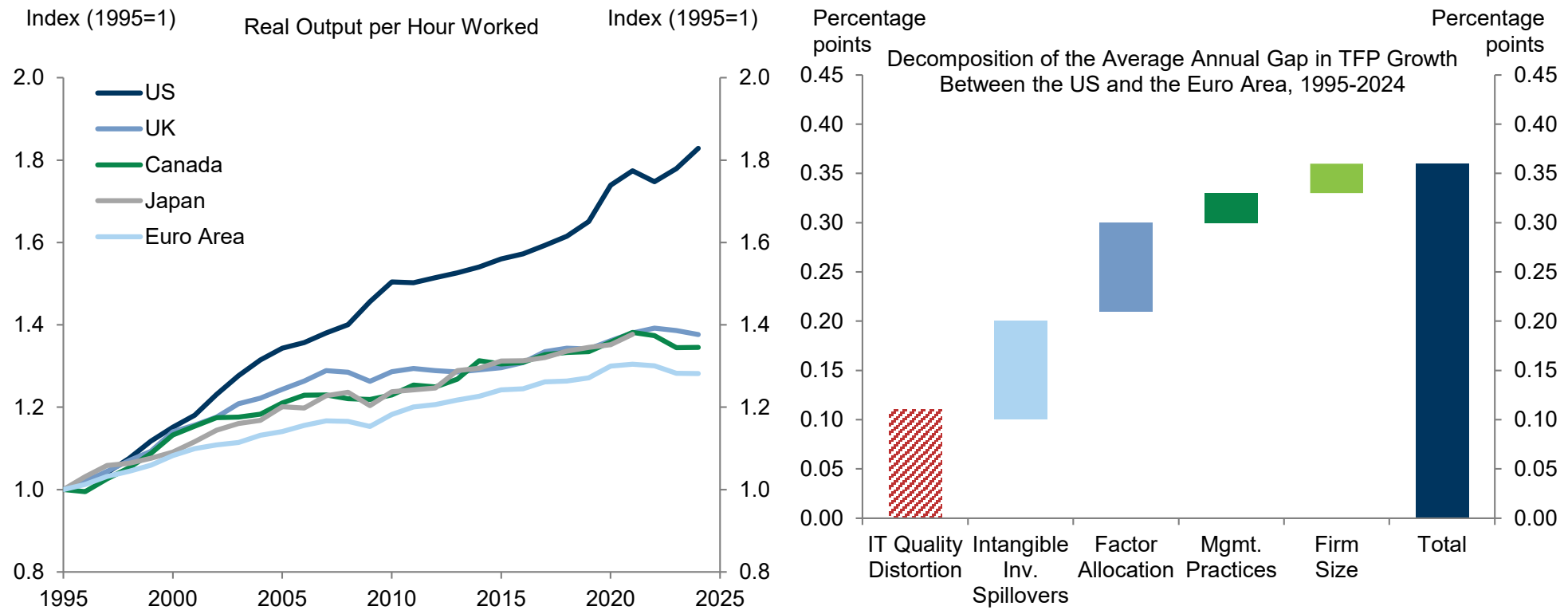
\* Sample begins in 1992, when productivity growth forecasts were added to the SPF. Forecasts based on trailing averages are calculated using real-time productivity data. Similar forecast errors are obtained starting the sample in 1968, when real-time productivity data published by the Philadelphia Fed become available.



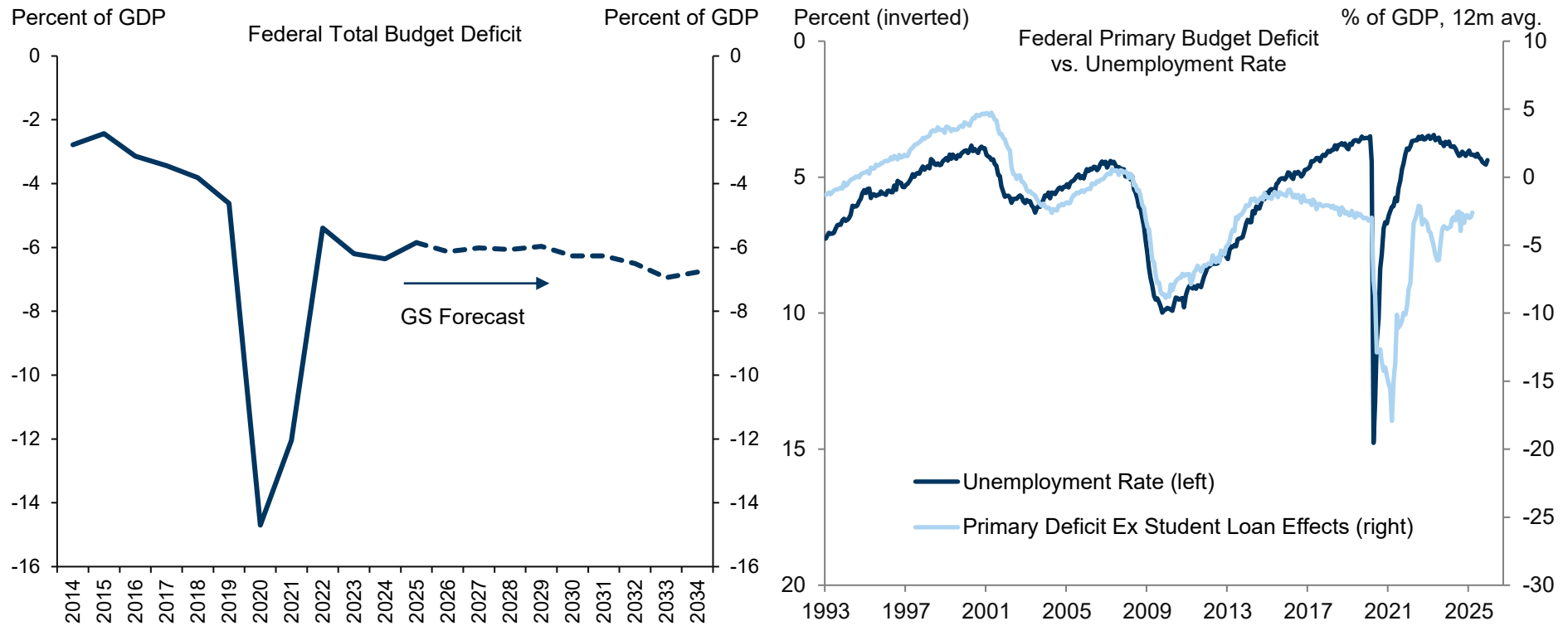
\* We only report SPF forecasts every 5 years to ease visualization, but those are available

Source: Goldman Sachs Global Investment Research.

# The US-Europe Gap Has Grown Due to: 1) More Investment in Software and R&D; 2) Resources Go to Best Firms; 3) Better Management; 4) Larger Size

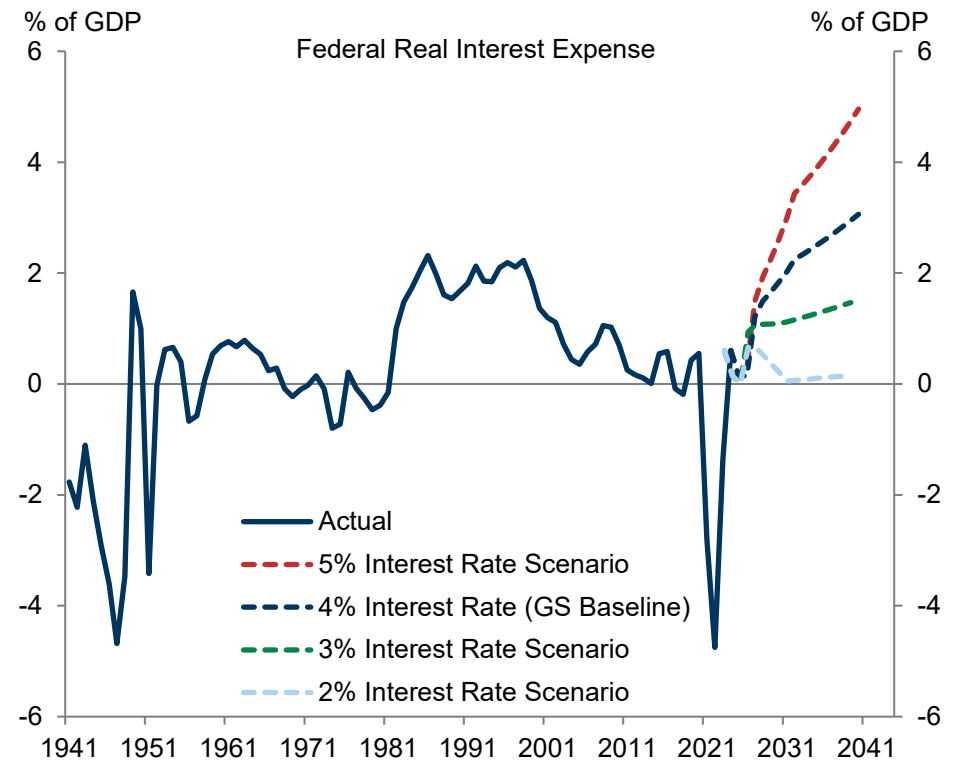
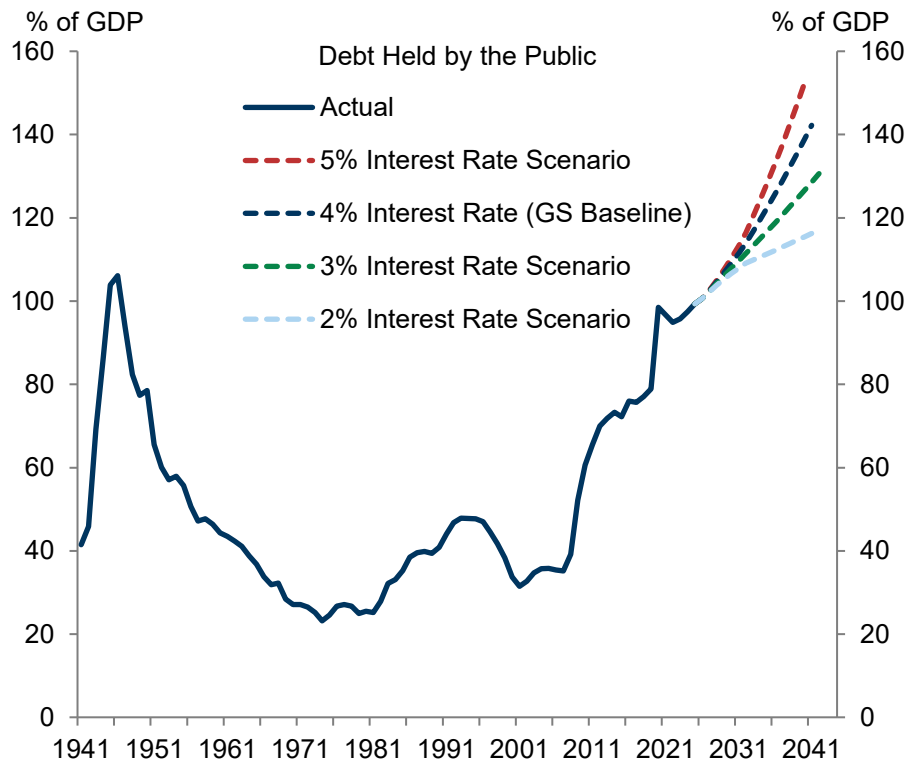


# Fiscal Sustainability: The Three Key Pieces of the Fiscal Sustainability Problem Are 1) a Much Wider Than Usual Primary (Ex-Interest) Deficit ...



Source: Goldman Sachs Global Investment Research.

# ... 2) A Debt/GDP Ratio That Will Soon Eclipse the Post-WW2 High, and 3) Much Higher Interest Rates That Have Worsened the Fiscal Trajectory



Source: Goldman Sachs Global Investment Research.

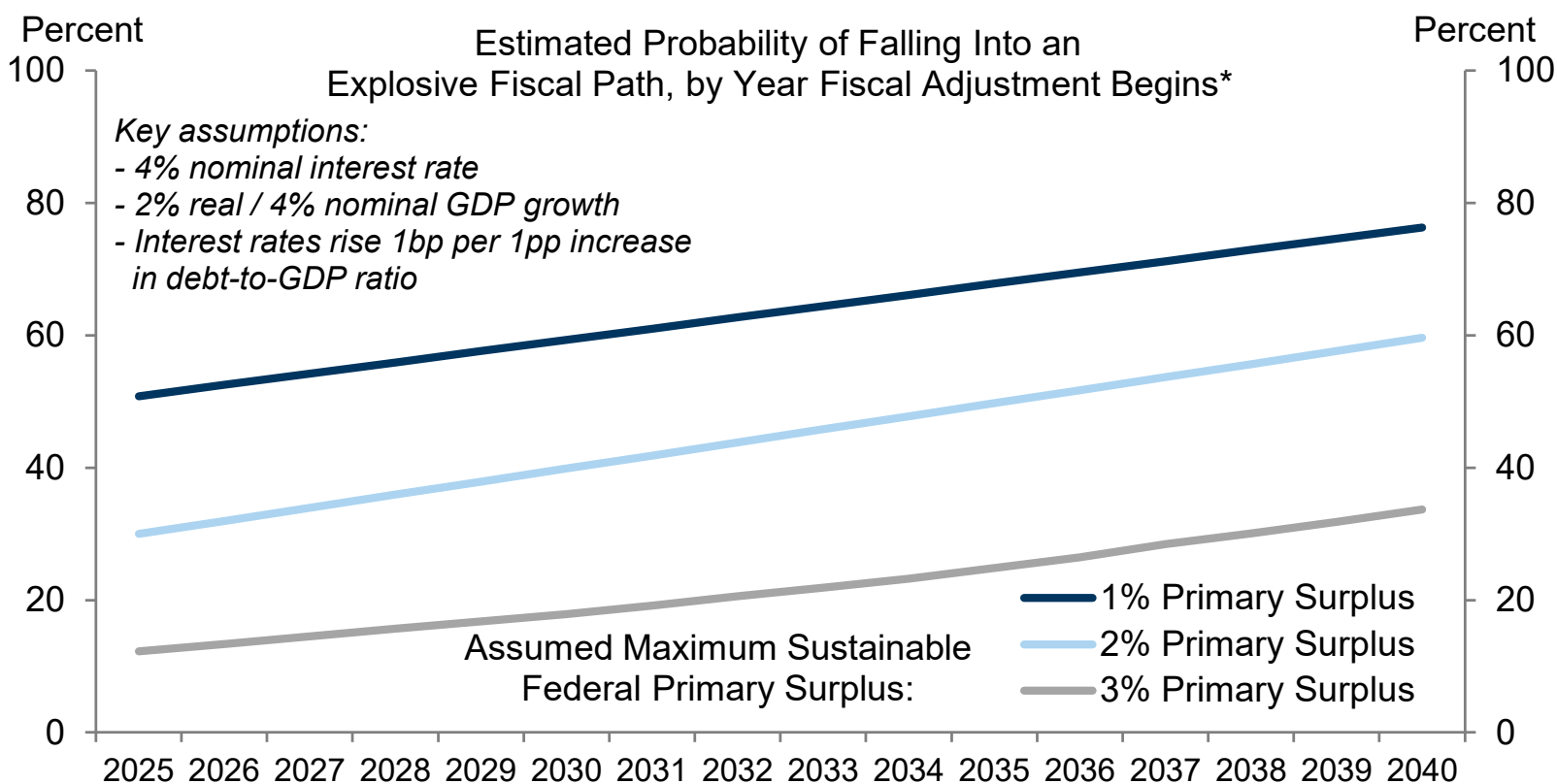
# The Longer We Wait, the Larger the Eventual Fiscal Consolidation and Primary Surplus Will Have to Be to Stabilize the Debt/GDP Ratio ...

Deficits, Debt, and Fiscal Consolidation Required by Year*			
	2025	2029	2035
<b>US Fiscal Position, GS Forecasts</b>			
Primary Balance (% of GDP)	-3.0%	-2.9%	-2.9%
Overall Budget Balance (% of GDP)	-6.1%	-6.6%	-7.8%
Debt-to-GDP	99.7%	107.1%	125.0%
<b>Primary Balance Required</b>			
1) Primary Balance Required to Stabilize the Debt-to-GDP Ratio	0.7%	0.8%	1.1%
2) Primary Balance Required to Keep Real Interest Expenses Below 2% of GDP	0.5%	0.8%	1.5%
3) Primary Balance Required to Keep Real Interest Expenses Below 2% of GDP, Interest Rates Rise by 2bp for Every 1pp Increase in the Debt-to-GDP Ratio	0.5%	1.0%	2.5%
<b>Primary Balance Improvement Required</b>			
1) Primary Balance Improvement Required to Stabilize the Debt-to-GDP Ratio	3.7pp	3.7pp	4.0pp
2) Primary Balance Improvement Required to Keep Real Interest Expenses Below 2% of GDP	3.5pp	3.7pp	4.4pp
3) Primary Balance Improvement Required to Keep Real Interest Expenses Below 2% of GDP, Interest Rates Rise by 2bp for Every 1pp Increase in the Debt-to-GDP Ratio	3.5pp	3.9pp	5.4pp

\* Fiscal projections assume that there is a 15% probability of recession each year and that recessions result in a 5pp cumulative increase in the primary deficit. We also assume that interest rates increase by 1bp for every 1pp increase in the debt-to-GDP ratio unless otherwise indicated.

Source: Goldman Sachs Global Investment Research.

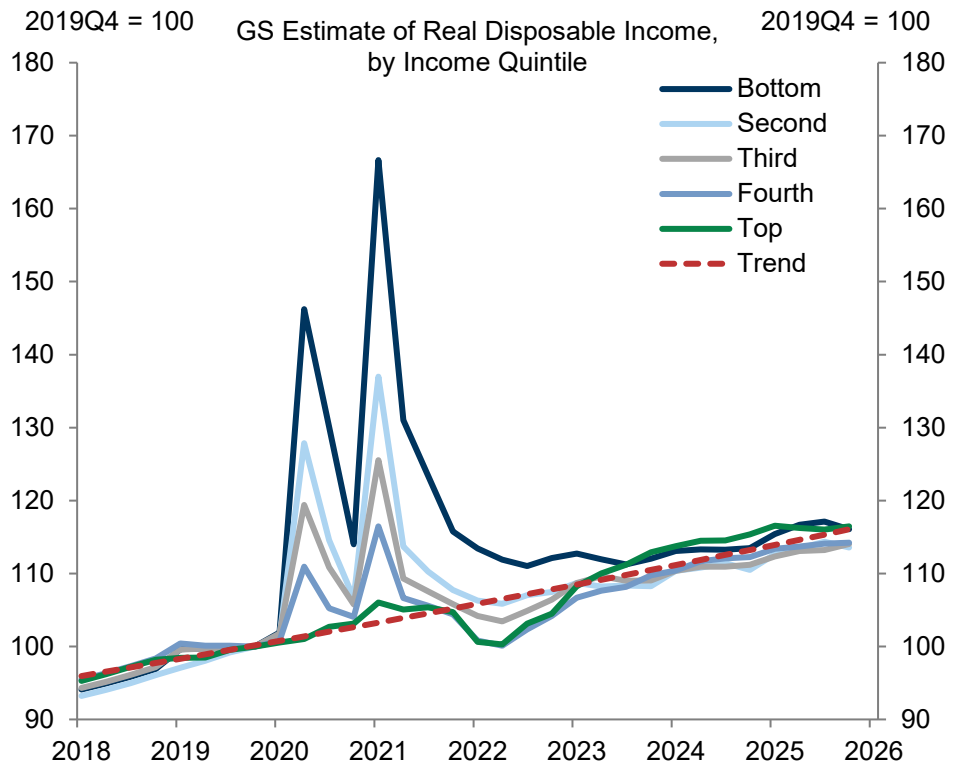
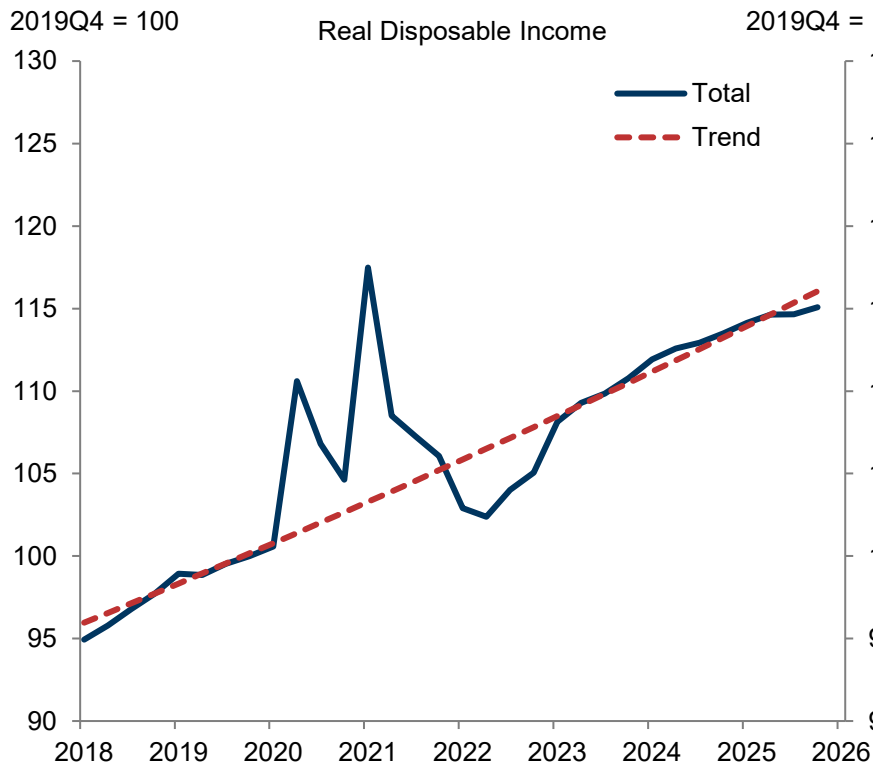
# ... and the Greater the Risk of Falling onto an Explosive Debt Path



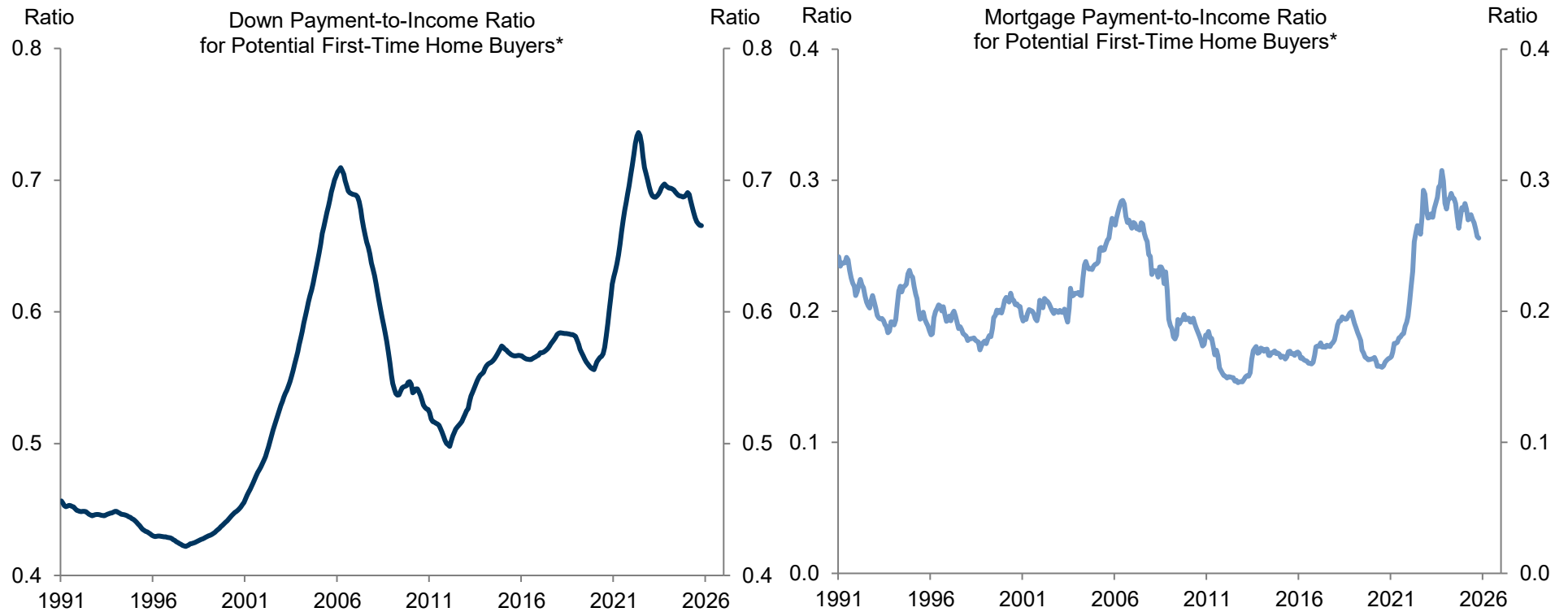
\* We assume that deficit reduction starts in the year shown and takes 10 years to reach the targeted primary surplus. We simulate shocks to growth, interest rates, and the deficit based on historical data and assess how probable it is that after 25 years the debt/GDP ratio rises to a level where the economy cannot avoid an explosive debt trajectory even with the maximum assumed primary budget surplus.

Source: Goldman Sachs Global Investment Research.

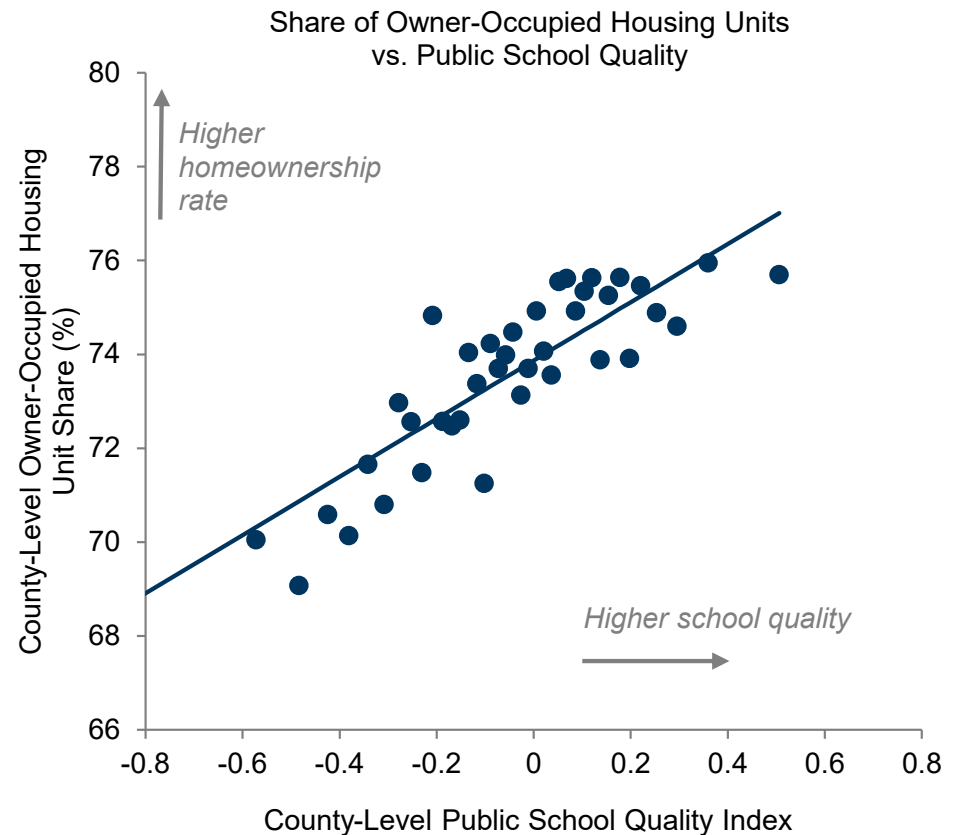
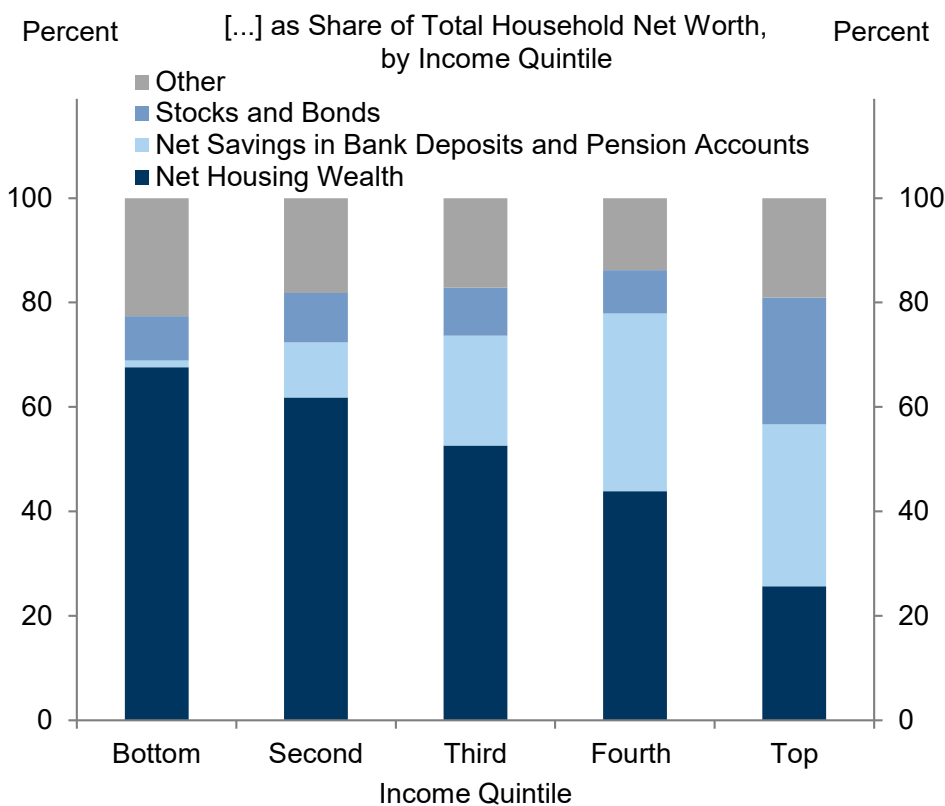
# Affordability Crisis? Real Disposable Income Is Back on the Pre-Pandemic Trend, Both in Aggregate and for Each Income Quintile



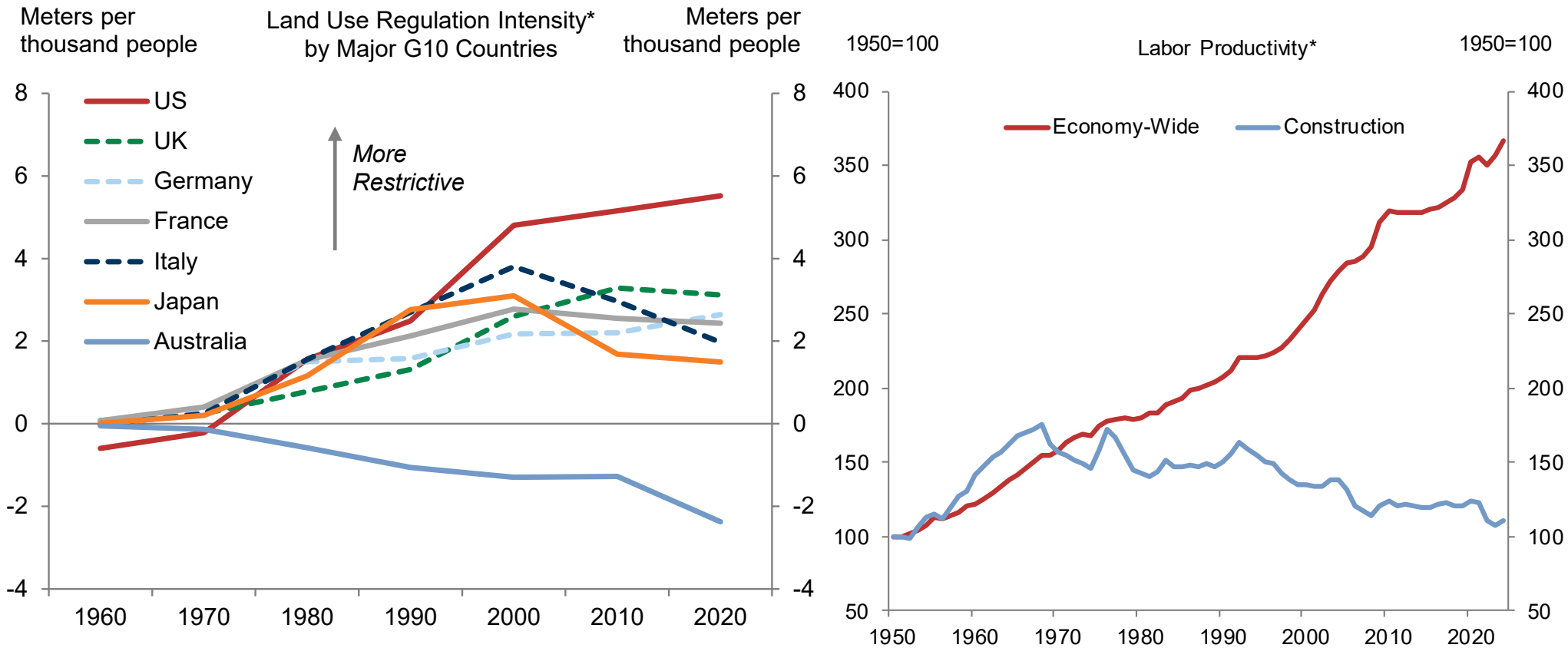
# But the Cost of Financing Owner-Occupied Housing Is Historically High



# Affordability of Owner-Occupied Housing Is Important Because It Is the Main Way That Low-Income Families Save and Is Vital for Social Mobility



# Zoning Restrictions and Regulatory Obstacles to Building Keep Prices High by Limiting Housing Supply and Depressing Construction Productivity Growth



\*Gap between regulated building height and model-implied latent demand for building height (Jedwab, Barr, and Brueckner 2021).

# US Economic Forecasts

## THE US ECONOMIC AND FINANCIAL OUTLOOK

(% change on previous period, annualized, except where noted)

	2023	2024	2025	2026	2027	2025 Q4	2026 Q1	2026 Q2	2026 Q3	2026 Q4	2027 Q1	2027 Q2	2027 Q3	2027 Q4
<b>OUTPUT AND SPENDING</b>														
Real GDP	2.9	2.8	2.1	2.0	2.0	0.5	1.6	1.9	1.9	1.8	2.0	2.1	2.2	2.3
<i>Real GDP (annual=Q4/Q4, quarterly=yoy)</i>	3.4	2.4	2.0	1.8	2.1	2.0	2.6	2.1	1.5	1.8	1.9	2.0	2.0	2.1
Consumer Expenditures	2.6	2.9	2.6	1.8	1.7	1.9	1.4	1.4	1.3	1.3	1.9	2.0	2.1	2.2
Residential Fixed Investment	-7.8	3.2	-2.2	-4.2	1.4	-1.7	-6.3	-6.9	1.5	1.5	2.2	2.2	2.2	2.2
Business Fixed Investment	7.3	2.9	4.1	6.4	5.7	2.4	10.1	6.8	7.5	6.9	4.9	4.9	4.9	4.9
Structures	16.7	1.1	-5.3	-3.8	2.0	-6.6	-5.4	0.4	-1.0	-0.2	3.5	3.5	3.5	3.5
Equipment	2.9	3.5	8.3	10.4	7.0	4.3	17.2	11.9	11.0	9.5	5.0	5.0	5.0	5.0
Intellectual Property Products	6.2	3.5	5.6	7.9	6.2	5.4	11.6	5.0	8.2	7.8	5.5	5.5	5.5	5.5
Federal Government	3.3	3.8	-1.2	-1.0	0.9	-16.7	9.5	0.0	1.0	1.0	1.0	1.0	1.0	1.0
State & Local Government	3.6	3.8	2.5	1.3	0.9	1.5	1.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0
Net Exports (\$bn, '17)	-925	-1,033	-1,091	-1,136	-1,222	-969	-1,064	-1,140	-1,160	-1,182	-1,198	-1,214	-1,230	-1,246
Inventory Investment (\$bn, '17)	47	44	29	43	66	-16	-26	66	66	66	66	66	66	66
Nominal GDP	6.7	5.3	5.0	6.0	4.8	4.2	5.2	8.6	4.6	4.6	4.7	4.4	4.5	4.4
Industrial Production, Mfg.	-1.0	-1.0	0.8	3.1	3.6	-3.4	5.3	6.3	4.4	3.7	3.2	3.2	3.2	3.3
<b>HOUSING MARKET</b>														
Housing Starts (units, thous)	1,421	1,370	1,356	1,286	1,322	1,323	1,280	1,290	1,280	1,292	1,304	1,316	1,328	1,340
New Home Sales (units, thous)	666	684	671	670	644	680	690	690	662	638	626	632	649	670
Existing Home Sales (units, thous)	4,103	4,067	4,076	4,212	4,375	4,157	4,169	4,189	4,223	4,267	4,310	4,353	4,396	4,440
Case-Shiller Home Prices (%yoy)*	5.3	3.8	0.6	0.8	2.2	0.6	0.3	0.8	0.7	0.8	1.1	1.4	1.8	2.2
<b>INFLATION (% ch, yr/yr)</b>														
Consumer Price Index (CPI)**	3.3	2.9	2.7	3.9	2.0	2.7	2.7	4.0	3.8	3.8	3.5	2.3	2.3	2.1
Core CPI**	3.9	3.2	2.6	2.6	2.2	2.7	2.5	2.8	2.5	2.6	2.4	2.2	2.2	2.2
Core PCE** †	3.1	3.0	3.0	3.0	2.2	2.9	3.1	3.3	3.2	3.1	2.6	2.3	2.2	2.2
<b>LABOR MARKET</b>														
Unemployment Rate (%)^	3.8	4.1	4.4	4.4	4.3	4.4	4.3	4.3	4.4	4.4	4.4	4.4	4.3	4.3
U6 Underemployment Rate (%)^	7.2	7.6	8.4	8.3	8.0	8.4	8.0	8.1	8.3	8.3	8.3	8.3	8.1	8.0
Payrolls (thous, monthly rate)	210	122	10	72	92	-39	73	130	40	47	70	97	100	100
Employment-Population Ratio (%)^	60.1	59.9	59.7	59.1	58.9	59.7	59.2	59.2	59.1	59.1	59.0	58.9	58.9	58.9
Labor Force Participation Rate (%)^	62.5	62.5	62.4	61.8	61.5	62.4	61.9	61.8	61.8	61.8	61.7	61.7	61.6	61.5
Average Hourly Earnings (%yoy)	4.4	3.9	4.0	3.9	3.8	4.0	4.0	4.0	3.9	3.8	3.8	3.8	3.8	3.8
<b>GOVERNMENT FINANCE</b>														
Federal Budget (FY, \$bn)	-1,694	-1,833	-1,775	-1,950	-2,050	--	--	--	--	--	--	--	--	--
<b>FINANCIAL INDICATORS</b>														
FF Target Range (Bottom-Top, %)^	5.25-5.5	4.25-4.5	3.5-3.75	3.5-3.75	3-3.25	3.5-3.75	3.5-3.75	3.5-3.75	3.5-3.75	3.5-3.75	3.5-3.75	3.25-3.5	3.25-3.5	3-3.25
10-Year Treasury Note^	3.88	4.58	4.18	4.10	4.15	4.18	4.30	4.30	4.20	4.10	4.10	4.10	4.15	4.15
Euro (€/\$)^	1.11	1.04	1.17	1.18	1.20	1.17	1.15	1.16	1.19	1.18	1.19	1.20	1.20	1.20
Yen (\$/¥)^	141	157	157	158	141	157	159	158	158	158	156	141	101	141

\* Weighted average of metro-level HPIs for 381 metro cities where the weights are dollar values of housing stock reported in the American Community Survey. Annual numbers are Q4/Q4.

\*\* Annual inflation numbers are December year-on-year values. Quarterly values are Q4/Q4.

† PCE = Personal consumption expenditures. ^ Denotes end of period.

Note: Published figures in bold.

# GS Market Strategy Forecasts

	GS Forecasts			Forward pricing			Upside vs. forward pricing		
	3m	6m	12m	3m	6m	12m	3m	6m	12m
<b>Equities</b>									
S&P 500	7600	8000	8300	7663	7726	7870	-1%	4%	5%
STOXX Europe 600	640	645	660	623	625	623	3%	3%	6%
Topix	4100	4200	4400	3948	3925	3909	4%	7%	13%
MSCI AC Asia-Pac ex Japan	900	940	990	918	925	938	-2%	2%	6%
MSCI EM	1750	1800	1850	1779	1794	1819	-2%	0%	2%
<b>10 Year Government Bond Yields</b>									
US	4.23%	4.13%	4.10%	4.51%	4.56%	4.65%	-28 bps	-43 bps	-55 bps
Germany	2.93%	2.98%	3.00%	3.08%	3.12%	3.18%	-14 bps	-13 bps	-18 bps
Japan	2.50%	2.50%	2.42%	2.75%	2.83%	2.98%	-25 bps	-33 bps	-56 bps
UK	4.55%	4.43%	4.33%	5.02%	5.06%	5.15%	-47 bps	-63 bps	-81 bps
<b>Corporate Bond Spreads (bps, upside vs. spot)</b>									
Bloomberg USD IG	93	91	90				21	19	18
Bloomberg USD HY	328	318	315				71	61	58
EM Hard Currency Sovereign			300						63
<b>Commodities</b>									
WTI Crude Oil (\$/bbl)	85.0	83.0	81.0	83.3	78.5	74.4	2%	6%	9%
Brent Crude Oil (\$/bbl)	92.0	90.0	85.0	88.0	83.6	79.2	5%	8%	7%
LME Copper (\$/mt)	13,620	13,735	13,800	13,832	13,817	13,807	-2%	-1%	0%
TTF Natural Gas (EUR/MWh)	40	40	28	49.1	47.2	34.7	-18%	-15%	-19%
NYMEX Natural Gas (\$/mmBtu)	3.50	3.50	3.50	3.26	4.48	3.28	7%	-22%	7%
<b>FX (upside vs. USD)</b>									
EUR/USD	1.14	1.18	1.20	1.17	1.17	1.18	-2%	1%	2%
USD/JPY	160	158	155	159	157	155	-1%	0%	0%
USD/CNY	6.80	6.70	6.50	6.75	6.71	6.62	-1%	0%	2%



## **Nicole Boyson**

*Professor and Group Chair, Finance*

*Northeastern University, D'Amore-McKim School of Business*

<https://damore-mckim.northeastern.edu/people/nicole-m-boyson/>

Professor Nicole Boyson has been at Northeastern University since 2004. Her teaching expertise is in Investments, Alternative Investments, and Fixed Income. Her research focuses on institutional investors, with a current interest in conflicts of interest among financial advisors. She also has a significant body of work related to hedge fund activism, regulatory arbitrage, financial crises, and mutual funds, much of it published in the elite finance journals.

She currently serves as a co-editor for Financial Analysts Journal and is on the board of directors for the Eastern Finance Association.

Boyson has served on several program committees of professional organizations such as the Western Finance Association and the Financial Management Association, has been a track chair for the Financial Management Association and the Eastern Finance Association, and acts as an ad-hoc referee for journals including The Journal of Finance, Review of Financial Studies, Journal of Financial Economics, and The Journal of Financial and Quantitative Analysis.

A CPA, her prior work experience includes 8 years in industry, at KPMG Peat Marwick, Third Federal Savings and Loan Association of Cleveland, Pension Consulting Services, and Ernst & Young.

Boyson has presented her work at prestigious academic and industry conferences, and is passionate about expanding the relation between academic work and industry practice. She regularly and frequently engages with the media (often via Twitter), and has been featured on Bloomberg television, NPR Marketplace, and numerous podcasts. She is also regularly cited in publications such as the Wall Street Journal and Barrons.

In her spare time, Boyson enjoys reading, tending to her flower garden, and spending time with her husband and children. She is a member of the Milton Library Foundation Board and the Board of Trustees for the First Congregational Church in Milton.

### Education

- PhD Finance, The Ohio State University
- MBA Finance, Case Western Reserve University
- BBA Accounting, Kent State University

### Awards & Recognition

- 2020 Poets and Quants Top 50 Undergraduate Business Professor
- 2016 D'Amore-McKim Best Teacher Award

# An overview of recent academic research in defined benefits

**State of Wisconsin Investment Board**

June 16, 2026

*Nicole Boyson, Ph.D.*

*Professor of Finance & Department Chair,  
Northeastern University*

*Co-Editor, Financial Analysts Journal*



Northeastern

**D'Amore-McKim  
School of Business**

# 1: Pension plan funding (1)

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- Accounting changes and funding (data from 2015)
  - Governmental Accounting Standards Board (GASB) Statements 67 and 68 enacted in 2015
  - Required sponsors to estimate pension liabilities to potentially use a lower discount rate
    - Public pensions use expected rate of return on investments to discount liabilities
    - Private pensions use a much lower risk rate (e.g., AA corporate bond curve or Treasury yield curve)
  - **Governments increase pension contributions significantly upon applying GASB 67/68**
  - Response stronger from governments likely to face greater political consequences once pension deficits are revealed.
  - These plans do not tend to cut benefits.
    - Citation: Divya Anantharaman & Elizabeth Chuk, 2024. The impact of governmental accounting standards on public-sector pension funding, *Review of Accounting Studies*, 29(2) 1948-1996



# 1: Pension plan funding (2)

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- As of 2021, reported unfunded pension liabilities for state and local plans is \$1.1 trillion.
- Paper argues that the market value of this liability is actually \$6.5 trillion, if the liability were discounted using the US Treasury bond yield curve instead of the expected rate of return on investments (similar to FASB for private plans).
  - Also suggest a risk-sharing arrangement with beneficiaries
- Argues that public plans have increased exposure to alternative assets in an attempt to achieve high returns.
  - Giesecke, O. and J. Rauh, 2023. Trends in State and Local Pension Funds. *Annual Review of Financial Economics* 15, 221-238.
    - Several other papers make a similar point; this is a key debate among financial economists



# 2: Asset allocation and benchmarks

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2a. Overall allocations

2b. Allocation to alternative assets

2c. How do we benchmark?



## 2a: Overall allocations (1)

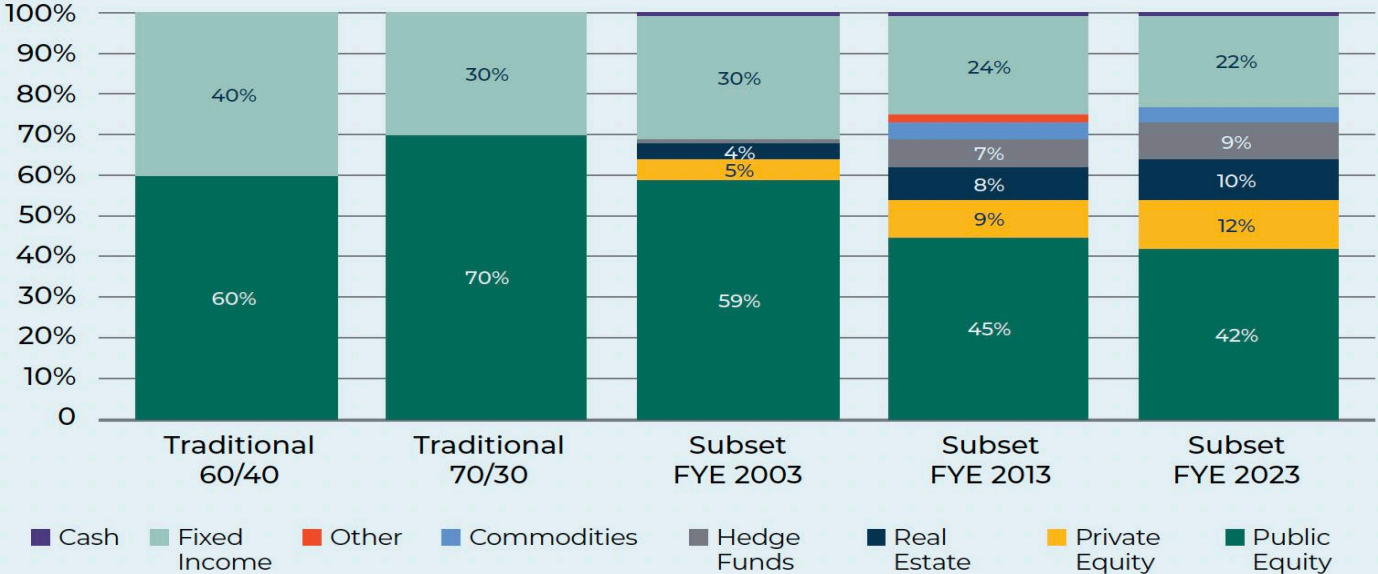
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- Since 2001, public pensions have re-allocated 20% of their assets from traditional investments to alternative investments.
- This shift accelerated after the financial crisis in 2008, since interest rates were very low.
- This article argues that DB public plans have outperformed a 60/40 portfolio since the financial crisis.
  - Private credit has been a standout in this period.
  - Fewer public companies meant that plans chose some private alternatives.
  - Citation: Bond, T, K. Comstock, and J. Sullivan. EVOLUTION AND GROWTH: How Public Pension Plans Have Diversified Their Investments Amid Changing Markets, 2025, Aon: National Institute on Retirement Security.



# 2a: Overall allocations (2)

**Figure 19: The Evolution of Asset Allocation**



Source: Public Plans Data (publicplansdata.org) as of December 2024



## 2b: Allocation to alternative assets (1)

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- Pension funds allocate about 39% of assets to alternatives
  - Why?
    - Consultant recommendations (promising higher alpha, not seemingly about risk)
    - Spillover effects from geographically adjacent funds
    - Dot com bubble in early 2000's caused move away from public equities
      - Begenau, Juliane and Liang, Pauline and Siriwardane, Emil, The Rise of Alternatives (June 09, 2025). Available at SSRN abstract=4940886



## 2b: Allocation to alternative assets (2)

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- Public pension funds increase their risk when interest rates are low (e.g., post crisis)
  - Asset risk
    - Find that plans with the worst funding ratios take on higher future risk
      - (uses risk-free rate discounting)
  - Net worth risk
    - Results a little different and may indicate some hedging instead of risk taking
- Both results especially strong for states with weaker public finances
- Citation: Lu, L., M. Pritzker, A. Zlate, and K. Anadu, 2025, Reaching for Yield by U.S. Public Pension Funds. Working paper.



## 2c: Benchmarking

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- Do investment consultants affect private fund benchmark selection in public pension plans?
  - Yes: benchmark choices vary a lot and are not well-matched with their private equity portfolios.
- Consultants' personal career concerns and incentives matter!
  - New consultants suggest different benchmarks than the prior consultant.
  - Plans frequently change existing benchmarks to new benchmarks that are worse -  
- the underperform the previous benchmark both historically and prospectively.
  - Benchmark choices reflect consultants' incentives to expand client portfolios rather than changes in PE performance expectations or realized returns.
- Public pension funds suffer!!!
  - Lower benchmark hurdles are associated with higher PE target allocation and worse subsequent fund selection.
  - Citation: Augistin, N., M. Binfare, E. Femand, 2025, Benchmarking Private Equity Portfolios: Evidence from Pension Funds, working paper.



# 3: Sustainability/ESG (1)

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- Many states have adopted anti-ESG laws
  - Regardless of whether ESG investments outperform or underperform, complying with these laws will be costly in terms of time and effort
  - The author proposes that states adopt permissive ESG policies like those stated in the 2022 Department of Labor Rule regarding private employer pensions governed under the Employee Retirement Security Income Act of 1974 ("ERISA").
    - Citation: Norman, A., 2024, The ESG War: Public Pension Fiduciaries and Anti-ESG Law, Wash U Journal of Law and Policy, 245-272.



## 3: Sustainability/ESG (2)

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- ESG investing refers to the assimilation of environmental, social, and governance factors into the process and analysis of investing
  - It is nearly impossible to gauge the true amount of ESG investing in the markets
- Is ESG investing consistent with the fiduciary duty of loyalty?
  - to place the client's interests above the fiduciary's interests and to avoid theft, conflicts of interest, and self-dealing
    - "best interest" historically means risk-adjusted returns (financial)
    - Research is mixed on whether supporting ESG improves long-term value.
- Argues that: "That is not to say that an investment manager must ignore ESG factors as an investment strategy. However, she should approach ESG factors in the same way that she would approach other strategies or industries. If investing with an ESG focus would improve risk-adjusted returns, the investments would be appropriate."
- Alex Edmans makes a similar argument.
- Citation: Laby, A, 2025, ESG investing and asset managers, *Capital Markets Law Journal* 20, 1-18.



# 3: Constraining Investments, in general

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- Committed to Wisconsin:
  - “SWIB welcomes opportunities that have the dual benefit of being both a good investment for the trust funds and good for Wisconsin’s economy.”
  - As of June 30, 2024, SWIB had more than \$8.9 billion invested in companies either headquartered or with more than 100 employees in Wisconsin.
    - <https://www.swib.state.wi.us/wrs/investments/in-wisconsin/>
- Constraining an investment set can reduce expected returns. On the other hand, if the rationale is due to expertise in a particular area (e.g., investing in Wisconsin companies via private debt or VC), then this can actually enhance performance.
  - This framework can apply to any type of specialized investing, whether it be geographical preference, ESG, or other possible parameters.



# Economics of Private Debt (1)

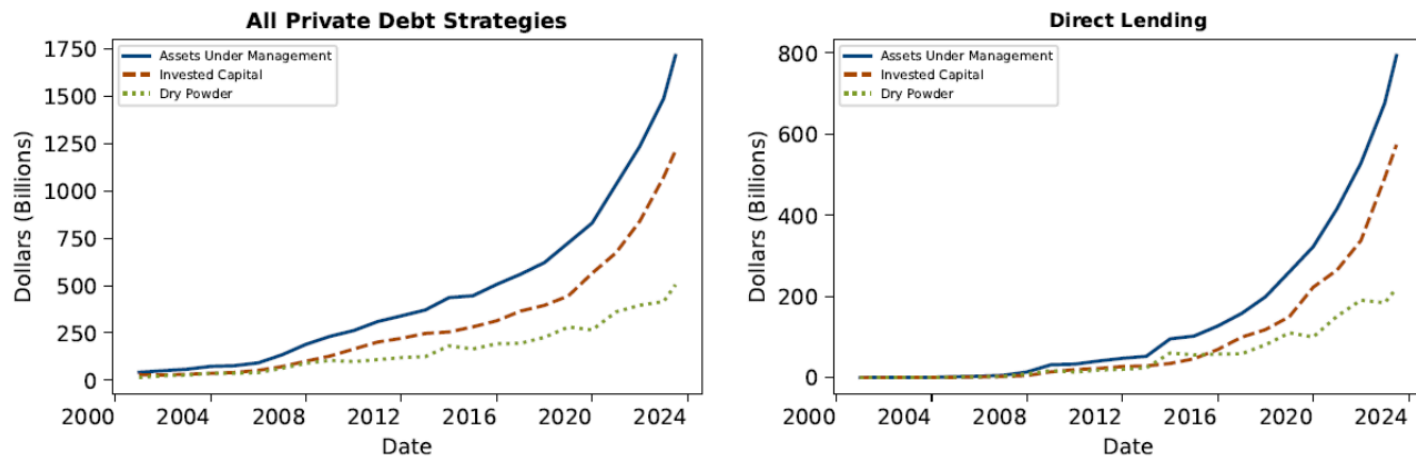
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- Characteristics
  - Non-publicly traded instruments
  - Non-bank providers: Private credit funds or business development companies (BDCs)
  - Direct lending, no liquid secondary market
  - Hold to maturity and have more monitoring
  - Investors: pension funds, insurance companies, family office, sovereign wealth funds and high net worth individuals
- Top 10 U.S. private debt fund managers hold about 40-45%
  - Goldman, Oaktree, Ares, Blackstone
- Senior secured, floating, most have PE backing, mostly term loans, 250 bp spread to leveraged loans
  - Cai, Fang and Sharjil Haque. 2024. Private Credit: Characteristics and Risk. *Feds Notes*. <https://www.federalreserve.gov/econres/notes/feds-notes/private-credit-characteristics-and-risks-20240223.html>



# Economics of Private Debt (2)

## Figure 1. Growth in Private Debt Allocations



Note: 'Dry Powder' refers to committed but not invested capital. Invested capital is committed & invested capital (typically in the form of loans). Assets under management is the sum of invested capital and dry powder. Data as of June 2023. AUM data reported with a 6-month lag.

Source: Preqin



# Economics of Private Debt (3)

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- Risks: illiquidity, credit, spillover to banks, super concentrated portfolios, rise in corporate leverage
  - Cai, Fang and Sharjil Haque. 2024. Private Credit: Characteristics and Risk. *Feds Notes*. <https://www.federalreserve.gov/econres/notes/feds-notes/private-credit-characteristics-and-risks-20240223.html>
- Private credit has risen since 2008 crisis
  - Direct lending by investment funds most of rise
  - Speed, flexibility, and confidentiality with higher returns for investors
  - Risks include reduced transparency, regulatory challenges, and bankruptcy law implications
  - Relates to broader movement of capital away from public markets
    - Ellias, Jared and Elisabeth De Fontenay. 2025. The credit markets go dark. *Yale Law Journal* 134, 779.



## Board Meeting

### Tab 1 – Committee Reports – Open Session Items

- A. Audit and Finance Committee
- B. Compensation and Workforce Development Committee
- C. Strategic Planning and Corporate Governance Committee

## Board Meeting

### Tab 2 – Consent Agenda

- A. Open Session Minutes of March 18, 2026
- B. Recommended Actions from Committee Agendas –  
Open Session Items

***Regular Meeting of the Board of Trustees***

**Wednesday, June 17, 2026**

**STATE OF WISCONSIN INVESTMENT BOARD**

**CONSENT AGENDA – OPEN SESSION ITEMS**

**Proposed Motions:**

1. Move to approve the Open Session Minutes of March 18, 2026, as presented.
2. *[TBD after Committee meetings]*

**STATE OF WISCONSIN INVESTMENT BOARD**  
***Board of Trustees Meeting – Open Session***  
**Wednesday, March 18, 2026**

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

**Board Members Present:** Clyde Tinnen, Chair  
Tom Merfeld, Vice Chair & Secretary  
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  
Edwin Denson, Executive Director/Chief Investment Officer  
Anne-Marie Fink, Private Markets & Funds Alpha CIO  
Greg Fletcher, Performance Director  
Jameson Greenfield, Chief Financial Officer  
Dan Gyorog, Internal Auditor  
Tori Hassler, Internal Auditor  
Rochelle Klaskin, Deputy Executive Director/Chief Operating Officer  
Jon Loboda, Performance Measurement Operations Manager  
Todd Mattina, Head Economist, Asset & Risk Allocation CIO  
Lin Maung, Senior Portfolio Manager  
Frank Mazzucco, Senior Legal Counsel  
Scott Parrish, Head of Private Equity  
Jay Risch, Communications Manager and Government Relations Liaison  
Dawn Tuescher, Executive Administrative Assistant  
Ivan “Butch” Cliff, Callan Associates  
Sam Rebenstorf, Legislative Audit Bureau  
Peter Knotek, Public Attendee  
Bob Schaefer, Public Attendee  
Dave Stein, Public Attendee  
Anne Steinberg, Public Attendee  
(Some individuals may have attended only portions of the meeting.)

Trustee Tinnen, Chair of the Board of Trustees (the “Board”), declared a quorum was present and called the Board meeting to order at 9:00 a.m. on March 18, 2026.

**1. Committee Reports – Open Session Items**

**A. Compensation and Workforce Development Committee**

Trustee Bolens, Vice Chair of the Compensation and Workforce Development Committee, reported that,

in open session, the Committee: (i) approved prior meeting minutes; (ii) conducted its annual review of the Committee charter; (iii) received a presentation on the proposed 2026 ISS Strategic Results Scorecard and recommended that the Board approve the same; (iv) heard a 2025 Incentive Compensation Program Review; (v) considered the recommended incentive compensation awards for performance year 2025 in aggregate for those employees not specifically discussed in executive closed session and recommended that the Board approve the same; and (vi) reviewed information regarding talent acquisition and people metrics.

## **B. Audit and Finance Committee**

Trustee Merfeld, Chair of the Audit and Finance Committee, reported that, in open session, the Committee: (i) approved prior meeting minutes; (ii) reviewed changes to the Committee charter and recommended that the Board approve the same, and also reviewed and approved changes to the Internal Audit Division charter; (iii) reviewed the *Open Audit Issues Report as of February 28, 2026*; (iv) approved the draft audit reports for Operational Risk Management, Limited Scope Performance Review, and Follow-Up; (v) heard presentations regarding the 2026 Internal Audit Plan Status and the 2026 Internal Audit Goals; (vi) received a Compliance and Operational Risk Update; and (vii) reviewed the Quarterly Cost of Management Update for Q4 2025 and recommended that the Board approve amendments to the CY2026 Total Cost of Management Plan to reflect the actual amount of annual and long-term incentive compensation, as well as associated fringe benefits, paid in the aggregate to all SWIB staff.

## **C. Strategic Planning and Corporate Governance Committee**

Trustee Tinnen, Chair of the Strategic Planning and Corporate Governance Committee, reported that, in open session, the Committee: (i) approved prior meeting minutes; (ii) received a Corporate Governance Program Update; (iii) heard a preview of the upcoming June Investment Forum; (iv) heard an Innovation and Projects Update; and (v) received a Targeted Strategic Planning Update related to SWIB's "Key Investment Philosophies" and recommended that the Board approve the same, as modified following Trustee feedback and discussion.

## **2. Consent Agenda**

Eric Barber, Chief Legal Counsel, distributed a proposed consent agenda. Trustee Tinnen 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 December 17, 2025, as presented.
- Move to approve the 2026 Strategic Results Scorecard, as recommended by the Compensation and Workforce Development Committee and as presented in the Committee's meeting materials.
- Move to approve, as recommended by the Compensation and Workforce Development Committee and as presented in the Committee's meeting materials, the incentive compensation awards for performance year 2025 for all SWIB employees in the aggregate of \$12,639,658, as recommended and allocated by the Executive Director/Chief Investment Officer, but excluding the specific awards to (i) the Executive Director/Chief Investment Officer, recommended by the Compensation and Workforce Development Committee; (ii) the Head of Internal Audit, recommended by the Audit and Finance Committee; and (iii) the Deputy Executive Director/Chief Operating Officer, Asset Class CIOs, Strategy Heads, Senior Portfolio Managers of Investment Management Staff, Chief of Staff and Strategy, Chief Technology Officer, Chief Legal Counsel, Chief Financial

Officer, Head of Risk Management, and Head of Human Resources, as well as the ED/CIO IMS, ISS, and Executive Staff Discretionary Awards.

- Move to approve the changes to the Audit and Finance Committee Charter, as recommended by the Audit and Finance Committee and as presented in the Committee’s meeting materials.
- Move to approve amendments to the CY2026 Total Cost of Management Plan to reflect the actual amount of annual and long-term incentive compensation, as well as associated fringe benefits, paid in the aggregate to all SWIB staff, as recommended by the Compensation and Workforce Development and Audit & Finance Committees, respectively, to be presented to the Board for approval and as set forth in the Committees’ meeting materials.
- Move to approve the Key Investment Philosophies, as modified following Trustee feedback and discussion, as recommended by the Strategic Planning and Corporate Governance Committee and as presented in the Committee’s meeting materials.

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

### **3. Election of Secretary and Assistant Secretary**

Trustee Tinnen stated that, in accordance with Board procedures, the Board annually elects a Secretary and Assistant Secretary. Duties of the Secretary include signing the minutes of Board meetings. Duties of the Assistant Secretary include certifying to the validity of copies of statutes and SWIB documents when requested by counterparties. Typically, the Board selects a Trustee as Secretary and the Chief Legal Counsel as Assistant Secretary.

**Motion:** A motion was made by Trustee Voelker and seconded by Trustee Blumenfeld to elect Trustee Merfeld as Secretary and Eric Barber as Assistant Secretary for 2026.

### **4. Annual Committee Assignments by Board Chair**

Trustee Tinnen stated that, pursuant to each Committee charter, the Board Chair appoints members of each Committee and appoints members to serve as Committee chair, vice chair, and secretary for terms not to exceed one year. He reviewed the appointments in effect as of March 19, 2026, included on page 18 of the meeting materials.

### **5. Proposed 2027 Board Meeting Dates**

Mr. Barber presented tentative dates for the 2027 Board and Committee meetings, included on page 20 of the meeting materials, and asked that the Trustees advise whether they are aware of any conflicts with the dates as soon as possible.

### **6. Investment Performance and Market Updates**

#### **A. Board Investment Performance Report, Q4 2025**

Greg Fletcher, Performance Director, presented the *Investment Performance Report as of December 31, 2025*, included on pages 22-37 of the meeting materials. Mr. Fletcher reported that: (i) the Core Trust Fund (“CTF”) returned 2.23% net of all fees and expenses in Q4 2025, representing seven basis points (“bps”) of outperformance relative to its benchmark for the quarter; (ii) the CTF returned 14.40% net of

all fees and expenses for the one-year period, resulting in an excess return of 76 bps; (iii) the CTF five-year return net of all fees and expenses was 7.08% and outperformed the benchmark by 65 bps on an annualized basis; and (iv) the CTF net of all fees and expenses return outperformed the 60/40 Reference Portfolio return by 14.9% (cumulative) over the past twenty years, which equates to an excess value add of \$10 billion over the same period.

Mr. Fletcher also highlighted that: (i) the CTF net of all fees and expenses return also outperformed its benchmark for the year-to-date and three- and five-year time periods; (ii) 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 (iii) SWIB’s investment management has added more than \$3.8 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 to approximately \$178 billion, representing a year-over-year increase of \$15.4 billion. He then noted that the percentage of WRS assets that are actively managed has declined slightly year-over-year, and that the percentage of WRS assets that are internally managed increased 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 December 31, 2025*, included on pages 38-39 of the meeting materials, commenting that policy leverage contributed 100 bps to CTF absolute performance year-to-date and remained a positive contributor over the one-, three-, and five-year periods.

## **B. 2025 Callan Report**

Ivan “Butch” Cliff, Executive Vice President and Director of Investment Research, Callan Associates, presented the *Callan Quarterly Report Summary as of December 31, 2025*, included on pages 40-58 in the meeting materials, which summarized SWIB’s performance relative to its peer group.

Mr. Cliff reviewed SWIB’s gross cumulative returns relative to the policy target, noting that SWIB generated absolute gross returns of 7.23% annualized over the prior five years, which exceeded the 6.8% actuarial return threshold by 43 bps and the policy target by 78 bps, resulting in a cumulative gross excess return of 5.08% above the policy target for the five-year period. Mr. Cliff also commented that SWIB’s highly controlled tracking error relative to target constituted evidence of strong risk controls and noted the consistency with which SWIB’s quarterly returns exceeded target policy returns, particularly over the three-year period. When looking at the ten-year period, Mr. Cliff again identified consistency and risk control, highlighting an annualized ten-year gross excess return of 72 bps, resulting in a cumulative gross excess return of 15.4% over that time period.

Mr. Cliff concluded by reviewing a comparison of SWIB’s risk and asset allocation versus the policy target and peers. He (i) noted that SWIB’s use of financial leverage enables the use of more risk reducing/diversifying assets without sacrificing growth assets, allowing for a more diversified and risk-balanced portfolio than most peers; (ii) reviewed SWIB’s cumulative and annual performance rankings relative to its peer group, highlighting that the CTF’s total fund unadjusted performance exceeds the policy target for the one-, three-, five-, and ten-year periods, and is in the second quartile of the peer group for the one, three- and ten-year periods and in the third quartile for the five-year period; and (iii) commented

that, on an asset allocation adjusted basis, the CTF's performance rankings are in the first quartile for the one-, three-, five-, and ten-year periods.

## **7. Committee Open Session Business**

### **A. Amendments to WRS Investment Committee Guidelines**

Mr. Barber discussed amendments to the *SWIB Investment Committee Wisconsin Retirement System Investment Guidelines*, included on pages 70-115 of the meeting materials, which were approved by the Investment Committee at its January 2026 meeting. Mr. Barber noted that the changes (i) with respect to the Board-approved 2026 asset allocation, reflect the discontinuation of the long Treasuries portfolio and the widening of the active risk target range for the VTF; (ii) in connection with the relative performance maximum review, incorporate increases in target tracking error for the small cap and multi-strat portfolios and corresponding changes to their soft risk parameters; (iii) reflect the new Liquidity Management and Beta Implementation ("LMBI") division, the restructuring of the Asset & Risk Allocation ("ARA") division, and the delineation of responsibilities and functions between the two; and (iv) revise the leverage use policy related to the commercial paper pilot program.

### **B. Approved Open Session Investment Committee Minutes**

Mr. Barber stated that the approved open session minutes of the November 25, 2025, December 18, 2025, and January 27, 2026 Investment Committee meetings were included on pages 116-132 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 February 24, 2026 Investment Committee meeting, as well as draft open session agendas for the March 31 and April 28, 2026 Investment Committee meetings, were included on pages 133-138 of the meeting materials for the Board's review.

### **D. Draft Open Session Enterprise Risk and Compliance Committee Minutes**

Mr. Barber noted that draft open session minutes of the November 11, 2025 Enterprise Risk and Compliance Committee meeting were included on pages 139-141 of the meeting materials for the Board's review.

## **8. Quarterly Investment Update, Q4 2025**

Todd Mattina, Head Economist and Asset & Risk Allocation CIO, presented the *Quarterly Investment Update*, included on pages 143-181 of the meeting materials. Mr. Mattina began with a review of the CTF five-year rolling annualized net of external manager fee return compared to the CTF twenty-year net of fee return and the actuarial target rate of return. He noted that, despite volatility over the last few years, the five-year rolling return continues to outperform the actuarial target as well as the policy benchmark. In addition, he noted that the average return required to avoid any negative dividend adjustment in 2027 was a 1.8% average return for 2026, an improvement over past projections presented to the Board. The Board also briefly discussed the difference between the structure of the WRS, the annuity rate, and highlighted that the annuity rate was not intended or designed to track the consumer price index or act as a cost of living adjustment, so that the WRS's funding status and contribution rates would remain stable, unlike many other public pensions.

Mr. Mattina then presented the *Economic and Market Outlook*, included on pages 149-177 of the meeting materials. He commented that (i) structural changes in U.S. fixed income and public equity markets, alongside rising geopolitical fragmentation, have increased concerns about downside risks and lower long-term return potential; (ii) with respect to fixed income, elevated sovereign issuance, inflation uncertainty, weaker stock–bond diversification, and structurally higher real rates could pressure valuations, while gradual dollar diversification may moderate foreign demand for Treasuries; (iii) with respect to equities, elevated valuations and artificial intelligence-driven concentration may compress future returns and increase downside sensitivity if expectations reset; and (iv) implications for long-term returns and WRS financial stability depend on how these risks and offsets evolve, and the team will conduct future analysis to assess WRS asset–liability linkages.

## **9. Motion to Convene in Closed Session**

**Motion:** 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 Merfeld and seconded by Trustee Bolens.

The Chair called for a roll call vote.

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

There being seven ayes and no nays, the Chair declared the motion passed. The Board convened in closed session at 10:52 a.m. and reconvened in open session at 12:49 p.m.

## **10. Announcement of Board Actions Relating to Items Taken up in Closed Session**

Trustee Tinnen announced that, while in closed session, the Board (i) received a risk management update; and (ii) heard an update regarding Investment Committee closed session business as well as Enterprise Risk and Compliance Committee closed session business. Trustee Tinnen also reported that, during executive closed session, the Board (i) received Committee reports on closed session and executive closed session matters; (ii) approved the closed session consent agenda; and (iii) received a presentation on succession planning.

## **11. Governance Updates**

### **A. Amendments to WRS Investment Policy**

Mr. Barber reviewed proposed revisions to the “Board of Trustees Wisconsin Retirement System Investment Policy,” included on pages 253-272 of the meeting materials. He noted that the revisions (i) update the policy to align with statutory language and fiduciary duty standard, the Board’s most recent trustee manual changes, and current practices; (ii) reflect the new LMBI division and the realignment of responsibilities and roles between the LMBI and the ARA divisions; and (iii) make title updates and other clarifying changes throughout.

### **B. Amendments to Investment Board Procedures**

Mr. Barber then discussed proposed updates to the “Investment Board Procedures,” included on pages 273-276 of the meeting materials. He commented that the changes align with statutory and legal requirements, add a description of the Board’s cyber risk liaison role, and ensure consistency with current agency practice.

**Motion:** A motion was made by Trustee Bolens and seconded by Trustee Merfeld to approve the amendments to the Board of Trustees Wisconsin Retirement System Investment Policy, as recommended by the Investment Committee, as well as the amendments to the Investment Board Procedures, in each case as presented. The motion passed unanimously.

## **12. Reports Filed Without Comment**

In the absence of questions, the following reports, included on pages 277-290 of the meeting materials, were filed without comment: (i) Quarterly Charges to Funds Report, Q4 2025; (ii) Private Markets and Funds Alpha Commitments, Q4 2025; and (iii) Board Contact Log.

## **13. Future Items for Discussion**

Mr. Barber noted that the 2026 Board Meeting and Agenda Plan was included on pages 292-295 in the meeting materials for the Board’s information.

## **14. Adjournment**

**Motion:** A motion to adjourn was made by Trustee Voelker and seconded by Trustee Collins. The motion passed unanimously, and the meeting was adjourned at 12:54 p.m.

Date of Board Approval:

Signed: \_\_\_\_\_

\_\_\_\_\_  
Thomas J. Merfeld, Board Secretary

## Board Meeting

### Tab 3 – Investment Performance and Market Updates

- A. Board Investment Performance Report, Q1 2026
- B. Callan Quarterly Report



# Investment Performance Report

*as of March 31, 2026*

# Investment Performance Report

## *1Q 2026 Key Insights*

### Absolute and Relative Performance YTD<sup>1</sup>

- YTD Return: Core Trust Fund (CTF) down (0.33%) and Variable Trust Fund (VTF) down (2.82%) with excess performance of +24 bps and +1 bp, respectively.

### Key Portfolio Outcomes

- Private Equity / Debt, Real Estate and Alpha Pool Overlay strategies generated positive 1st quarter absolute returns and helped offset negative absolute performance in Public Equities and Public Fixed Income.
- Strong relative results in Emerging Market ex-China equities and Alpha Pool Overlay helped offset underperformance relative to their benchmarks by Global Equities With Emerging Markets and US Small Cap during the quarter.
- Inflation-sensitive assets provided stability as investors navigated uncertainty surrounding economic growth, inflation, and interest rate expectations.

### 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 this lower exposure to public equity during a market runup.

#### Notes

<sup>1</sup> All returns are net of fees and expenses

# WRS Performance

*as of March 31, 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	(0.33)	12.24	9.81	6.43	8.58	7.67	6.87	
Core Trust Fund Benchmark	(0.57)	11.65	9.01	5.74	8.03	7.23	6.58	
Excess	+0.24	+0.59	+0.81	+0.69	+0.55	+0.44	+0.29	
Net Excess Value Add (\$M)	+\$344.8	+\$732.8	+\$2,844.9	+\$4,150.9				
Variable Trust Fund	(2.82)	20.63	17.12	9.97	12.27	10.83	8.81	
Variable Trust Fund Benchmark	(2.83)	20.58	17.15	9.99	12.33	10.81	8.83	
Excess	+0.01	+0.05	(0.02)	(0.02)	(0.06)	+0.03	(0.02)	
Net Excess Value Add (\$M)	+\$0.2	+\$5.5	+\$2.1	(\$0.4)				

Periods greater than 1 yr show annualized return

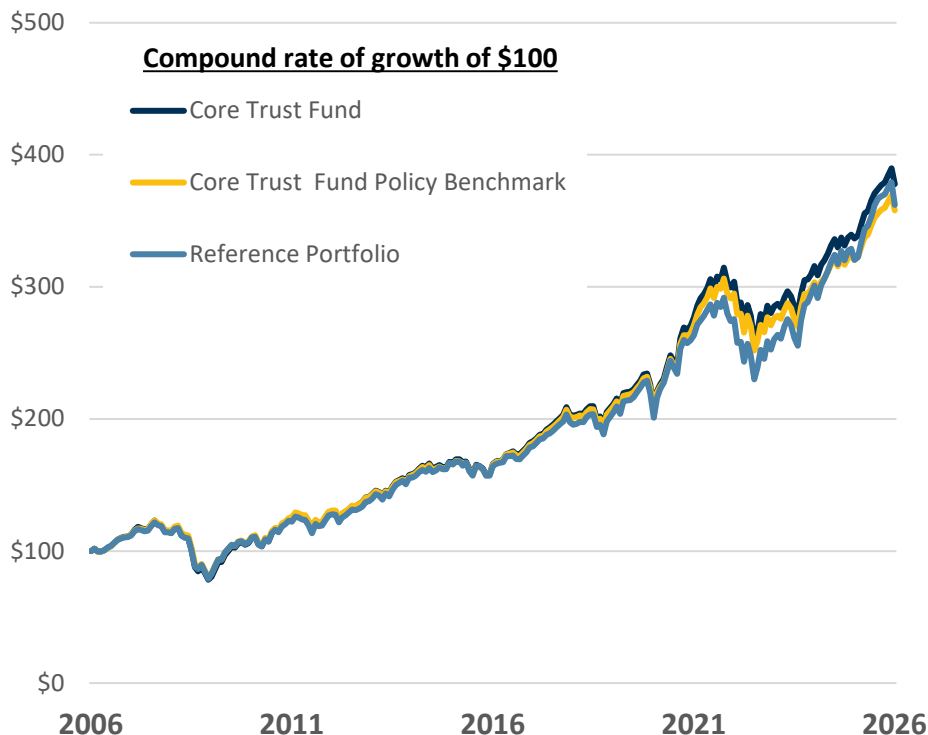
***SWIB's investment management has added more than \$4.1 billion above benchmark returns over the last five years to the WRS after consideration of all fees and expenses.***

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

# CTF vs. 60/40 Reference Portfolio

20-year cumulative return<sup>1</sup>: April 1, 2006, to March 31, 2026

## Indexed Benefit 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 <sup>2</sup> (60% equity/40% bonds)	6.6%	262.0%	= Passive Market Return
<b>Benefit of CTF Asset Allocation</b>			
CTF Policy Benchmark	6.6%	257.9%	+\$0.6B
<b>Benefit of CTF Active Management</b>			
CTF	6.9%	277.8%	+\$8.2B
<b>CTF Excess Return vs. Reference Portfolio</b>	<b>+0.2% pts</b>	<b>+15.7% pts</b>	<b>+\$8.8B</b>

### Notes

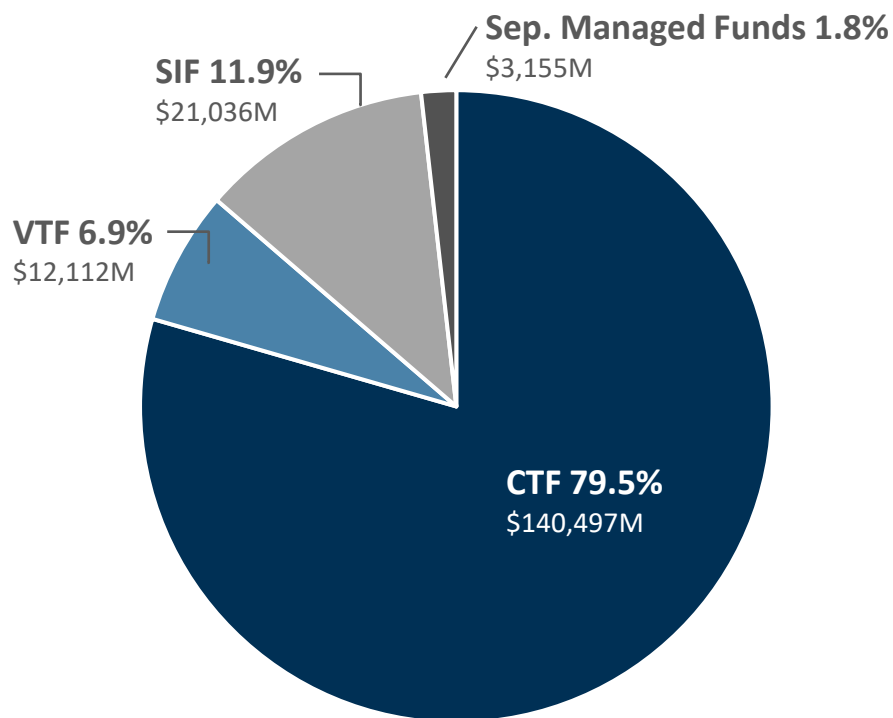
<sup>1</sup> Core Trust Fund beginning market value, as of April 1, 2006, was \$70.5B and ending market value, as of March 31, 2026, was \$140.4B.

<sup>2</sup> 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

# Total Assets Under Management (AUM)

*as of March 31, 2026*



Gross Market Value of Assets (\$millions)			
By Fund	3/31/2025	3/31/2026	1 Year Change
<b>Total WRS</b>	139,996	152,608	+12,613
<b>Core Trust Fund</b>	129,385	140,497	+11,112
<b>Variable Trust Fund</b>	10,611	12,112	+1,501
<b>State Investment Fund (SIF) <sup>1</sup></b>	21,764	21,036	(728)
<b>Separately Managed Funds</b>	2,989	3,155	+165
<b>Total SWIB AUM</b>	<b>\$164,749</b>	<b>\$176,799</b>	<b>+\$12,050</b>

**Notes**

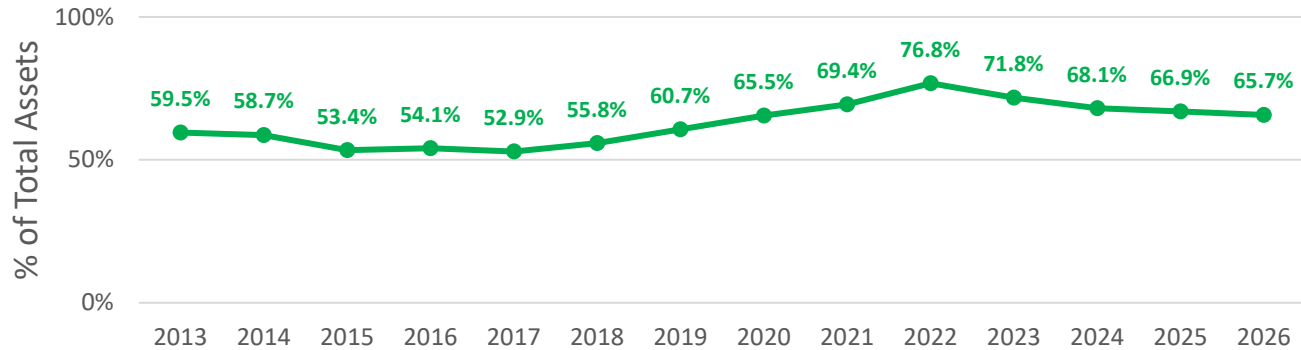
<sup>1</sup> Excludes cash invested in SIF held on behalf of CTF and VTF.

Refer to the disclosure section for additional details

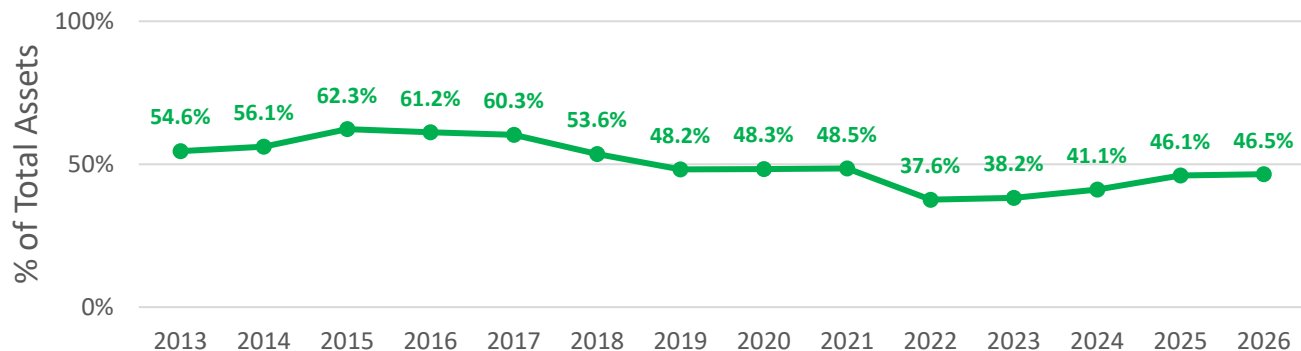
# WRS Assets as of March 31, 2026

## *Breakdown of Active vs. Passive and Internal vs. External*

### Actively Managed Assets



### Internally Managed Assets



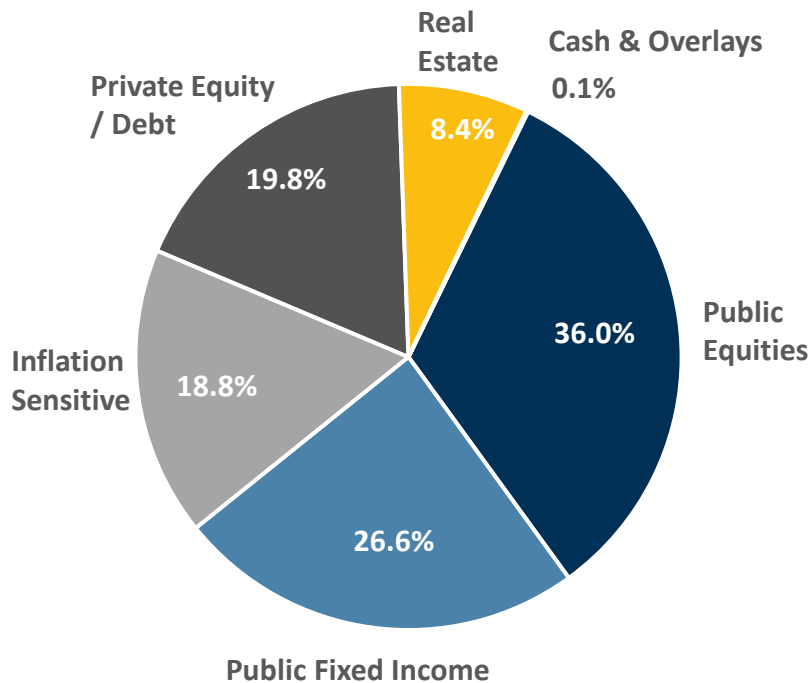
**52% of Total SWIB Assets (including SIF) are internally managed**

Refer to the disclosure section for additional details

# CTF Assets Under Management

*Breakdown by Asset Class as of March 31, 2026*

**Total Exposure - % of Total  
3/31/2026**



Total CTF by Asset Class	Total Exposure \$ & Adjusted AUM (\$millions)		
	Total Exposure \$ <sup>1</sup> 3/31/2025	Total Exposure \$ 3/31/2026	Year over Year Change
Public Equities	47,613	50,608	+2,995
Public Fixed Income	33,905	37,372	+3,467
Inflation Sensitive	24,370	26,471	+2,101
Real Estate <sup>2</sup>	12,002	11,862	(141)
Private Equity / Debt <sup>2</sup>	26,866	27,889	+1,023
Cash & Overlays	(201)	155	+355
<b>Total Exposure</b>	<b>\$144,556</b>	<b>\$154,356</b>	<b>+9,800</b>
<i>Less: Policy Leverage</i>	<i>15,167</i>	<i>13,849</i>	<i>(1,318)</i>
<b>Total CTF AUM</b>	<b>\$129,388</b>	<b>\$140,507</b>	<b>+11,118</b>

**Notes**

<sup>1</sup> Total Exposure is composed of the gross market value of investments, plus beta exposure added or offset through derivative instruments.

<sup>2</sup> The Real Estate and Private Equity / Debt asset classes (28% 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

# Core Trust Fund Allocation

*as of March 31, 2026*

## Allocation – Exposure Based

Strategies	(\$ millions)	As % of Total Fund		Target Range %	Notes
	Total Exposure	Portfolio Exposure %	Benchmark Target %		
<b>Public Equities</b>	<b>50,608</b>	<b>36.0</b>	<b>35.9</b>	<b>29.9 – 41.9</b>	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 available in disclosure section
Global Developed	40,516	28.8	28.7		
US Small Cap	2,919	2.1	2.1		
International Small Cap	2,637	1.9	1.9		
Emerging Markets	4,535	3.2	3.2		
<b>Public Fixed Income</b>	<b>37,372</b>	<b>26.6</b>	<b>26.8</b>	<b>20.8 – 32.8</b>	
Investment Grade	22,371	15.9	16.1		
Non-Investment Grade	11,167	7.9	8.0		
Emerging Market Debt	3,833	2.7	2.7		
<b>Inflation Sensitive</b>	<b>26,471</b>	<b>18.8</b>	<b>19.0</b>	<b>14.0 – 24.0</b>	
Real Estate	11,862	8.4	8.4	4.0 – 12.0	
Private Equity / Debt	27,889	19.8	19.8	12.0 – 28.0	
Cash / Overlays	155	0.1	0.0		
<b>Leverage</b>	<b>(13,849)</b>	<b>(9.9)</b>	<b>(10.0)</b>	<b>(18.0) to (2.0)</b>	
<b>Total Fund – Total Exposure</b>	<b>\$154,356</b>	<b>109.9</b>	<b>110.0</b>	<b>102.0 – 118.0</b>	
<b>Total Fund – Market Value</b>	<b>\$140,507</b>	<b>100.0</b>	<b>100.0</b>		

Asset \$ exposures and % weights may contain rounding differences

# Core Trust Fund: Asset Class Returns

*as of March 31, 2026*

Asset Class Group: Public Equities	Performance Start Date	Total Exposure Value (\$millions)	Net of External Manager Fee Return %				
			Calendar YTD	1 Year	3 Year	5 Year	10 Year or ITD
<b>Public Equities</b>	<b>12/31/2002</b>	\$50,575	(2.49)	21.63	16.93	9.70	11.78
<b>Benchmark</b>			(2.54)	21.43	16.84	9.73	11.87
<b>Excess</b>			<b>+0.05</b>	<b>+0.20</b>	<b>+0.10</b>	<b>(0.04)</b>	<b>(0.09)</b>
<b>Global Developed</b>	<b>2/28/2017</b>	\$38,280	(3.49)	19.33	17.14	10.44	11.75
<b>Benchmark</b>			(3.49)	19.37	17.27	10.75	12.02
<b>Excess</b>			<b>+0.00</b>	<b>(0.05)</b>	<b>(0.12)</b>	<b>(0.31)</b>	<b>(0.27)</b>
<b>Global Equities w/EM</b>	<b>5/31/2021</b>	\$2,522	(5.05)	19.03	17.79		9.94
<b>Benchmark</b>			(3.04)	20.64	17.09		8.97
<b>Excess</b>			<b>(2.01)</b>	<b>(1.61)</b>	<b>+0.70</b>		<b>+0.97</b>
<b>US Small Cap</b>	<b>2/28/2017</b>	\$2,920	1.41	23.52	14.55	5.61	9.54
<b>Benchmark</b>			2.64	24.74	13.70	4.84	8.75
<b>Excess</b>			<b>(1.22)</b>	<b>(1.22)</b>	<b>+0.85</b>	<b>+0.77</b>	<b>+0.80</b>
<b>International Small Cap</b>	<b>1/31/2020</b>	\$2,604	(0.26)	30.95	15.10	6.36	8.23
<b>Benchmark</b>			(0.41)	28.19	14.01	5.13	7.46
<b>Excess</b>			<b>+0.15</b>	<b>+2.76</b>	<b>+1.09</b>	<b>+1.22</b>	<b>+0.77</b>
<b>Emerging Market ex China</b>	<b>3/31/2022</b>	\$3,592	5.96	44.29	19.04		9.97
<b>Benchmark</b>			3.18	41.43	18.66		9.72
<b>Excess</b>			<b>+2.77</b>	<b>+2.87</b>	<b>+0.38</b>		<b>+0.25</b>
<b>Emerging Market China</b>	<b>3/31/2022</b>	\$570	(4.79)	14.08	8.53		4.12
<b>Benchmark</b>			(6.52)	10.31	6.80		3.77
<b>Excess</b>			<b>+1.73</b>	<b>+3.78</b>	<b>+1.73</b>		<b>+0.34</b>

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: Asset Class Returns

*as of March 31, 2026*

Asset Class Group: Public Fixed Income & Inflation Sensitive	Performance Start Date	Total Exposure Value (\$millions)	Net of External Manager Fee Return %				
			Calendar YTD	1 Year	3 Year	5 Year	10 Year or ITD
<b>Public Fixed Income</b>	<b>12/31/2003</b>	\$37,370	(0.42)	5.90	5.83	1.66	2.81
<b>Benchmark</b>			(0.41)	5.57	5.27	1.52	2.55
<b>Excess</b>			<b>(0.01)</b>	<b>+0.33</b>	<b>+0.56</b>	<b>+0.14</b>	<b>+0.26</b>
<b>Investment Grade US Credit</b>	<b>2/28/2022</b>	\$8,958	(0.37)	5.56	5.39		1.76
<b>Benchmark</b>			(0.48)	4.84	4.62		1.37
<b>Excess</b>			<b>+0.11</b>	<b>+0.72</b>	<b>+0.77</b>		<b>+0.39</b>
<b>US Treasuries</b>	<b>2/28/2022</b>	\$10,424	(0.05)	3.17	2.45		(0.23)
<b>Benchmark</b>			(0.04)	3.25	2.59		(0.03)
<b>Excess</b>			<b>(0.00)</b>	<b>(0.09)</b>	<b>(0.14)</b>		<b>(0.20)</b>
<b>MBS</b>	<b>4/30/2020</b>	\$2,981	0.52	6.91	6.09	1.29	1.10
<b>Benchmark</b>			0.40	5.79	4.17	0.45	0.26
<b>Excess</b>			<b>+0.12</b>	<b>+1.13</b>	<b>+1.92</b>	<b>+0.84</b>	<b>+0.85</b>

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: Asset Class Returns

*as of March 31, 2026*

Asset Class Group: Public Fixed Income & Inflation Sensitive	Performance Start Date	Total Exposure Value (\$millions)	Net of External Manager Fee Return %				
			Calendar YTD	1 Year	3 Year	5 Year	10 Year or ITD
<b>High Yield</b>	<b>7/31/2019</b>	\$7,464	(0.51)	7.20	8.37	3.20	4.31
<b>Benchmark</b>			(0.38)	7.10	8.01	4.02	4.58
<b>Excess</b>			<b>(0.14)</b>	<b>+0.10</b>	<b>+0.36</b>	<b>(0.82)</b>	<b>(0.27)</b>
<b>Leveraged Loans</b>	<b>3/31/2023</b>	\$3,700	(0.95)	4.31	7.94		7.94
<b>Benchmark</b>			(0.78)	5.94	8.34		8.34
<b>Excess</b>			<b>(0.18)</b>	<b>(1.62)</b>	<b>(0.40)</b>		<b>(0.40)</b>
<b>Emerging Market Debt - USD</b>	<b>6/30/2005</b>	\$1,934	(1.53)	10.85	9.93	3.18	4.34
<b>Benchmark</b>			(1.26)	10.38	9.45	2.47	3.75
<b>Excess</b>			<b>(0.27)</b>	<b>+0.47</b>	<b>+0.48</b>	<b>+0.71</b>	<b>+0.58</b>
<b>Emerging Market Debt - Local</b>	<b>7/31/2017</b>	\$1,899	(1.94)	15.49	8.36	3.08	1.95
<b>Benchmark</b>			(2.25)	11.76	6.84	2.06	1.68
<b>Excess</b>			<b>+0.31</b>	<b>+3.73</b>	<b>+1.52</b>	<b>+1.01</b>	<b>+0.27</b>
<b>Inflation Sensitive</b>	<b>12/31/2003</b>	\$26,470	0.26	3.04	3.19	1.49	3.05
<b>Benchmark</b>			0.26	3.00	3.18	1.48	2.96
<b>Excess</b>			<b>+0.00</b>	<b>+0.04</b>	<b>+0.01</b>	<b>+0.02</b>	<b>+0.08</b>

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: Asset Class Returns

*as of March 31, 2026*

Asset Class Group: Private Markets & Other Strategies	Performance Start Date	Total Exposure Value (\$millions)	Net of External Manager Fee Return %				
			Calendar YTD	1 Year	3 Year	5 Year	10 Year or ITD
<b>Real Estate</b>	<b>12/31/2003</b>	\$11,862	1.04	2.52	(1.61)	4.30	5.43
<b>Benchmark</b>			0.70	2.92	(4.25)	2.51	3.87
<b>Excess</b>			<b>+0.34</b>	<b>(0.40)</b>	<b>+2.64</b>	<b>+1.79</b>	<b>+1.55</b>
<b>Private Equity / Debt</b>	<b>11/30/2006</b>	\$27,889	2.19	10.69	8.87	12.11	13.76
<b>Benchmark</b>			2.18	10.25	8.42	10.62	11.68
<b>Excess</b>			<b>+0.01</b>	<b>+0.44</b>	<b>+0.45</b>	<b>+1.49</b>	<b>+2.08</b>
<i>Other strategies:</i>							
<b>Alpha Pool Overlay</b>	<b>1/31/2011</b>	\$13,796	2.05	3.92	3.65	3.55	3.24
<b>Benchmark (set to zero as of 1/1/2019)</b>			0.00	0.00	0.00	0.00	0.47
<b>Excess</b>			<b>+2.05</b>	<b>+3.92</b>	<b>+3.65</b>	<b>+3.55</b>	<b>+2.77</b>

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: Asset Class Returns

*Net of External Mgr Fee - Excess Returns as of March 31, 2026*



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 March 31, 2026

Alpha Pool Return	Performance Start Date	Market Value (\$ millions)	Net of External Manager Fee Return %				
			Calendar YTD	1 Year	3 Year	5 Year	10 Year
<b>Total Alpha Pool Composite</b>	<b>1/31/2011</b>	<b>\$13,796</b>	<b>2.05</b>	<b>3.92</b>	<b>3.65</b>	<b>3.55</b>	<b>3.24</b>
<b>CTF Policy Benchmark (Beta)</b>			<b>(0.57)</b>	<b>11.65</b>	<b>9.01</b>	<b>5.74</b>	<b>8.03</b>
<b>Alpha Pool Overlay Return (Alpha Pool Composite + Beta)</b>			<b>1.49</b>	<b>15.57</b>	<b>12.66</b>	<b>9.30</b>	<b>11.27</b>

Periods greater than 1 yr show annualized return

## Sub Strategy Details

Alpha Pool: Key Sub Strategies	Market Value (\$ millions)	% of Alpha Pool	NEVA (\$ millions)		Alpha Pool Contribution To Return %	
			Calendar YTD	1 Year	Calendar YTD	1 Year
<b>Hedge Funds</b>	\$9,703	70%	(\$11.6)	\$371.5	(0.09)	2.56
<b>Multi Strat</b>	\$1,817	13%	\$71.9	\$168.6	0.51	1.18
<b>Public Exposure Alpha</b>	\$1,843	13%	\$236.6	(\$55.6)	1.67	(0.37)
<b>TBA - Mortgages</b>	\$433	3%	(\$12.6)	\$13.0	(0.09)	0.08

### Observations

- 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

# Variable Trust Fund

*as of March 31, 2026*

## Performance

Fund	Performance Start Date	Market Value (\$ millions)	Net of External Manager Fee Return %				
			Calendar YTD	1 Year	3 Year	5 Year	10 Year
Variable Trust Fund	6/30/1977	\$12,112	(2.81)	20.67	17.18	10.02	12.33
Variable Trust Fund Benchmark			(2.83)	20.58	17.15	9.99	12.33
Excess			+0.02	+0.09	+0.03	+0.03	+0.01

Periods greater than 1 yr show annualized return

## Portfolio Allocation

By Portfolio	(\$ millions)	As % of Total Fund		Target Range
	Total Exposure	Portfolio Exposure	Exposure Target	
Public Equities	12,072	99.7	100.0	
US Equities	8,480	70.0	70.0	65.0 – 75.0%
International Equities	3,593	29.7	30.0	25.0 – 35.0%
Cash & Overlays	39	0.3	0.0	
Total Fund	\$12,112	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

# Separately Managed Funds

*as of March 31, 2026*

Fund	Performance Start Date	Market Value (\$ millions)	Net of External Manager Fee Return %				
			Calendar YTD	1 Year	3 Year	5 Year	10 Year or ITD
<b>State Investment Fund (SIF)</b>	<b>6/30/1975</b>	\$24,153	0.91	4.19	4.89	3.47	2.31
<b>SIF Benchmark</b>			0.90	4.04	4.71	3.39	2.25
<b>Excess</b>			<b>+0.01</b>	<b>+0.16</b>	<b>+0.18</b>	<b>+0.08</b>	<b>+0.06</b>
<b>State Life Insurance Fund</b>	<b>10/31/1994</b>	\$94	(0.47)	3.04	2.06	(1.01)	1.80
<b>No Benchmark</b>							
<b>Historical Society Endowment Fund</b>	<b>12/31/1993</b>	\$31	(3.03)	14.99	14.69	8.58	11.15
<b>Historical Society Endowment Benchmark</b>			(2.99)	14.46	14.22	8.35	10.84
<b>Excess</b>			<b>(0.04)</b>	<b>+0.53</b>	<b>+0.46</b>	<b>+0.24</b>	<b>+0.31</b>
<b>Injured Patients &amp; Families Comp. Fund</b>	<b>10/31/1993</b>	\$1,589	(0.69)	6.63	5.88	2.12	4.00
<b>IP&amp;FC Benchmark</b>			(0.66)	6.05	5.50	1.89	3.54
<b>Excess</b>			<b>(0.02)</b>	<b>+0.57</b>	<b>+0.38</b>	<b>+0.23</b>	<b>+0.46</b>
<b>UW System Long Term Fund</b>	<b>3/31/2018</b>	\$650	(1.04)	13.41	10.13	6.62	7.74
<b>UW System Benchmark</b>			(1.16)	13.27	9.99	6.49	7.55
<b>Excess</b>			<b>+0.12</b>	<b>+0.14</b>	<b>+0.13</b>	<b>+0.12</b>	<b>+0.18</b>
<b>UW Cash Management Fund</b>	<b>4/30/2022</b>	\$791	(0.48)	7.31	6.99		5.41
<b>UW Cash Management Benchmark</b>			(0.51)	7.27	7.01		5.44
<b>Excess</b>			<b>+0.04</b>	<b>+0.04</b>	<b>(0.02)</b>		<b>(0.02)</b>

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

# Leverage Performance

*As of March 31, 2026*

# CTF Policy Leverage Performance

as of March 31, 2026

Core Trust Fund	Net of All Fees and Expenses Return %			
	Calendar YTD	1 Year	3 Year	5 Year
<b>Unlevered Returns (as estimated):</b>				
Portfolio <sup>1</sup>	(0.19)	11.42	9.38	6.27
CTF Benchmark Return <sup>1</sup>	(0.43)	10.83	8.57	5.58
Excess Return	<b>+0.24</b>	<b>+0.60</b>	<b>+0.81</b>	<b>+0.69</b>
<hr/>				
Portfolio Return (Unlevered)	(0.19)	11.42	9.38	6.27
Absolute Return from Leverage <sup>1,2</sup>	(0.14)	0.82	0.43	0.17
Implementation (+) or (-)	0.00	0.00	(0.01)	(0.01)
<hr/>				
<b>Levered Returns (as reported):</b>				
Portfolio	(0.33)	12.24	9.81	6.43
CTF Benchmark	(0.57)	11.65	9.01	5.74
Excess	<b>+0.24</b>	<b>+0.59</b>	<b>+0.81</b>	<b>+0.69</b>

Periods greater than 1 yr show annualized return

## Notes

<sup>1</sup> The Unlevered Portfolio Return, Unlevered CTF Benchmark Return, Absolute Return from Leverage and Implementation (+) or (-) are estimated.

<sup>2</sup> 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<sup>1</sup>
- 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

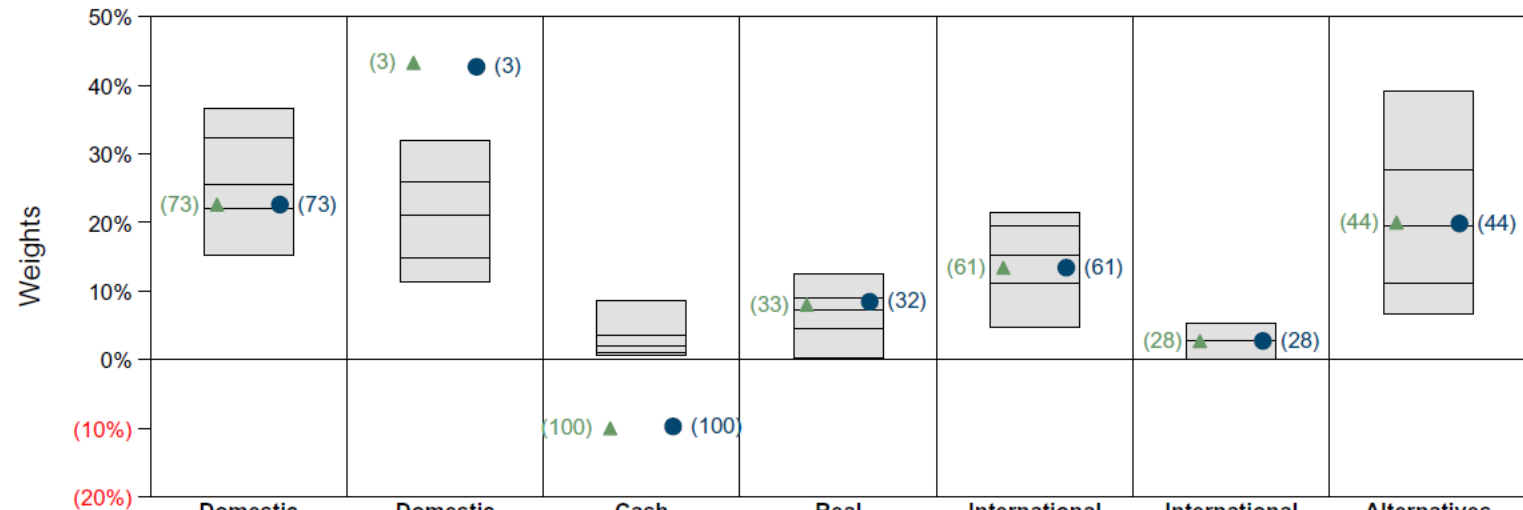
# Callan Quarterly Report Summary

*As of March 31, 2026*

# Callan Peer Rank Update (3.31.2026)

## CTF Asset Allocation Comparison to Peer Group

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



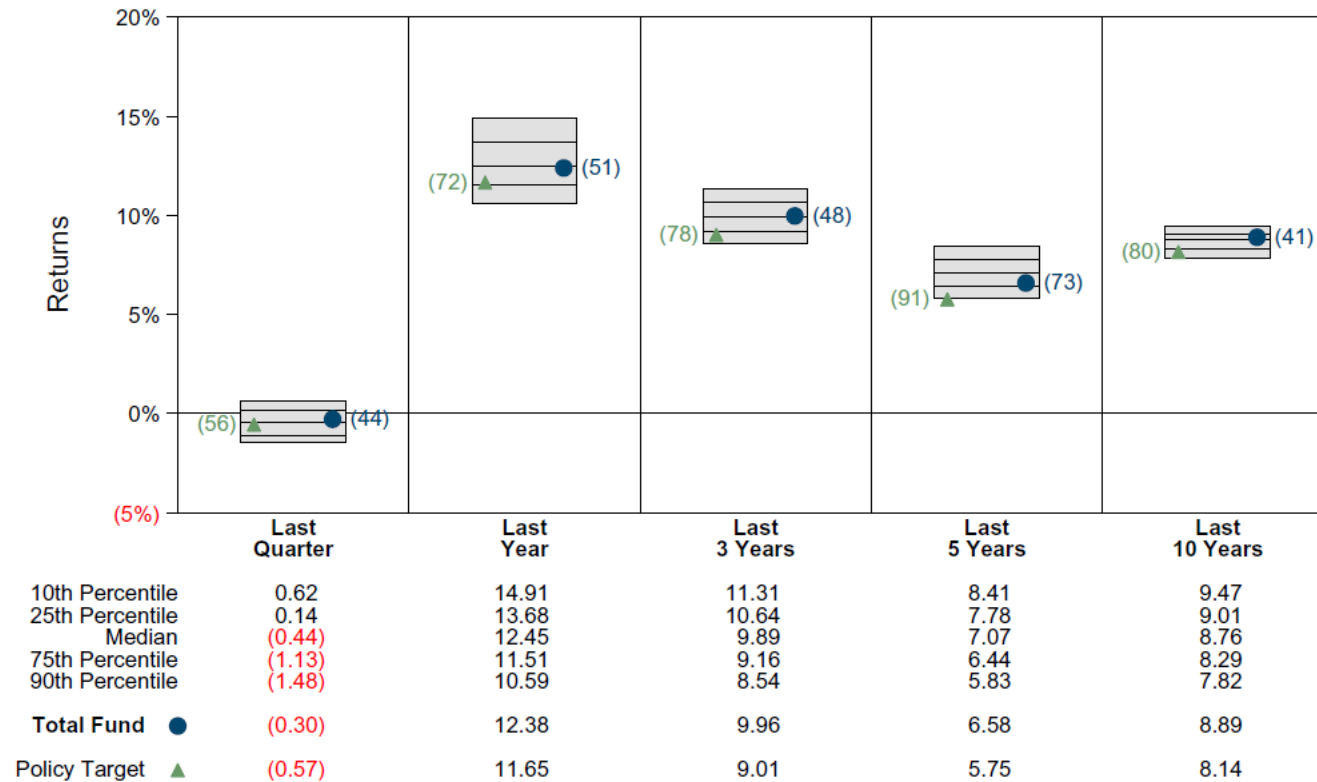
	Domestic Equity	Domestic Fixed	Cash Equivalent	Real Estate	International Equity	International Fixed	Alternatives
10th Percentile	36.73	32.04	8.56	12.56	21.38	5.26	39.12
25th Percentile	32.28	25.96	3.64	9.04	19.46	2.79	27.63
Median	25.51	21.09	2.01	7.25	15.16	0.09	19.41
75th Percentile	22.04	14.85	0.96	4.44	11.16	0.00	11.04
90th Percentile	15.26	11.41	0.58	0.22	4.68	0.00	6.66
<b>Fund</b> ●	22.61	42.71	(9.75)	8.44	13.41	2.73	19.85
<b>Target</b> ▲	22.60	43.30	(10.00)	8.00	13.40	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 (3.31.2026)

## CTF Performance vs. Peer Group Universe

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

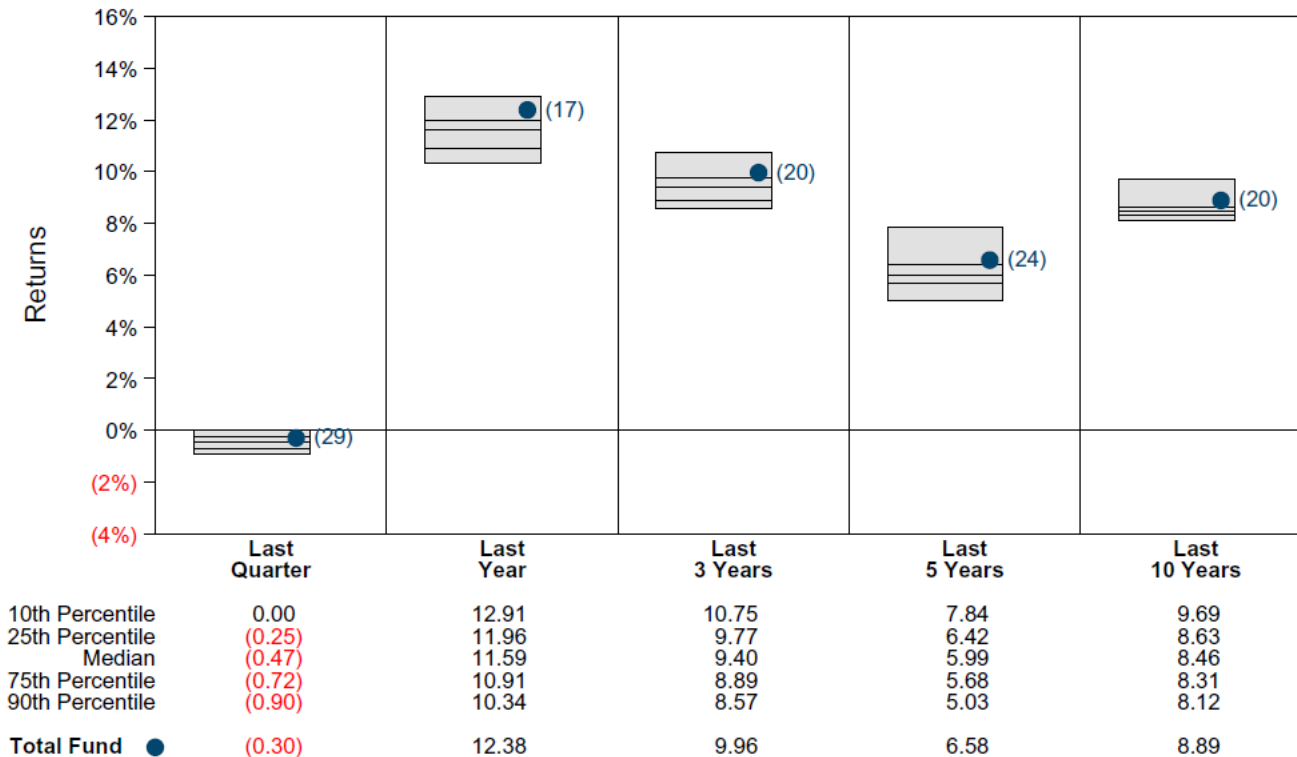


- CTF return exceeds Policy Target over all time periods.
- 1Q, 3-, and 10-year returns are 2<sup>nd</sup> quartile and the 1- and 5-year returns are 3<sup>rd</sup> quartile.

# Callan Peer Rank Update (3.31.2026)

## *CTF Performance on Asset Allocation Adjusted Basis vs. Peer Group*

### Asset Allocation Adjusted Ranking

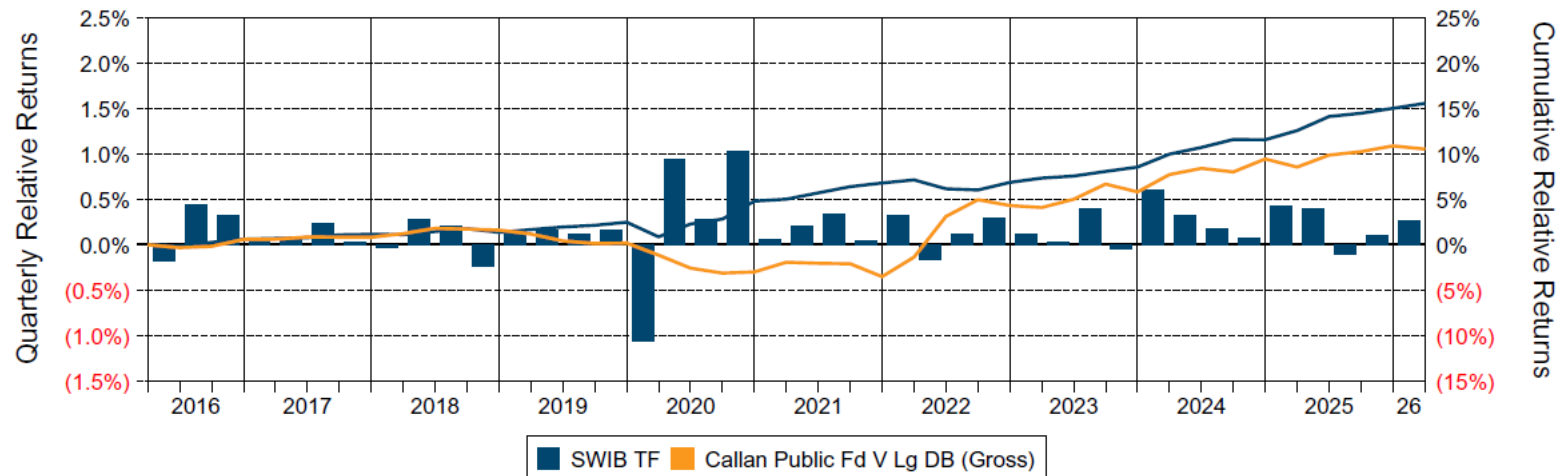


- Peer universe returns are adjusted to match the CTF risk-balanced allocation.
- CTF Fund achieved 1<sup>st</sup> quartile results for the 1-, 3-, 5-, and 10-year periods and 2<sup>nd</sup> quartile results for the 1<sup>st</sup> quarter.

# Callan Peer Rank Update (3.31.2026)

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

Cumulative and Quarterly Relative Returns vs Target



- 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.

# Report Disclosures

*Glossary, Definitions & Data Sources*

# Report Disclosures

Key Terms	Return Measurement Description / Definitions				
<b>WRS Gross Return History</b>	<b>30 Year – Gross of Fee Return %</b>		<b>Fund Return</b>	<b>Gross Benchmark</b>	<b>Excess</b>
	<b>Core Trust Fund</b>		7.92	7.39	<b>+0.52</b>
	<b>Variable Trust Fund</b>		8.94	8.60	<b>+0.35</b>
<b>Gross of Fee Return (“GoF Return”)</b>	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.				
<b>Net Return Types</b>	<b>Net of External Manager Fee Return (“NoF Return”)</b> 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.				
	<b>Net of All Fees and Expenses Return (“NoA Return”)</b> 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.				
<b>NoA Return History and Methodology Details</b>	<p><b>Externally Calculated NoA Return</b> 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.</p> <p><b>Internally Calculated NoA Return:</b> 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.</p> <p>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 .</p> <p>SWIB developed calculations to geometrically link the NoA Return data series and archived the results in its data warehouse (UDM platform).</p> <p>With this calculation, annualized NoA Return may be reported for 10-, 15-, and 20-year periods for the CTF and VTF.</p>				
<b>Excess Return % (“Excess”)</b>	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.				

# Report Disclosures

Key Terms	Return Measurement Description / Definitions
<b>Net Excess Value Add \$ ("NEVA")</b>	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.
<b>Cumulative Return Calculation</b>	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. <b>Cumulative Return</b> = $((1 + r^1) \times (1 + r^2) \times (1 + r^3) \dots) - 1$ ; $r^{(n)}$ = series of holding period returns
<b>Compound rate of growth of \$100</b>	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). <b>Compound rate of growth of \$100</b> = $(\$100 \times (1 + r^1) \times (1 + r^2) \times (1 + r^3) \dots)$ ; $r(n)$ = series of holding period returns
<b>SWIB Inception To Date Reporting</b>	The Quarterly Performance Summary discloses a reporting period described as <b>10 years or ITD</b> . 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.
<b>Performance Start Date</b>	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.
<b>Time-weighted Rate of Return</b>	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.
<b>Annualized Return Calculation</b>	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). <b>Annualized Return</b> = $((1 + r^1) \times (1 + r^2) \times (1 + r^3) \dots)^{(calendar\ units / time\ interval\ measured)} - 1$ ; $r^{(n)}$ = series of holding period returns and calendar units are often expressed as days, months or years
<b>Modified Dietz Total Rate of Return</b>	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).

# Report Disclosures

Key Term	Benchmark Descriptions / Definitions
<b>Policy Benchmark</b>	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 referred to as "Policy Target" as implemented through SWIB's Asset Allocation plan).
<b>Reference Portfolio</b>	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.
<b>Zero or No Benchmark</b>  (for Official Measurement purposes)	<p><b>Zero Benchmark:</b> 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.</p> <p><b>No Benchmark:</b> 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.</p>
<b>Reported Benchmark Returns</b>	<p>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 <i>Benchmark Qualities</i> criteria to ensure portfolio and benchmark attributes are closely aligned.</p> <p><b>Net Total Return Benchmarks:</b> 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.)</p> <p><b>SWIB Custom Net Benchmark for non-U.S. Public Equity Strategies:</b> 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.</p> <p><b>Net of External Manager Fee-based Benchmarks:</b> 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.)</p> <p><b>Gross Policy Benchmarks</b> (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.</p>
<b>Custom Weighted Calculated Benchmarks</b>	<p>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.</p> <p>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".</p>

# Report Disclosures

Key Term	Market Value and Exposure Descriptions / Definitions
<b>Total Exposure</b>	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.
<b>Market Value</b>	<p>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.</p> <p><b>Gross Market Value:</b> the market value of a portfolio or composite without any deduction for SWIB expenses.</p> <p><b>Net Market Value:</b> the market value of a portfolio or composite as adjusted for the effect of expense transactions as recorded on the balance sheet.</p>
<b>Illiquid Investments</b>	Those investments that may be difficult to sell or be sold quickly because of a lack of market or ready or willing investors.
<b>WRS Asset Classifications</b>	<p><b>Internally Managed:</b> 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.</p> <p><b>Externally Managed:</b> 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.</p> <p><b>Actively Managed:</b> 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.</p> <p><b>Passively Managed:</b> 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.</p>

# Report Disclosures

Key Term	Market Value and Exposure Descriptions / Definitions
<p><b>WRS Market Value Reporting</b></p> <p><b>Calculations &amp; Methodologies</b></p>	<p><u>Rationale for market value reporting changes adopted as of March 2026:</u></p> <p>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.</p> <p><u>Calculation and methodology changes now in effect:</u></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• Calculation and methodology changes have been applied over the entire reporting period.</li> </ul>

# Report Disclosures

## 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

On 1/1/2024, the BNY ABOR processing platform became the primary source for CTF and VTF return calculations and market values. Beginning 10/1/2024, the SWIB IBOR was used to process SIF, SWIB-managed Separately Managed Funds, and CTF strategies reporting unlevered returns. Small rounding differences attributable to the use of BNY ABOR vs. SWIB IBOR data sources is possible.

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).

# Leverage Disclosures

*Calculation formulas to estimate impact*

# Leverage Disclosures

## Notes on CTF Leverage Analysis

Term	Description / Definitions
<b>Portfolio Return (Unlevered)</b>	<p>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.</p> <p>It is estimated by:</p> <ol style="list-style-type: none"> <li>1) <u>Excess Return (Levered)</u> is first subtracted from the <u>Portfolio Return (Levered)</u><sup>1</sup>;</li> <li>2) The result of Step 1 is then divided by the <u>Policy Leverage Factor</u>; then</li> <li>3) <u>Excess Return (Levered)</u> 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).</li> </ol> $\text{Portfolio Return (Unlevered)} = \left( \frac{\text{Portfolio Return (Levered)} - \text{Excess Return (Levered)}}{\text{Policy Leverage Factor}} \right) + \text{Excess Return (Levered)} - \text{cost of implementation}$ <p><sup>1</sup> Note, because <u>Excess Return (Levered)</u> 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.</p> <p><u>Policy Leverage Factor</u> 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.</p>
<b>CTF Benchmark Return (Unlevered)</b>	<p>Estimated by the <u>Benchmark Return (Levered)</u> divided by the <u>Policy Leverage Factor</u> for the period.</p>

# Leverage Disclosures

## *Notes on CTF Leverage Analysis*

Term	Description / Definitions
<b>Excess Return (Unlevered)</b>	<p>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.</p> <p>Estimated as <u>Portfolio Return (Unlevered)</u> minus <u>Benchmark Return (Unlevered)</u>.</p> <p>Can also be estimated by taking the actual <u>Excess Return (Levered)</u> minus <u>Implementation (+) or (-)</u> (see below for definition).</p>
<b>Absolute Return from Leverage</b>	Estimated by the <u>Portfolio Return (Levered)</u> minus <u>Portfolio Return (Unlevered)</u> minus <u>Implementation (+) or (-)</u> .
<b>Implementation (+) or (-)</b>	<p>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).</p> <p>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.</p>
<b>Portfolio Return (Levered)</b>	Actual performance of the CTF Portfolio for the period presented, from all strategies including Policy Leverage.
<b>CTF Benchmark Return (Levered)</b>	Actual performance of the CTF Benchmark for the period, taking into account the use of Policy Leverage.
<b>Excess Return (Levered)</b>	Actual excess return of the CTF. Portfolio Return (Levered) minus Benchmark Return (Levered).

## Board Meeting

### Tab 4 – Committee Open Session Business

- A. Amendments to WRS Investment Committee Investment Guidelines
- B. Approved Open Session Investment Committee Meeting Minutes of February 24, March 31, and April 28, 2026
- C. Final Open Session Investment Committee Agenda for May 26, 2026, and Draft Open Session Agendas for June 23 and July 28, 2026

SWIB Investment Committee  
**WISCONSIN RETIREMENT SYSTEM  
INVESTMENT GUIDELINES**

Revised as of

~~January 27~~ April 28, 2026

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## I. INTRODUCTION

The SWIB Board of Trustees (the “Board”) has delegated to the investment staff of SWIB standing authority to manage the assets of the Core Retirement Trust Fund (the “Core Fund”) and the Variable Retirement Trust Fund (the “Variable Fund”), which together make up the Wisconsin Retirement System (the “WRS”), pursuant to the Board’s WRS Investment Policy and to section 25.15(2) of the Wisconsin Statutes and section IB 2.02 of the Wisconsin Administrative Code. The Investment Committee was created to provide oversight of WRS<sup>1</sup> investments within the parameters established by the Board and pursuant to the Investment Committee’s Charter approved by the Board. To properly and prudently execute its delegated authority and oversight functions, the Investment Committee has established guiding policies, guidelines and procedures, which are set forth in this document, the Investment Committee Investment Guidelines (these “IC Guidelines”). These IC Guidelines articulate the policies and guidelines that are employed in the day-to-day management of the WRS assets by SWIB’s staff. This document will be reviewed periodically and updated as necessary by the Investment Committee to reflect changes in investment strategies and to reflect best industry practices for prudent investors. Notwithstanding the delegation of authority by the Board to the Investment Committee for the establishment, approval, and amendment of the policies, guidelines and procedures included in these IC Guidelines, the Board reserves all rights to modify and amend these IC Guidelines at any time in its discretion. Any changes to these IC Guidelines will be periodically reported to the Board. In addition to these IC Guidelines, SWIB staff may also have to comply with Risk, Compliance Division or legal requirements, and review operational readiness with Operations staff prior to the trading of the instruments and securities authorized herein.

## II. LEVERAGE USE POLICY

### Introduction

Leverage is an exposure to an asset that is not fully collateralized by cash assets or an exposure to an asset acquired that has not been fully funded. Leverage by itself does not necessarily create additional market risk or variation in market returns. Leverage may result in greater diversification and lower market risk than an unlevered portfolio under normal market conditions. The funds managed by SWIB can have exposure to leverage through different structures, instruments and vehicles.

SWIB uses leverage in two primary ways. The first is to express the overall policy asset allocation, which includes leverage (“Policy Leverage”). Generally, Policy Leverage is implemented passively. The total amount of Policy Leverage is approved by the Board through the WRS asset allocation process. The Board-approved asset allocation targets for each asset class together with the approved Policy Leverage is called the “Policy Portfolio.” The second use of leverage is to fund the alpha pool (“Alpha Pool Leverage”), which overlays alpha-producing strategies on the overall Core Fund Policy Portfolio. Those alpha strategies are funded with additional leverage but are

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<sup>1</sup> The Investment Committee also has oversight of the State Investment Fund and other funds managed by SWIB as described in the Board’s SIF and Separately Managed Funds Investment Policy and Guidelines.

not part of the Policy Portfolio. The total amount of Alpha Pool Leverage is limited by the Board-approved active risk target and range.

Certain internal active portfolios are also authorized to use portfolio-specific leverage. The Core Fund may provide limited unallocated cash (“Temporary Leverage”) to such internal active portfolios, and to other portfolios, to fund short-term financing needs, and charge a market-based funding rate to the applicable portfolio. Active internal and external portfolios may also fund portfolio leverage by financing assets within the portfolio.

Use of leverage introduces distinct liquidity risk that can vary based on leverage sources and margin requirements. Often, leverage requires liquid assets to satisfy margin obligations. Liquidity risk is managed by monitoring the level of liquidity required in various market scenarios and ensuring that an adequate reserve of liquid assets is available to meet commitments in times of market stress. Having a variety of leverage sources diversifies the refinancing risk and mitigates cost under varied market scenarios.

Alpha Pool and Policy Leverage can be generated through several different mechanisms. These mechanisms may be utilized in different proportions given market conditions and asset allocations. Each of these mechanisms have unique counterparty dynamics and risks, all of which are addressed by SWIB’s counterparty risk framework.

**Derivative instruments.** Leverage can be gained by replacing a physical instrument with a derivative instrument such as a futures contract, a swap contract, or a forward contract. Most of the proceeds generated from the sale of the physical instrument can then be used to finance further investment. The cost of the leverage is imbedded in the price of the derivative instrument. Use of derivative instruments provides the ability to source large scale leverage across many different asset classes in a standardized format. There is a risk of tracking error, or basis risk, between the physical instrument and the derivative instrument that could result in the returns of the two instruments diverging.

**Securities Lending Cash Collateral.** Through the course of securities lending, cash collateral may be received from borrowers. This cash may be used to finance leverage needs without creating basis risk. The available cash fluctuates day to day and is governed by the borrowing demand of and choice of collateral posted by market participants.

**Repurchase Agreements (Repo).** Repo is another way to gain leverage from physical instruments, like securities lending, without using derivative instruments. While securities lending relies on borrowing demand for the physical instrument, repo can generate leverage from physical instruments that do not have borrow demand, and also creates zero basis risk. The repo and the underlying asset management may be executed internally, externally or a mix of the two. An agency repo model can be used to facilitate operational scale, collateral efficiency, and market access by partnering with an external agent.

**Secured Borrow Agreements.** Physical instruments can be pledged as collateral in a secured borrow agreement to gain financing from a bank or other financial institution, as and when needed. This form of financing creates zero basis risk and may have maturities

ranging from three to six months. The stability of the available capital can vary based on the financing bank's or financial institution's balance sheet constraints.

**Unsecured Borrowing.** Unsecured borrowing, such as the issuance of commercial paper, is another way to gain leverage without encumbering assets or requiring collateral. This form of borrowing can diversify the cash providers purchasing the debt providing SWIB with access to new borrowing sources. SWIB's commercial paper pilot program ("CP Pilot Program") managed by the Liquidity Management and Beta Implementation ("LMBI") Division shall not exceed \$2 Billion face amount outstanding in the aggregate. The LMBI Division shall report on the CP Program to the Investment Committee on a quarterly basis.

New mechanisms may be added from time to time and included herein.

### **Leverage Use Philosophy**

Leverage is used where it can improve investment portfolio efficiency in terms of return for risk versus alternative choices that do not use leverage. Leverage will also be used to improve portfolio diversification and reduce portfolio concentration.

### **Leverage Monitoring**

Detailed reporting is regularly (i.e., daily, monthly and quarterly) produced by SWIB to provide feedback regarding leverage exposures for review by portfolio managers, the head of Asset and Risk Allocation (ARA), the head of LMBI, the Risk Management Division, and the Executive Director/Chief Investment Officer (ED/CIO). Leverage use risk metrics are reported at least quarterly to the Investment Committee. Leverage use is also periodically reported by the ED/CIO to the Board.

### **Policy and Alpha Pool Leverage Guidelines**

1. Leverage ratios govern leverage derived from beta sources (i.e., from levered asset class exposures). Established leverage ratio ranges for each levered asset class are set forth below. Current Leverage Ratio is defined as the ratio of notional exposure to capital available in the portfolio (or total exposure to unencumbered exposure in the case of repo). If the Current Leverage Ratio for any levered asset class exceeds the Maximum Target Leverage Ratio, SWIB will, within 30 days (unless such time limit is waived by the ED/CIO), reduce exposure or add capital to bring the Current Leverage Ratio within the established range. A Current Leverage Ratio below the Minimum Target Leverage Ratio will be monitored as part of the overall optimization of capital and funding costs.

<b>Levered Asset Class</b>	<b>Minimum Target Leverage Ratio</b>	<b>Target Leverage Ratio</b>	<b>Maximum Target Leverage Ratio</b>
<i>US Large Cap Equity</i>	2.7	3.3	4.0
<i>US Small Cap Equity</i>	2.7	3.3	4.0
<i>MSCI World xUS Equity</i>	2.7	3.3	4.0
<i>US TIPS</i>	6.0	8.0	10.0
<i>US Treasuries</i>	8.0	10.0	12.0

### **Variable Fund Liquidity Management**

While the Variable Fund asset allocation does not explicitly include leverage, the same mechanisms may be used to manage the liquidity position of the Variable Fund. For example, derivative instruments and/or securities lending cash collateral may be used to manage the liquidity position of the Variable Fund. Variable Fund liquidity will be optimized to facilitate rebalancing activity, meet fund outflows (e.g., benefit payments) or manage other liquidity needs.

## **III. DERIVATIVES USE POLICY**

### **Introduction**

A "derivative instrument" is an investment instrument which usually derives its value and marketability from an underlying instrument which represents direct ownership of an asset or a direct obligation of an issuer (e.g. a "spot" or cash market instrument). SWIB recognizes that derivatives provide a means through which SWIB can implement investment strategies in a more cost and time efficient manner than through the physical investment of the underlying securities. Additionally, derivatives can be used to facilitate SWIB's risk management activities including risk mitigation. Derivatives include such instruments as futures, swaps, options and currency forwards and may be exchange traded, traded over-the-counter (OTC) and/or cleared.

### **Derivatives Use Objectives**

The overall strategic objective of SWIB's use of derivatives is to facilitate risk exposure management and to manage the cost of investing. Objectives for derivatives use include:

1. Constructing portfolios with risk and return characteristics that could not efficiently be created using underlying physical securities,
2. Changing systematic exposures without executing trades in the underlying physical securities,
3. Hedging or managing risks, and
4. Effecting varying active and passive investment strategies including, but not limited to: portable alpha, currency hedging, equitization, relative value trades, transition management, and rebalancings.

## **Derivatives Use Monitoring and Reporting**

Derivatives use exposures will be monitored by portfolio managers that employ derivatives and incorporated as part of the overall risk monitoring of the strategy by the ED/CIO and the Risk Management Division. The Investment Committee will be notified of material risks identified.

### **Derivatives Guidelines Applicable to all WRS Internal Portfolios:**

1. Exchange-traded derivatives must be traded on a recognized exchange approved by the Investment Committee, except for exchange-traded derivatives that are traded pursuant to Exchange for Related Position (EFRP) transactions, which are traded off-exchange and not subject to this requirement. Such approved exchanges are listed on *Appendix 1*. As additional exchanges are approved *Appendix 1* shall be updated without amendment to these IC Guidelines.
2. OTC derivatives may only be traded with counterparties with which SWIB has a current International Swap and Derivative Association (ISDA) agreement that includes a Credit Support Annex (CSA).

In addition:

- a) The counterparty, or its guarantor, must, on each date on which a transaction is entered into, have an actual credit rating of not less than: (1) "A2/P2" on short-term debt from S&P or Moody's; and/or (2) "Baa2/BBB" on long-term debt from S&P or Moody's.
- b) The collateral that SWIB holds under a CSA may be invested in the following:
  - i. Bank deposit accounts;
  - ii. Any money market fund having a rating of at least "Aaa" by Moody's or at least "AAA" by S&P;
  - iii. Overnight commercial paper having a rating of at least "P-1" by Moody's and "A-1" by S&P;
  - iv. Overnight repurchase agreements with U.S. government, agency or dollar cash collateral;
  - v. Overnight reverse repurchase agreements with U.S. government, agency or dollar cash collateral; and
  - vi. The State Investment Fund or similar short term investment funds.
3. For clarity, Items 1 and 2 do not apply to exchange-traded funds (ETFs), or to over-the-counter derivatives entered into on behalf of SWIB, or a title-holding entity that is wholly-owned by SWIB, by either an external manager or advisor in connection with a real estate separate account.
4. Investments may be made in exchange-traded notes (ETNs) which are traded on exchanges included on an approved-exchange list maintained by the Compliance Division. The Risk and Compliance Divisions shall be notified upon any investment in a new ETN.

5. Investments may be made in put option contracts and call option contracts on securities, futures or an index of a group of securities. Put and call options may be purchased or sold on investments that could be held in the portfolio if the options were exercised.
6. Currency exposure management is permitted (but not required) through the use of exchange-traded currency instruments, and through the use of spot and forward contracts in foreign currencies (including FX Swaps). Direct currency hedging is permitted to directly hedge currency exposure back to the U.S. dollar. Cross-currency exposure management to transfer out of an exposed currency and into a benchmark currency is permitted.
7. Guideline limits and soft parameters for each portfolio will be applied to the aggregate exposures which include both physical and synthetic securities.
8. New derivatives instruments will be reviewed and approved by the Investment Committee before their implementation or use.
9. SWIB shall not enter into new derivatives agreements with new counterparties until the ED/CIO has approved the agreement. Each relevant division head or portfolio manager shall submit to the ED/CIO a written summary of any proposed addition of a relationship that may require evaluation of counterparty credit risks. Such relationship may involve (a) entering into a master netting or trading agreement with a new counterparty, which acts either as a principal or as an agent on behalf of multiple principals, or (b) hiring an external manager to implement a strategy that may require the manager to evaluate and monitor counterparty credit risks on SWIB's behalf (excluding external managers selected by Private Markets and Funds Alpha staff and LMBI staff pursuant to their portfolio guidelines). The ED/CIO will review all proposals of such new relationships to determine that (i) the addition of the relationship is consistent with SWIB's investment goals and strategies, (ii) the appropriate loss and drawdown limits for the credit risk associated with the proposed counterparty relationship have been considered, and (iii) appropriate due diligence has been conducted. The relevant division head or portfolio manager ("Initial Division User") shall retain responsibility for monitoring any such approved relationship. If another division expects to use the derivatives agreement for trading strategies after its initial approval, the ED/CIO, Initial Division User and the new division lead shall agree on the strategy for monitoring for the counterparty.

#### **IV. REBALANCING PROCEDURES**

1. Mandatory rebalancing is triggered by the procedures in the Board's WRS Investment Policy and the procedures below, as applicable. The Core Fund and Variable Fund asset mixes will be reviewed at least monthly for potential rebalancing.
2. Discretionary rebalancing may be used to bring public market asset classes partially or fully back to their strategic target weights, to reduce or use active risk, to otherwise minimize asset allocation drift, or to intentionally overweight or underweight an asset or sub-asset class. Discretionary rebalancing will be recommended by the head of ARA and approved by the ED/CIO.

3. In connection with any rebalancing, the ARA Division, in consultation with the LMBI Division as needed, will develop a plan approved by the ED/CIO (a "Rebalancing Plan") to affect the rebalancing. The Rebalancing Plan will include the total amount of each asset class to be bought and sold, the intended market exposures, and the time frame of purchases and sales. The Rebalancing Plan is based on best estimates of market prices, private market valuations, and benefits cash flows for when the rebalance will take effect. The LMBI Division will ~~implement~~assist in the implementation of the Rebalancing Plan. To the extent that the market prices are different at the time of a rebalancing from the anticipated market prices, valuations or cash flows, the Rebalancing Plan may be subsequently adjusted by the ARA Division, in consultation with the LMBI Division, for additional purchases and/or sales to true up the market exposures to the anticipated levels of the original Rebalancing Plan.
4. The LMBI Division, under the supervision of the head of LMBI, has the discretion to authorize and instruct intra-month allocation adjustments of cash and/or exposures across LMBI-managed Core Fund or Variable Fund portfolios. Such adjustments may be used, for example, to optimize exposure implementation, to raise liquidity to fund private markets capital calls, or adjust the overall liquidity position of the fund. Only LMBI portfolios (including unallocated fund-level cash) may be utilized for these adjustments. Any adjustments made in this way shall not have a material impact on the overall asset allocation or active risk of the fund. Aggregate daily portfolio de/allocation shall not exceed \$1 billion notional unless approved by the ED/CIO. The ED/CIO will be notified of any de/allocation in excess of \$100 million notional.
5. ~~4-~~The ARA Division, under the supervision of the head of ARA, in consultation with the LMBI Division as needed, has the discretion to approve intra-month allocation adjustments to align portfolio and cash exposures with the approved Rebalancing Plan. Only ~~passive~~LMBI portfolios may be utilized for allocations or deallocations. Aggregate daily portfolio allocations or deallocations shall not exceed \$400 million unless approved by the ED/CIO.
6. ~~5-~~Exchange-traded and OTC options or other derivatives may be purchased or sold in conjunction with managing asset class exposure and rebalancing. The aggregate notional value of the options will be limited to 2% of the market value of the Core Fund at the date of purchase. The term of options used for this purpose may not exceed one year.
7. ~~6-~~Cleared derivatives traded on a swap execution facility (SEF) may only be traded on or pursuant to the rules of the SEFs of which SWIB is a member or participant.
8. ~~7-~~In connection with any rebalancing, the following procedures will be followed with respect to the following asset classes:
  - a. The Real Estate Asset Class will rebalance 50% to Public Equities and 50% to Public Fixed Income. Accordingly, in connection with any rebalancing, for any percentage increase in Real Estate there will be a corresponding 50% reduction to Public Equities and a corresponding 50% reduction to Public Fixed Income, and vice versa

if the Real Estate assets decrease. The rebalancing does not have to be proportional through the sub-asset classes.

- 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.

**STATE OF WISCONSIN INVESTMENT BOARD**  
***Investment Committee Meeting–Open Session***

**Tuesday, February 24, 2026**

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

**Committee Members Present:** Edwin Denson, Executive Director/Chief Investment Officer (Chair)  
Anne-Marie Fink, Private Markets & Funds Alpha–Chief Investment Officer  
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  
Andrea Ruiz, Senior Portfolio Manager–Liquidity Management and Beta Implementation

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

**Also in Attendance:** Kathy Blumenfeld, Trustee  
J. Michael Collins, Trustee  
John Voelker, Trustee  
Chelsey Barczak, GPMS Business Director  
Brandon Brickner, Head of Internal Audit  
Rosa Brown, Quantitative Analyst–Asset & Risk Allocation  
Kate Burkart-Paulson, Senior Legal Counsel  
John Burkhartzmeyer, Senior Trader  
Sara Chandler, Chief of Staff & Strategy  
Tunc Dayioglu, Senior Portfolio Manager–Funds Alpha  
Jack Drew, Trader–High Yield and Leveraged Loans  
Trey Edgerle, Compliance Analyst  
Greg Fletcher, Performance Director  
Tom Freeman, Director of Quantamental Research  
Scott Freundlich, Portfolio Manager–High Yield and Leveraged Loans  
Max Garcia, Analyst–Funds Alpha  
Jameson Greenfield, Chief Financial Officer  
Thomas Gregg, PMFA Operations Manager  
Dan Gyorog, Internal Auditor  
Sean Hamner, Legal Counsel  
Logan Hash, Investment Associate–Funds Alpha  
Tori Hassler, Internal Auditor

Vince Janecky, Internal Auditor Data Analyst  
Ryan Johnston, Senior Analyst–Funds Alpha  
Salah Khalaf, Senior Portfolio Engineer–Private Markets & Funds  
Alpha  
Jason Kowalke, PMFA Operations Manager  
Jason Krueger, Compliance Analyst  
Alex Kubiak, Investment Operations 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, Legal Counsel  
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  
David Meyer, Senior Trader  
Joy Mukherjee, Senior Portfolio Manager–U.S. Small Cap Strategy  
Scott Nichols, Head of Trading  
Sarah Noronha, Senior Portfolio Manager–U.S. Small Cap Strategy  
Hunter Olson, Analyst–High Yield and Leveraged Loans  
Cefe Quesada, Chief Technology Officer  
Anand Rakesh, Director of Risk Analytics & Financial Engineering  
Systems  
Robby Richlen, Analyst–Funds Alpha  
Tom Robinson, Head of Corporate Governance  
Harsh Shah, 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, Internal Auditor  
Rob Thornton, ARA Business Director  
Leif Thybony, Senior Portfolio Manager–High Yield and Leveraged  
Loans  
Dawn Tuescher, Executive Administrative Assistant  
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 1:01 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 January 27, 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 Mr. Stanton to approve both the open session and the closed session minutes of January 27, 2026, as presented. The motion passed unanimously.

## **2. Trustee WRS Investment Policy Amendments**

Eric Barber, Chief Legal Counsel, described the proposed amendments to the *Board of Trustees Wisconsin Retirement System Investment Policy*, included on pages 11-30 in the meeting materials. He noted that the revisions **(a)** update the policy to align with statutory language, the Board of Trustees’ most recent trustee manual, and current practices, **(b)** reflect the new Liquidity Management and Beta Implementation (“LMBI”) division and the realignment of responsibilities and roles between the LMBI and the Asset & Risk Allocation (“ARA”) divisions, and **(c)** made title updates and other clarifying changes throughout. He noted that, if approved by the Committee, the changes would be recommended to the Board for approval.

Mr. Barber then led the Committee’s discussion regarding the Board’s ongoing process to update its key investment philosophies as well as the role of various investment staff in ensuring compliance with investment restrictions.

**Motion:** A motion was made by Mr. Drummond and seconded by Ms. Ruiz to recommend to the Board of Trustees that it adopt and approve the proposed amendments to the *Board of Trustees Wisconsin Retirement System Investment Policy*, as presented in the Committee materials, subject to review for alignment with other staff and board policies. The motion passed unanimously.

## **3. Global Public Market Strategies Division Update**

Mike Shearer, Head of Fixed Income Strategies, reported on performance from the Global Public Market Strategies division in the *Global Public Market Strategies Quarterly Update, Q4 2025*, included on pages 31-33 in the meeting materials. He commented that overall division performance was strong for 2025, with small cap equities performing well, especially relative to peers, while leveraged loans underperformed.

## **4. Q4 2025 Quarterly Updates**

### **A. Fixed Income Strategies**

Mr. Shearer presented the *Fixed Income Strategies Review*, included on pages 34-48 in the meeting materials. He noted that performance through Q4 2025 is included for the long Treasury portfolio, which has since been converted in 2026 to passive Treasuries managed by the LMBI division. Mr. Shearer reviewed the positioning of the portfolios, noting that they are overall neutral beta and that the teams added back on a small yield curve steepener

in response to inflationary concerns. He also commented that, although the benchmarks generally had positive performance in the fourth quarter, their paths differed in response to market events.

With respect to the fixed income markets generally, Mr. Shearer commented that **(a)** market pricing of expected cumulative Federal Reserve interest rate cuts over the next twelve months decreased in the fourth quarter, **(b)** the U.S. Treasury yield curve steepened in Q4 2025 before starting to flatten in the first half of Q1 2026, **(c)** credit spreads were mostly unchanged in Q4 with the exception of tightened mortgage-backed securities (“MBS”) spreads, and **(d)** higher-tier consumer credit remains strong with securitized non-prime and subprime consumer credit also continuing to perform relatively well. Lastly, he confirmed that the portfolios were in compliance with their guidelines in Q4 2025.

## **B. Small Cap Strategy**

Joy Mukherjee, Senior Portfolio Manager–U.S. Small Cap Strategy, presented the *U.S. Small Cap Strategy Review*, included on pages 49-56 in the meeting materials. He highlighted that the portfolio generated 69 basis points (“bps”) of alpha in 2025 and maintained positive excess returns for the three- and five-year periods. Mr. Mukherjee then provided public equity market commentary for 2025, noting that **(a)** small-cap equities overall underperformed relative to large-cap equities for a fifth consecutive year as rising tariff concerns shifted investor sentiment back toward large-cap safety, a trend that had not happened since 1998, and **(b)** the small-cap equities market remained difficult, with only 18% of small-cap managers in the market outperforming for the year. He noted that SWIB’s outperformance relative to its benchmark in 2025 put it in the small group of outperformers amongst its peers. Lastly, Mr. Mukherjee **(i)** provided sector commentary for the small cap portfolio, noting that industrials and consumer staples were the top performing sectors, while the materials and communication services sectors detracted, and **(ii)** confirmed that the portfolio remained in compliance with its guidelines.

## **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 **(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 fixed income strategies, small cap equities, and exposure management, and **(c)** discussion of the impact of recent events on portfolio positioning, was made by Mr. Shearer and seconded by Mr. Mattina.

Mr. Denson called for a roll call vote.

Denson-Aye	Fink-Aye	Mattina-Aye	Shearer-Aye
Stanton-Aye	Bloom-Aye	Drummond-Aye	Lucas-Aye
Nair-Aye	Ruiz-Aye		

There being ten ayes and no nays, Mr. Denson declared the motion passed. The Committee convened in closed session at 1:24 p.m. and reconvened in open session at 2:18 pm.

## **6. 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 fixed income strategies, small cap equities, and exposure management, and **(iii)** discussed the impact of recent events on portfolio positioning.

## **7. Soft Risk Parameters**

Hassan Chehime, Head of Risk Management, noted that the report *Soft Risk Parameters – Asset Class and Portfolio*, as of January 31, 2026, was included on pages 144-145 in the meeting materials for the Committee’s review. Mr. Chehime noted that the soft risk parameters had been updated to reflect the guideline amendments approved by the Committee at its prior meeting. With the updates, there was one new discussion trigger relating to the small cap portfolio’s ex ante tracking error and one discussion trigger was dropped relating to the Variable Trust Fund’s (“VTF”) ex ante tracking error.

## **8. Future Meeting Topics**

Mr. Denson noted that draft agendas for the March 31, 2026, and April 28, 2026, Committee meetings were included on pages 146-149 in the meeting materials.

## **9. Adjournment**

**Motion:** A motion to adjourn the meeting was made by Mr. Stanton and seconded by Mr. Bloom. The motion passed unanimously, and the meeting adjourned at 2:19 p.m.

Date of Committee Approval: 03/31/26

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

**STATE OF WISCONSIN INVESTMENT BOARD**  
*Investment Committee Meeting–Open Session*

**Tuesday, March 31, 2026**

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

**Committee Members Present:** Edwin Denson, Executive Director/Chief Investment Officer (Chair)  
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  
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 Management and Beta  
Implementation

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:** J. Michael Collins, Trustee  
John Voelker, Trustee  
Kevin Blank, Senior Analyst–Funds Alpha  
Brandon Brickner, Head of Internal Audit  
Rosa Brown, Quantitative Analyst–Asset & Risk Allocation  
Kate Burkart-Paulson, Senior Legal Counsel  
John Burkhartzmeyer, Senior Trader  
Sara Chandler, Chief of Staff & Strategy  
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  
Greg Fletcher, Performance Director  
Tom Freeman, Director of Quantamental Research  
Scott Freundlich, Portfolio Manager–High Yield and Leveraged Loans  
Thomas Gregg, PMFA Operations Manager  
Dan Gyorog, Internal Auditor  
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  
Theresa Holterman, Funds Alpha Specialist

Vince Janecky, Internal Audit Manager  
Ryan Johnston, Senior Analyst–Funds Alpha  
Salah Khalaf, Senior Portfolio Engineer–Private Markets & Funds Alpha  
Jason Krueger, Compliance Analyst  
Alex Kubiak, Investment Operations Analyst  
Katie Kuryla, Senior Paralegal/Records Specialist  
Alex Li, Senior Analyst–Asset & Risk Allocation  
Jon Loboda, Performance Measurement Operations Manager  
Bill Luetzow, Senior Legal Counsel  
Michael Mandarino, Senior Analyst–High Yield and Leveraged Loans  
Ed Martinez, PMFA Business Director  
Lin Maung, Senior Portfolio Manager–Private Equity  
Nick Mokha, Portfolio Manager–High Yield and Leveraged Loans  
Joy Mukherjee, Senior Portfolio Manager–U.S. Small Cap Strategy  
Matt Notzon, Performance Analyst  
Hunter Olson, Analyst–High Yield and Leveraged Loans  
Vishnu Reddy, Senior Trader–MBS  
Robby Richlen, Analyst–Funds Alpha  
Tom Robinson, Head of Corporate Governance  
Joe Roth, Transition Management and Portfolio Support Manager  
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  
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, Internal Auditor  
Rob Thornton, ARA Business Director  
Leif Thybony, Senior Portfolio Manager–High Yield and Leveraged Loans  
Dawn Tuescher, Executive Administrative Assistant  
Ping Wong, Portfolio Manager– Liquidity Management and Beta  
Implementation  
Sarah Zhao, Investment Operations Analyst  
Doston Bradley, Cerberus Capital Management  
(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 February 24, 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 Mr. Mattina to approve both the open session and the closed session minutes of February 24, 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 10-12 in the meeting materials. He provided an overview of the new division and discussed the key activities provided by each team, including managing internal passive assets, external passive managers, the State Investment Fund (“SIF”), non-fixed income trading activity, leverage sourcing, liquidity levels, and counterparty relationships. Mr. Stanton then led the Committee’s discussion of LMBI’s cash management activities and the Core Trust Fund’s (“CTF”) sources of leverage.

## **3. Q4 2025 Quarterly Updates**

### **A. LIRM**

Andrea Ruiz, Senior Portfolio Manager–Liquidity Management and Beta Implementation, presented the *Investment Strategies: Liquidity, Inflation, and Rates Management* quarterly update, included on pages 13-17 in the meeting materials. With respect to the market, she noted that (a) money market fund net assets continued to rise during Q4 2025 and reached a new all-time high, (b) U.S. Treasury bills outstanding remained elevated during Q4 2025, 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 SIF, noting that the SIF returned positive absolute and relative performance for the one-, three- and five-year periods, and confirmed that the portfolio remained in compliance with its guidelines.

### **B. Multi-Strat**

Chase Nicholson, Senior Portfolio Manager–Multi-Asset Strategies, presented the *Multi-Strat Portfolio Review*, included on pages 18-22 in the meeting materials. He reported that the multi-strat portfolio outperformed its benchmark by 184 basis points (“bps”) in Q4 2025, with strong performance from systematic and fundamental security selection strategies only partially offset by negative performance from fundamental arbitrage strategies. Mr. Nicholson noted that the portfolio returned positive absolute and relative performance for the one-, three- and five-year periods. Lastly, he (a) discussed turbulence and disarray in the equity markets at the beginning of 2026, and (b) confirmed that the portfolio remained in compliance with its guidelines.

## **4. Transition Update (Q4 2025)**

Joe Roth, Transition Management and Portfolio Support Manager, presented the *Transition Management Summary, Q4 2025*, included on page 27 in the meeting materials, and reviewed the transition event from the fourth quarter. The transition, which was managed internally, effectuated the CTF policy change to exit the active long Treasury strategy and reallocate to a passive Treasury index. He highlighted that that the transition resulted in positive performance.

**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, multi-strat, 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, was made by Mr. Mattina and seconded by Mr. Nicholson.

Mr. Denson called for a roll call vote.

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

There being ten 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 3:16 p.m.

**6. 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 liquidity management and beta implementation, multi-strat, LIRM, asset and risk allocation, and exposure management, (iii) reviewed broker information, and (iv) discussed of the impact of recent events on portfolio positioning.

**7. Research Task Force Report**

Mr. Stanton presented the *Research Task Force Update*. He reported that the Research Task Force is focusing its efforts on bringing in speakers throughout the year to present on relevant research topics such as artificial intelligence, the use of large language models in return strategies, and the global macroeconomic environment.

**A. June Investment Forum Preview**

With respect to the June Investment Forum, he discussed the integration of programming into the June Board meeting, with potential in-person speakers on financial analysis and the global economy.

**8. Quarterly Performance Review (Q4 2025)**

Mr. Denson noted that the *Investment Performance Report*, as of December 31, 2025, was included on pages 138-184 in the meeting materials for the Committee’s information.

**9. QIR Annual Certification Report**

Mr. Denson stated that the QIR Annual Certification Report for 2025 was included on page 185 in the meeting materials for the Committee’s information.

**10. Soft Risk Parameters**

Hassan Chehime, Head of Risk Management, noted that the report *Soft Risk Parameters–Asset Class and Portfolio*, as of February 27, 2026, was included on pages 186-187 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.

**11. Future Meeting Topics**

Mr. Denson noted that draft agendas for the April 28, 2026, and May 26, 2026, Committee meetings were included on pages 188-191 in the meeting materials for the Committee’s review.

**12. Adjournment**

**Motion:** A motion to adjourn the meeting was made by Mr. Stanton and seconded by Mr. Nair. The motion passed unanimously, and the meeting adjourned at 3:20 p.m.

Date of Committee Approval: 04/28/26

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

**STATE OF WISCONSIN INVESTMENT BOARD**  
*Investment Committee Meeting–Open Session*

**Tuesday, April 28, 2026**

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

**Committee Members Present:** Edwin Denson, Executive Director/Chief Investment Officer (Chair)  
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  
Sara Chandler, Interim Head of PMFA and Chief of Staff & Strategy  
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 Management and Beta  
Implementation  
  
Eric Barber, Chief Legal Counsel (non-voting)  
Hassan Chehime, Head of Risk Management (non-voting)

**Also in Attendance:** J. Michael Collins, Trustee  
John Voelker, Trustee  
Chelsey Barczak, GPMS Business Director  
Chris Benish, Senior Portfolio Manager–Liquidity Management and  
Beta Implementation  
Kevin Blank, Senior Analyst–Funds Alpha  
Kate Burkart-Paulson, Senior Legal Counsel  
John Burkhartmeyer, Senior Trader  
Christian Comito, Senior Portfolio Manager–MBS  
Tunc Dayioglu, Senior Portfolio Manager–Funds Alpha  
Trey Edgerle, Compliance Analyst  
Greg Fletcher, Performance Director  
Jameson Greenfield, Chief Financial Officer  
Thomas Gregg, PMFA Operations Manager  
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  
Jason Krueger, Compliance Analyst  
Katie Kuryla, Senior Paralegal/Records Specialist  
Matt Kuznacic, Business Integration Director  
Lisa Lange, Director of Compliance & Senior Legal Counsel  
Shan Lo, 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  
Ed Martinez, PMFA Business Director  
Lin Maung, Senior Portfolio Manager–Private Equity  
Frank Mazzucco, Senior Legal Counsel  
Scott Nichols, Head of Trading  
Hunter Olson, Analyst–High Yield and Leveraged Loans  
Scott Parrish, Head of Private Equity  
Chris Prestigiacommo, 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  
Jason Rothenberg, Head of Real Estate  
Dan Schally, Senior Analyst–Real Estate  
Sam Shibilski, Investment Operations Analyst  
Hannibal Smith, Operational Risk Analyst  
Gabriel Souza, Investment Operations 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  
Leif Thybony, Senior Portfolio Manager–High Yield and Leveraged  
Loans  
Dawn Tuescher, Executive Administrative Assistant  
Ping Wong, Portfolio Manager–Liquidity, Inflation & Rates Mgmt.  
Ivy Zhang, Senior Portfolio Manager–Asset & Risk Allocation  
Jon Born, Derivatives Attorney, Axiom  
Doston Bradley, Cerberus Capital Management  
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 March 31, 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. Mattina and seconded by Mr. Stanton to approve both the open session and the closed session minutes of March 31, 2026, as presented. The motion passed unanimously.

## **2. Amendments to Investment Committee WRS Investment Guidelines**

Lisa Lange, Director of Compliance and Senior Legal Counsel, discussed the proposed amendments to the *SWIB Investment Committee Wisconsin Retirement System Investment Guidelines*, included on pages 9-18 in the meeting materials. She reported that the proposed revisions clarify the leverage use policy to acknowledge that the Variable Trust Fund (“VTF”) uses many of the same tools for liquidity management purposes that the Core Trust Fund (“CTF”) uses in the context of leverage.

In addition, the proposed revisions 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.

**Motion:** A motion was made by Mr. Mattina and seconded by Mr. Nicholson to approve the proposed amendments to the *SWIB Investment Committee WRS Investment Guidelines*, as presented in the Committee’s materials. The motion passed unanimously.

## **3. Q1 2026 Quarterly Updates**

### **A. Funds Alpha**

Derek Drummond, Head of Funds Alpha, presented the *Funds Alpha Q1 2026 Update*, included on pages 19-27 in the meeting materials. He highlighted that the beta one portfolios generated positive excess value added (“EVA”) year-to-date and that the hedge funds portfolio’s performance was slightly negative but roughly flat at the end of a volatile quarter. With respect to first quarter performance, he commented that **(a)** the beta one fixed income portfolio’s performance was bifurcated with U.S. credit outperforming and emerging market debt underperforming, **(b)** the beta one equity portfolio had high alpha volatility and dispersion amongst manager returns across styles and regions, and **(c)** in the hedge funds portfolio, losses in tactical trading and long-short trades were not fully offset by gains in relative value and multi-strategy.

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 beta shifted overweight, while beta one fixed income remained slightly underweight beta, **(ii)** U.S. fixed income managers remain at low risk levels while emerging market debt managers are more risk-on, **(iii)** moves in index credit spreads and the volatility index

differed relative to historical moves, and **(iv)** performance from the average hedge fund in the market was flat in the quarter, but returns varied widely across strategies, and gross leverage among hedge funds was generally down. Lastly, he confirmed that all portfolios were in compliance with their guidelines for Q1 2026.

## **B. Private Equity & Current Return**

Scott Parrish, Head of Private Equity, presented the *Quarterly Activity Report – Private Equity*, included on pages 28-49 in the meeting materials. He provided a private equity market update for Q1 2026, noting that **(a)** U.S. private equity fundraising dollars decreased year-over-year even as the number of funds increased in a challenging fundraising environment, **(b)** approximately half of 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)** U.S. private equity deal volume is up quarter over quarter while deal value is down, and exit volume and value are both down quarter over quarter, and **(d)** the number of portfolio company exits was split 55/45 between sponsor-to-sponsor transactions and corporate acquisitions, with IPO activity beginning to increase. He also noted that European private equity managers have had more difficulty fundraising than U.S. managers, and that European deal volume, deal value, exits, and exit value are all down quarter over quarter.

Mr. Parrish then reported that, as of March 31, 2026, the market value of the private equity and current return portfolios, excluding the venture capital and private debt portfolios, was approximately \$23.5 billion and made up 16.7% of the CTF. He commented that the portfolio is seeing good distributions and was cash-flow positive in Q1 2026.

With respect to performance, Mr. Parrish noted that final Q1 2026 performance numbers for the private equity and current return portfolios would be provided at a subsequent Committee meeting after the relevant benchmarks are reported. He noted that **(a)** in the private equity portfolio, the main contributors to preliminary absolute performance were small buyout and distressed/turnaround sub-strategies, while mid, mega, and large buyout sub-strategies detracted, and **(b)** in the current return portfolio, structured and opportunistic sub-strategies were the largest contributors, while distressed debt and junior capital were the biggest detractors. He then **(i)** discussed the portfolios' sub-asset class diversification, **(ii)** noted that public company exposure remained low, and **(iii)** answered questions regarding international exposure in the benchmark. Lastly, Mr. Parrish reviewed the commitments made in Q1 2026, discussed the portfolio pipeline for the second quarter, and confirmed that the portfolio remained in compliance with all investment guidelines.

## **C. Private Debt**

Chris Prestigiaco, Head of Private Debt & Venture Capital, presented the *Private Debt Portfolio Investment Committee Quarterly Report*, included on pages 50-64 in the meeting materials. He provided a private debt market update, noting that **(a)** fundraising declined in 2025 from the prior year, **(b)** direct lending remains the preferred sub-strategy of investors within private debt, but demand for the distressed debt sub-strategy is increasing, **(c)** private debt quarterly volume for Q1 2026 was at the highest level since Q2 2024, **(d)** leveraged buyout and mergers & acquisitions financing activity remained the most active parts of the market, **(e)** activity in the healthcare sector overtook the technology sector in early 2026, and **(f)** within Fitch's privately monitored rating portfolio of direct loans to mid-market companies, default rates eased in early 2026 but remained elevated.

Mr. Prestigiaco noted that one loan paid off and four new loans were added during the quarter. He then reviewed the portfolio's **(i)** characteristics, noting that duration and average life declined slightly quarter over quarter, **(ii)** below investment grade ("BIG") holdings, which remain at 10% of the portfolio, consistent with Q4 2025, **(iii)** sector mix, which remained slightly underweight industrial relative to the benchmark, and **(iv)** originations within and outside Wisconsin, noting that ratings are the same in both portfolios and that the non-Wisconsin flow and pipeline continue to be more active than in past quarters.

With respect to performance, Mr. Prestigiaco highlighted that the portfolio has 35 basis points ("bps") of outperformance year-to-date and that it outperformed its benchmark over the one-, three-, and five-year periods. He then reported that pricing trends are improving on the loan in the portfolio facing near-term headwinds. Finally, he discussed the pipeline under review and confirmed that the portfolio remained in compliance with its guidelines.

#### **D. Real Estate**

Jason Rothenberg, Head of Real Estate, presented the *Quarterly Activity Report – Real Estate*, included on pages 65-78 in the meeting materials. He provided a market overview, noting that **(a)** the composition of the real estate benchmark has shifted over the last several years, with the industrial sector weighting increasing and the office sector decreasing, **(b)** with respect to returns by property type in the benchmark, all property types have provided positive but muted returns, **(c)** cash flow returns are generally high due to valuation adjustments and stable operating fundamentals, and **(d)** forecasts for the next several years are optimistic as constrained supply is expected to support appreciation.

Mr. Rothenberg then reviewed the real estate portfolio, noting that the portfolio's market value of approximately \$11.9 billion represented 8.5% of the CTF as of March 31, 2026 and that the portfolio was cash-flow positive for the quarter. He also reviewed the portfolio's performance, noting **(i)** outperformance relative to the benchmark for the three-, five-, and ten-year periods with negative relative performance for the one-year period, and **(ii)** strong performance from senior housing but recent underperformance from the office and diversified sub-strategies. Lastly, Mr. Rothenberg reviewed the commitment made in the first quarter, discussed the pipeline under review, and confirmed that the portfolio remained in compliance with its investment 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 funds alpha, private equity, venture capital, private debt, real estate, global public market strategies, asset and risk allocation, liquidity management and beta implementation, 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
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 1:46 p.m. and reconvened in open session at 3:29 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, global public market strategies, asset and risk allocation, liquidity management and beta implementation, and exposure management, and (iii) discussed of 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 March 31, 2026, was included on pages 190-191 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 May 26, 2026, and June 23, 2026, Committee meetings were included on pages 192-195 in the meeting materials for the Committee’s review.

#### **8. Adjournment**

**Motion:** A motion to adjourn the meeting was made by Mr. Drummond and seconded by Mr. Lucas. The motion passed unanimously, and the meeting adjourned at 3:30 p.m.

Date of Committee Approval: 05/26/26

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

# AGENDA / NOTICE

**Name of Meeting:** Staff Investment Committee Meeting  
**Date/Time:** Tuesday, May 26, 2026 1:00 pm  
**Room:** 7<sup>th</sup> Floor Conference Room - 7022  
**Address:** 4703 Madison Yards Way, Madison, WI 53705

Est. Time Minutes	Action Item	Topic	Presenter
		<b>OPEN SESSION</b>	
	Motion	1. Approval of the Minutes – Open Session A. April 28, 2026	
5		2. Global Public Market Strategies Division Update	Mike Shearer
20		3. Q1 2026 Quarterly Updates A. Multi-Strat B. Fixed Income C. Small Cap	Chase Nicholson Mike Shearer Joy Mukherjee
	Motion	<b>CLOSED SESSION*</b>	
	Motion	<b>RECONVENE IN OPEN SESSION</b>	
		4. Announcement of Committee Actions Relating to Items Taken Up in Closed Session	
5		5. Private Markets & Funds Alpha Division Performance Update	Scott Parrish
		6. Soft Risk Parameters (No presentation unless requested)	
		7. Future Meeting Topics	
	Motion	8. Motion to Adjourn	
		<i>NOTES: Items may be taken in order other than listed.</i>  <i>The meeting site is physically accessible. Upon prior request, reasonable accommodations will be provided.</i>	

\* 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, multi-strat, fixed income, small cap equities, private markets and funds alpha, 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.

**Future Meetings**

6/23/26 – June Committee Mtg.  
 7/28/26 – July Committee Mtg.  
 8/25/26 – August Committee Mtg.  
 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 Management & Beta Implementation

**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

**Name of Meeting:** Staff Investment Committee Meeting  
**Date/Time:** Tuesday, June 23, 2026 1:00 pm  
**Room:** 7<sup>th</sup> Floor Conference Room - 7022  
**Address:** 4703 Madison Yards Way, Madison, WI 53705

Est. Time Minutes	Action Item	Topic	Presenter
		<b>OPEN SESSION</b>	
	Motion	1. Approval of the Minutes – Open Session A. May 26, 2026	
10		2. LMBI Division Update	Nick Stanton
15		3. Q1 2026 Quarterly Updates A. LIRM	Andrea Ruiz
5		4. Transition Update (Q1 2026)	Joe Roth
	Motion	<b>CLOSED SESSION*</b>	
	Motion	<b>RECONVENE IN OPEN SESSION</b>	
		5. Announcement of Committee Actions Relating to Items Taken Up in Closed Session	
5		6. Research Task Force Report A. June Investment Forum Debrief	Nick Stanton
		7. Quarterly Performance Review (Q1 2026) (No presentation unless requested)	
		8. Soft Risk Parameters (No presentation unless requested)	
		9. Future Meeting Topics	
	Motion	10. Motion to Adjourn	

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*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**

7/28/26 – July Committee Mtg.  
 8/25/26 – August Committee Mtg.  
 9/22/26 – September Committee Mtg.  
 10/27/26 – October Committee Mtg.  
 11/24/26 – November Committee Mtg.  
 12/22/26 – December Committee Mtg.

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**Jason Rector**, Senior Portfolio Manager–Funds Alpha  
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**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

**Name of Meeting:** Staff Investment Committee Meeting  
**Date/Time:** Tuesday, July 28, 2026 1:00 pm  
**Room:** 7<sup>th</sup> Floor Conference Room - 7022  
**Address:** 4703 Madison Yards Way, Madison, WI 53705

Est. Time Minutes	Action Item	Topic	Presenter
		<b>OPEN SESSION</b>	
	Motion	1. Approval of the Minutes – Open Session A. June 23, 2026	
5		2. Private Markets & Funds Alpha Division Update	Sara Chandler
45		3. Q2 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	<b>CLOSED SESSION*</b>	
	Motion	<b>RECONVENE IN OPEN SESSION</b>	
		4. Announcement of Committee Actions Relating to Items Taken Up in Closed Session	
		5. Soft Risk Parameters (No presentation unless requested)	
		6. Future Meeting Topics	
	Motion	7. Motion to Adjourn	
		<i>NOTES: Items may be taken in order other than listed.</i>  <i>The meeting site is physically accessible. Upon prior request, reasonable accommodations will be provided.</i>	

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**Future Meetings**

8/25/26 – August Committee Mtg.  
9/22/26 – September Committee Mtg.  
10/27/26 – October Committee Mtg.  
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**Non-voting Committee Members:**

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**Eric Barber (Secretary)**, Chief Legal Counsel  
**Hassan Chehime**, Head of Risk Management

## Board Meeting

### Tab 5 – Quarterly Investment Update, Q1 2026

- A. Private Markets Strategy Reports and Market Outlook
- B. Quarterly Investment Update (no presentation unless requested)



# Quarterly Investment Update: Private Markets

*Board Meeting – Open Session*  
*June 2026*

# Key Insights

- Investment in private markets requires the balancing of opportunities and risks, with diversification and return potential balanced against illiquidity, higher fees and embedded leverage
- SWIB has deliberately grown its private markets footprint since 2020 as a proactive asset allocation decision – a period during which global private markets AUM grew at 14% annually
- The private markets portfolios are tasked with delivering both alpha and beta, with no passive options for beta replication
  - To maintain a consistent CTF allocation, staff must deploy capital constantly into active managers to offset distributions and growth in CTF AUM. The requirement to deploy capital can be in tension with alpha generation.
  - Alpha generation is all about manager selection. There is wide dispersion among managers within asset classes, and performance is compared to a benchmark of funds invested in by LPs.

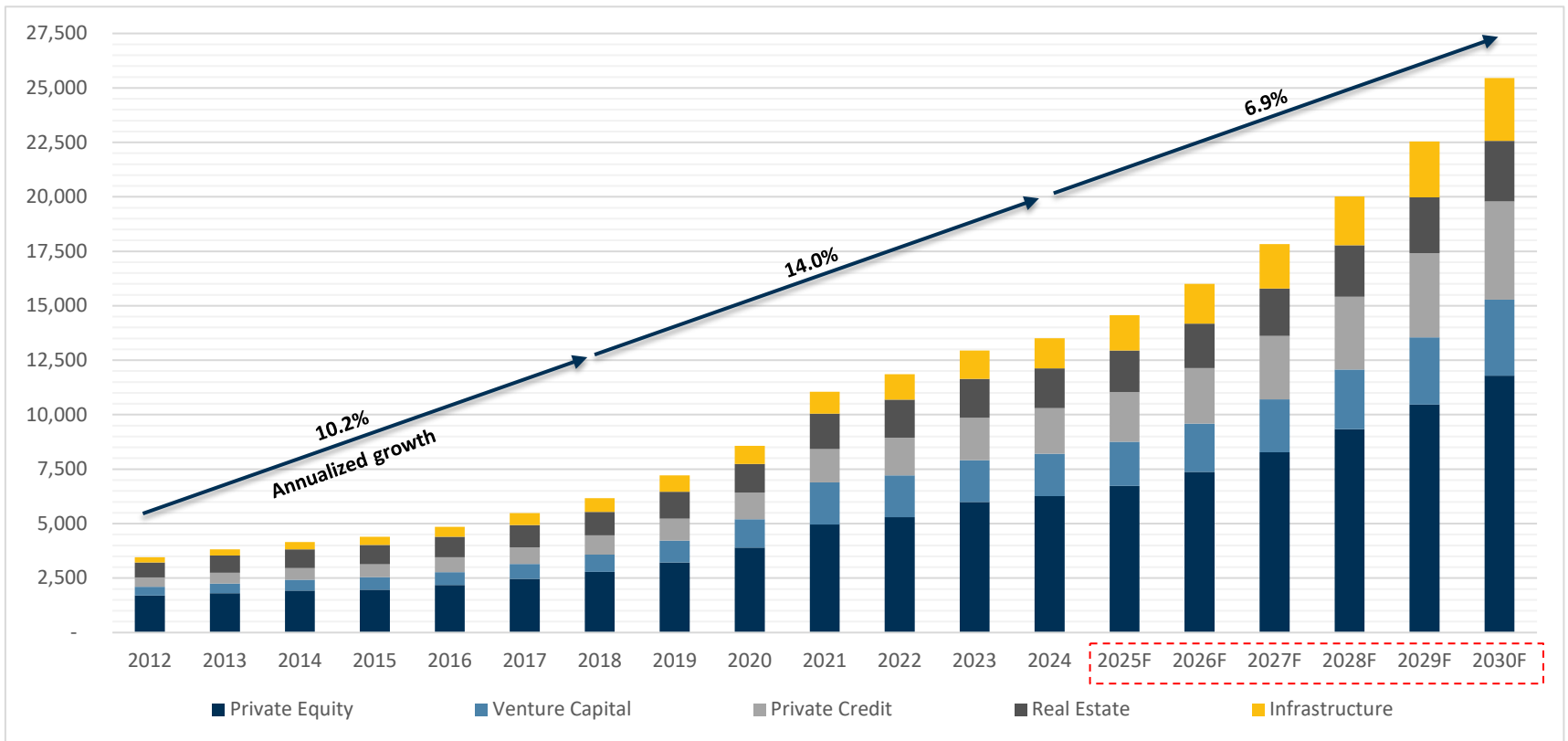
# Benefits of Investing in Private Markets

- Growing Share of Capital Formation and Financing is Happening Outside of Public Markets
  - Key Investment Philosophy: “Diversification enhances risk-adjusted returns.”
- Higher Expected Returns
  - Key Investment Philosophy: “SWIB’s relatively long-term investment horizon and predictability of capital provide an opportunity for improved returns including the capture of illiquidity risk premia.”
  - Illiquidity premium based on NEPC capital market assumptions is ~200 bps for private equity and ~100 bps for private credit
- Ability to Influence Operations
  - GPs are closer to the management teams of portfolio companies and can exercise a level of control (based on greater transparency) on our behalf that cannot be replicated in the public markets
- Leveraging Size and Scale
  - SWIB’s size and scale allow it to access top-tier external investment talent
- Inflation Protection Plus Stable Cash Flows
  - Real estate in particular provides an additional source of inflation protection
  - Both real estate and private credit generate stable and predictable cash flows

# Risks of Investing in Private Markets

- **Illiquidity** must be monitored carefully across the total plan to ensure obligations can be met
- Higher **fees** are typically associated with accessing top-tier investment talent – these fees must be justified by net returns to ensure the value proposition of the asset classes
- Performance **dispersion** among managers is significant, highlighting the importance of strong diligence and selection efforts by experienced internal teams
- **Valuations** are not based on continuous transaction-based price discovery and tend to lag market events, which can lead to understated volatility and delayed realization of impairment
- **Leverage** is used at various levels in private transactions, which can exacerbate issues associated with illiquidity and create refinancing risk

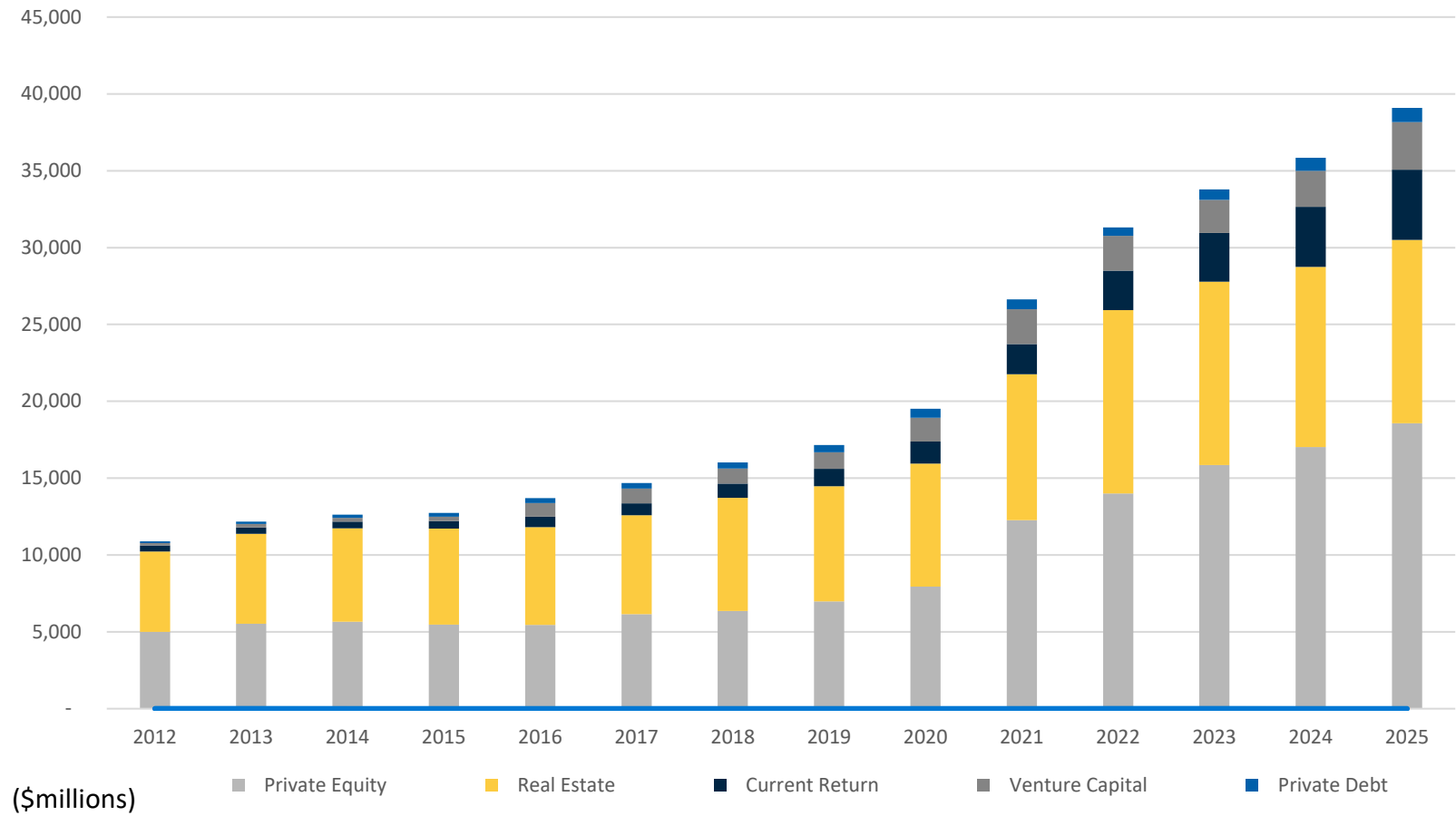
# Private Markets Global AUM



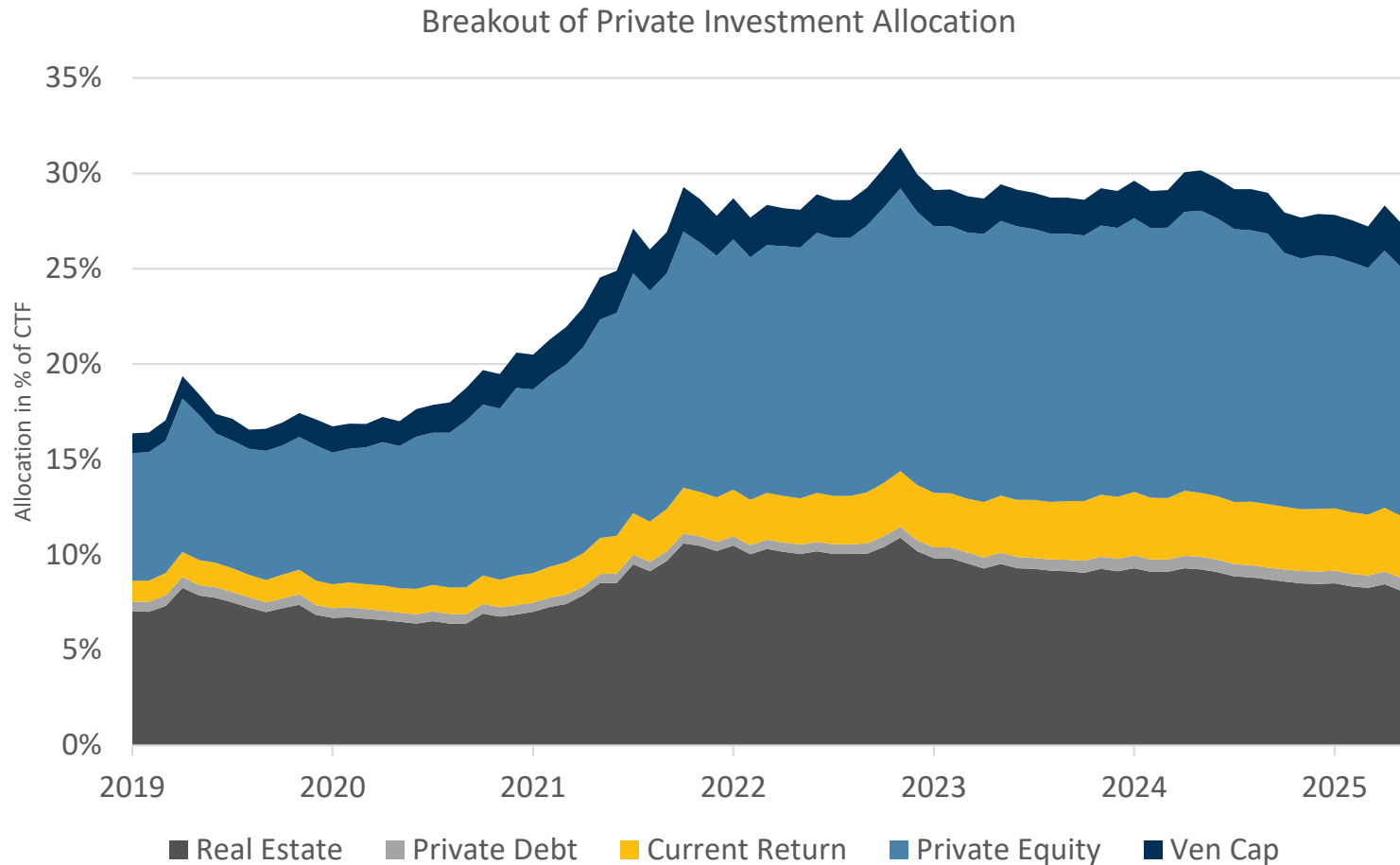
(\$billions)

Source: Preqin Insights Global Reports. Values relate to end of year. The degree of incline for the annualized growth line is not proportional to the rate of growth

# CTF Private Markets AUM



# CTF Private Markets Allocation



# Dual Mandate: Alpha and Beta

- Deliver beta according to the asset allocation – annual commitments of over \$5 billion needed to replace distributions and account for CTF growth
  - Beta cannot be easily obtained by purchasing an index, ETF or swap. Can only be delivered through careful manager selection and overall portfolio construction
- Generate alpha above the benchmark return – aggregate EVA target of \$380 million for the five portfolios
  - Capital must be consistently deployed into first and second quartile managers



# Quarterly Investment Update

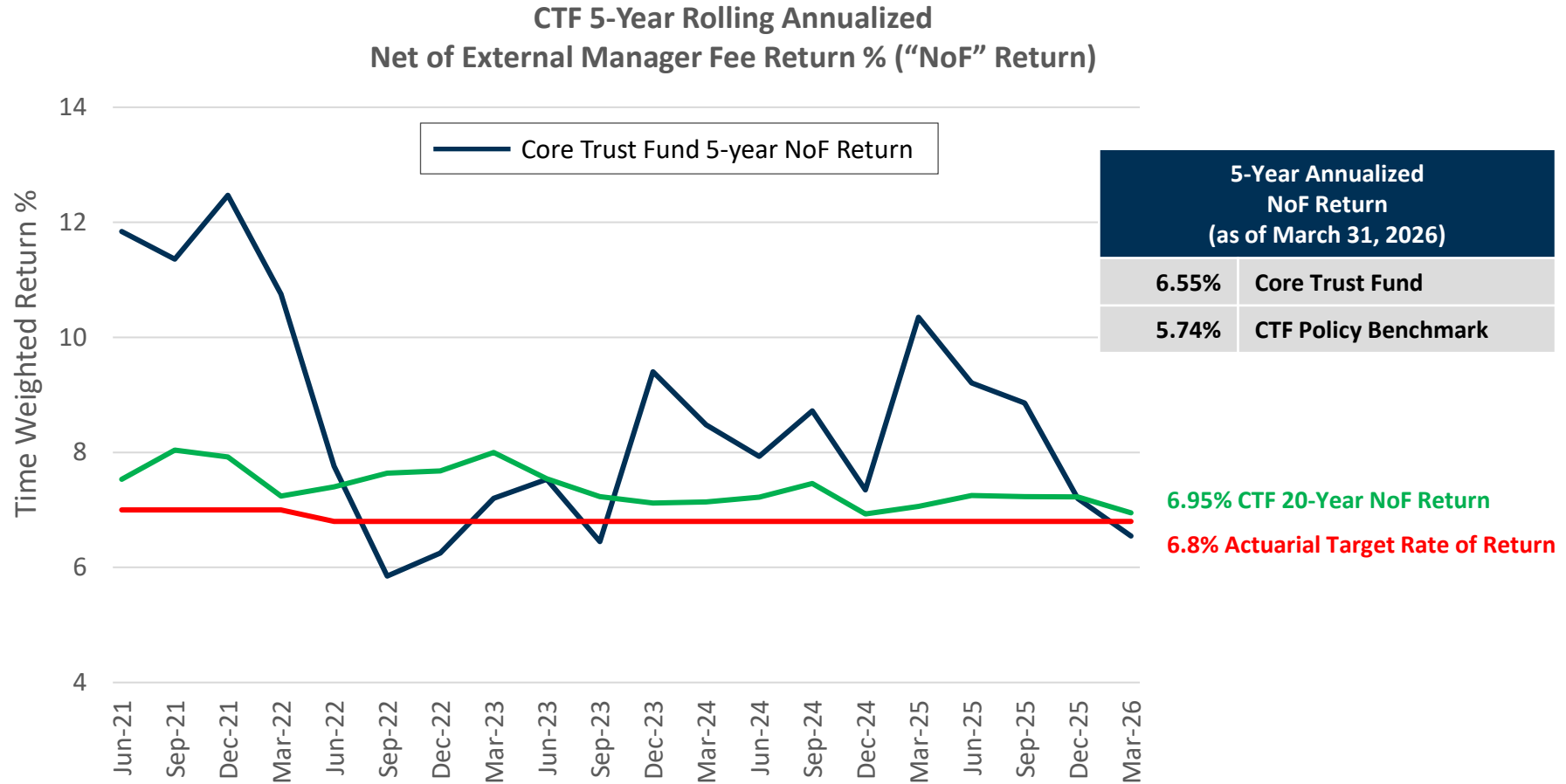
*Board Meeting*

*June 17, 2026*

# Performance Trends & Outlook

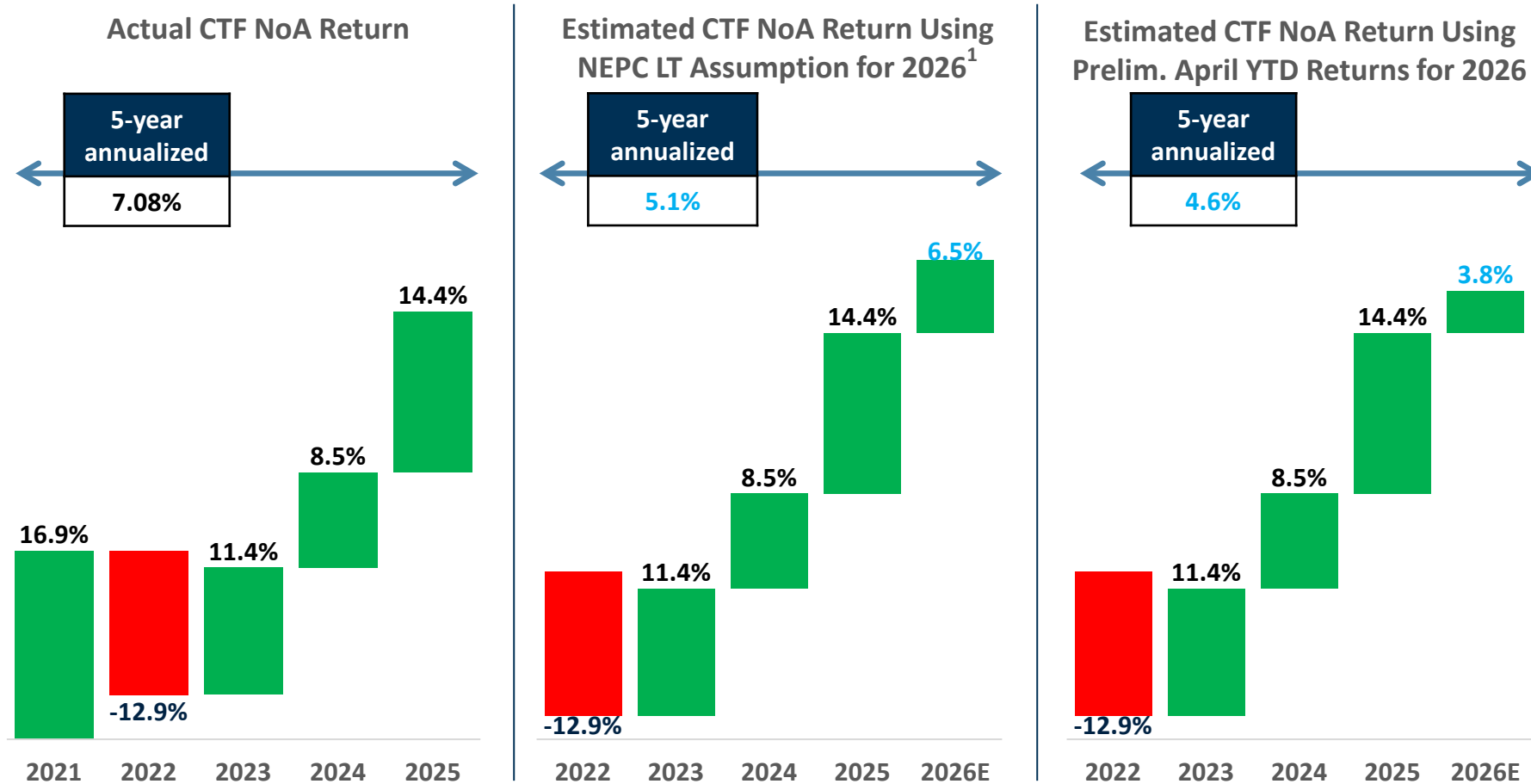
# CTF 5-Year Rolling NoF Return Trend

*Quarter-end Results Through March 31, 2026*



# CTF 5-Year NoA Return Estimate

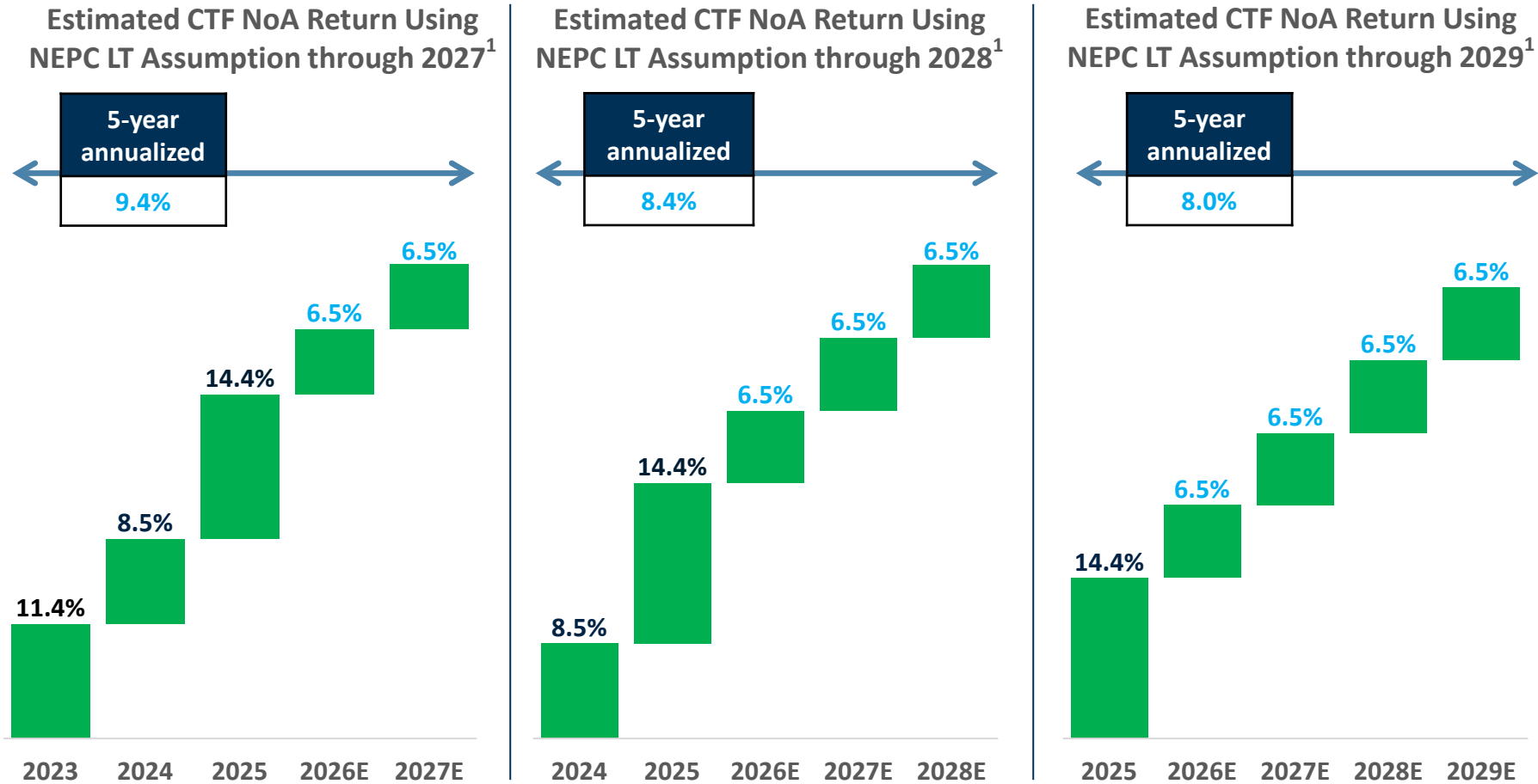
*Calendar year and 5-year annualized returns*



<sup>1</sup> 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.

# CTF 5-Year NoA Return Forward Estimate

*Calendar year and 5-year annualized returns*

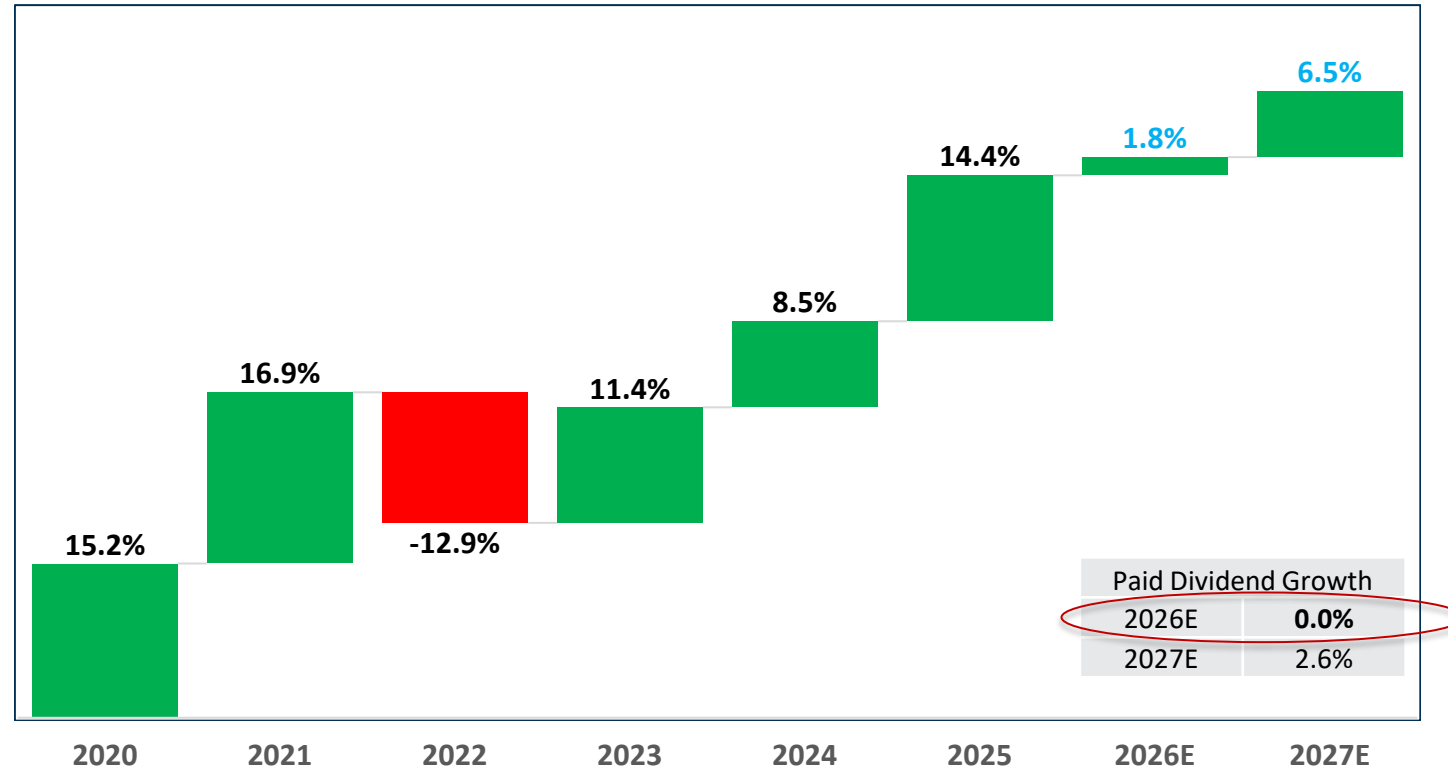


<sup>1</sup> 6.5% is NEPC's 10-year expected return for SWIB's 2026 policy portfolio and is used to estimate future year performance through 2029. SWIB's asset allocation process balances risk and expected return to set its asset allocation. The 10-year expected return does not always equal or exceed 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.

# Return Required for No Dividend Cut

## *CTF NoA Return and Paid Dividend Growth*

CTF needs to generate 1.8% return in 2026 to avoid a negative CTF dividend adjustment<sup>1</sup>



<sup>1</sup> 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.

# CTF Policy Benchmark & Other Indices

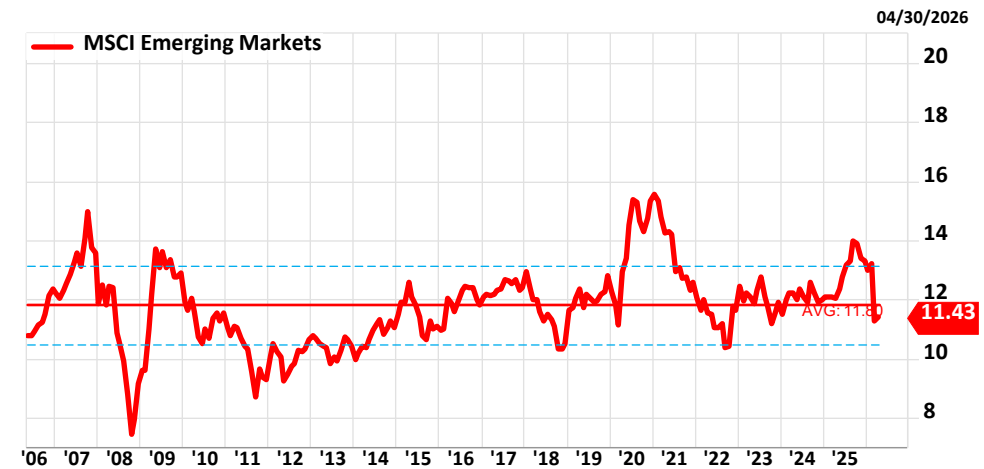
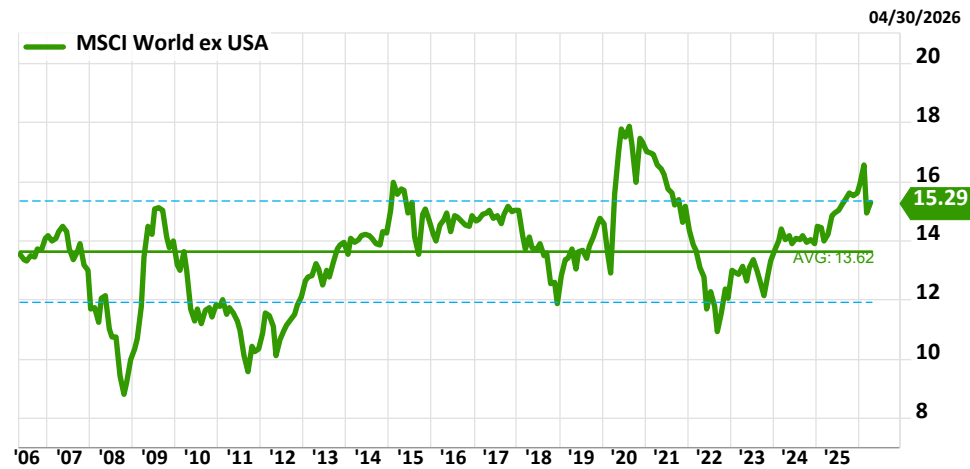
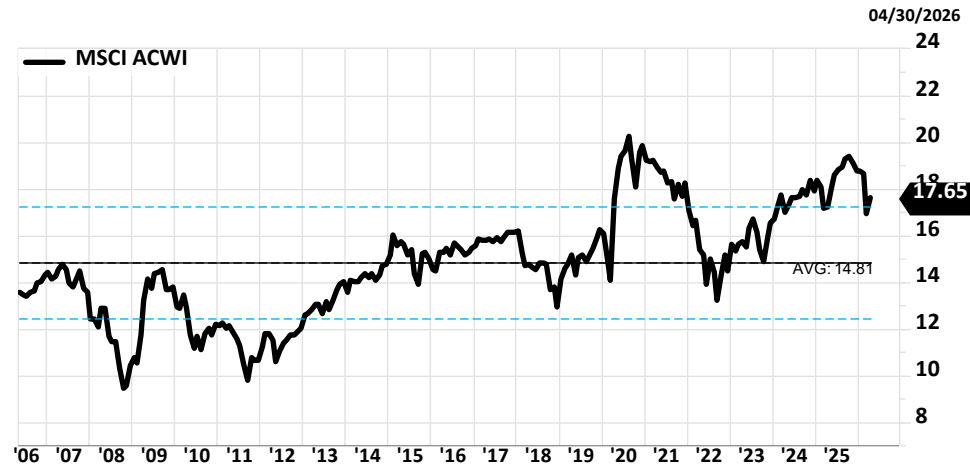
April 30, 2026: Total Rate of Return %, Annualized					
Index Name (Gross Return Basis, unless noted)	YTD	1yr	5yr	10yr	10yr volatility
CTF Policy Benchmark (Net)	3.5	15.6	6.0	8.3	8.5
MSCI USA	5.5	30.8	12.7	15.2	15.5
MSCI USA Small Cap	12.4	40.0	7.2	11.9	19.9
MSCI World ex US Equities (Net)	6.4	26.3	9.3	9.1	15.1
MSCI World ex US Equities (Net) (Local)	5.5	25.1	11.2	10.0	11.9
MSCI EAFE Small Cap	7.8	29.9	5.9	8.6	17.0
MSCI Emerging Markets ex China	22.4	62.4	11.8		
MSCI China	(5.6)	12.6	(4.3)	5.6	23.7
MSCI ACWI	6.8	31.5	11.2	12.8	14.7
MSCI ACWI (Local)	6.7	31.4	12.0	13.3	13.5
Bloomberg US Gov't / Credit	(0.1)	3.6	0.1	1.8	5.2
ICE BOFA High Yield BB/B	1.2	8.7	4.1	20.8	6.9
Bloomberg U.S. TIPs	1.4	4.1	1.4	2.7	5.0

Source: Factset, SWIB

# Asset Class Review

# Global Equities - Valuation

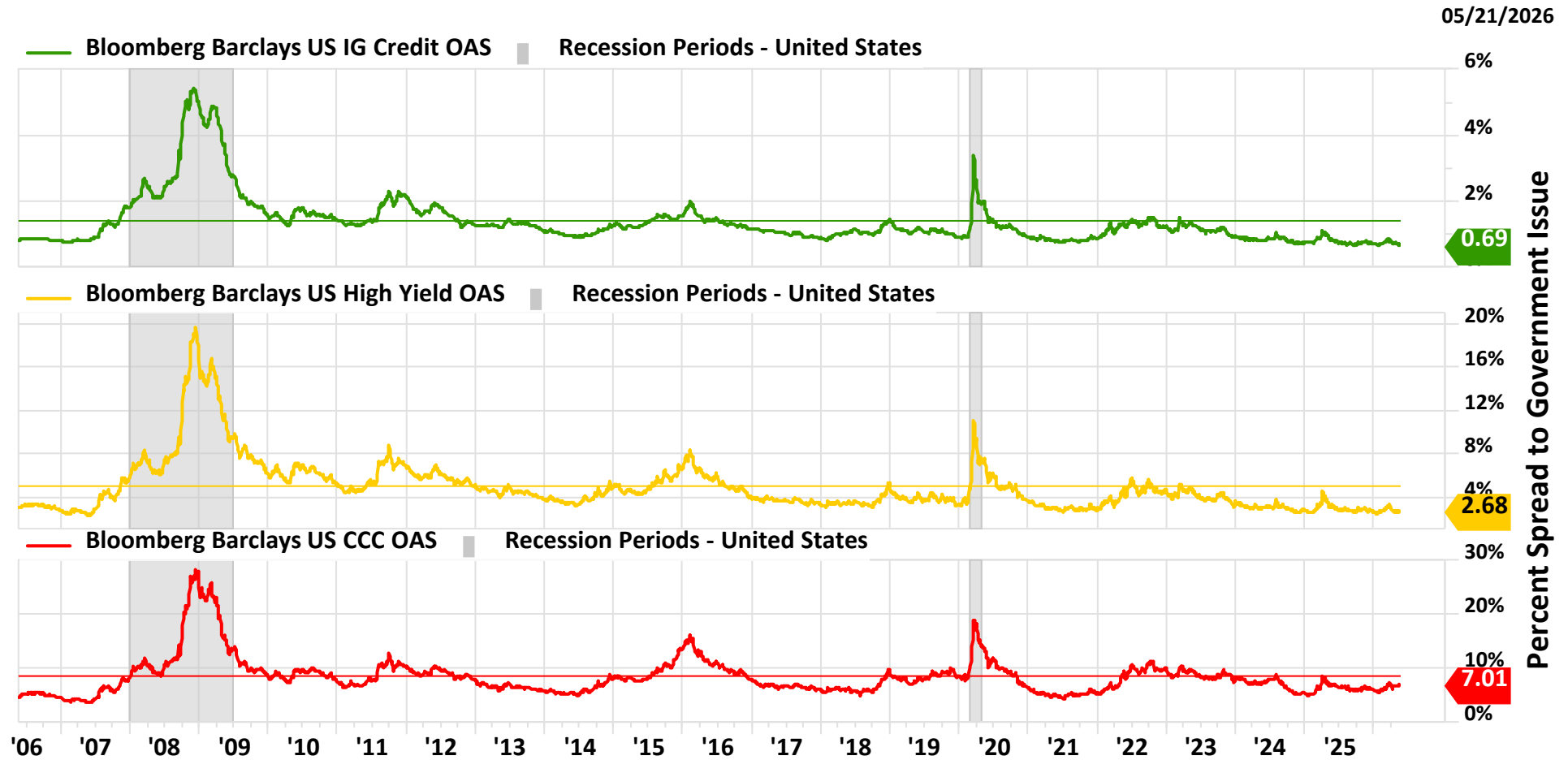
*US P/E ratio is 1.4 standard deviations above its 20-year average*



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

# Credit Sectors

*Spread levels are below the long run averages*



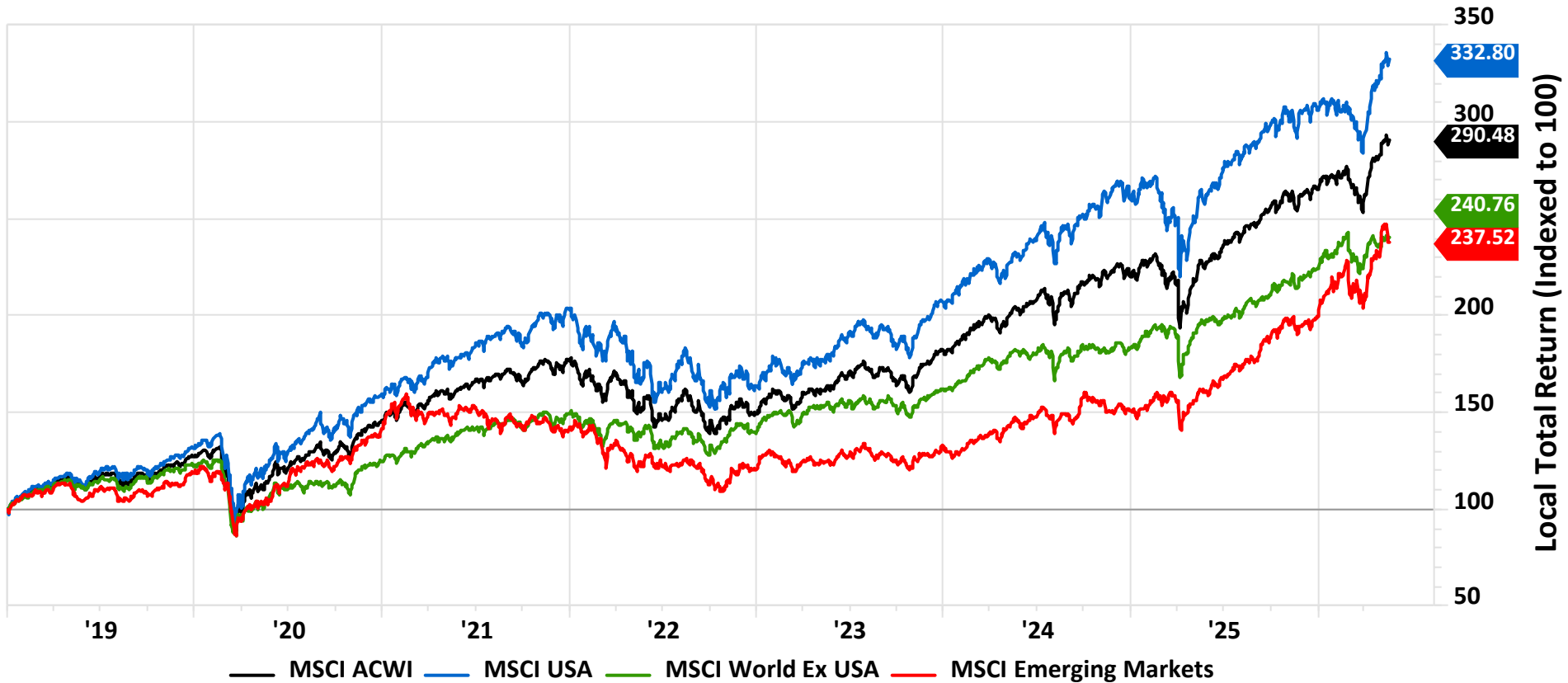
Source: FactSet

# Global Equities - Performance

*Both DM and EM equities have increased in the last few months*

05/21/2026

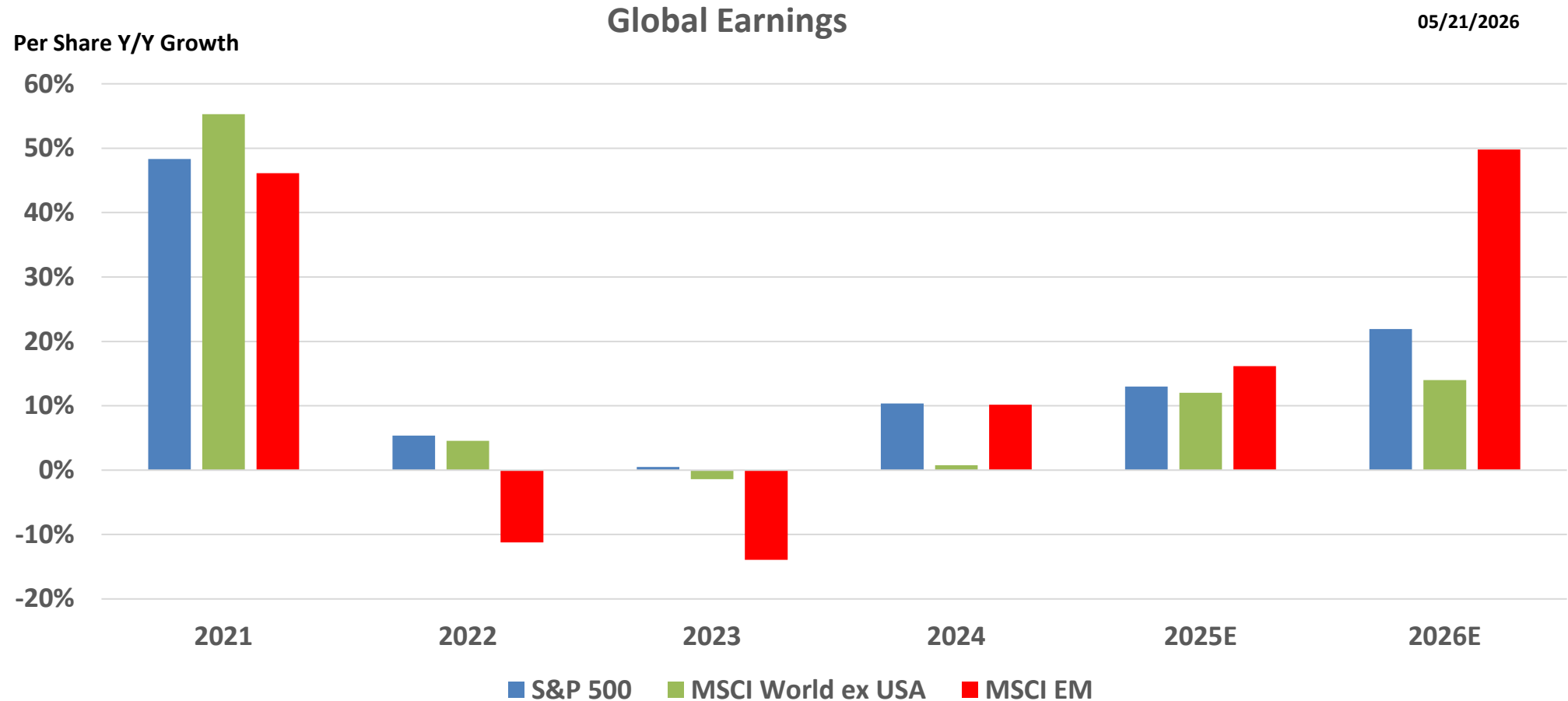
## Local Equity Performance



Source: FactSet

# Earnings Growth

*EM leads expectations for earnings growth*



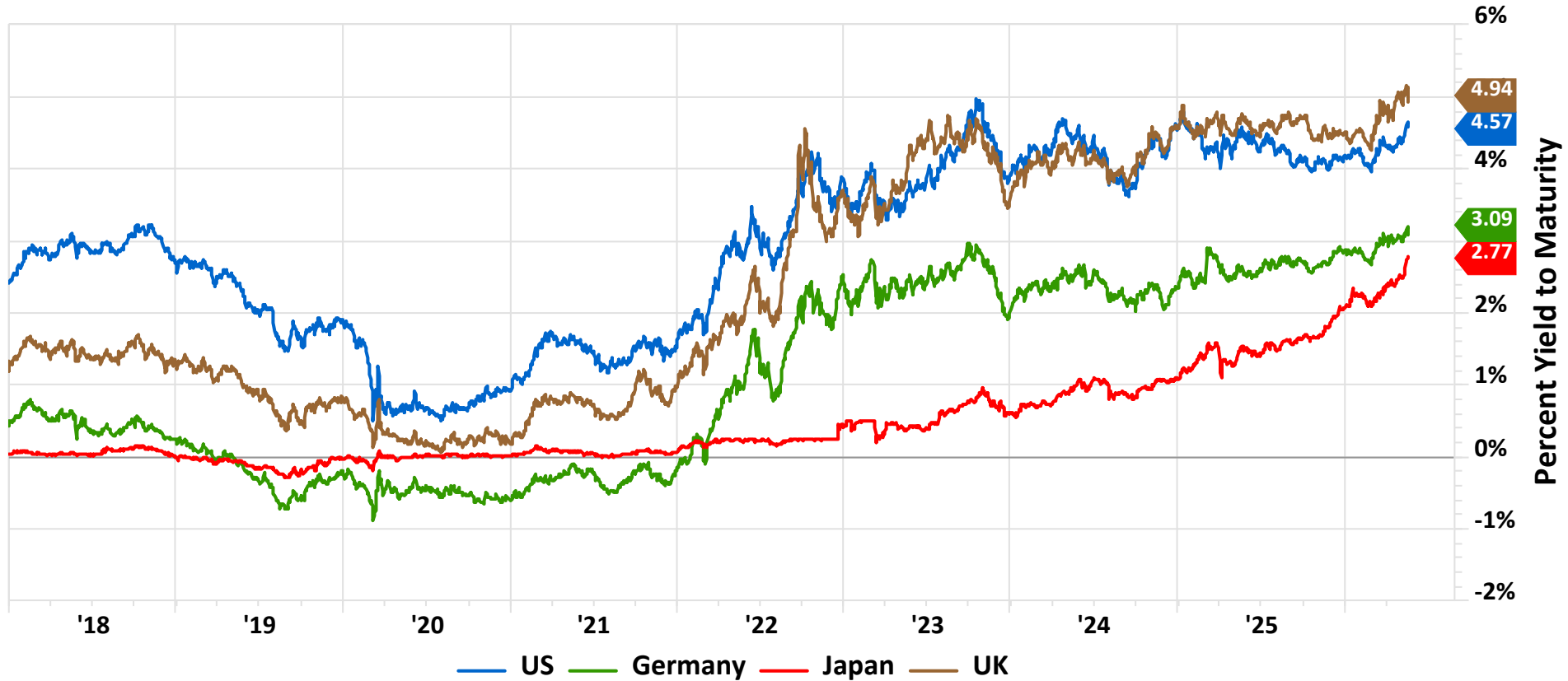
Source: Analyst Consensus, FactSet

# Global Bonds

*DM yields have increased in recent weeks*

05/21/2026

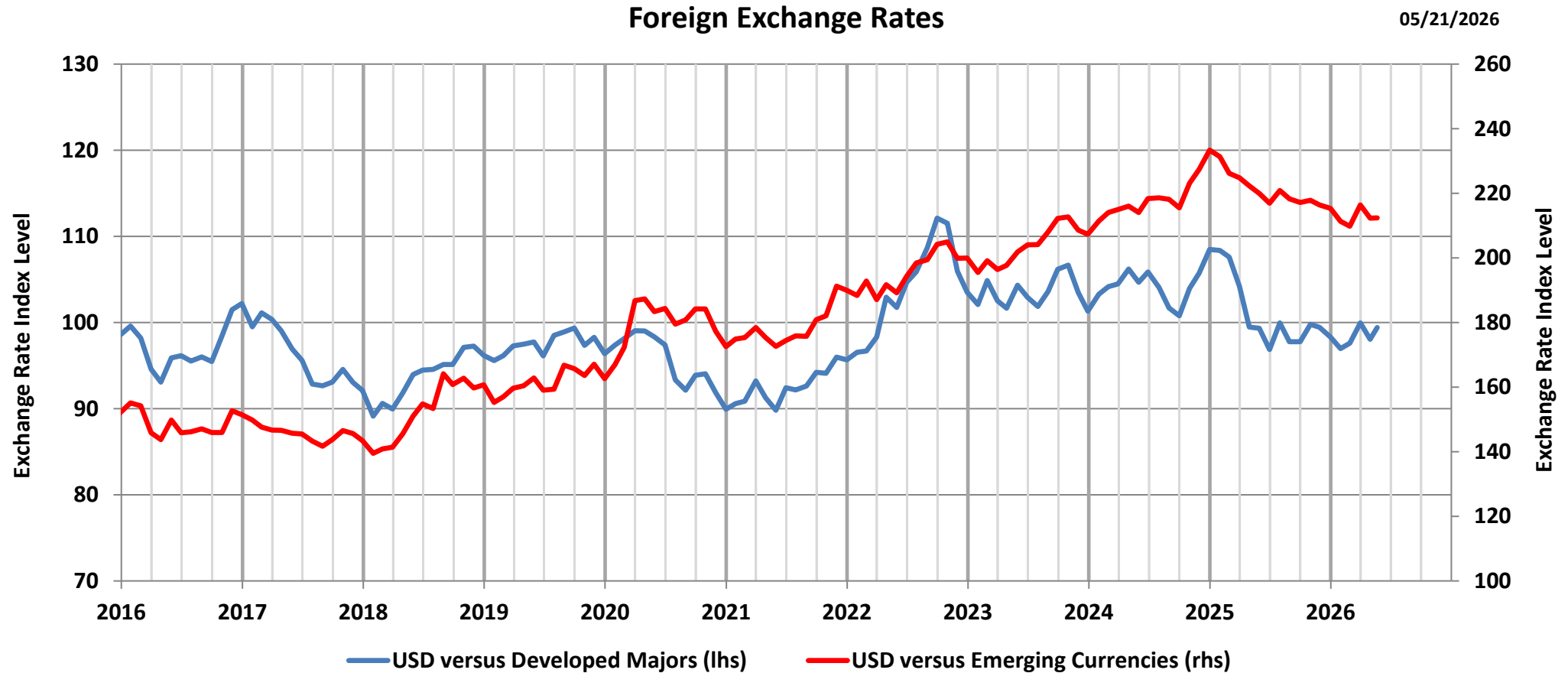
## 10-Year Government Bond Yields



Source: FactSet

# Currency Performance

*US Dollar trading in range year to date*



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

# U.S. Inflation

*Inflation expectations higher year to date*

US 5 Year Breakeven Inflation

05/21/2026



Source: Bloomberg

## Board Meeting

### Tab 6 – Announcement of Matters Taken Up in Closed Session

Board Meeting

Tab 7 – ERCC Charter Amendments

## SWIB ENTERPRISE RISK AND COMPLIANCE COMMITTEE CHARTER

**Board Approval Date: June 2011**  
*Last Amended ~~December 2024~~ [June 2026]*

The State of Wisconsin Investment Board (“SWIB”) Enterprise Risk and Compliance Committee (the “Committee”), in conjunction with SWIB management and the Board of Trustees (the “Board” or “Trustees”), has developed ~~the following policies and procedures~~ this Charter relating to oversight of the enterprise risk and compliance functions at SWIB.

### **Enterprise Risk and Compliance Committee Membership:**

~~Head of Risk Management (Co-Chair)~~

Director of Compliance & Senior Legal Counsel (~~Co~~-Chair)

Chief Financial Officer (Vice Chair)

Chief Legal Counsel (Secretary)

Executive Director/Chief Investment Officer

Deputy Executive Director/Chief Operating Officer

Chief Technology Officer

Head Economist & Asset and Risk Allocation CIO (Section 25.167 CIO)

Head of Liquidity Management and Beta Implementation

Head of Risk Management

Operational Risk Manager

Head of Internal Audit (non-voting)

### **I. Committee Purpose and Charter**

The ~~Enterprise Risk and Compliance Committee (the “Committee”)~~ Committee is created to oversee that significant enterprise and compliance risks are identified, monitored, and managed to aid in accomplishing SWIB’s goals and objectives. The Committee shall not be responsible for oversight of investment-related risks, which are monitored by the Risk Management Division and the Investment Committee.

The Committee will provide management input to help scope risk analysis activities and will support staff’s risk management activities to ensure operational reality drives risk analysis. The Committee oversees the development and periodically reviews the maintenance of a sound framework for enterprise risk management, which may include operational risk, legal, compliance and regulatory risk, credit, liquidity and counterparty risk, information security and technology risk, and reputational risk. The Committee will also monitor and provide consultation for the activities of the ~~Enterprise Risk~~ enterprise risk and ~~Compliance~~ compliance functions. The Committee is part of the overall control structure of the organization and is responsible for reviewing and assessing the effectiveness of the organization’s enterprise-wide risk assessment processes and compliance program to ensure they are

reasonably designed to prevent violations of SWIB's investment guidelines and other investment-related policies and procedures, state statutes, and other laws and applicable regulations. When appropriate, the Committee may recommend improvements to such policies, procedures, or processes. Further, the Committee may discuss any other enterprise risk matter it deems prudent and take necessary action.

In conjunction with the Section 25.167 CIO's exercise of the duties assigned in Wisconsin Statute Section 25.167, the Committee relies on the ~~Head of Risk Management and~~ Director of Compliance & Senior Legal Counsel for insight into SWIB's compliance with investment policies and guidelines and the development and implementation of operating procedures intended to ensure such compliance.

## II. Authority

- A. The Committee may examine methodology, staffing, technology needs, reporting processes, middle and back-office operational needs, and such other matters as the Committee deems appropriate for the purpose of understanding, measuring, controlling, monitoring and reporting SWIB's risk exposure.
- B. For purposes of fulfilling its risk management and oversight responsibilities, the Committee will act as liaison between SWIB staff and ~~SWIB~~ Trustees on issues concerning enterprise risk management and compliance.
- C. The Committee may review and analyze all matters directed to the attention of the Committee by the Trustees, Head of Internal Audit, Legislative Audit Bureau, Committee members, or others and report as appropriate.
- D. Unless related to confidential personnel matters, the Committee shall review all compliance - related issues associated with SWIB operations including compliance with statutes, ~~administrative rules, internal and external manager~~ Investment Guidelines, regulatory reporting requirements and such other compliance matters as the Committee deems appropriate or as otherwise requested. For any such confidential personnel matters, the following Committee members will be separately notified by Human Resources of such compliance - related issues: Executive Director/Chief Investment Officer, Deputy Executive Director/Chief Operating Officer, Director of Compliance & Senior Legal Counsel, Chief Legal Counsel and Head of Internal Audit . The Committee's ~~Minutes~~meeting minutes shall include all compliance violations reviewed by the Committee, management's action to remedy the violations, and management's actions to avoid any risk of reoccurrence. Immediate notification of the ~~chair~~Chair of the Audit and Finance Committee is required for any issue that appears to involve fraud or would otherwise be considered material for financial statement purposes.
- E. The Committee may review all risk - related issues associated with enterprise risk management. From time to time, the Committee may ask SWIB staff to research, analyze and report on areas of risk.

- F. Upon the request of the Chief ~~Financial Officer~~ Legal Counsel, in consultation with ~~the~~ Operational, ~~Financing and Counterparty~~ Risk ~~Director~~ Manager and the Head of Internal Audit, the Committee will review SWIB's Internal Control Plan, which is submitted annually to the Department of Administration (~~DOA~~) pursuant to statute.

### III. General Committee Procedures

- A. A majority of the voting members of the Committee constitute a quorum, and a majority of a quorum is required to take Committee action. The Committee shall meet at least semi-annually, but meetings may be called by any Committee ~~Member~~ member with sufficient lead time to provide appropriate notice of the meeting to the public. The Committee may invite members from the Investment Committee or other SWIB staff to respond to questions on specific risks related to investments or areas of concern.
- B. ~~The Committee~~ Any amendments to this Charter shall be approved by the Board ~~of Trustees~~. The Committee will review the Charter at least annually and make recommendations (if any) to the Board ~~of Trustees~~ for approval.
- C. The Committee may establish a standard reporting format and procedures for performing reviews of risk and compliance. Minutes of Committee meetings shall be kept and provided to the Board.

## Board Meeting

Tab 8 – In the absence of questions, the following reports will be filed without comment (for informational purposes):

- A. Quarterly Charges to Funds Reports, Q1 2026
- B. Private Markets and Funds Alpha Commitments, Q1 2026
- C. Board Contact Log

May 14, 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<sup>1</sup>. The information contained in this report is for the quarter ended March 31, 2026.

Total Cost of Management Summary	2Q 2025	3Q 2025	4Q 2025	1Q 2026	Trailing 4 Qtr Total	% of Total
<b>Internal Operating Expenses</b>						
Operating Budget Expenses	\$ 60,501,443	\$ 21,796,031	\$ 17,691,911	\$ 18,506,070	\$ 118,495,454	68.3%
Investment Research, Data & Consulting	9,676,291	10,217,743	10,461,680	9,521,599	39,877,313	23.0%
Custodial, Investment Operations & Banking	1,663,283	1,529,906	1,638,936	1,719,613	6,551,738	3.8%
Legal	91,372	770,424	1,478,417	483,474	2,823,687	1.6%
<b>Total Internal Operating Expenses</b>	<b>\$ 71,932,390</b>	<b>\$ 34,314,103</b>	<b>\$ 31,270,944</b>	<b>\$ 30,230,757</b>	<b>\$ 167,748,193</b>	<b>96.8%</b>
<b>Total Securities Lending Agent Expenses</b>	<b>\$ 1,104,449</b>	<b>\$ 1,227,404</b>	<b>\$ 1,593,830</b>	<b>\$ 1,698,910</b>	<b>\$ 5,624,593</b>	<b>3.2%</b>
<b>Total SWIB Operating Costs</b>	<b>\$ 73,036,839</b>	<b>\$ 35,541,507</b>	<b>\$ 32,864,774</b>	<b>\$ 31,929,667</b>	<b>\$ 173,372,786</b>	<b>100.0%</b>
<b>Supplemental Info - External Investment Management Fees</b>						
Hedge Funds	\$ 98,108,041	\$ 56,887,256	\$ 96,869,183	\$ 57,215,751	\$ 309,080,230	33.7%
Beta One & Other - External Funds	76,995,552	3,845,924	66,555,527	81,728,583	229,125,586	25.0%
Private Equity	55,162,651	51,936,175	57,553,732	47,006,906	211,659,464	23.1%
Real Estate	23,263,966	23,315,652	21,832,269	24,872,582	93,284,469	10.2%
Venture Capital	10,553,219	9,873,604	9,900,812	11,036,567	41,364,201	4.5%
Current Return	8,756,046	8,858,242	8,326,735	6,886,991	32,828,013	3.6%
<b>Total External Investment Management Fees</b>	<b>\$ 272,839,475</b>	<b>\$ 154,716,853</b>	<b>\$ 261,038,258</b>	<b>\$ 228,747,379</b>	<b>\$ 917,341,964</b>	<b>100.0%</b>
<b>Grand Total Cost of Management</b>	<b>\$ 345,876,313</b>	<b>\$ 190,258,359</b>	<b>\$ 293,903,032</b>	<b>\$ 260,677,045</b>	<b>\$ 1,090,714,750</b>	

<sup>1</sup> 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 March 31, 2026, SWIB's total authorized full-time equivalent positions are 298 as shown in the table below.

<b>Assets Under Management &amp; Positions</b>		
	<b>12/31/2025</b>	<b>3/31/2026</b>
Internal Management	52.1%	52.1%
External Management	47.9%	47.9%
<b>Total SWIB Positions</b>	<b>298</b>	<b>298</b>

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  
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

<b>Total Assets Under Management</b>	<b>6/30/2025</b>		<b>9/30/2025</b>		<b>12/31/2025</b>		<b>3/31/2026</b>	
	Amount (in millions)	%	Amount (in millions)	%	Amount (in millions)	%	Amount (in millions)	%
<b>Wisconsin Retirement System (WRS)</b>								
Internally Managed Assets	\$59,590	40.5%	\$63,104	41.4%	\$72,442	46.8%	\$71,011	46.5%
Externally Managed Dedicated Assets	33,540	22.8%	35,057	23.0%	25,723	16.6%	9,709	6.4%
Externally Managed Commingled Assets <sup>1</sup>	54,102	36.7%	54,257	35.6%	56,461	36.5%	71,853	47.1%
1. Passive Index	543	0.4%	773	0.5%	593	0.4%		
2. Limited Partnerships	37,938	25.8%	36,718	24.1%	36,944	23.9%		
3. Active Managed Commingled	15,622	10.6%	16,766	11.0%	18,925	12.2%		
<b>Total WRS Assets</b>	<b>\$147,232</b>	<b>100.0%</b>	<b>\$152,417</b>	<b>100.0%</b>	<b>\$154,626</b>	<b>100.0%</b>	<b>\$152,574</b>	<b>100.0%</b>
<b>Other Funds</b>								
State Investment Fund - Internally Managed	\$20,813		\$20,252		\$20,340		\$21,036	
Separately Managed Funds - Internally Managed	\$93		\$94		\$93		\$92	
Separately Managed Funds - Externally Managed	\$2,996		\$3,100		\$3,090		\$3,063	
<b>Total Other Funds</b>	<b>\$23,903</b>		<b>\$23,446</b>		<b>\$23,523</b>		<b>\$24,191</b>	
<b>Total Assets Under Management</b>	<b>\$171,136</b>		<b>\$175,863</b>		<b>\$178,149</b>		<b>\$176,764</b>	
<b>Supplemental AUM Breakout</b>								
<b>Total Internal Assets Under Management</b>	<b>\$80,497</b>	<b>47.0%</b>	<b>\$83,450</b>	<b>47.5%</b>	<b>\$92,875</b>	<b>52.1%</b>	<b>\$92,139</b>	<b>52.1%</b>
<b>Total External Asset Under Management</b>	<b>\$90,639</b>	<b>53.0%</b>	<b>\$92,413</b>	<b>52.5%</b>	<b>\$85,274</b>	<b>47.9%</b>	<b>\$84,625</b>	<b>47.9%</b>

<sup>1</sup> In the first quarter of 2026, Externally Managed Commingled Assets have been 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.

**STATE OF WISCONSIN INVESTMENT BOARD**  
**Expenses for All Funds Under Management**  
**Quarter Ending March 31, 2026**

<u>EXPENSE CATEGORY</u>	<u>EXPENSES</u>
<b><u>Internal Expenses</u></b> <sup>1</sup>	
Staff Compensation	\$ 10,304,518
Fringe Benefits	3,511,050
Staff Travel	340,278
<b>Total Internal Expenses</b>	<b>\$ 14,155,846</b>
<b><u>Supplies, Services, and Facilities</u></b>	
Advanced Systems Concepts	\$ 41,120
AE Business Solutions	16,944
Amazon.com	1,256
Association of Public Pension Fund Auditors (APPFA)	500
AT&T Landline	9,866
BiZZdesign United States Inc.	31,677
Bloomberg BusinessWeek	1,177
Building Service, Inc.	9,271
Capital Data Inc.	17,976
Carahsoft Technology Corp	79,851
CDS MY Block 1 Office, LLC	1,093,194
CDW-G	1,004
Centurylink	61
CFA Society Madison	2,097
Charter Communications (Spectrum Business)	7,198
Ciphereus LLC	3,000
CleanMark	24,035
Coffee Werks Machine Service and Sales	298
Column Software PBC	224
Complex Security Solutions Inc.	(4,152)
COMPLY Technologies, Inc.	15,234
Concur Technologies, Inc.	1,127
Crain's Chicago Business	199
Dell Marketing LP	314,073
Department of Administration (DOA)	116,193
Department of Employee Trust Funds (ETF)	62,817
Department of Workforce Development (DWD)	2,799
Depreciation Expense	1,064,676
Diligent Corporation	2,178
Disa Global Solutions, Inc	614
efilemyforms.com	23
Fed Ex	826
Forte	11,161
Funston Advisory Services LLC	6,825
GoDaddy.com	688
Gordon Flesch	16,079
IKM Building Solutions, Inc.	8,579
Info-Tech Research Group	77,985
Institutional Investor	1,798
Institutional Society of Risk Professionals	300
International Centre for Pension Management	23,234
Jackson-Hirsh	62
JetBrains Americas Inc.	518
KeyStone Peer Review Organization Inc	912
Klein-Dickert Glass	544
Legislative Audit Bureau (LAB)	54,079
LinkedIn	17,205
Litera Corp	522
Madison Gas and Electric Company	67,770
Menards.com	16
Metropolitan Unified Fiber Network Consortium	9,892

Microsoft, Inc.	300,000
Milwaukee Business Journal	170
Milwaukee Journal Sentinel	235
mxtoolbox.com	297
National Association of Corporate Directors	13,775
National Council on Teacher Retirement	1,120
Nationwide Power Solutions Inc	2,754
New York Times	262
OpenAI LLC	36,000
Packerland Rent-A-Mat, Inc.	621
PayScale, Inc.	6,900
Planeteria Media LLC	18,200
Podcamp Media, LLC	20,500
Prosymmetry, LLC	15,855
Red Flag Reporting	705
SailPoint Technologies, Inc.	18,422
Scooter Software	343
Security Onion Solutions	12,047
Shred-it	449
Sigma Computing, Inc	39,948
Software House Intl	611,869
Staples Advantage	1,252
The Associated Press	33
The Economist	(988)
The Information	299
Thomson Reuters	11,575
Twilio.com	50
US Bank	(1,044)
UW System Administration	950
VaxPro	70
Verizon Wireless	5,556
Warp	15,000
Wisconsin Independent Network	1,350
Wisconsin State Journal	126
<b>Total Supplies, Services, and Facilities</b>	<b>\$ 4,350,224</b>
<b>Total Operating Budget Expenses</b>	<b>\$ 18,506,070</b>
<b><u>Investment Counsel</u></b>	
12358433 Canada Inc.	\$ 15,470
20-20 Investment Association	20,000
22V Research LLC	10,000
AE Business Solutions	110,271
Aksia LLC	412,555
Alex Solutions	46,250
Apex Systems, LLC	76,995
Arcana Analytics, Inc.	25,000
Axonomy Limited	15,304
BackStop Solutions Group	48,474
Bank of America Merrill Lynch	11,212
BCA Research Inc	30,375
Blackrock Financial Management Inc	67,763
Bloomberg Finance LP	1,381,489
Bridge Consulting Partners Ltd	73,920
Callan Associates Inc	8,750
Canoe Software Inc.	16,500
Capital Economics LTD	15,965
Carahsoft Technology Corp	28,736
CBJL Incorporated	101,680
CBOE Global Markets, Inc.	1,635
CFRA Research	18,750
Charles River System Inc	485,241
Citrini Research	1,250
CLO Research Group	4,080
CoStar Portfolio Strategy	24,171

Credit Benchmark, LTD	54,600
CUSIP Global Services	16,250
Dacheng Xiu	62,475
Dow Jones News Service	39,375
DTCC EPN	2,400
DTCC ITP LLC	1,647
EFront Financial Solutions Inc	213,650
Elevation LLC	8,750
EquiLend Holdings LLC	28,266
Ernst & Young LLP	20,500
EUNA Solutions, Inc.	20,000
FactSet Research Systems Inc	1,046,571
FBN Securities, Inc.	9,000
Finarch LLC	54,960
FIS Data Systems Inc.	46,159
Fitch Solutions Inc	77,120
FTSE International Inc	6,196
Funston Advisory Services LLC	14,500
Gallagher	10,583
Global Peer Financing Association	2,500
Green Street Advisor	22,587
Haver Analytics	25,181
Hawking LLC	5,352
ICE Data Indices, LLC	24,781
ICE Data Pricing & Reference Data, LLC	172,962
Institutional Limited Partners Association ILPA	7,875
Institutional Shareholder Services Inc	103,908
Intex Solutions, Inc.	30,600
Investment Research Expense Accrual	232,788
IPC Systems Inc	9,642
JPSB Consulting Limited	80,240
KeyStone Consulting Inc	80,320
London Stock Exchange	56,816
Makor Securities London LTD	6,000
Manalo Advisors Limited	3,750
McLagan Partners Inc	27,000
Microsoft, Inc.	(300,000)
Moody's Investors Service Inc.	40,000
Moodys Analytics	55,382
MSCI - Barra	56,250
MSCI Inc - Risk Metrics Solutions	293,500
MSCI, Inc.	124,501
My Data Outlet International, LLC	54,600
NAIOP Commercial Real Estate Development Association	305
National Council of Real Estate Investment Fiduciaries	2,780
NEPC LLC	91,250
New Issue IQ, Inc	39,500
Newsfile	175
NYSE Market Inc	5,795
Octus Intelligence, Inc.	57,500
OptionMetrics	69,150
Options Price Reporting Authority	1,449
Oxford Economics USA INC	18,298
Pension Real Estate Association	330
Pitchbook Data Inc	21,417
Preqin Limited	25,405
Preyer	177,270
RavenPack International S.L.U.	30,000
Refinitiv	338,901
RIMES Technologies Corporation	65,438
Russell Investment Group	14,874
S&P Dow Jones Indices	3,200
S&P Global Limited (Markit Group Limited)	84,343
S&P Global Market Intelligence	118,100
S&P Global Valuations Limited	221,476

Sanford C Bernstein & Co LLC	6,000
Seaport Global Holdings, LLC	9,130
SEI Investments	23,006
Sharp Decisions Inc	132,860
Sheffield Haworth Inc	50,000
Simcorp USA, Inc.	1,173,559
Snowflake Inc	148,248
Software House Intl	22,106
State Street	25,000
Stepstone Group	2,334
Stepstone Group Real Estate	60,813
SWIFT SC	13,544
TechVest Global Solutions Inc.	126,484
The Bachrach Group	35,856
The Financial Times Limited	506
The Institute for Quantitative Research in Finance	6,500
The Nasdaq Stock Market, LLC	5,100
The Spaulding Group, Inc.	33,500
The Yield Book Inc	25,020
Toronto Stock Exchange	13,142
TradeWeb	11,481
UFP Research SA	12,500
Verity LLC	50,874
Verus Advisory Inc	5,000
Virtu ITG Analytics LLC	28,000
Wedbush	9,000
Wisconsin Technology Council	7,500
With Intelligence LLC	11,336
Wolters Kluwer Law & Business	4,043
Wolverine Execution Services LLC	698
Workday, Inc.	52,574
WorldBridge Partners Inc	27,560
<b>Total Investment Research, Data &amp; Consulting</b>	<b>\$ 9,521,599</b>
<b><u>Custodial, Investment Operations and Banking Fees</u></b>	
Albourne America LLC	\$ 187,500
BNY Asset Servicing - Custody	861,447
BNY Asset Servicing - Investment Operations	423,017
Markit NA	2,679
S&P Global Limited (Markit Group Limited)	244,970
<b>Total Custodial, Investment Operations &amp; Banking</b>	<b>\$ 1,719,613</b>
<b><u>Legal Fees</u></b>	
Axiom Global Inc	\$ 25,460
Cox Castle & Nicholson LLP	7,326
DLA Piper LLP (US)	97,212
Legal Services Expense Accrual	196,993
Neal Gerber Eisenberg	17,918
Quarles & Brady	76,837
Vedder Price PC	17,268
Winston & Strawn LLP	44,462
<b>Total Legal</b>	<b>\$ 483,474</b>
<b>Total Internal Operating Expenses</b>	<b>\$ 30,230,757</b>
<b><u>Securities Lending Agent Fees</u></b>	
Securities Lending Agent Fees	\$ 1,698,910
<b>Total Securities Lending Agent Expenses</b>	<b>\$ 1,698,910</b>
<b>TOTAL QUARTERLY CHARGES TO FUNDS</b>	<b>\$ 31,929,667</b>

<sup>1</sup> 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<sup>1</sup>, 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.

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<sup>1</sup> 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\*

*January 2026 – March 2026*

<i>Investment</i>	<i>Commitment (millions)</i>
Bridgepoint Europe VIII, L.P.	€150.0
Francisco Partners Agility IV, L.P.	\$50.0
Francisco Partners VIII, L.P.	\$150.0
KWISCO Investments, L.P.	\$200.0
Percheron Capital Fund III L.P.	\$100.0
Rubicon Badger Co-Invest, L.P.	\$50.0
STG Allegro II, L.P. (add-on)	\$5.0
Industrials Co-Investment	€20.0
Consumer Co-Investment	\$25.0
Technology Co-Investment	\$25.0
Consumer Co-Investment	\$10.0
Financial Services Co-Investment (add-on)	\$5.0

\*Includes Current Return Portfolio and Co-Investments.

# Private Debt Investments/Commitments

*January 1, 2026 to March 31, 2026 (First Quarter)*

<i>Investment</i>	<i>Investment/Commitment</i>
Manufacturing	\$9,000,000
Real Estate/Residential	\$27,000,000
Logistics/Transportation	\$10,000,000
<b>Total</b>	<b>\$46,000,000</b>

# Real Estate Commitments

*January 2026 – March 2026*

<i>Investment</i>	<i>Commitment (millions)</i>
Bridge Logistics Value Fund II, LP	\$40
<b>Total</b>	<b>\$40</b>

# Funds Alpha Commitments\*

*January 1 – March 31, 2026*

<b>Manager</b>	<b>Commitment (Millions)</b>
Artisan International (VTF to CTF)	\$ 63
FW Project Lorenz	\$ 30
LibreMax CLO	\$ 20
<b>Total</b>	<b>\$ 113</b>

*\*Includes Hedge Funds and Beta One*

Board Contact Log – June 2026 Board Meeting

DATE OF INBOUND COMMUNICATION	DATE COMMUNICATED TO THE BOARD	COMMUNICATION SOURCE	TOPIC	WRS PARTICIPANT*
March 11, 2026	June 9, 2026	Paul Price	Divestment from Charlesbank Capital Partners	No
May 6, 2026	June 9, 2026	Michael Arney	Fossil fuel divestment and systematic climate risks	No

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\* Comment submitters indicate whether they are or are not WRS Participants when submitting the comment.

## Board Meeting

### Tab 9 – Future Items for Discussion

# 2026 Board Meeting and Agenda Plan

March 2026

<b>Audit &amp; Finance</b>	<p><b>Open Session</b></p> <ul style="list-style-type: none"> <li>• Annual Charters Review</li> <li>• Open Audit Issues Report(s)</li> <li>• Approval of Draft Audit Report(s)</li> <li>• 2026 Internal Audit Plan Status</li> <li>• 2026 Internal Audit Goals</li> <li>• Compliance and Operational Risk Updates</li> <li>• Financial Reporting</li> <li>• Administrative Reports</li> </ul> <p><b>Executive Closed Session</b></p> <ul style="list-style-type: none"> <li>• Evaluation of Head of Internal Audit</li> <li>• Head of Internal Audit Compensation Recommendation</li> </ul>
<b>Compensation &amp; Workforce Development</b>	<p><b>Open Session</b></p> <ul style="list-style-type: none"> <li>• Annual Committee Charter Review</li> <li>• Strategic Results Scorecard Approval</li> <li>• Incentive Compensation Program Review and Division Scorecards Results</li> <li>• Incentive Compensation Award Recommendations</li> <li>• Talent Acquisition Update and People Metrics</li> </ul> <p><b>Executive Closed Session</b></p> <ul style="list-style-type: none"> <li>• Incentive Compensation Award Recommendations for Specific Individuals</li> <li>• Long-Term Incentive Plan Awards</li> <li>• Deputy Executive Director/Chief Operating Officer Incentive Compensation Award Recommendation</li> <li>• ED/CIO Evaluation and Compensation</li> </ul>
<b>SPCG</b>	<p><b>Open Session</b></p> <ul style="list-style-type: none"> <li>• Corporate Governance Program Update</li> <li>• June Investment Forum Preview</li> <li>• Innovation and Projects Update</li> </ul> <p><b>Executive Closed Session</b></p> <ul style="list-style-type: none"> <li>• ED/CIO Goals Review</li> </ul>
<b>Board Meeting</b>	<p><b>Open Session</b></p> <ul style="list-style-type: none"> <li>• Committee Reports</li> <li>• Election of Secretary and Assistant Secretary</li> <li>• Annual Committee Assignments</li> <li>• Proposed Meeting Dates for Next Year</li> <li>• Investment Performance and Market Updates; Callan Annual Report</li> <li>• Committee Open Session Business</li> <li>• Quarterly Investment Update (Economic Update)</li> <li>• Q4 Direct Charges to Funds / PMFA Commitments / Board Contact Log</li> </ul> <p><b>Closed Session</b></p> <ul style="list-style-type: none"> <li>• Risk Management Update</li> <li>• Committee Closed Session Business</li> </ul>

# 2026 Board Meeting and Agenda Plan

<b>June 2026</b>	
<b>Audit &amp; Finance</b>	<p><b>Open Session</b></p> <ul style="list-style-type: none"> <li>• WRS Audited Financial Statements</li> <li>• Open Audit Issues Report(s)</li> <li>• Approval of Draft Audit Report(s)</li> <li>• Annual Affirmations and Disclosures</li> <li>• 2026 Internal Audit Plan Status</li> <li>• Five-Year Audit Summary</li> <li>• Financial Reporting</li> <li>• Administrative Reports</li> </ul> <p><b>Executive Closed Session</b></p> <ul style="list-style-type: none"> <li>• LAB Review of Statements of Economic Interest</li> </ul>
<b>Compensation &amp; Workforce Development</b>	<p><b>Open Session</b></p> <ul style="list-style-type: none"> <li>• Human Resources Update</li> </ul>
<b>SPCG</b>	<p><b>Executive Closed Session</b></p> <ul style="list-style-type: none"> <li>• ED/CIO Goals Review</li> </ul>
<b>INVESTMENT FORUM</b>	
<b>Board Meeting</b>	<p><b>Open Session</b></p> <ul style="list-style-type: none"> <li>• Committee Reports</li> <li>• Investment Performance and Market Updates; Callan Quarterly Report</li> <li>• Committee Open Session Business</li> <li>• Quarterly Investment Update (Private Markets Strategy Reports and Market Outlook)</li> <li>• Q1 Direct Charges to Funds / PMFA Commitments / Board Contact Log</li> </ul> <p><b>Closed Session</b></p> <ul style="list-style-type: none"> <li>• Risk Management Update</li> <li>• Committee Closed Session Business</li> </ul>

# 2026 Board Meeting and Agenda Plan

September 2026	
<b>Audit &amp; Finance</b>	<p><b>Open Session</b></p> <ul style="list-style-type: none"> <li>• Open Audit Issues Report(s)</li> <li>• Approval of Draft Audit Report(s)</li> <li>• 2026 Internal Audit Plan Status and Plan Update</li> <li>• 2027 Internal Audit Plan Preview</li> <li>• Financial Reporting</li> <li>• Administrative Reports</li> </ul>
<b>Benchmark &amp; Performance</b>	<p><b>Open Session</b></p> <ul style="list-style-type: none"> <li>• NEPC 2026 Benchmark Review and Recommendation</li> </ul>
<b>SPCG</b>	<p><b>Open Session</b></p> <ul style="list-style-type: none"> <li>• Annual Corporate Governance Policy Review and Corporate Governance 2026 Proxy Voting Review</li> <li>• October Workshop Preview</li> <li>• Trustee Manual and Policies Review</li> </ul> <p><b>Closed Session</b></p> <ul style="list-style-type: none"> <li>• Data Management and Information Technology Update</li> <li>• Board/Staff Consultant Annual Reporting</li> </ul> <p><b>Executive Closed Session</b></p> <ul style="list-style-type: none"> <li>• Targeted Strategic Planning</li> <li>• ED/CIO Goals Review</li> </ul>
<b>Board Meeting</b>	<p><b>Open Session</b></p> <ul style="list-style-type: none"> <li>• Committee Reports</li> <li>• Investment Forum Recap</li> <li>• Biennial Ethics Training</li> <li>• Fiduciary &amp; Public Records Training</li> <li>• Investment Performance and Market Updates; Callan Quarterly Report</li> <li>• Committee Open Session Business</li> <li>• Quarterly Investment Update (Economic Update)</li> <li>• Q2 Direct Charges to Funds / PMFA Commitments / Board Contact Log</li> </ul> <p><b>Closed Session</b></p> <ul style="list-style-type: none"> <li>• Risk Management Update</li> <li>• Board/Staff Consultant Annual Reporting</li> <li>• Committee Closed Session Business</li> </ul> <p><b>Executive Closed Session</b></p> <ul style="list-style-type: none"> <li>• Board Self-Evaluation with Governance Consultant</li> </ul>

<b>OCTOBER BOARD WORKSHOP</b>	
<ul style="list-style-type: none"> <li>• Outside Speakers</li> <li>• Asset Allocation Review</li> </ul>	

## 2026 Board Meeting and Agenda Plan

December 2026	
<b>Audit &amp; Finance</b>	<p><b>Open Session</b></p> <ul style="list-style-type: none"> <li>• SIF Audited Financial Statements</li> <li>• Open Audit Issues Report(s)</li> <li>• Approval of Draft Audit Report(s)</li> <li>• 2026 Internal Audit Plan Status</li> <li>• Proposed 2026 Internal Audit Plan</li> <li>• Annual Presentation on Cost Benchmarking</li> <li>• Financial Reporting, including Budget and Position Request</li> <li>• Administrative Reports</li> </ul> <p><b>Executive Closed Session</b></p> <ul style="list-style-type: none"> <li>• LAB Review of Statements of Economic Interests</li> </ul>
<b>Benchmark &amp; Performance</b>	<p><b>Open Session</b></p> <ul style="list-style-type: none"> <li>• Annual Committee Charter, Policies, and Benchmarking Philosophy Review</li> <li>• Benchmark Consultant Report and Annual Benchmark Review and Recommendation</li> </ul>
<b>Compensation &amp; Workforce Development</b>	<p><b>Open Session</b></p> <ul style="list-style-type: none"> <li>• Annual RPM Review</li> <li>• Compensation Philosophy Review</li> <li>• Compensation Consultant Report</li> <li>• Incentive Compensation Plan Changes for Next Performance Year</li> <li>• Incentive Compensation Projections</li> <li>• Human Resources Update</li> </ul> <p><b>Executive Closed Session</b></p> <ul style="list-style-type: none"> <li>• Succession Planning</li> </ul>
<b>SPCG</b>	<p><b>Open Session</b></p> <ul style="list-style-type: none"> <li>• Annual Committee Charter Review</li> </ul> <p><b>Executive Closed Session</b></p> <ul style="list-style-type: none"> <li>• Targeted Strategic Planning</li> <li>• ED/CIO Goals Review</li> </ul>
<b>Board Meeting</b>	<p><b>Open Session</b></p> <ul style="list-style-type: none"> <li>• Committee Reports</li> <li>• Investment Performance and Market Updates; Callan Quarterly Report</li> <li>• Asset Allocation Recommendation</li> <li>• Quarterly Investment Update (Funds Alpha Strategy Reports and Market Outlook)</li> <li>• Committee Open Session Business</li> <li>• Q3 Direct Charges to Funds / PMFA Commitments / Board Contact Log</li> </ul> <p><b>Closed Session</b></p> <ul style="list-style-type: none"> <li>• Asset Allocation Discussion</li> <li>• Annual Review of Expected Tail Loss Analysis</li> <li>• Risk Management Update</li> <li>• Committee Closed Session Business</li> </ul>