# WRS Investment Performance & 2025 Outlook

March 27, 2025

STATE OF WISCONSIN INVESTMENT BOARD

*Edwin Denson*

*Executive Director/Chief Investment Officer*

*Rochelle Klaskin*

*Deputy Executive Director/Chief Operating Officer*

*Todd Mattina*

*Head Economist & Asset and Risk Allocation Chief Investment Officer*

# Agenda

- Performance
- Asset Allocation
- Economic Outlook
- Cost Benchmarking
- SWIB News
- Questions

# Performance

# WRS Core Fund Performance

*As of December 31, 2024*

| **Calendar YTD** | **5-Year** |
|---|---|
| **8.55%** | **7.24%** |
| Benchmark: 7.44% | Benchmark: 6.53% |
| **EVA: $1.3B** | **EVA: $4.1B** |

- AUM as of Dec. 31, 2024, was more than $128 billion.
- The investment objective of the Core Fund is to meet or exceed an average nominal return of 6.8% over the long-term.
- 15 of 17 active strategies outperformed.
- Most excess return (111 bps) since 2009.

Note: Returns are net of fees.

# WRS Variable Fund Performance

*As of December 31, 2024*

| **Calendar YTD** | **5-Year** |
| --- | --- |
| **18.77%** | **11.00%** |
| Benchmark: 18.27% | Benchmark: 11.08% |

- AUM as of Dec. 31, 2024, was more than $11 billion.
- The Variable Trust Fund is an optional all-stock fund as required by state statute.
- Approximately 7% of WRS assets are in the Variable Trust Fund.

Note: Returns are net of fees.



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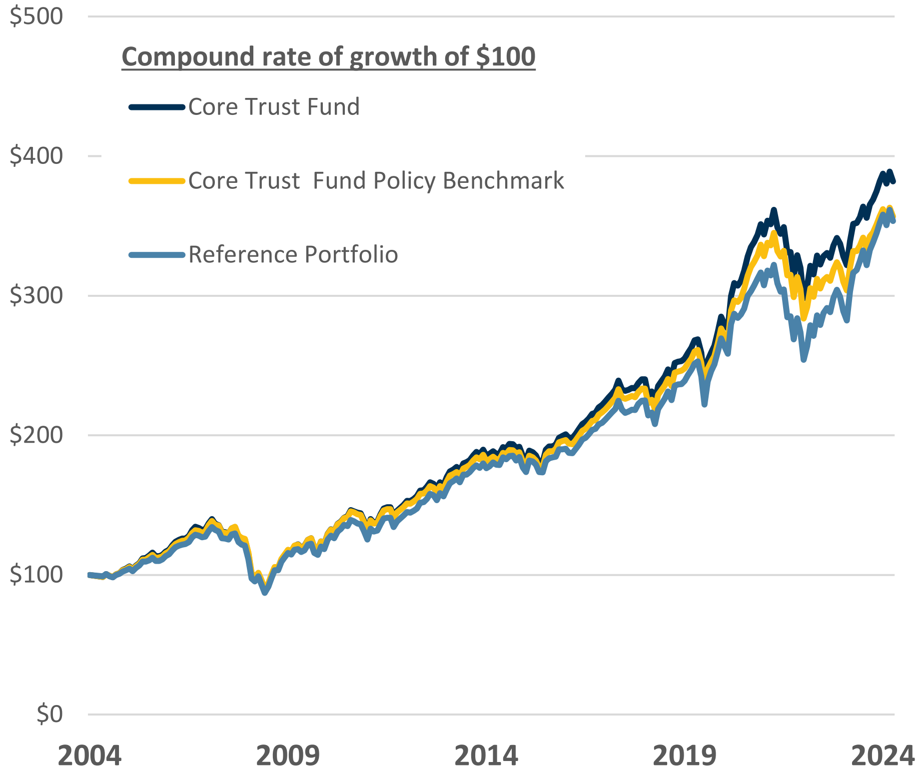
# CTF NoF Performance vs. 60/40 Reference Portfolio

*20-year cumulative return[1]: January 1, 2004, to December 31, 2024*

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




| Net of External Manager Fee Return & EVA | | | |
|---|---|---|---|
| Portfolio / Benchmark | Annualized Return | Cumulative Return | Cumulative $ Excess Value Added |
| Reference Portfolio[2] (60% equity/40% bonds) | 6.5% | 253.5% | = Passive Market Return |
| **Benefit of CTF Asset Allocation** | | | |
| CTF Policy Benchmark | 6.6% | 256.7% | +$5.1B |
| **Benefit of CTF Active Management** | | | |
| CTF Fund | 6.9% | 282.0% | +$10.6B |
| CTF Excess Return vs. Reference Portfolio | +0.4% pts | +28.5% pts | +$15.7B |

[1] Core Trust Fund beginning market value, as of January 1, 2004, was $63.7B and ending market value, as of December 31, 2024, was $128.4B

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

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# Asset Allocation



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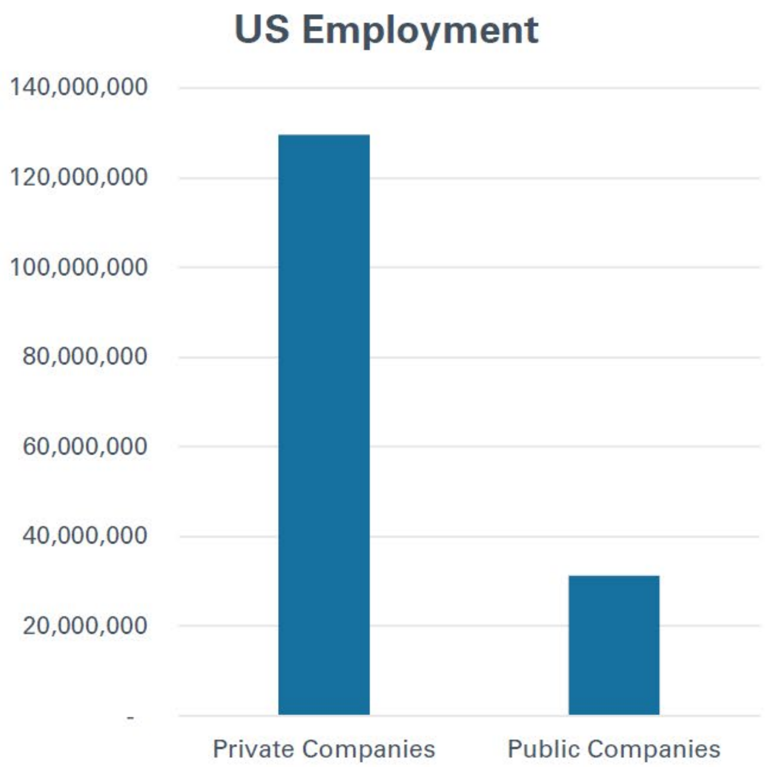
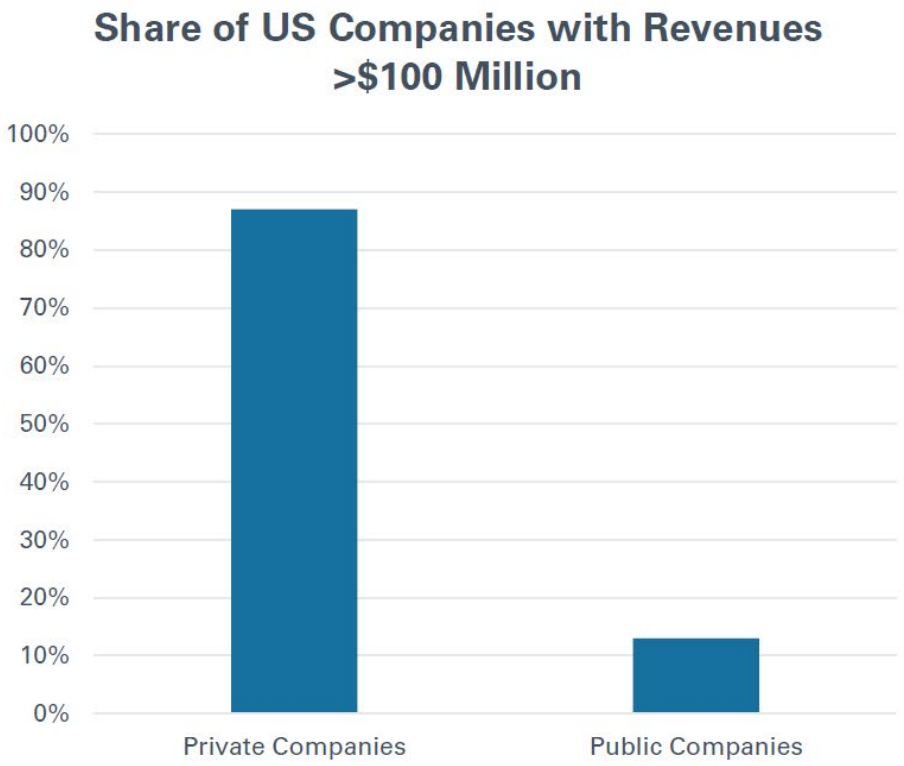
# Current CTF Policy & Recommendation

| Decision | 2024 Policy Targets | 2025 Policy Targets |
|---|---|---|
| Public Markets Allocation | 40% Equity<br>27% Fixed Income<br>19% TIPS | 38% Equity<br>27% Fixed Income<br>19% Tips |
| Private Markets Allocation | 18% Private Equity & Debt<br>8% Real Estate | 20% Private Equity & Debt<br>8% Real Estate |
| Policy Leverage | 12% of CTF | 12% of CTF |
| Active Risk Target | 1.2% of CTF | 1.2% of CTF |

# Majority of U.S. Companies are Private

The universe is sizable as more than **85% of U.S. companies are privately held**, representing a large share of employment and production not captured by listed stocks.

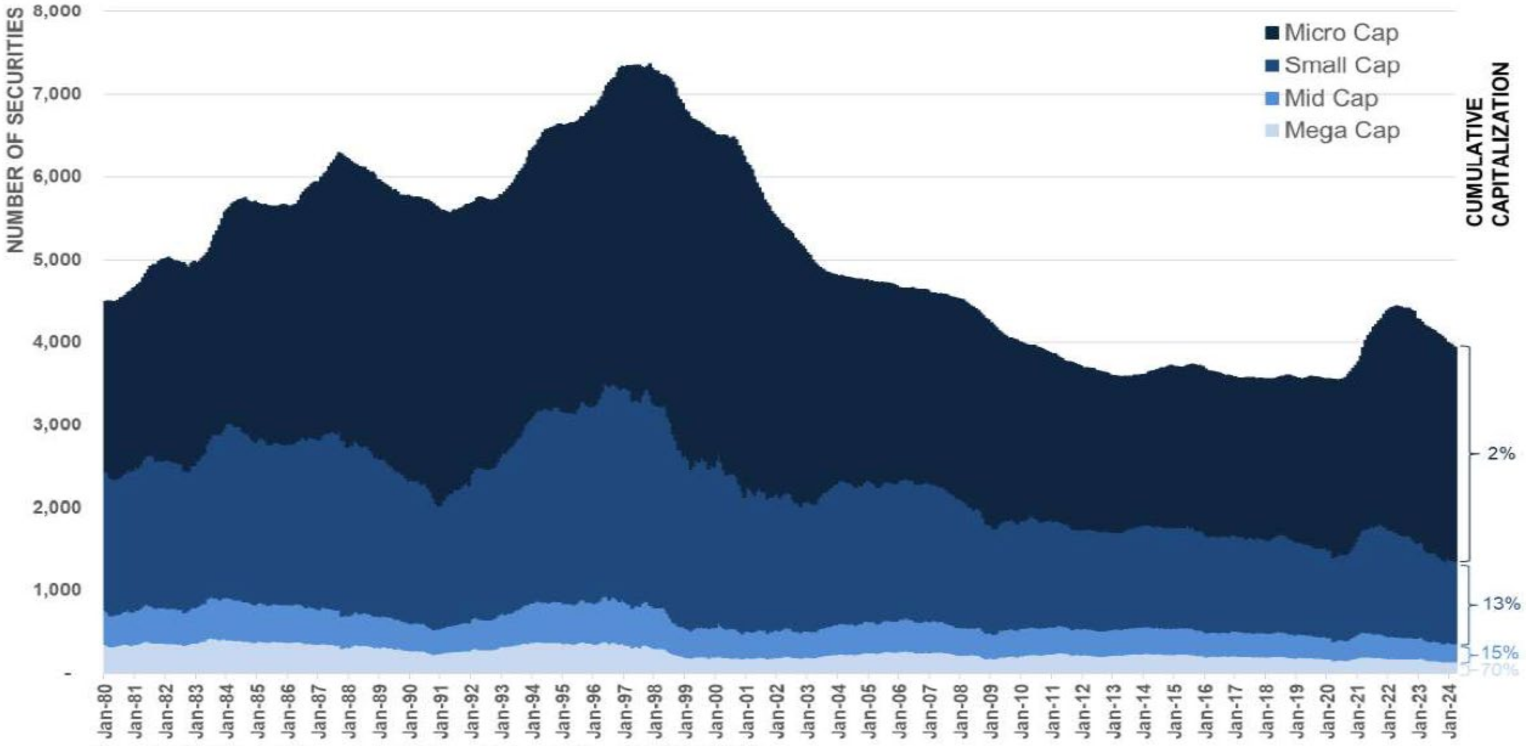



Source: U.S. Bureau of Labor Statistics, Bloomberg, Apollo Chief Economist

# Reduction in Public Companies Continues

In 1996, there were over 7,000 public companies across all U.S. exchanges. Today, there are around 4,000.



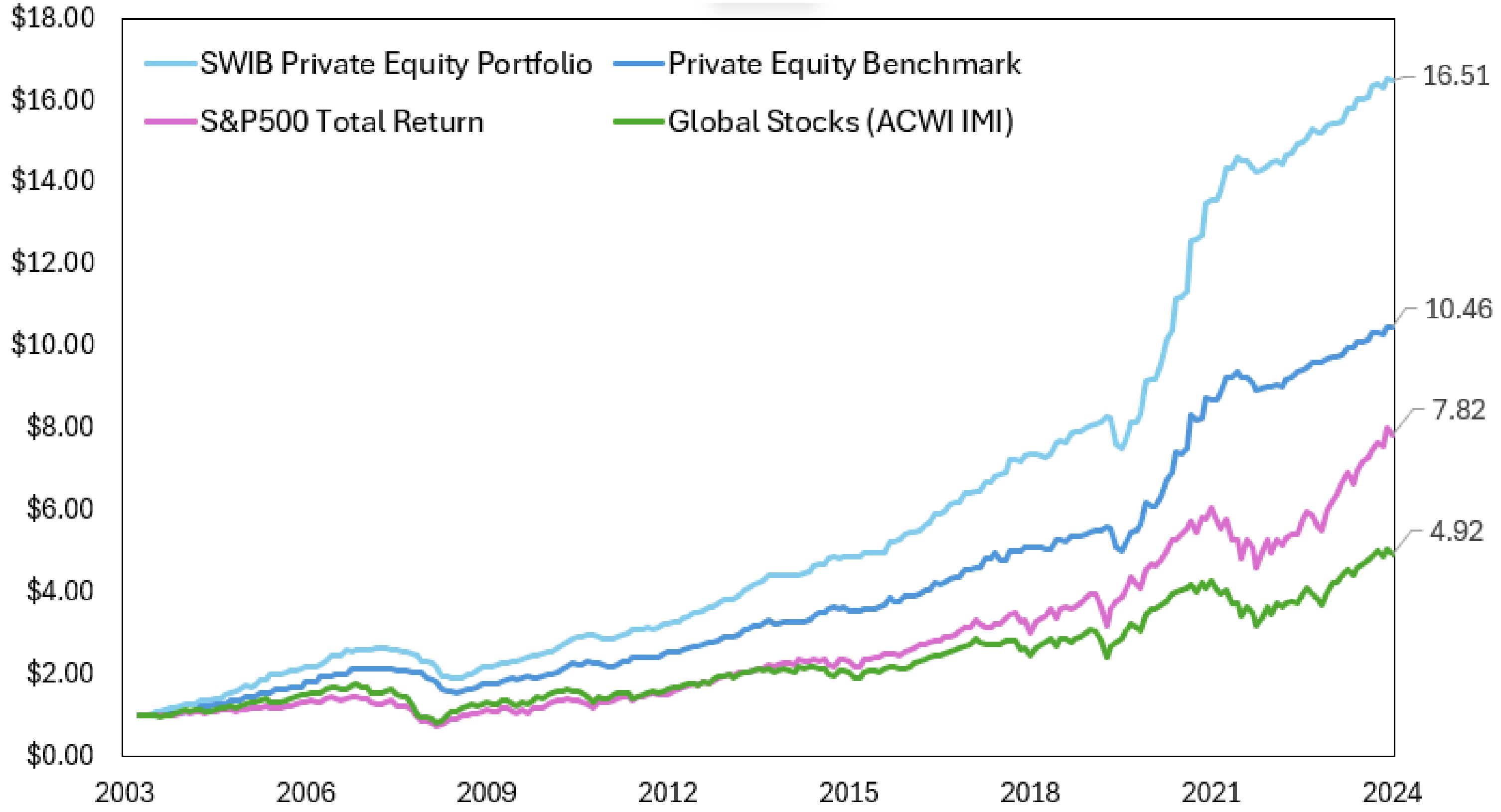

Source: CRSP US Stock Databases, Center for Research in Security Prices, LLC (CRSP), ©2024
Note: Stocks are defined as share codes 10 and 11. The counts are done at the PERMCO level, and exclude securities that did not have market capitalization on the date of measurement. The categories are based on cumulative capitalization. Securities in the top 70% of cumulative market capitalization are defined as Mega Cap; securities in the next 15% of cumulative market capitalization are Mid Cap; the next 13% of cumulative market capitalization are Small Cap; the last 2% of market cap are called Micro Cap. Data is on monthly frequency.

Source: Center for Research in Security Prices (CRSP), an affiliate of the University of Chicago

# Private Equity Has Generated Significant Value

## Growth of $1 invested in SWIB Private Equity Portfolio vs. Benchmarks

(Since inception of Private Equity benchmark data in 4/1/2004)




Private equity outperformed the public equity benchmarks and SWIB's manager selection outperformed the broad benchmark.

Source: Official net-of-all SWIB returns for PE Portfolio, State Street, MSCI, and FactSet



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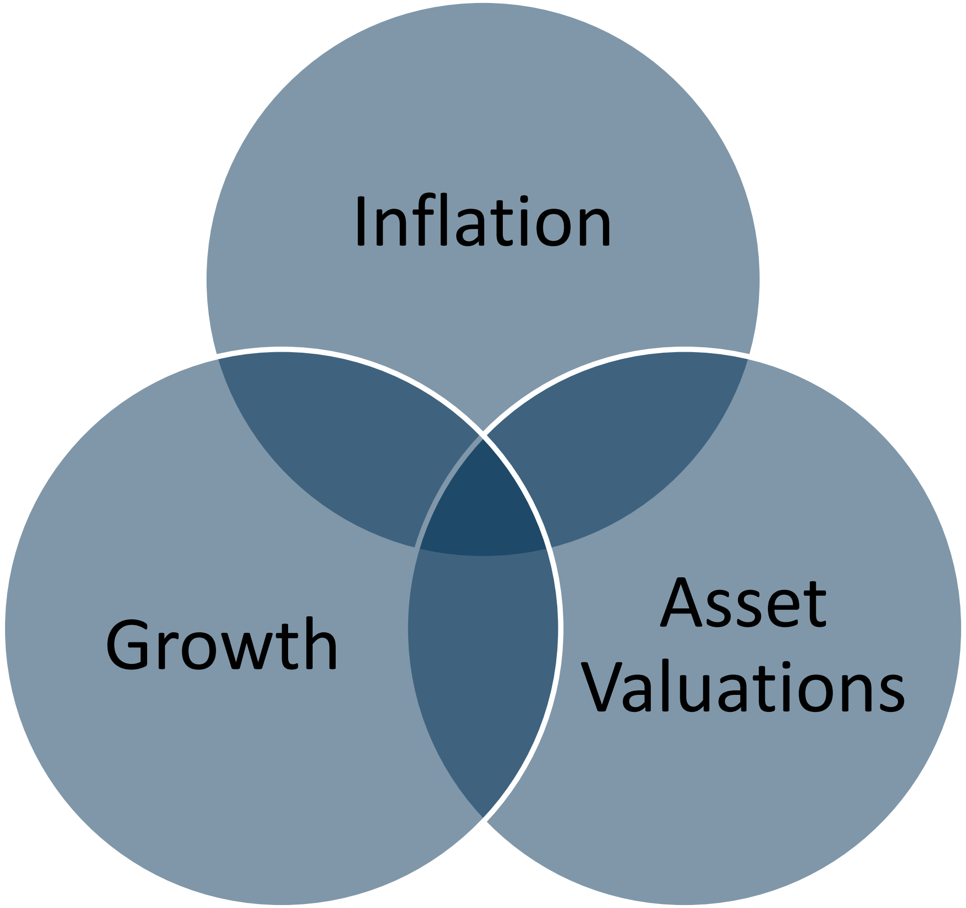
# Economic Outlook

# Economic Drivers of Long-Term WRS Stability

*Growth, inflation & starting asset valuations drive contributions, discount rates & investment returns*



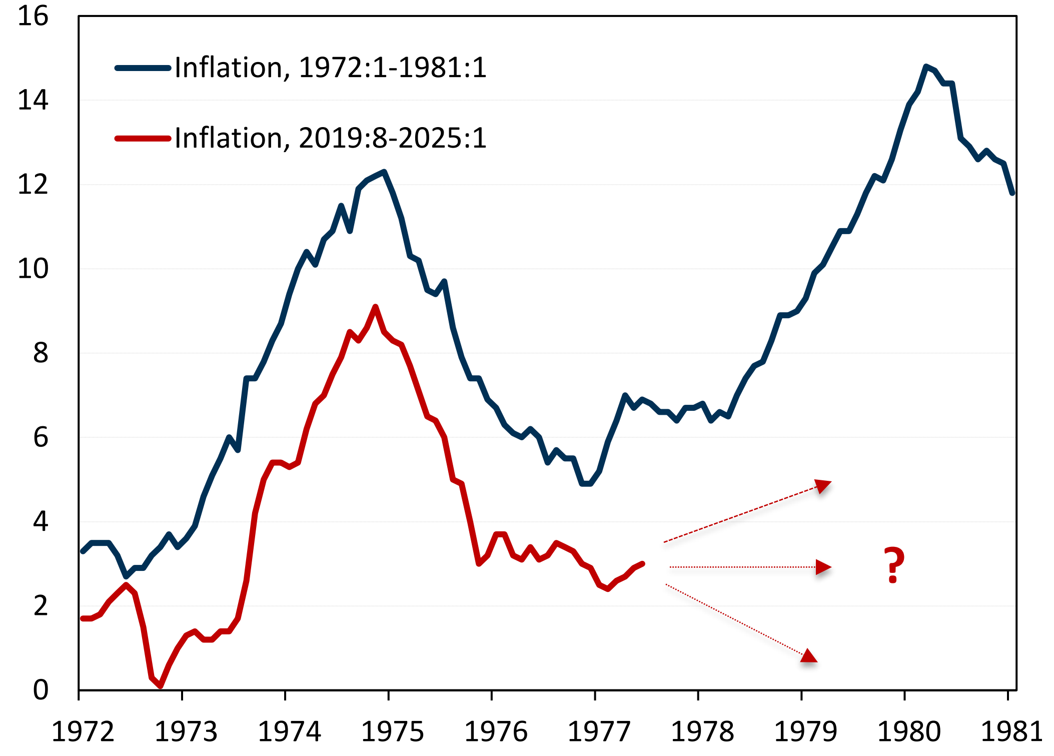

- The long-term inflation trend is an important factor influencing payroll growth, plan contributions and investment returns.
- The long-term trend in growth reflects multiple factors, including productivity and demographics.
- Starting asset class valuations have an important influence on long-term investment returns.
- Together, these economic and fundamental factors influence contributions, the present value of liability cash flows and investment returns.

# Long-Term Inflation Expectations Have Stabilized

*Recent inflation trends rhyme with the 1970s. Could history repeat itself?*

**U.S. CPI Inflation Trends in the 1970s and Covid Period**

(monthly CPI inflation, annualized rates)




Sources: U.S. CPI, all items, seasonally adjusted, year-over-year percent change. Data provided via Bloomberg. Based on John Cochrane, "Inflation Analogy", 13 February 2025.

- Inflation has declined sharply from its recent peak, but history reminds us that inflation can abruptly rebound.
- What could cause an increase in *long-term inflation*?

1. Fed loses credibility and expected inflation becomes "unanchored" from the 2% target.
2. Large structural budget deficits in a full employment economy cause inflationary pressures, especially if the Fed accommodates with looser financial conditions.
3. Higher import tariffs and restrictive immigration policies raise prices and wages over time.



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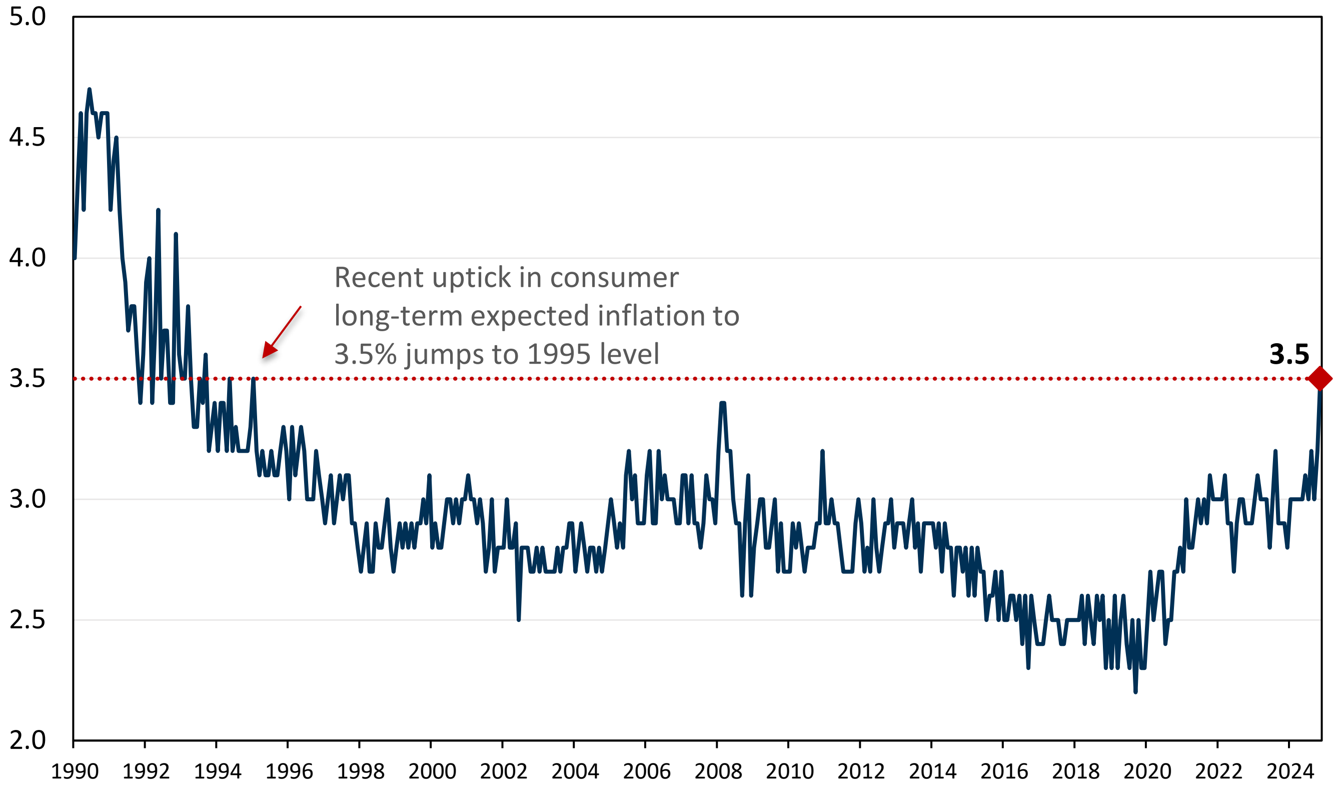
# Consumers Expect Higher Long-Term Inflation

*University of Michigan survey jumped to highest level since 1995*

**Consumer Long-Term Inflation Expectations Jump to Almost 30-Year High**

(University of Michigan 5-10 year consumer inflation expectation in %)




Source: University of Michigan Survey on Expected Change in Prices During the Next 5-10 Years: Median. Data provided via Bloomberg.

- Concerning jump in consumer long-term inflation expectations.
- All five components of the survey index dropped, including big-ticket items.
- Survey also indicated weaker overall consumer sentiment and a higher expected unemployment rate in the next year.
- Unclear if the recent monthly report is a post-election blip or a shift in trend.

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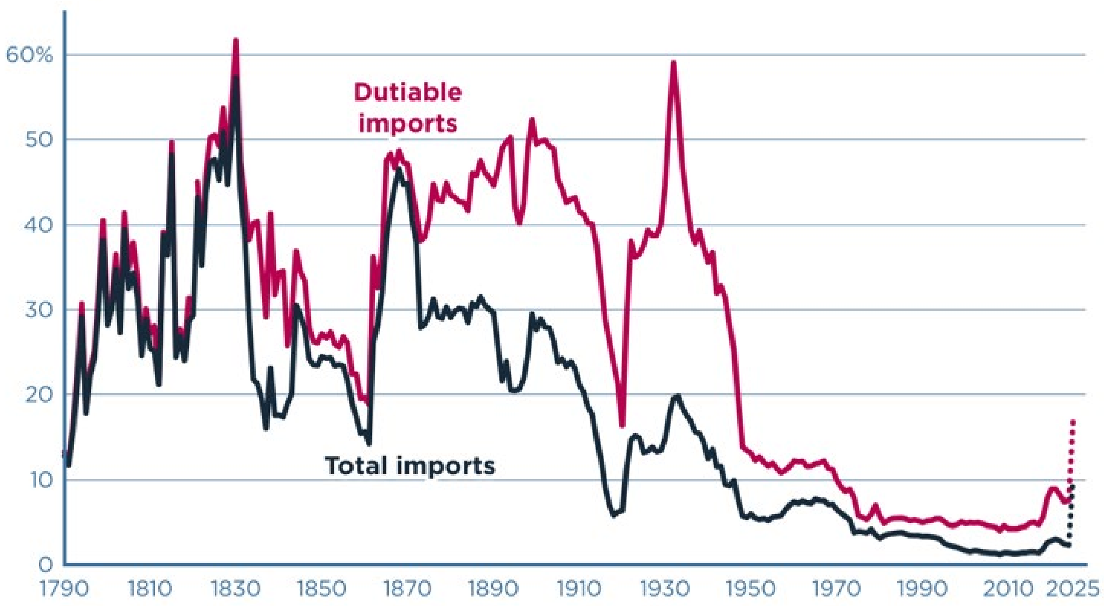
# Proposed Trade Tariffs Will Increase Prices

*Tariffs typically result in a one-time jump in the price level rather than ongoing inflation*

## Potential Return of Average Trade Tariff to World War 2 Levels




**Notes:** Dotted lines are projections.

**Source:** For 1790-1820: Douglas A. Irwin, "New Estimates of the Average Tariff of the United States, 1790-1820," Journal of Economic History 63, no. 2 (2003): 506–13. For 1821-1970: US Bureau of the Census, Historical Statistics of the United States (Washington, D.C., GPO, 1975), series U211-212, 1971-2023; US International Trade Commission, "US imports for consumption, duties collected, and ratio of duties to value, 1891-2023," May 2024.

PIIE

- Recent research finds that imports affected by the proposed higher tariffs would amount to 4.8% of GDP. This compares to 1.3% to 2.7% of GDP in historical tariff-raising episodes. The average effective tariff on dutiable imports would rise from 7.4% to 17.3%.

- **Higher tariffs have several impacts**:
  1. ***One-time price effects*** including a direct rise in import prices and an indirect effect in raising the cost of imported intermediate inputs (e.g., steel and aluminum).

  2. ***Stronger US dollar*** could partially offset imported inflation from higher tariffs.

  3. ***Slower economic growth*** from reduced trade could also partially offset inflationary effects.



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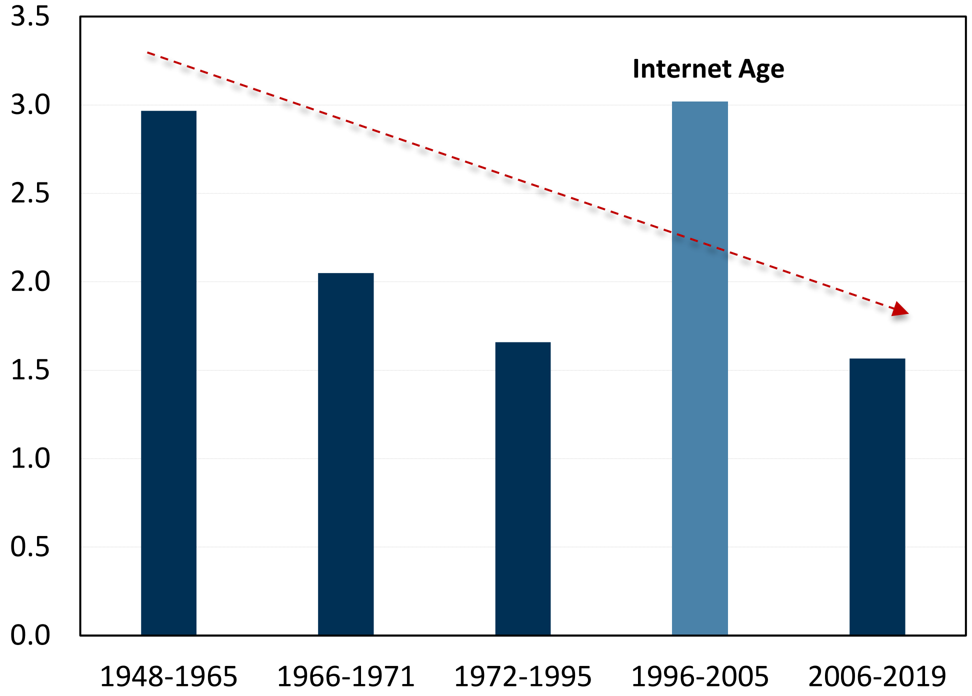
# Long-Term Productivity Growth Trending Lower

*Will AI reverse the trend or amount to a temporary boost versus the trend?*

**Long-term Decline in U.S. Labor Productivity Growth**
(average growth rate in selected periods)



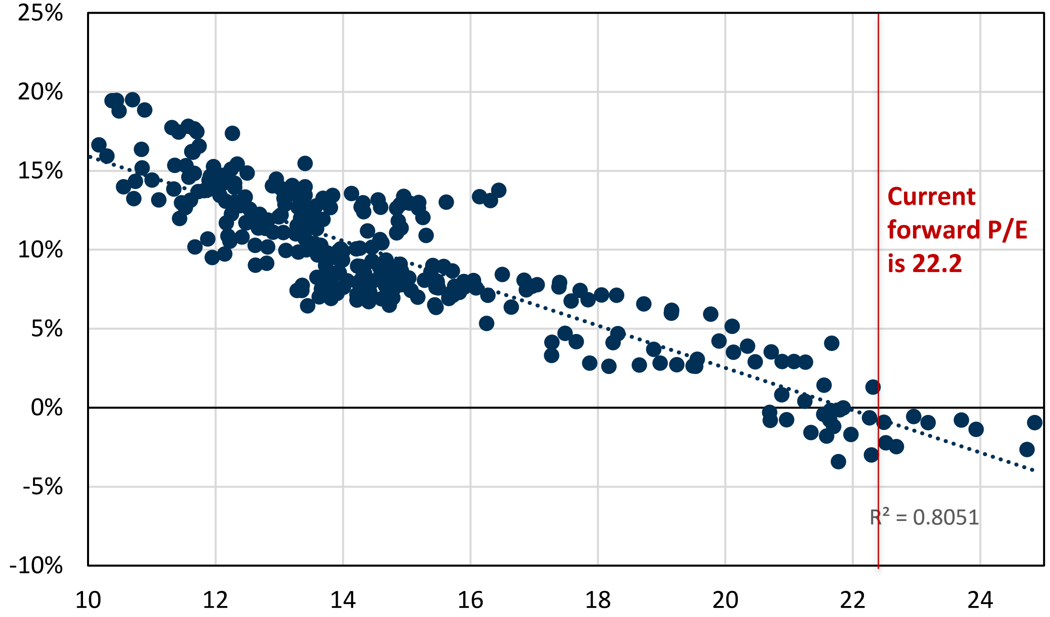

Sources: Chart based on U.S. nonfarm business sector output per hour worked, seasonally adjusted annualized rates. BLS data are provided via Bloomberg. Time periods and analysis are informed from Robert Gordon, 2012, "*Is U.S. Economic Growth Over? Faltering Innovation Confronts the Six Headwinds*". NBER Working Paper 18315.

- Robert Solow famously quipped in 1987 that "*You can see the computer age everywhere but in the productivity statistics.*"
- The "Internet Age" in 1996-2005 temporarily broke the long-term trend of falling average productivity growth.
- The 2020 pandemic makes post-2019 data hard to analyze. However, average productivity growth during 2021-2024 has declined further to about 1%.
- It's unclear if AI will be more like the post-1970s computer revolution (no obvious impact), Internet Age (temporary bump) or even reverse the long-term trend.

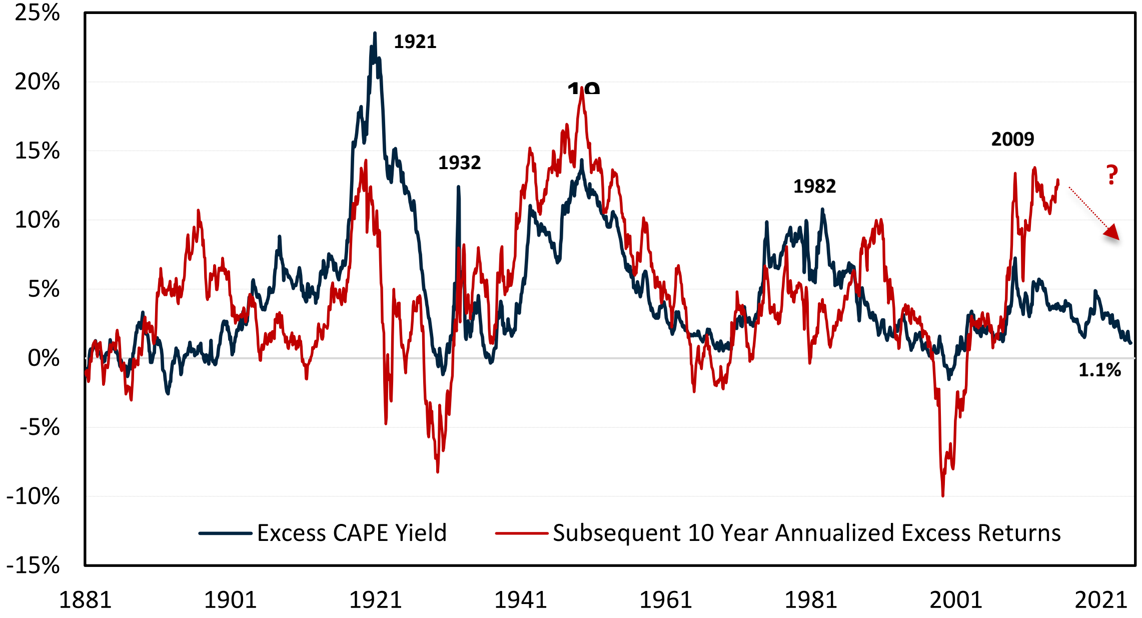
# Rich U.S. Equity Valuations Suggest Lower Returns

*Public equities look rich based on 12m forward P/E & Shiller's cyclically-adjusted P/E*

**Forward P/E of S&P500 and Subsequent 10-year Return**
(based on monthly data, 1990M3-2025M1)




**Excess Cyclically-Adjusted Earnings Yield of S&P500 vs. 10-Year Real Treasury Yield and Subsequent 10-year Equity Return**




- Forward P/E multiple for the S&P500 is based on expected earnings in the next 12 months. At 22.2, the forward P/E suggests lower 10-year expected returns based on historical patterns.

- Shiller's excess cyclically-adjusted earnings yield of just 1.1% also points to a lower 10-year expected return for U.S. equities.



Sources: 12-month forward P/E multiples for S&P500 based on Bloomberg consensus survey. Excess cyclically-adjusted earnings yield vs. 10-year Treasury yield provided via Robert Shiller online data.

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# Higher Yields Support Higher Treasury Returns

*Historically, starting yield is a large driver of subsequent 10-year realized returns*

**Higher Bond Yields Suggest Higher Expected Long-term Returns**

(based on monthly total returns, 1992M1-2025M1)


- Higher starting yields to maturity in 10-year Treasuries are a major driver of the subsequent realized total return in the next 10 years.
- As government bond yields have increased sharply since 2021, expected long-term returns have also increased.

Sources: Subsequent 10-year returns based on the Bloomberg 7 to 10-year Treasury total return index. Treasury yields also provided via Bloomberg.



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# Conclusion

*Inflation, economic growth & asset class valuations are key drivers of long-term WRS financial stability*

- **The long-term inflation trend is an important determinant of long-term payroll contributions, interest rates and investment returns**
  - Expected long-term inflation appears to remain anchored near the Fed's 2% target based on market pricing. However, long-term consumer inflation expectations have recently ticked materially higher.
  - The Fed will need to proceed cautiously in lowering modestly restrictive interest rates to contain inflationary pressures.

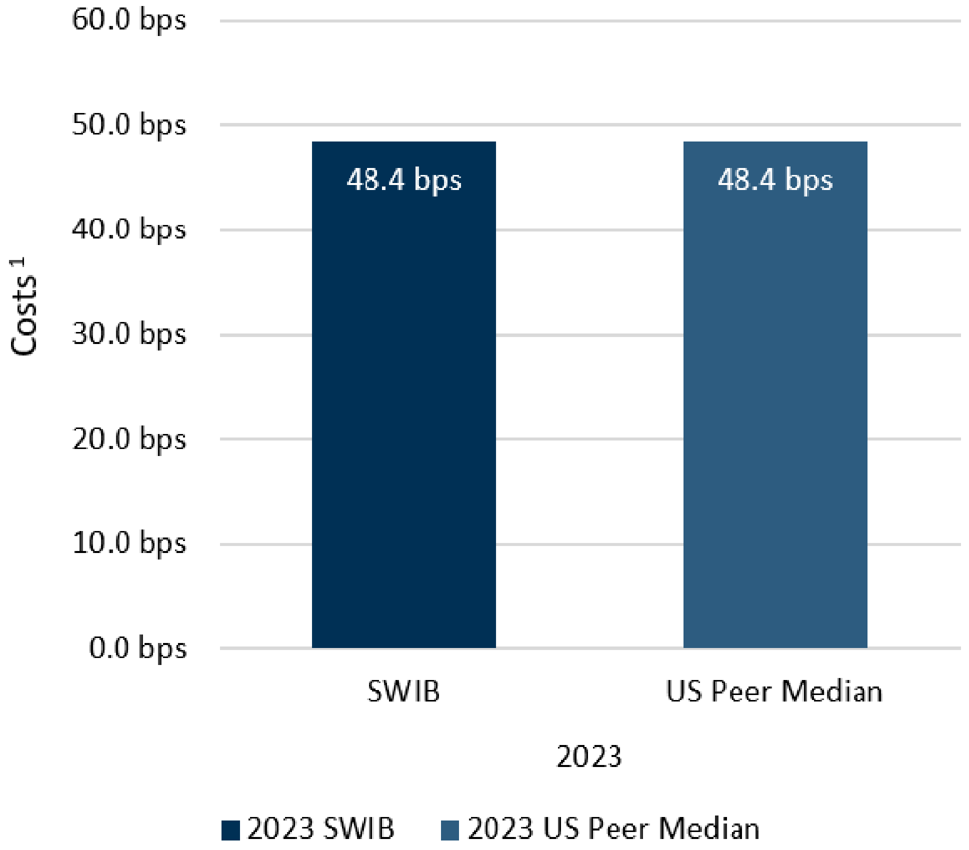
- **Long-term economic growth is an important driver that mainly reflects the trend in labor productivity and working age population growth**
  - Productivity and demographic factors are key determinants of long-term growth in labor earnings, real interest rates and investment returns.
  - Productivity has trended lower for decades while working age population growth will continue declining.

- **Historically, starting asset class valuations have been reliable predictors of long-term investment returns**
  - Public equities are richly valued in developed markets, especially large cap U.S. equity.
  - The material upward shift in Treasury yields since 2021 has boosted long-term fixed income returns.

# Cost Benchmarking

# SWIB's Costs vs. U.S. Peer Median

SWIB's costs, excluding performance fees, equals SWIB's U.S. peer median.




[1] Costs exclude external manger performance fees.



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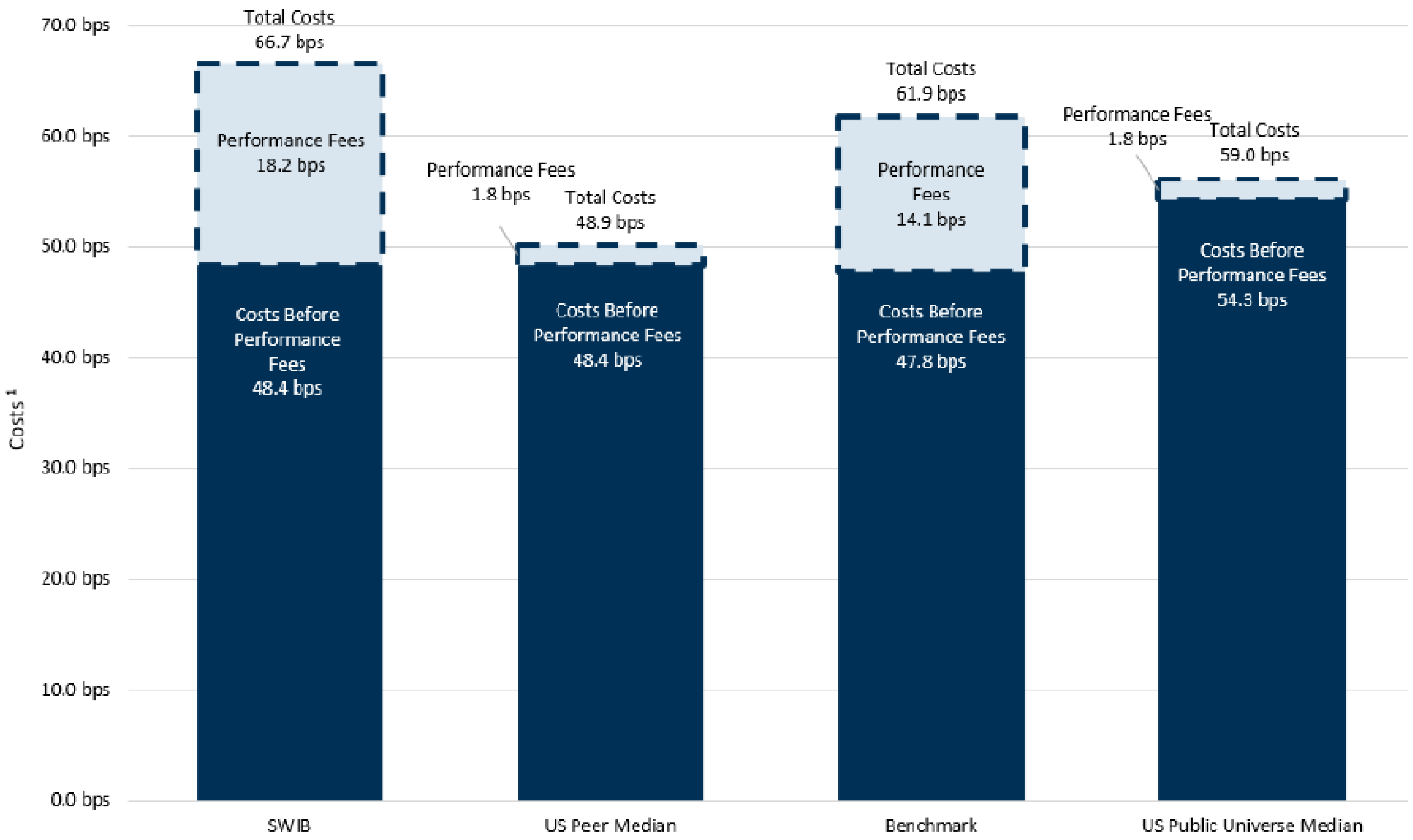
# Median Costs Including Performance Fees

SWIB's total costs are higher than other CEM measures. However, when adjusted for performance fees, SWIB's costs are equal to the peer median, slightly higher than the CEM benchmark, and lower than the U.S. Public Universe.



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# SWIB News

# Board of Trustees Update

- Trustee **Jeff DeAngelis** has been reappointed to 6-year term.
  - Former CIO of Northwestern Mutual Wealth Management Company and portfolio manager at Putnam Investments and Van Kampen Investments.
  - One of five members appointed by the Governor required to have at least 10 years of investment experience (Sec. 15.76(5)).
- Gov. Evers appointed **Robert Scott** to the Board.
  - Director of Finance & Administration for the City of Brookfield.
  - Appointed by the Governor as a representative of a local government that participates in the SIF through LGIP (local government investment pool) (Sec. 15.76 (1r)).

Jeff DeAngelis

Robert Scott



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Pensions&Investments

## 2024 Influential Women in Institutional Investing

- The award recognizes women who are having an outsized impact on the professional investment and retirement market as well as driving positive change in the industry.
- Anne-Marie manages 29 investment and 12 operations professionals across 8 lines of business with an aggregate $73 billion under management.
- Since joining SWIB in 2020, her teams **have added over $3.6 billion in outperformance** to the WRS.

**Anne-Marie Fink**

Private Markets & Funds Alpha
Chief Investment Officer



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## 2024 Rising Star

chief investment officer

## Class of 2024 NextGens

- Rising Stars are recognized as distinguished allocators across several accomplishments including thought leadership, innovation, and alpha generation.

- NextGens are allocators who stand to become chief investment officers themselves someday and are known for their virtuous mixture of financial knowledge, interpersonal skills, and forward thinking.

**Chase Nicholson**
Senior Portfolio Manager



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## Allocators' Choice Awards – 2024 Hedge Fund Allocator of the Year

- The eight-member Funds Alpha Team was nominated for growing SWIB's hedge fund portfolio through exceptional performance, innovation, and strategic vision, and positioning themselves as leaders in the hedge fund industry.
- The Funds Alpha Team has grown its hedge fund portfolio to an impressive **$8.3 billion**, generating over **$1.4 billion in value add for the WRS** from 2018-2023.

**Derek Drummond**
Head of Funds Alpha

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Wisconsin Retirement System Insights

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**www.swib.state.wi.us/podcasts**

## Some Recent Episodes:

**Episode 33**
*An In-Depth Look at SWIB's Investments in Wisconsin, with Chris Prestigiacomo*

**Episode 32**
*A Look Back at 2024 and Ahead to 2025, with Edwin Denson*

**Episode 31**
*Small Cap Stock Play a Big Role in SWIB's WRS Investment Strategy, with Joy Mukherjee*



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# Need More Information?

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# Questions