






NYC Board of Education Retirement System Investment Meeting (Public)

BERS

Schedule Wednesday, June 18, 2025 9:30 AM — 1:30 PM EDT
Venue Live Stream: <https://vimeo.com/nycpensionmeeting>
Organizer Kim Boston

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9:45 AM	Quarterly Presentation (Public): -Market Overview -Performance Update -Risk Update	3
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10:15 AM	New MWBE Definitions Memo:	59
	 Revised MWBE and DVBE Definitions Fiscal Year 2025 BERS 06.18.2025.pdf	60
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PUBLIC AGENDA -

Welcome and Opening

Quarterly Presentation (Public):

- Market Overview
- Performance Update
- Risk Update



BERS INVESTMENT MEETING

PUBLIC SESSION



June 18, 2024

US AND GLOBAL INFLATION

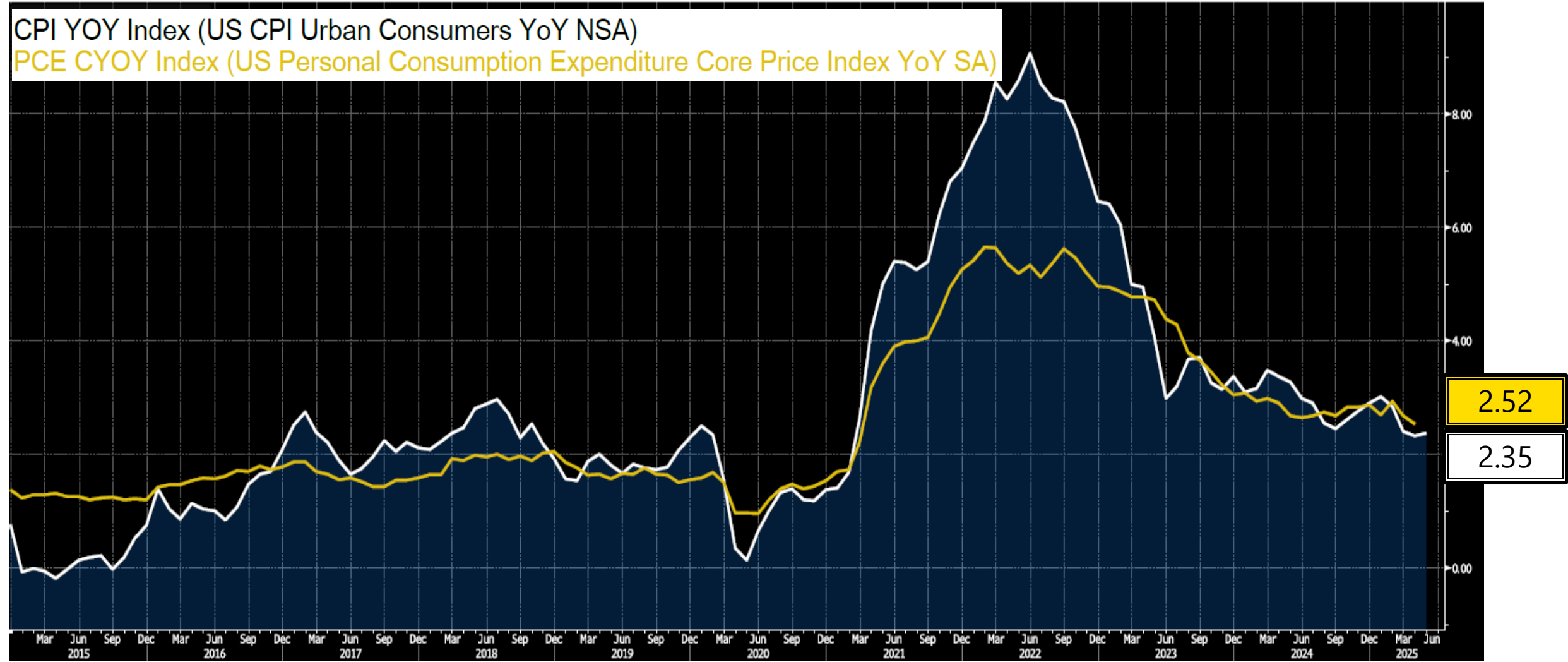
Markets

On inflation, no bad news is good news

Source: Financial Times, May 11, 2025



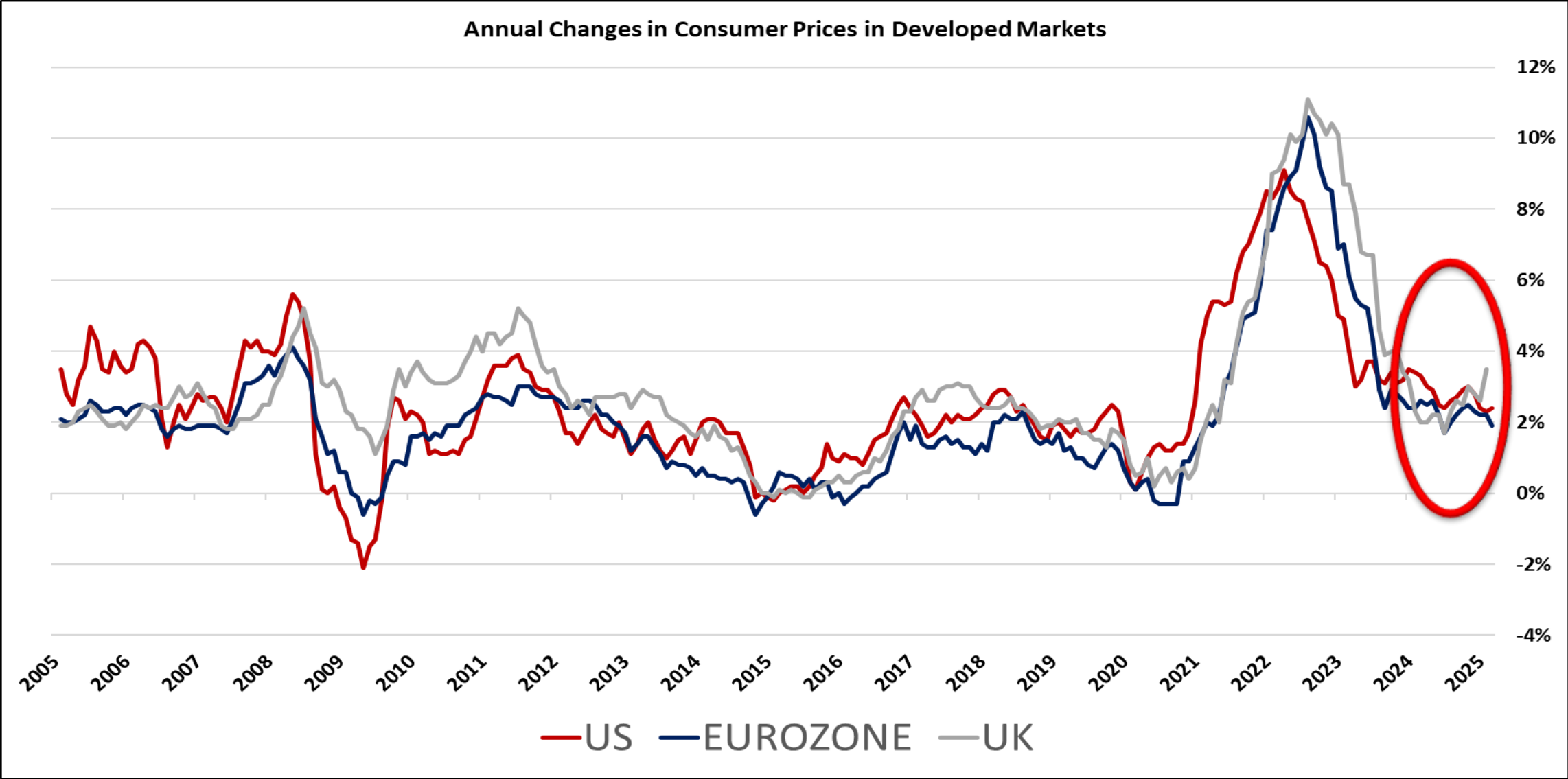
INFLATION



CPI values as of 5/31/25
PCE values as of 4/30/25



INFLATION AROUND THE WORLD



US EMPLOYMENT

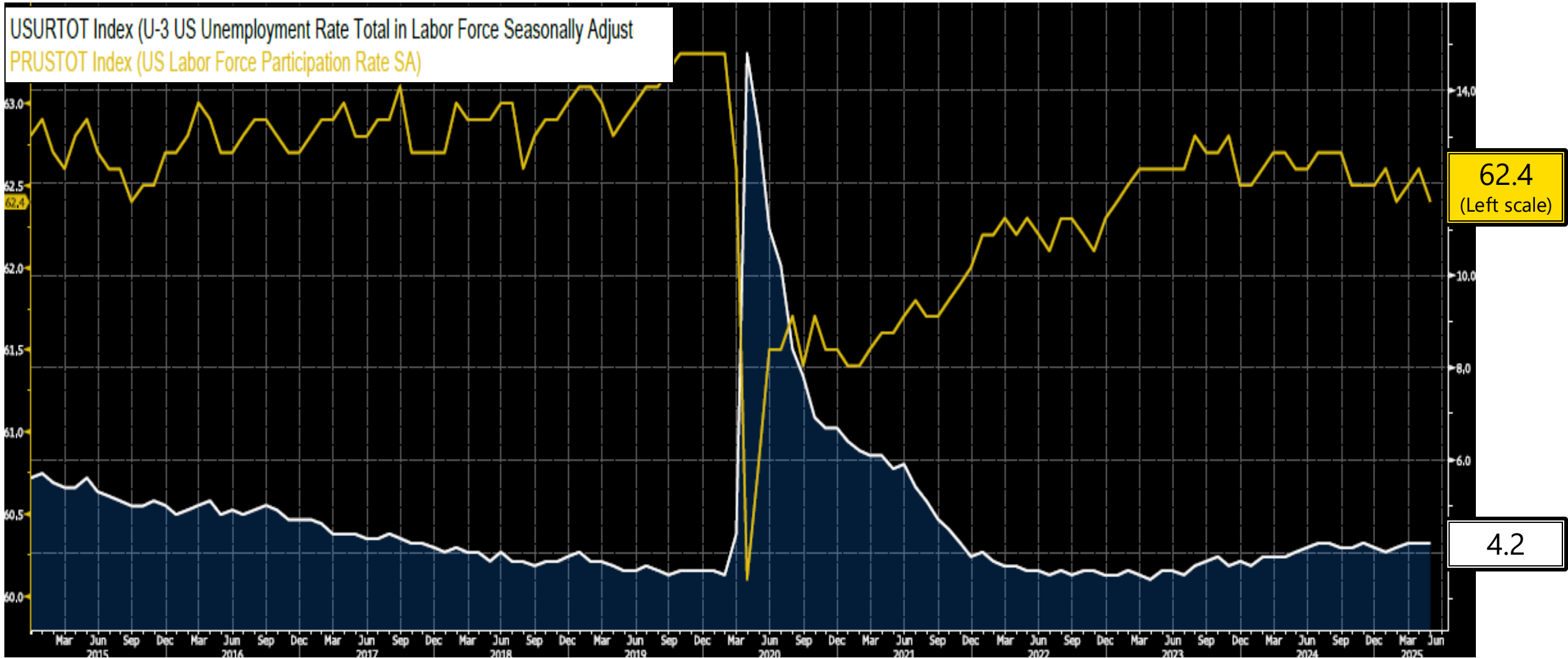
Employers Added 177,000 Jobs in April Despite Tariff Uncertainty

The labor market steadily added jobs despite tariff announcements that many economists expect will give way to a slowdown later this year.

Source: The Wall Street Journal, May 2, 2025



UNEMPLOYMENT



US AND NON-US ECONOMIC GROWTH

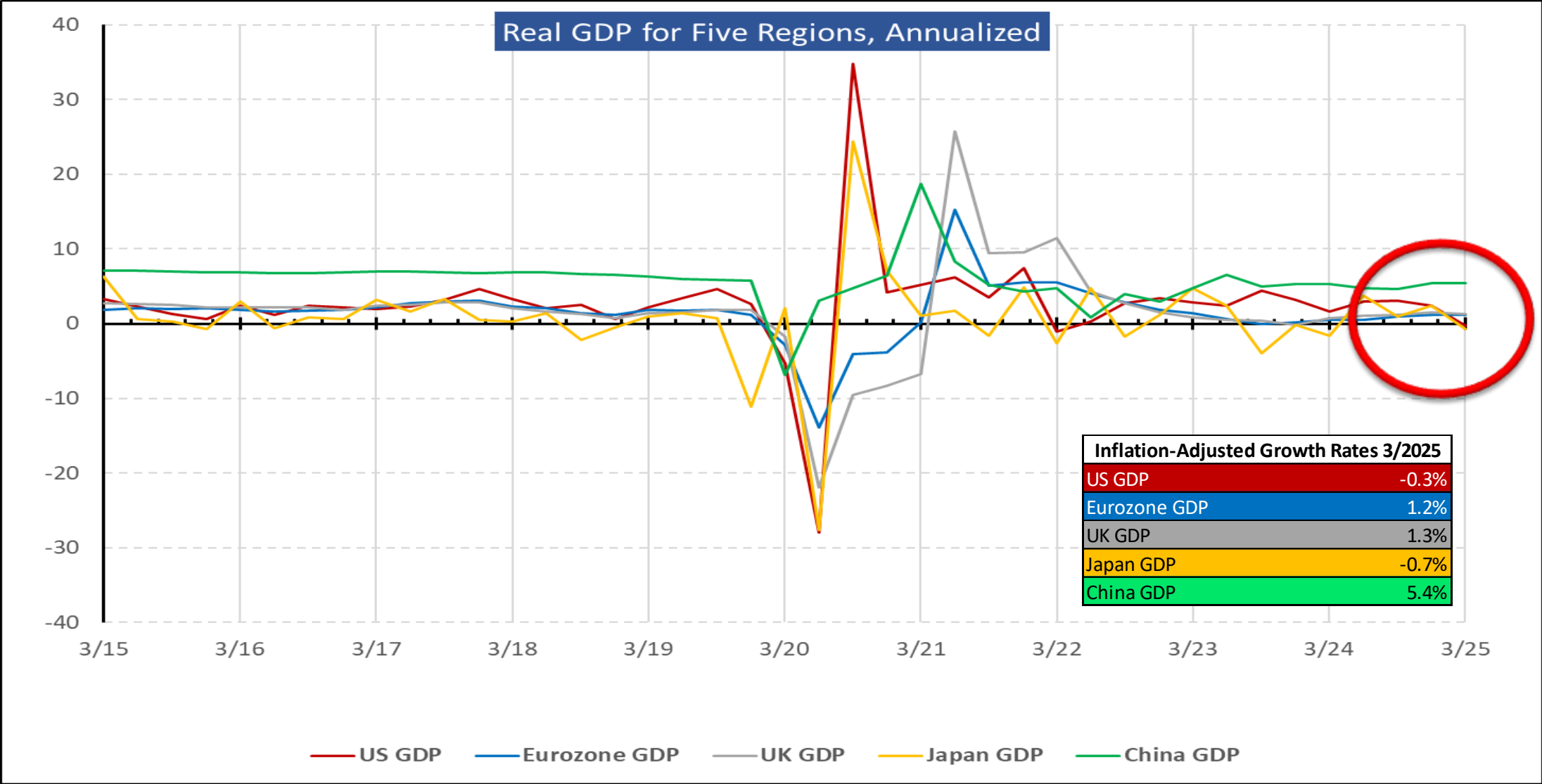
The GDP Drop Isn't as Bad as It Looks

The economic contraction last quarter should make policymakers cautious about an extended trade war.

Source: Bloomberg, April 30, 2025



ECONOMIC GROWTH



US AND GLOBAL INTEREST RATES

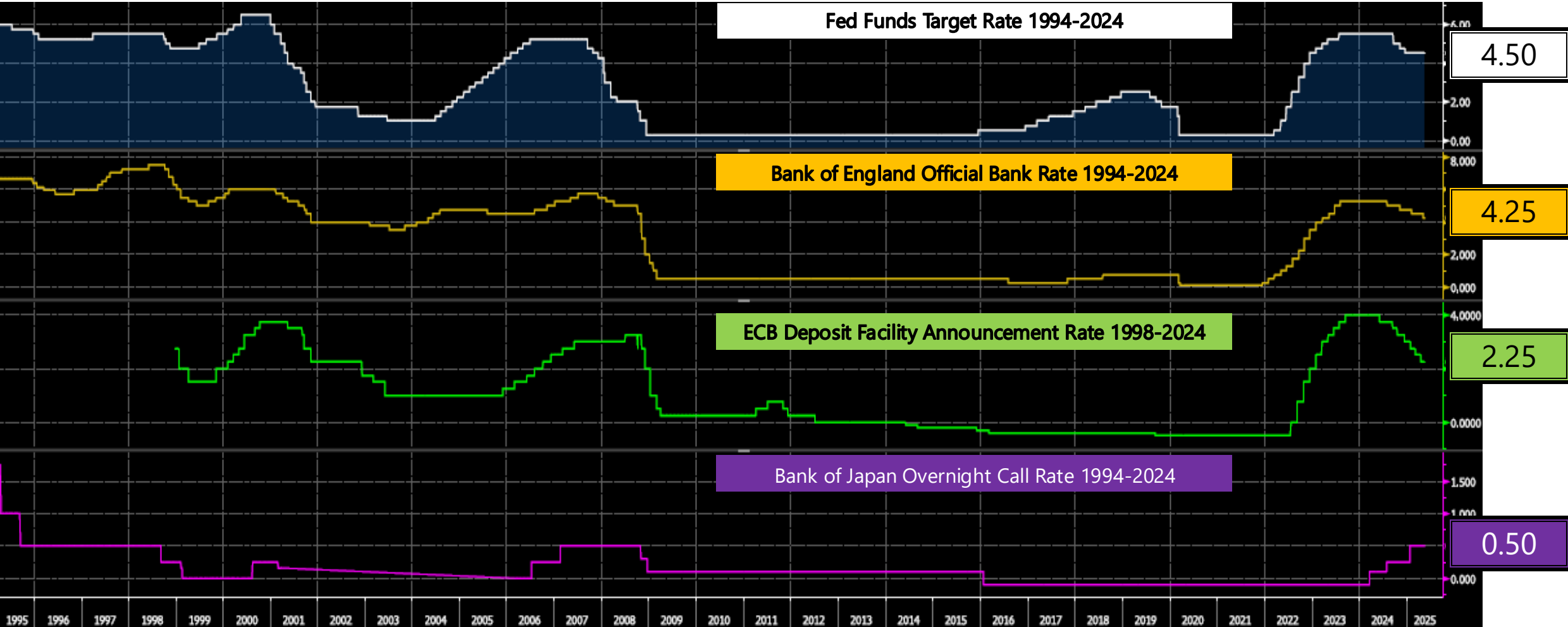
Why the Fed Isn't Ready to Join Other Central Banks in Cutting Rates

The U.S. faces risks of higher inflation and unemployment. Countries without tax hikes on imports are focused on the hit to growth.

Source: The Wall Street Journal, May 8, 2025



GLOBAL RATE TARGETS



US CREDIT SPREADS AND US TREASURY YIELDS

US Treasuries Slip Ahead of Auction With Spotlight on Demand

US Treasuries edged lower and were on track to snap three days of gains on Wednesday, as attention turns to a fresh wave of supply after recent auctions signaled weaker demand for government paper.

Source: Bloomberg, May 28, 2025

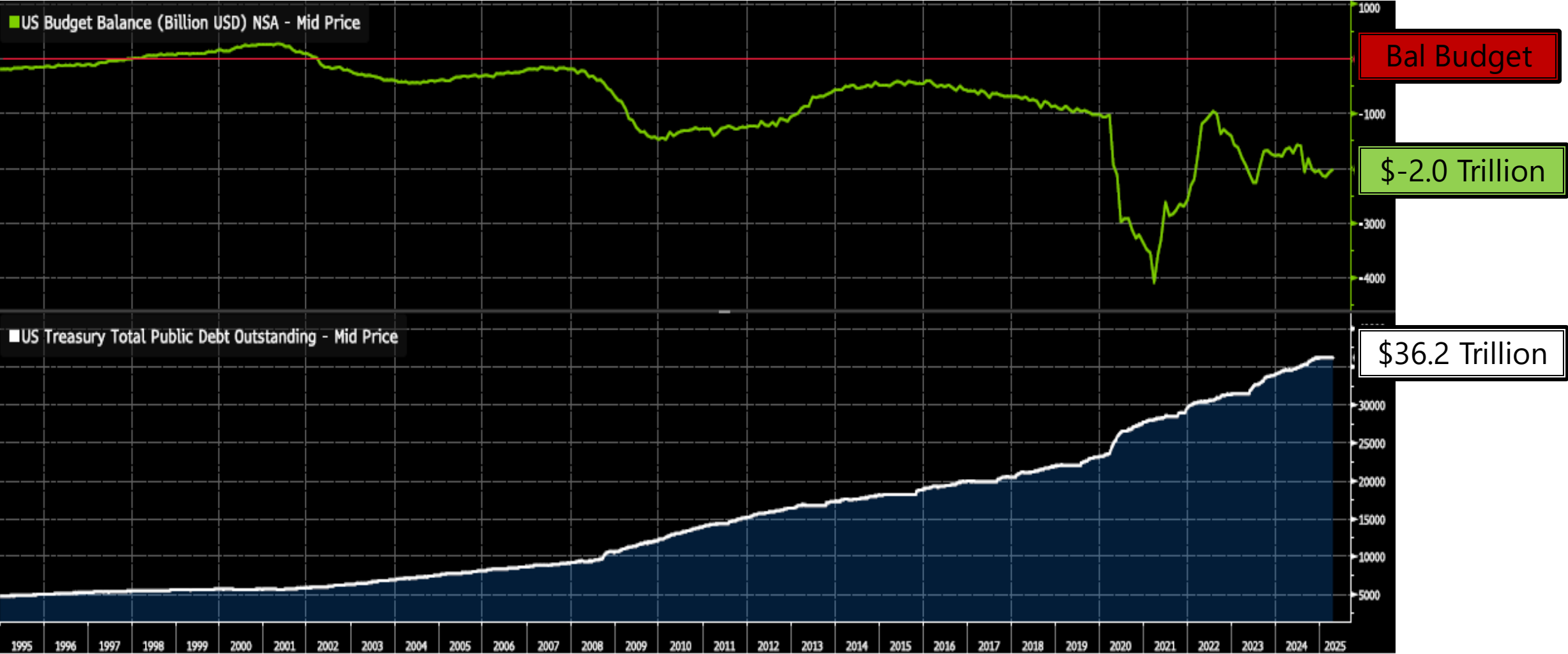
Japan's 40-year bond sale draws weakest demand since July

Long-dated debt sells off as concerns mount over world's third-largest market

Source: Financial Times, May 28, 2025



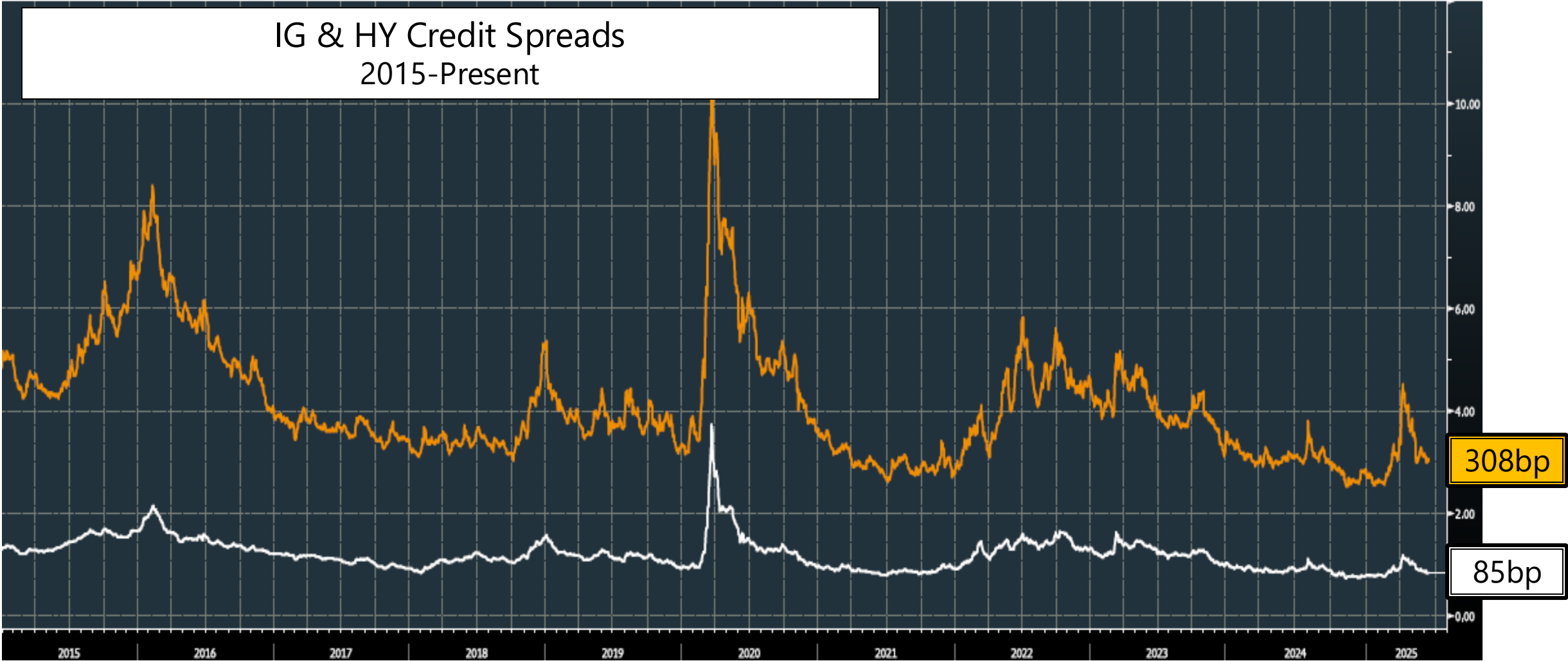
U.S. DEFICIT SPENDING AND NATIONAL DEBT



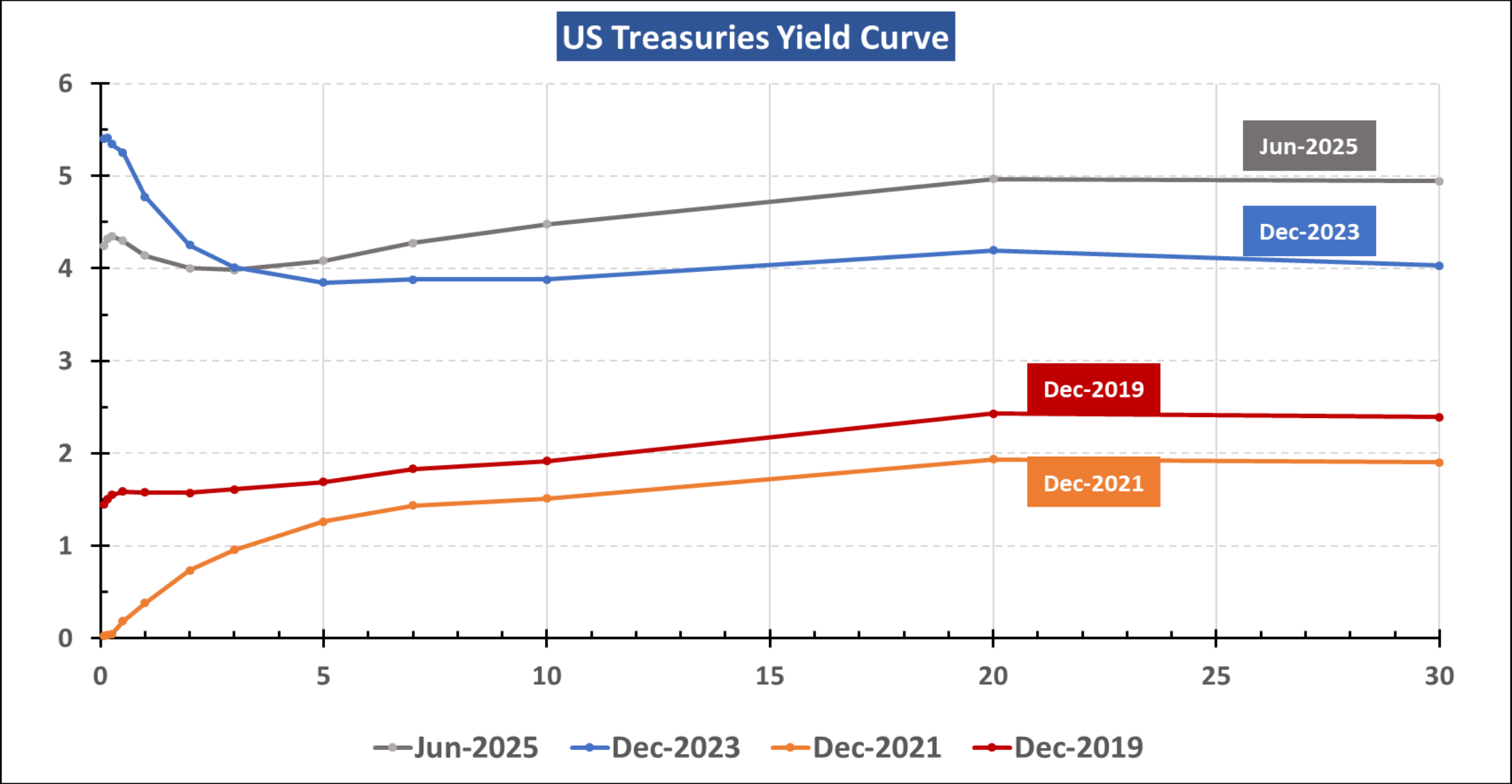
30 Years Ended April 30, 2025



CREDIT SPREADS



U.S. TREASURY YIELDS



U.S. TREASURY YIELD HISTORY



10 Years Ended June 16, 2025



U.S. TREASURY YIELD SPREADS



US STOCK AND BOND MARKET RETURNS

US stocks jump as Donald Trump touts 'positive' progress on EU trade talks

Stronger than expected consumer confidence reading adds to buoyant investor mood

Source: Financial Times, May 28, 2025



BENCHMARK RETURNS, Q1-2025

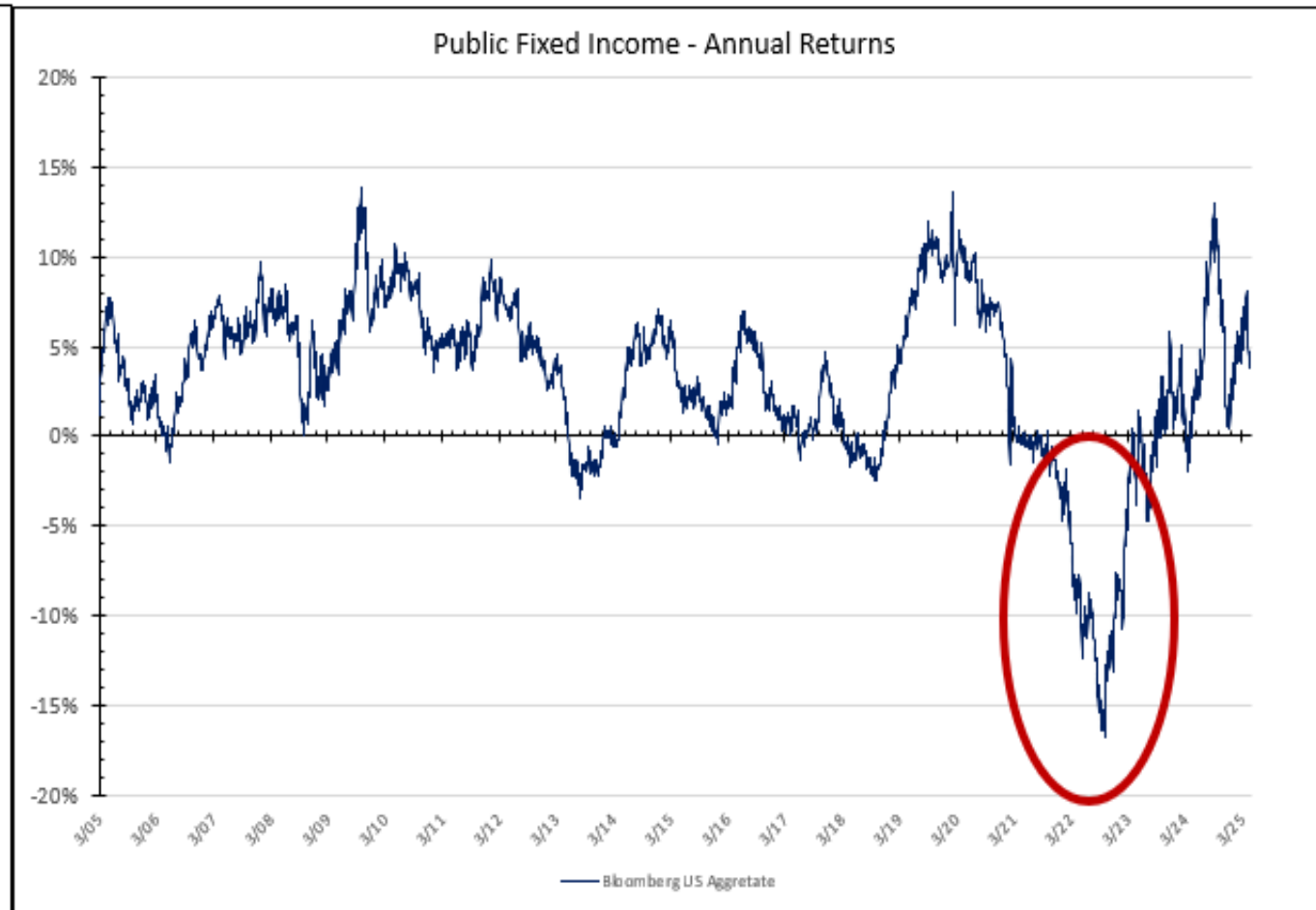
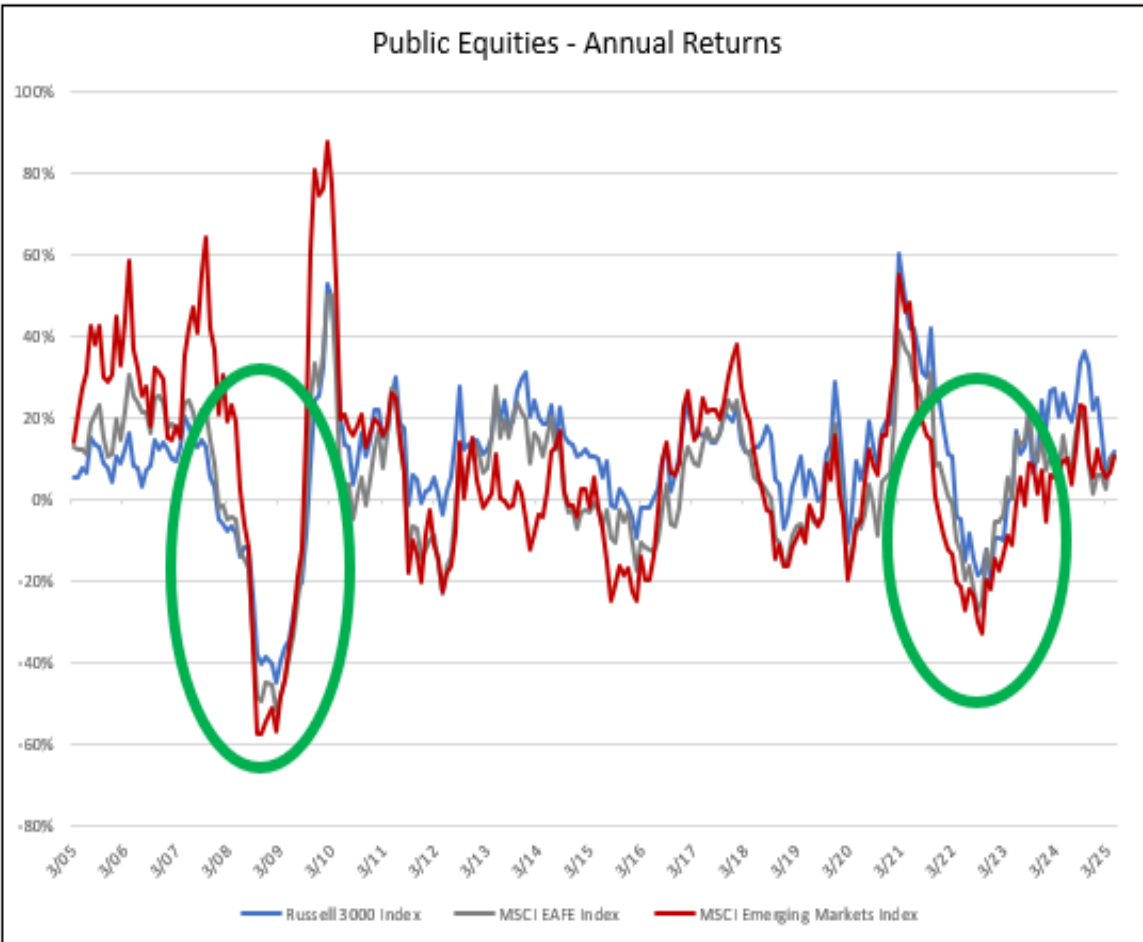
Asset Class	Index	Q1-25	1 Year	3 Year	5 Year	Expected*
Equities - U.S.	Russell 3000	-4.7%	7.2%	8.2%	18.2%	6.7%
Equities - Developed Intl	MSCI World ex USA IMI Net	5.8%	5.1%	5.0%	12.0%	7.0%
Equities - Emerging Intl	MSCI EMERGING MARKETS	2.9%	8.1%	1.4%	7.9%	8.1%
Debt - US Government	NYC Treas/Agency +5	4.1%	3.4%	-3.2%	-4.4%	3.9%
Debt - Investment Grade	Bloomberg U.S. Corporate IG	2.3%	4.9%	1.1%	1.4%	4.4%
Debt - High Yield	Bloomberg U.S. HY -2% Issuer Cap	1.0%	7.7%	5.0%	7.3%	5.2%

*Average of consultant long-term arithmetic expected market returns as of 1H '23



MARKET RETURNS

Trailing 12-month returns over the last 20 years



Values through 5/31/25



RECENT NEWS

Trump's Tariffs: Where Things Stand

The basics on the president's far-reaching protectionist agenda

Source: The Wall Street Journal, May 25, 2025



FOOD FOR THOUGHT

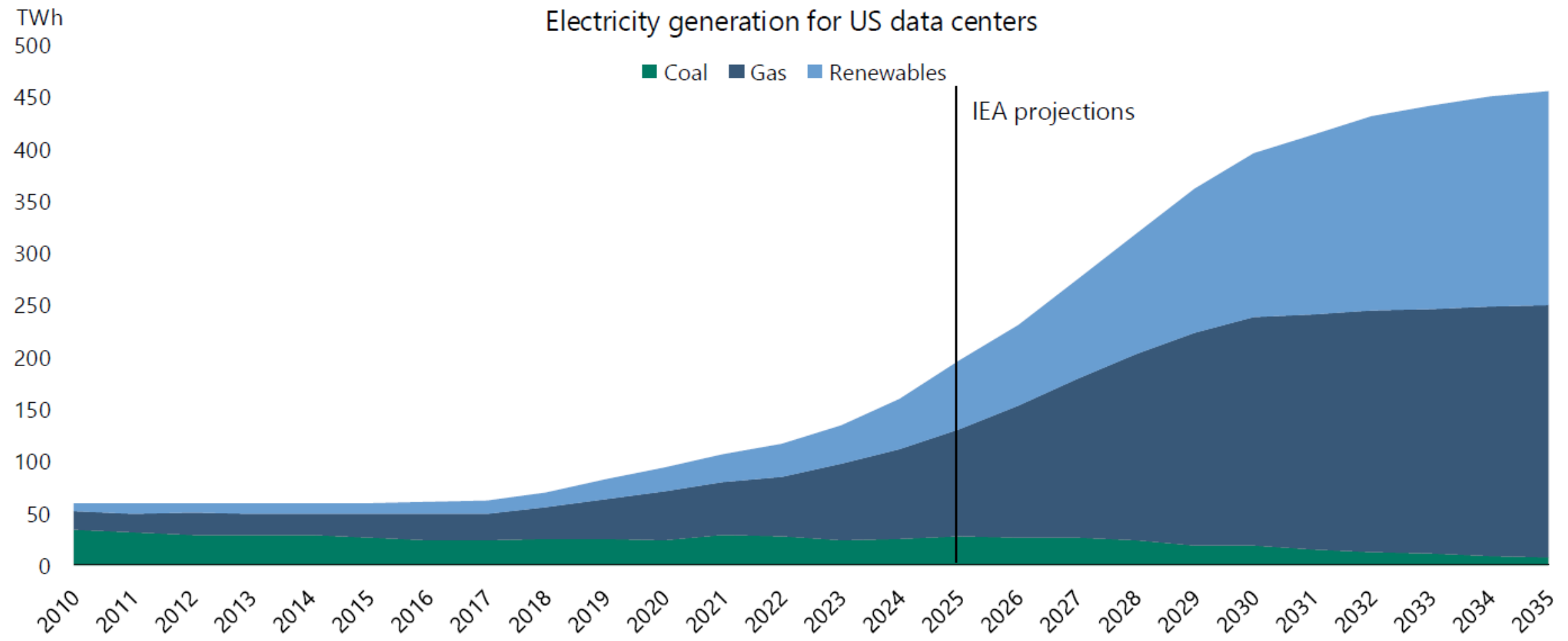
10 downside risks to the US economic outlook

1. Moody's downgrade increasing borrowing costs for US consumers and firms
2. The ongoing negative impact of tariffs on earnings
3. Trade deal uncertainty and trade war retaliation risk
4. Extremely high uncertainty for business planning and weak corporate confidence
5. Consumer spending slowing because of higher prices in stores such as Walmart
6. Historically weak consumer confidence
7. Lower tourism
8. Student loan payments restarting
9. Housing demand weakening because of higher mortgage rates
10. DOGE laying off government workers



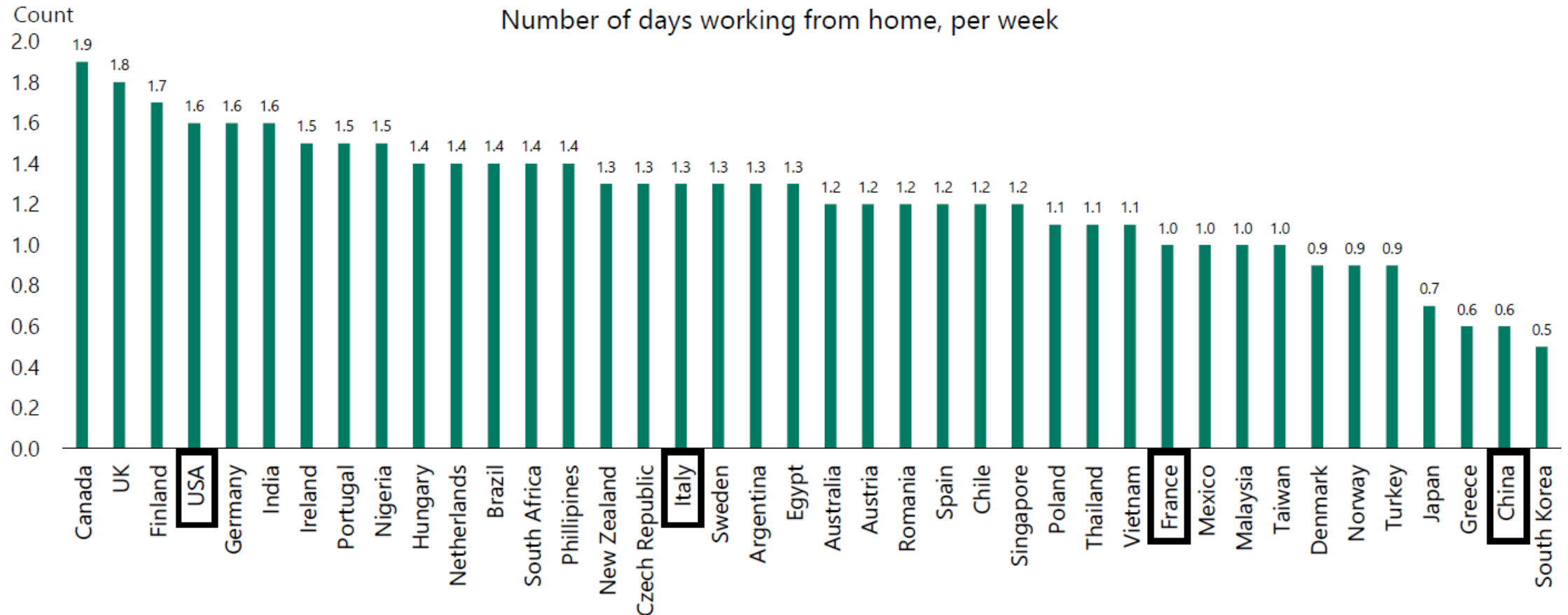
FOOD FOR THOUGHT

US data centers are currently powered mainly by gas and coal



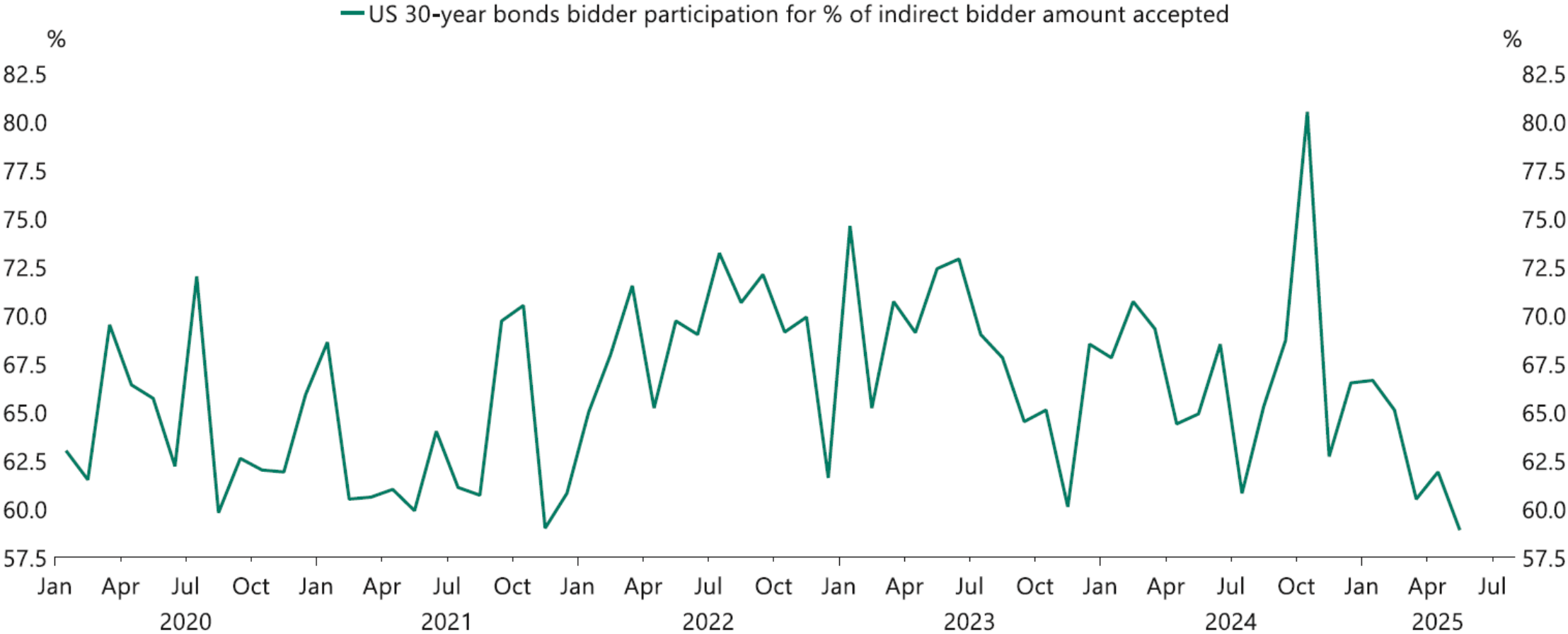
FOOD FOR THOUGHT

Average number of days working from home every week, by country



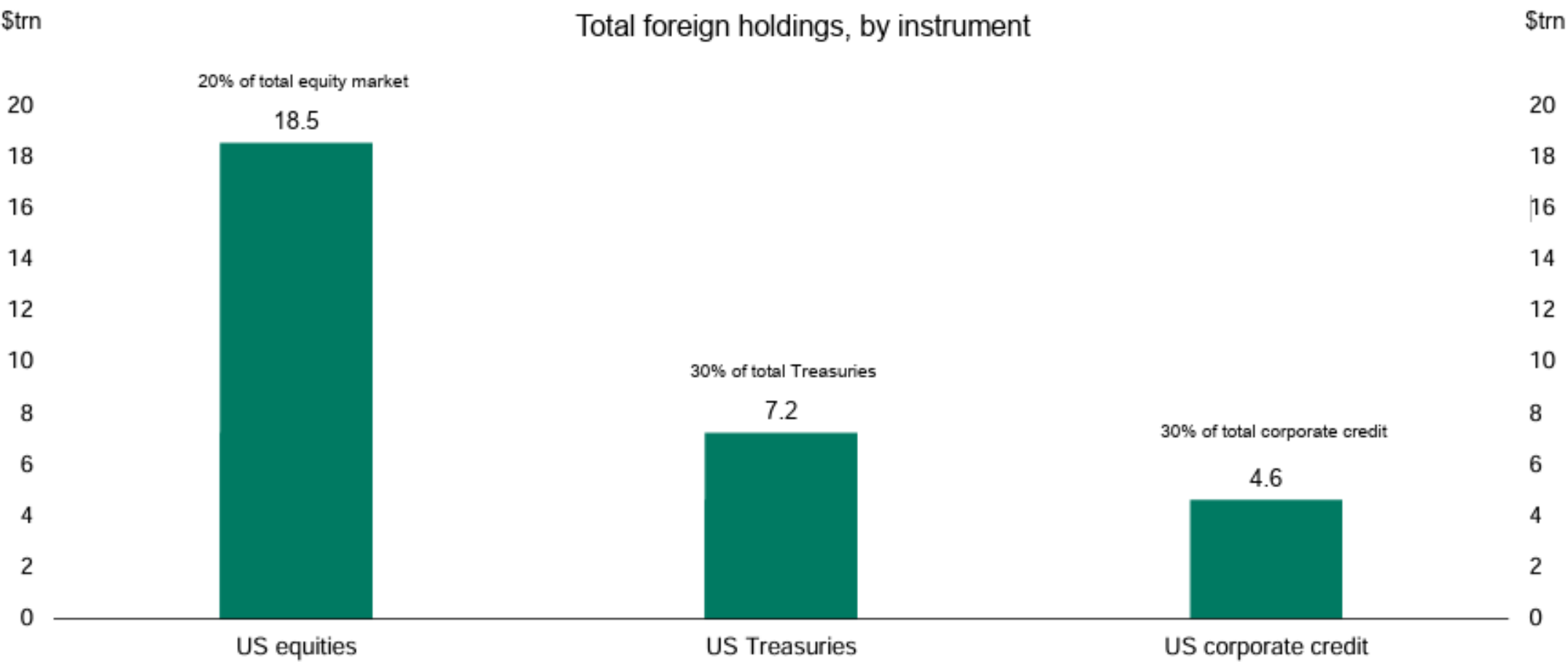
FOOD FOR THOUGHT

30-year Treasury auctions: Foreign participation (indirect bidding) going down



FOOD FOR THOUGHT

Total foreign holdings of US equities, Treasuries, and US credit



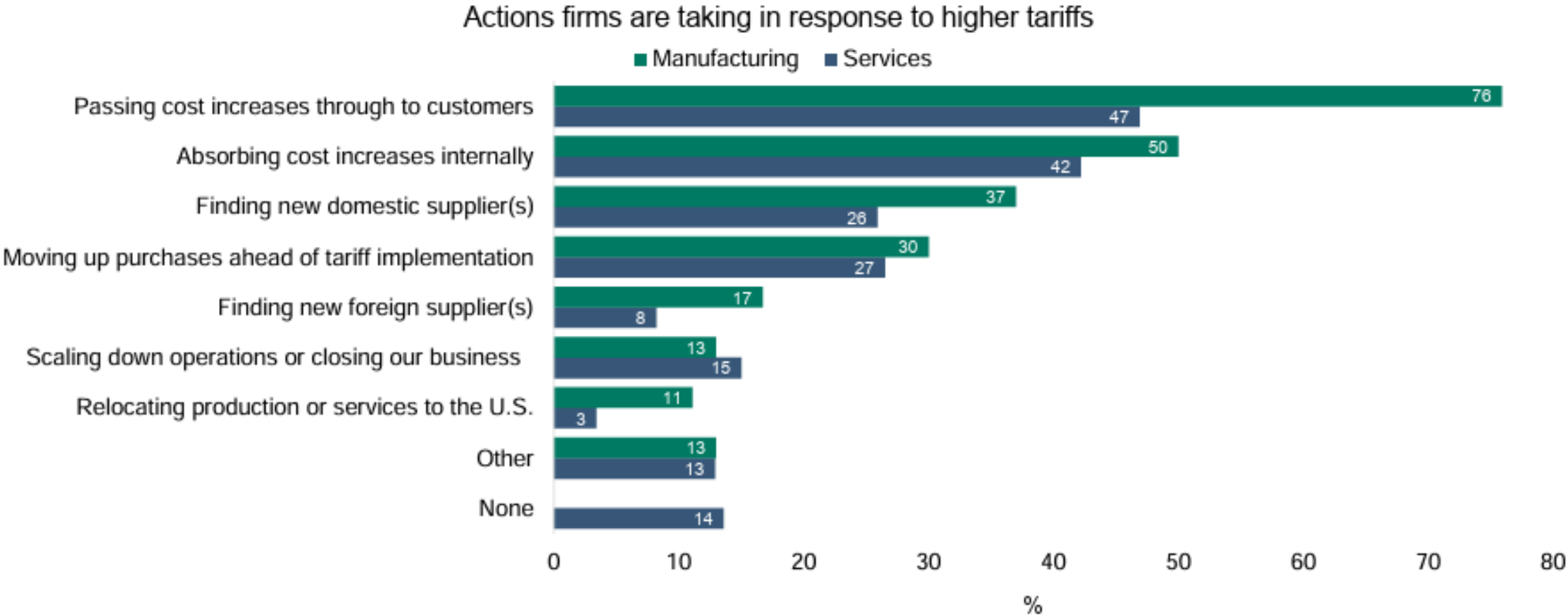
FOOD FOR THOUGHT

Sector impact of tariffs



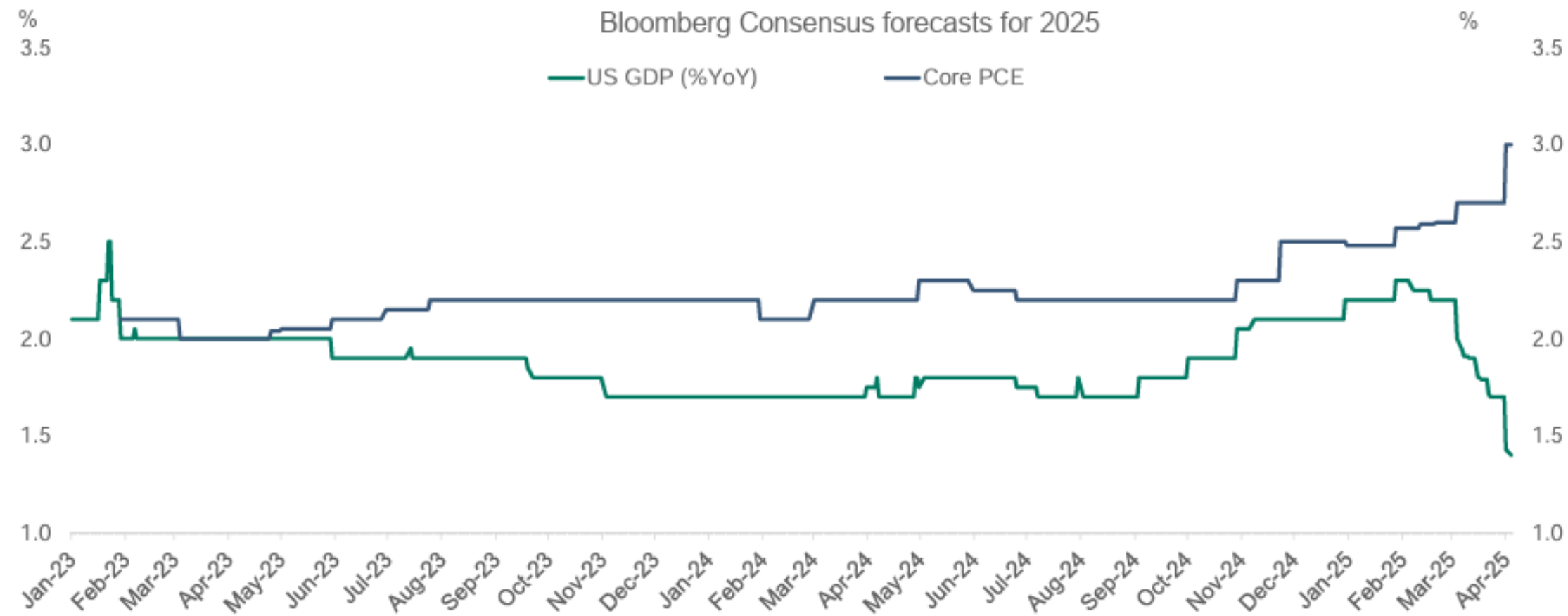
FOOD FOR THOUGHT

Firms plan to pass tariff-related costs to consumers



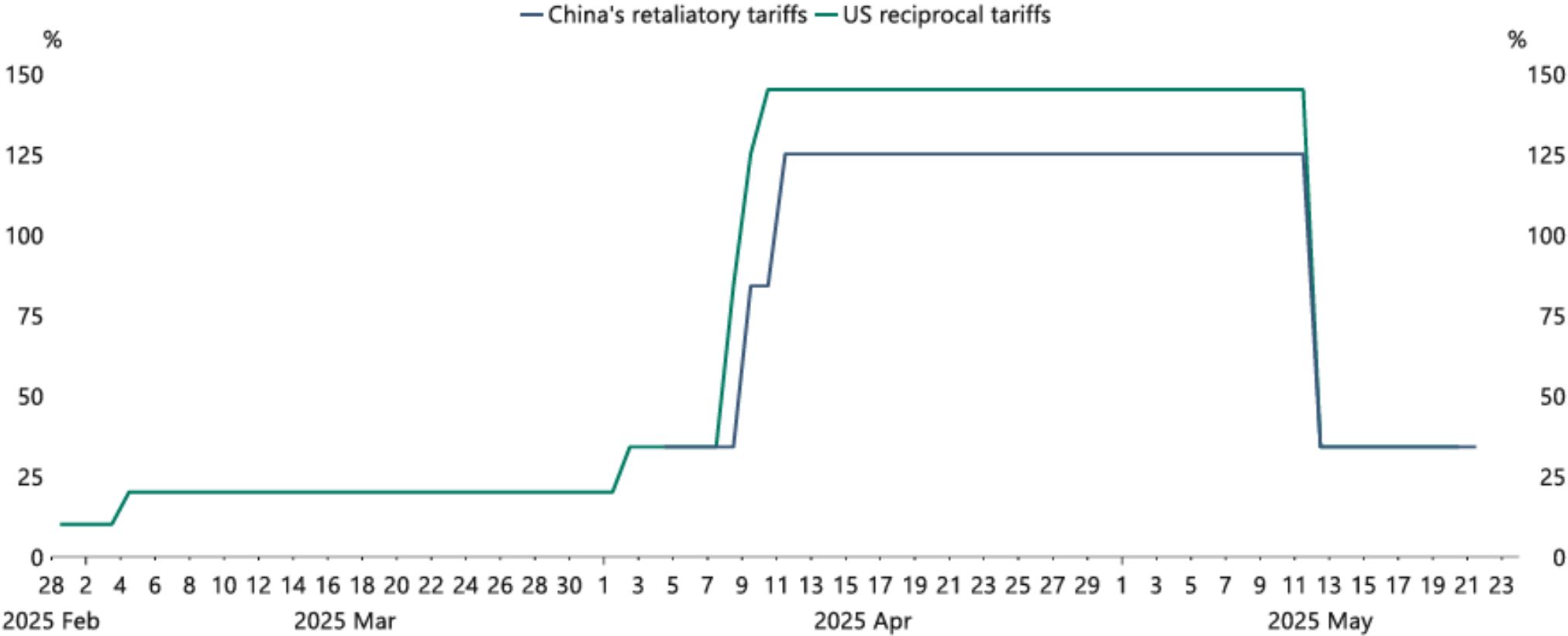
FOOD FOR THOUGHT

Consensus forecasting stagflation



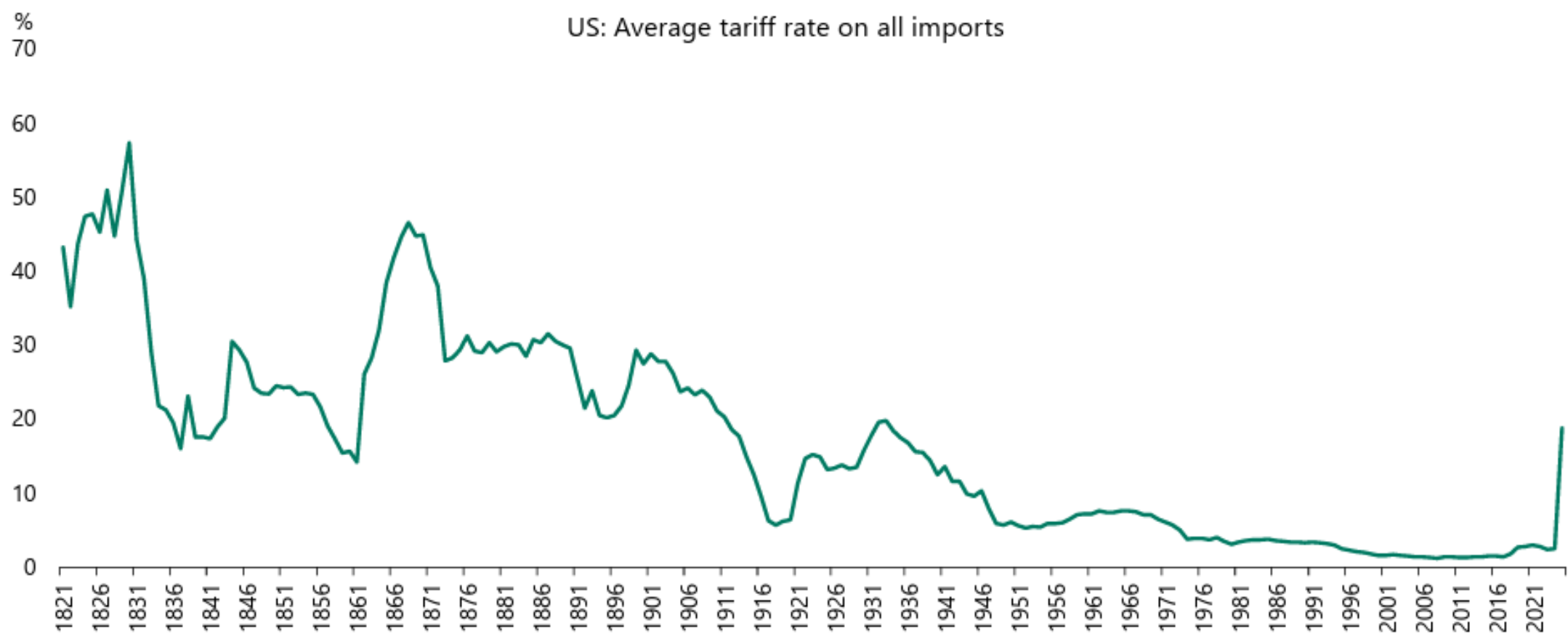
FOOD FOR THOUGHT

Tariff timeline for the US-China trade war



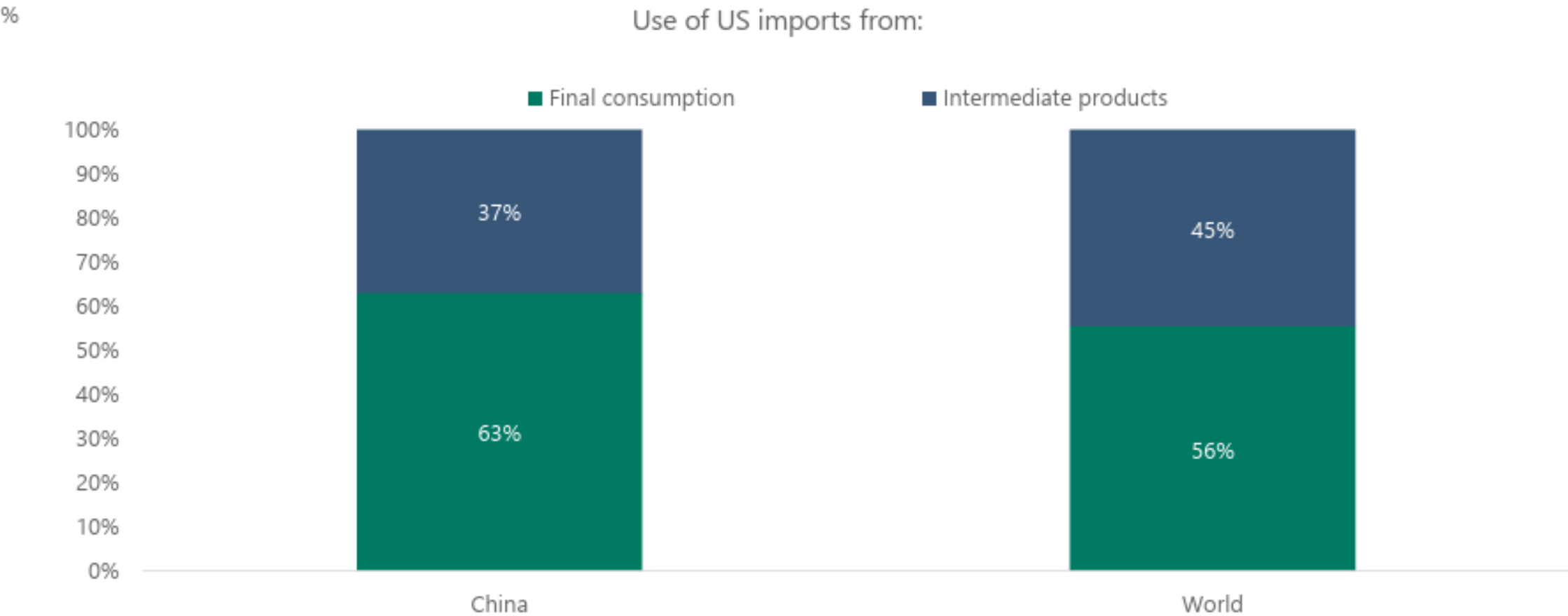
FOOD FOR THOUGHT

During the 2018 trade war with China, the average tariff rate went up from 2% to 3%. Today the average tariff rate is 18%.



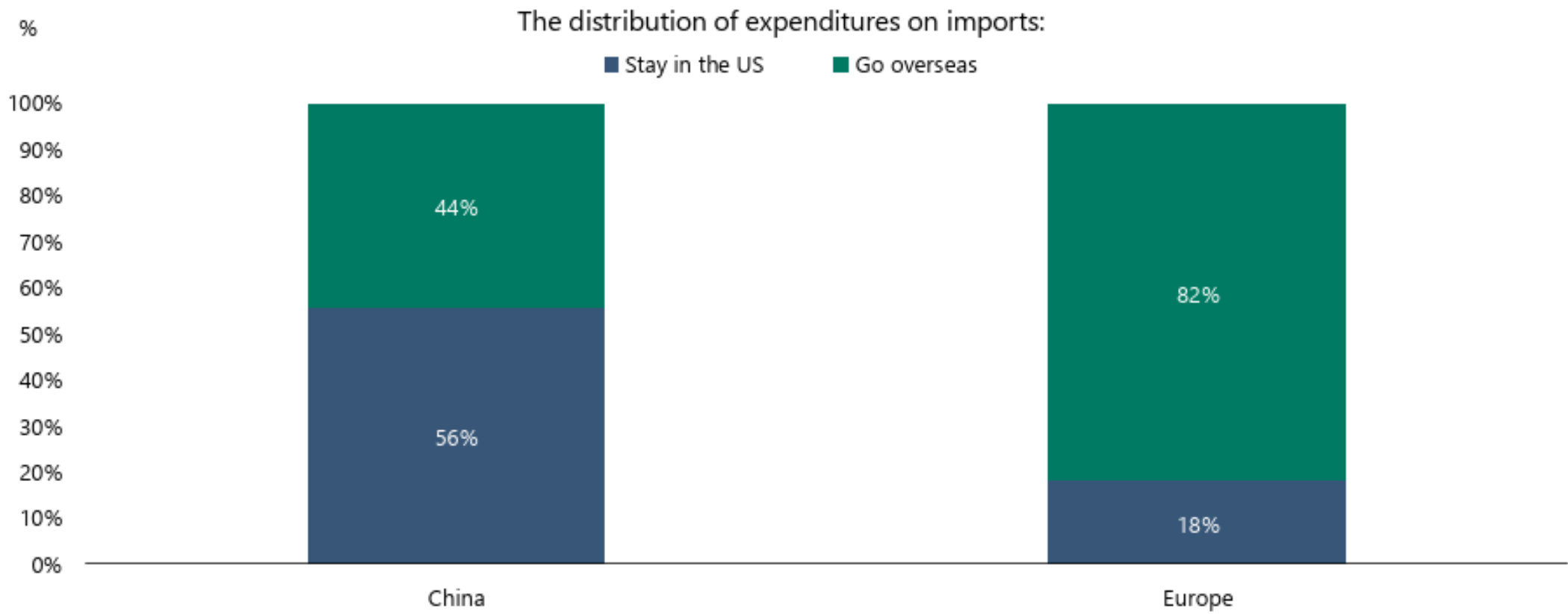
FOOD FOR THOUGHT

37% of US imports from China are intermediate goods used in US production



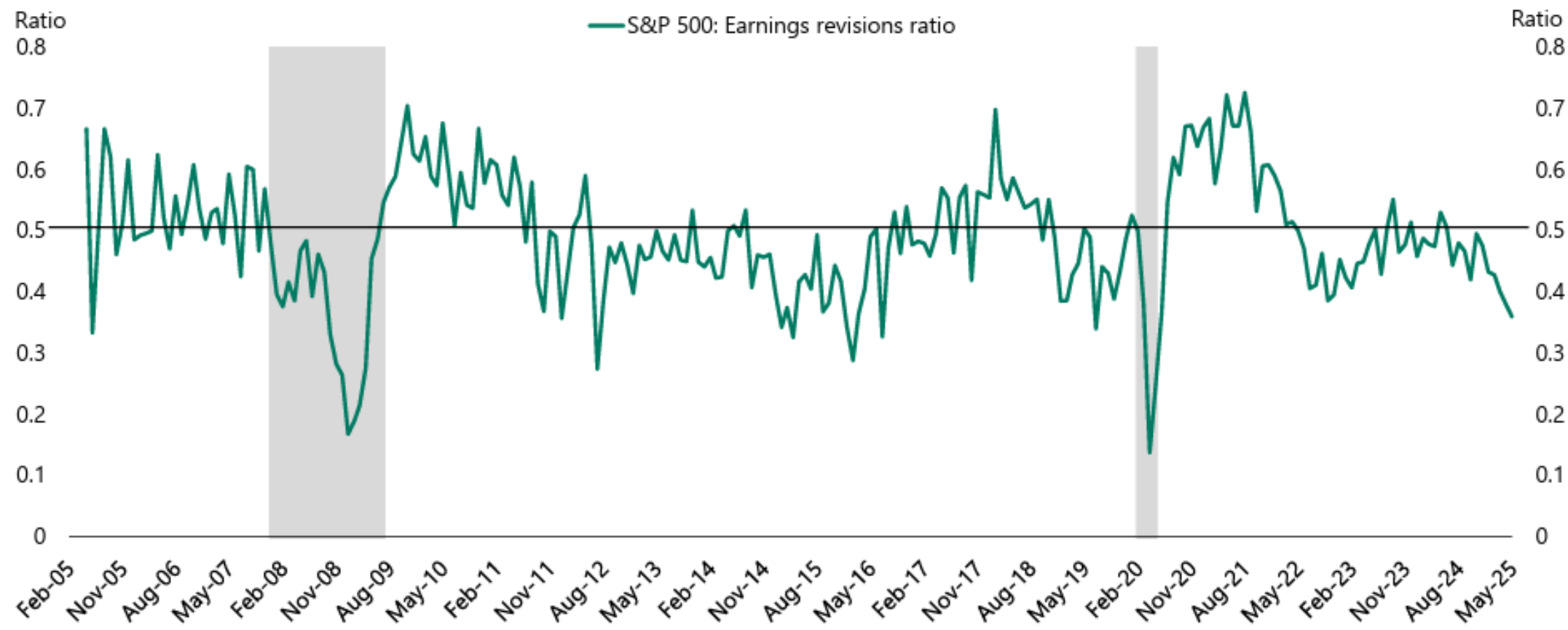
FOOD FOR THOUGHT

More than half of expenditures on goods coming from China stays in the US



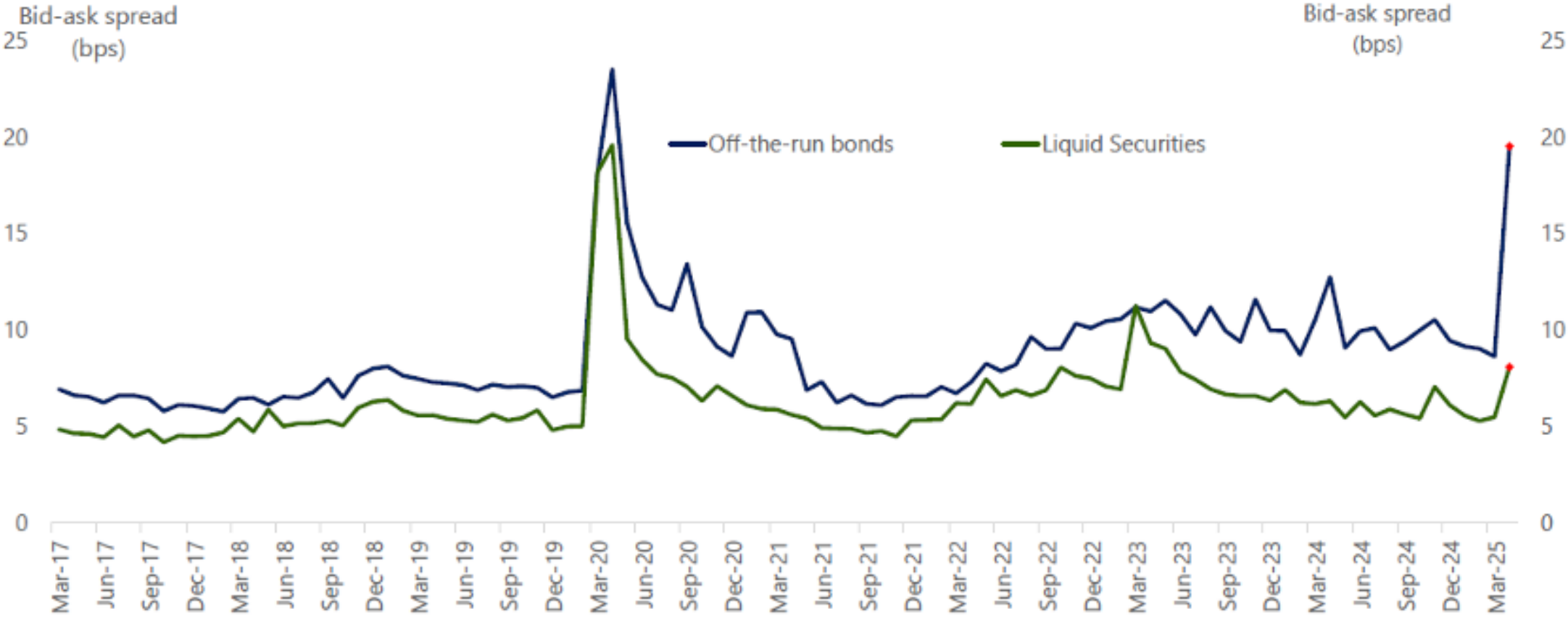
FOOD FOR THOUGHT

Corporate earnings expectations deteriorating



FOOD FOR THOUGHT

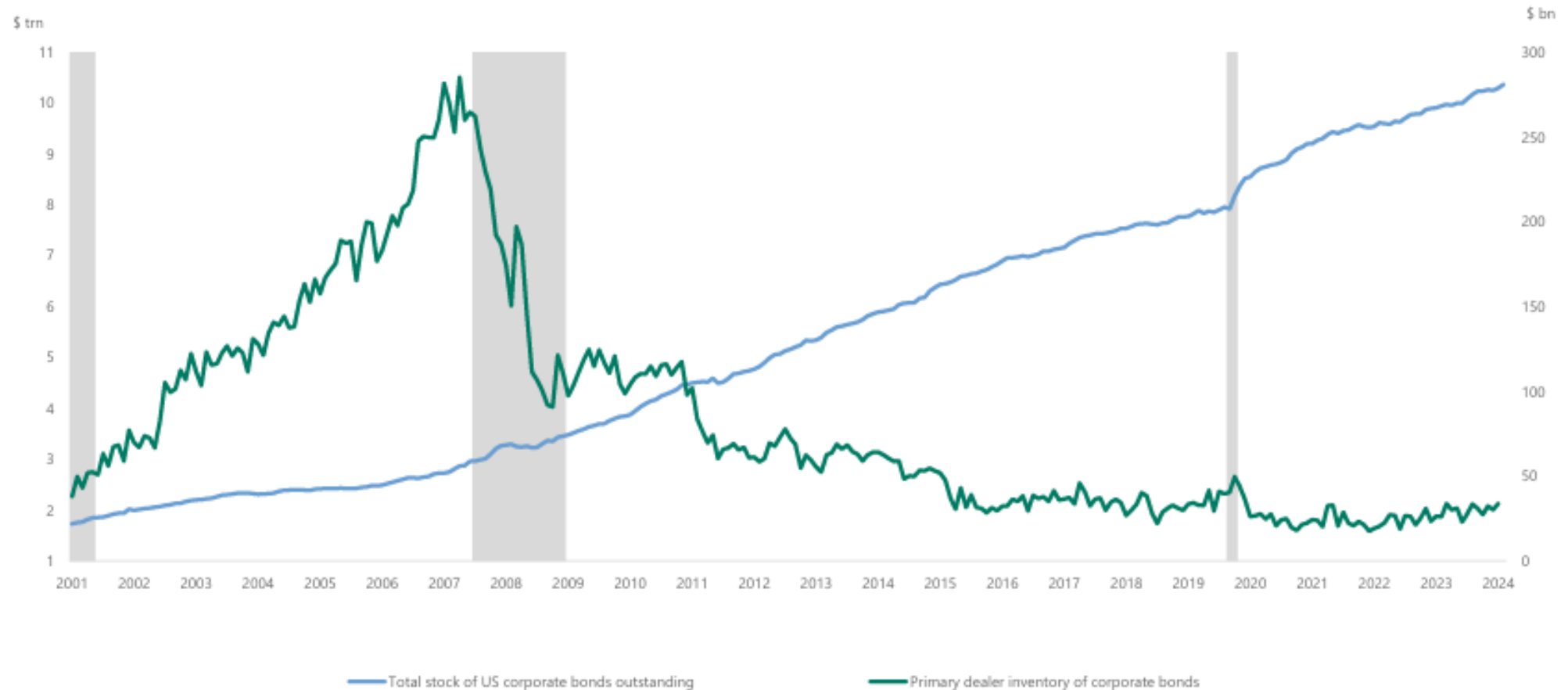
Bid-Ask spreads widening in IG credit markets



FOOD FOR THOUGHT

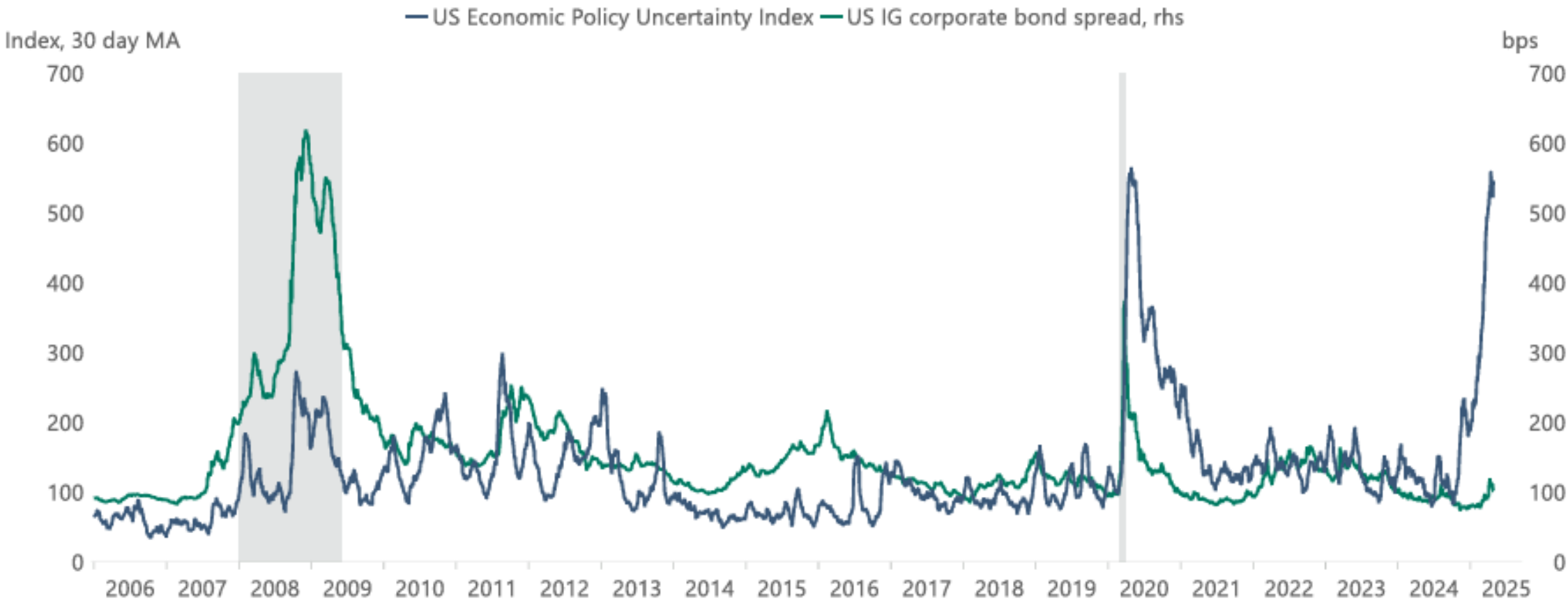
Low liquidity in public credit markets:

Dealer balance sheets are a fraction of their pre-GFC size while the market has grown 3x



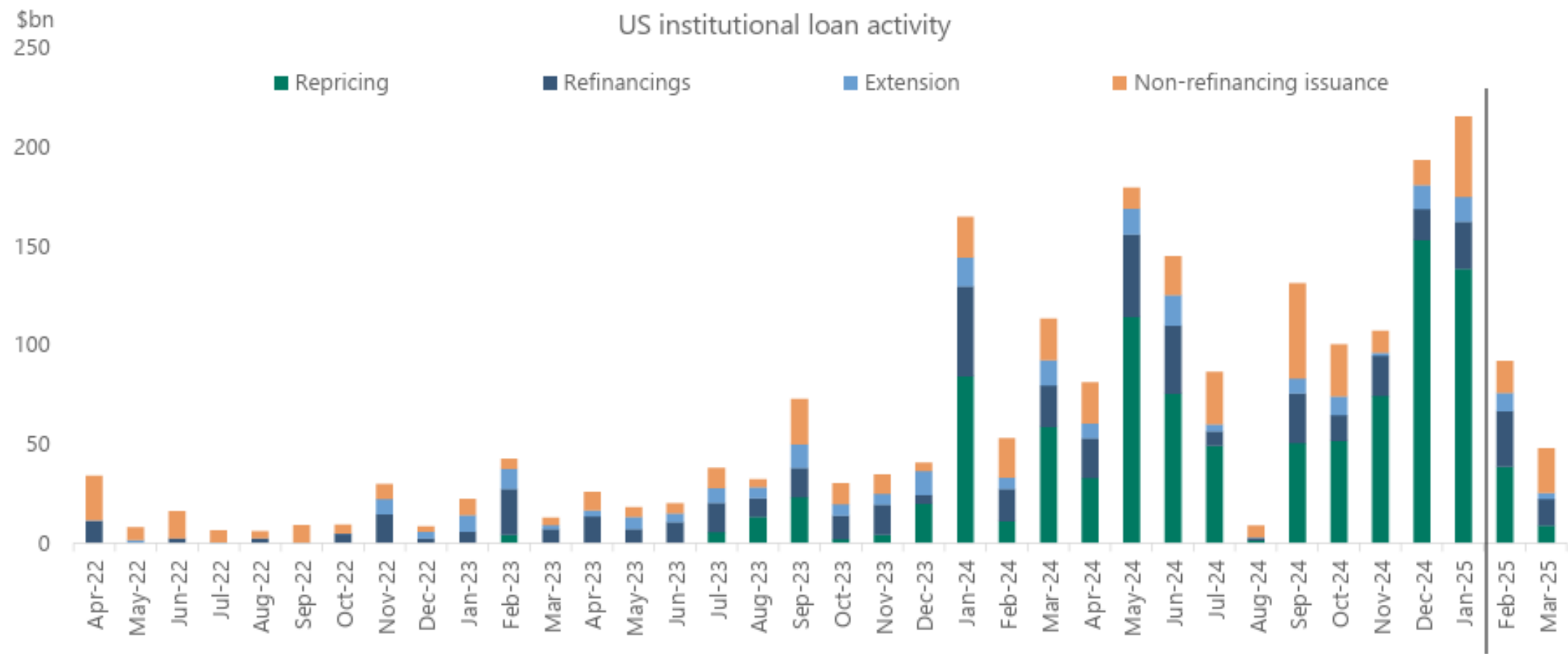
FOOD FOR THOUGHT

IG spreads are disconnected from the economic policy uncertainty index



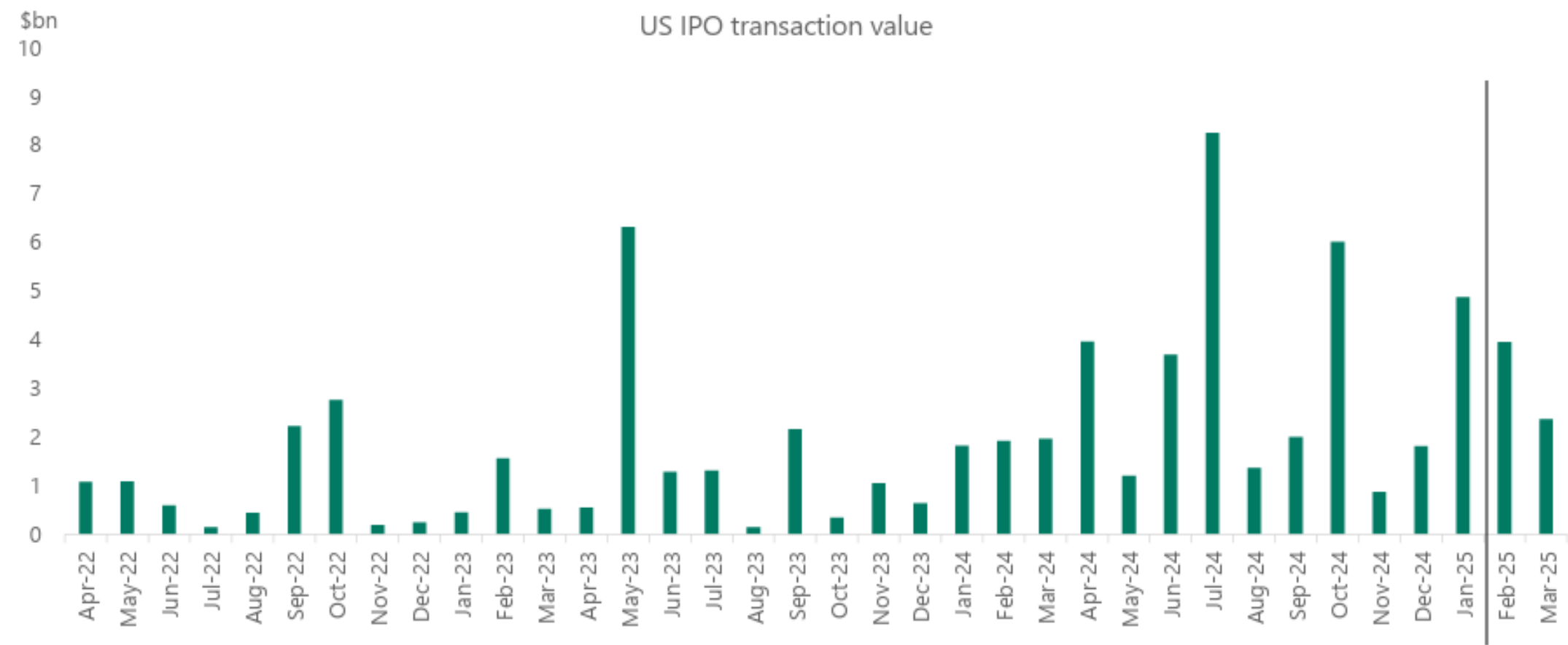
FOOD FOR THOUGHT

When policy uncertainty went up, loan issuance went down



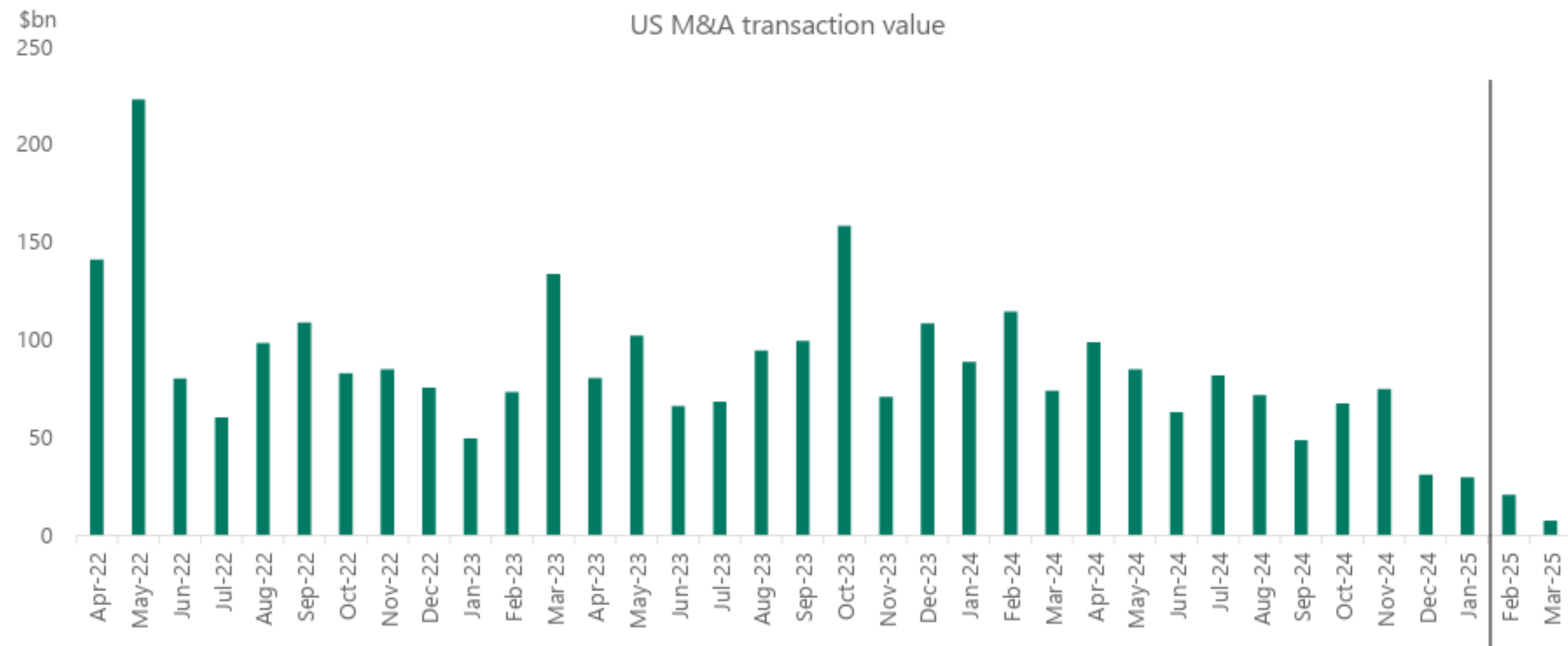
FOOD FOR THOUGHT

When policy uncertainty went up, IPO activity went down



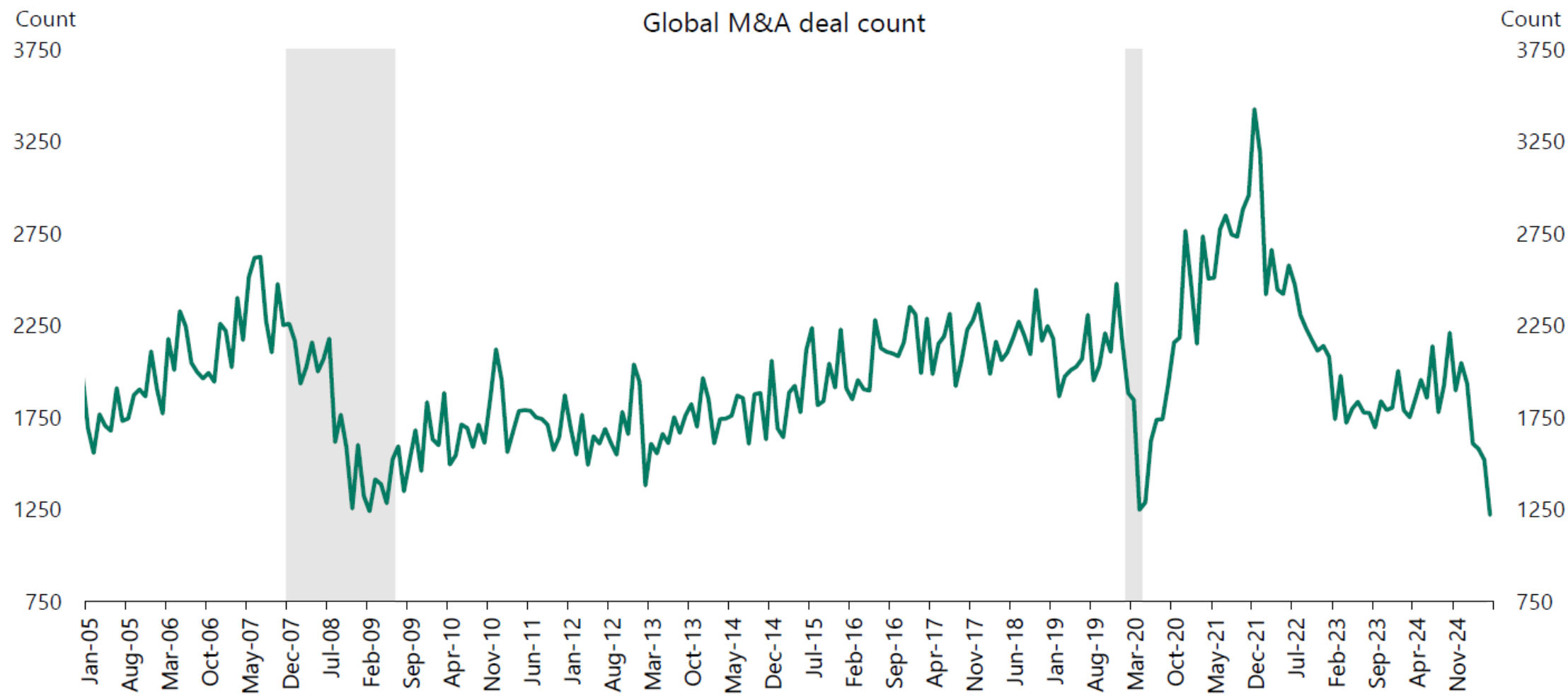
FOOD FOR THOUGHT

When policy uncertainty went up, M&A activity went down



FOOD FOR THOUGHT

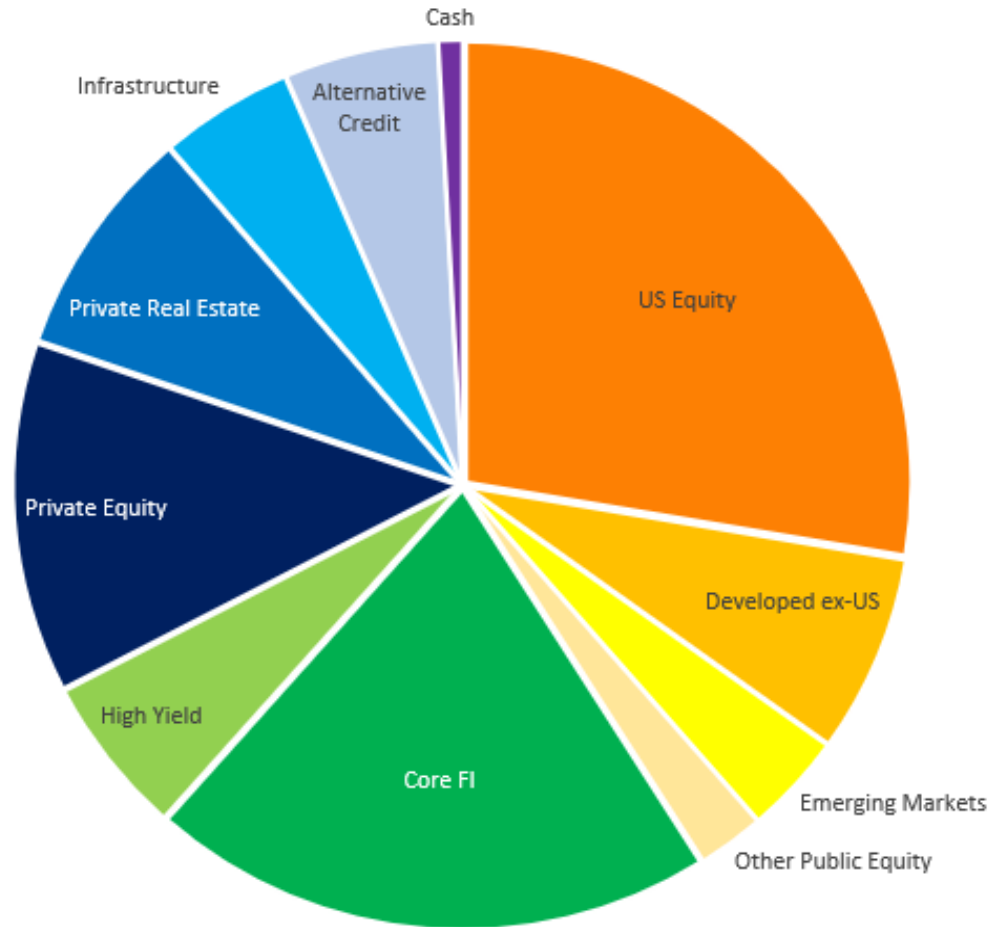
M&A activity very weak at the moment



BERS PERFORMANCE REPORTING Q1-2025

BERS PORTFOLIO OVERVIEW

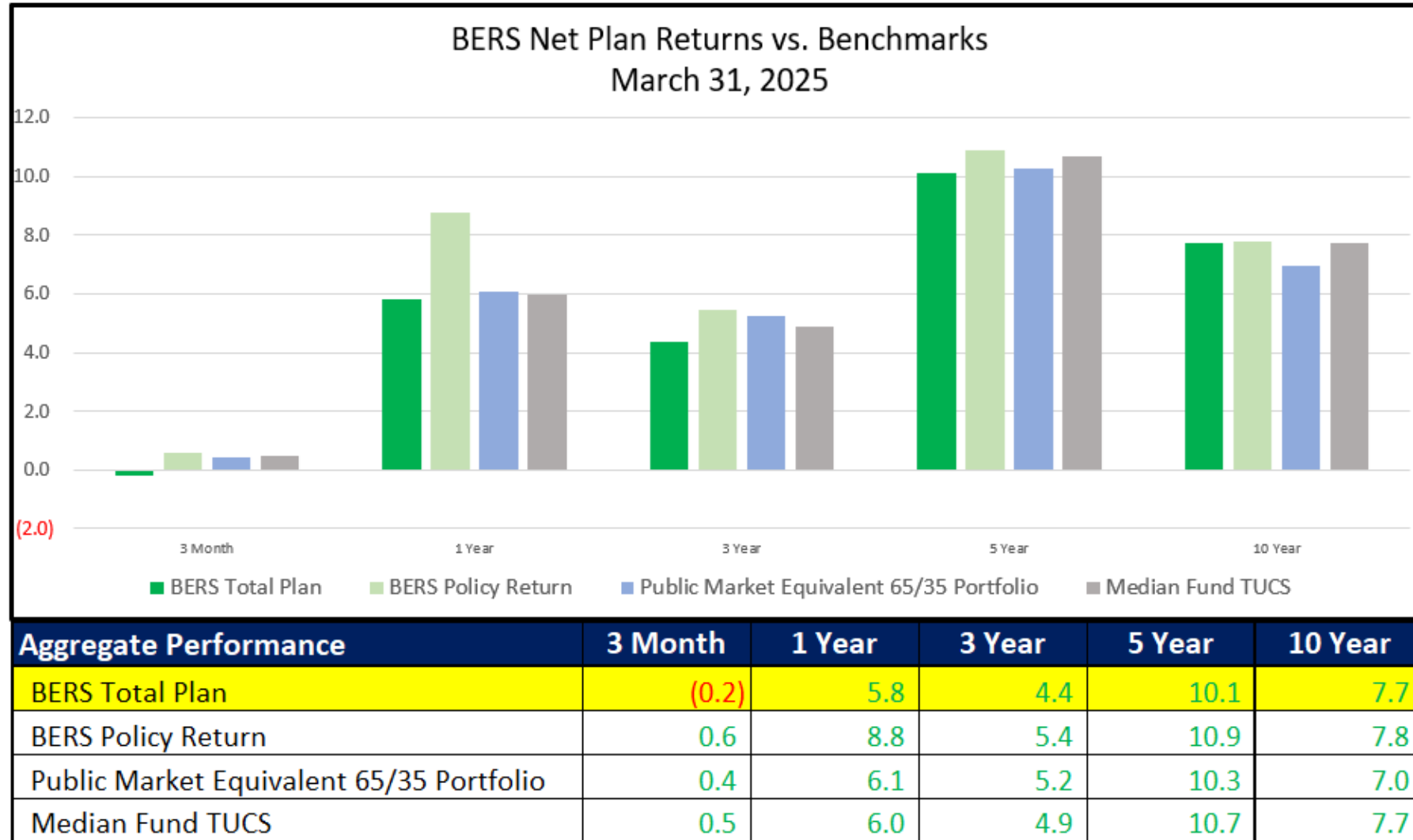
BERS AUM by Strategy as of March 31, 2025



Strategy	\$Millions	%
US Equity	2,660	27.7%
Developed ex-US	699	7.3%
Emerging Markets	354	3.7%
Other Public Equity	233	2.4%
Core FI	1,974	20.5%
High Yield	561	5.8%
Private Equity	1,237	12.9%
Private Real Estate	814	8.5%
Infrastructure	467	4.9%
Alternative Credit	537	5.6%
Cash	84	0.9%
BERS Total AUM	9,619	100.0%



BERS NET PLAN RETURN SUMMARY



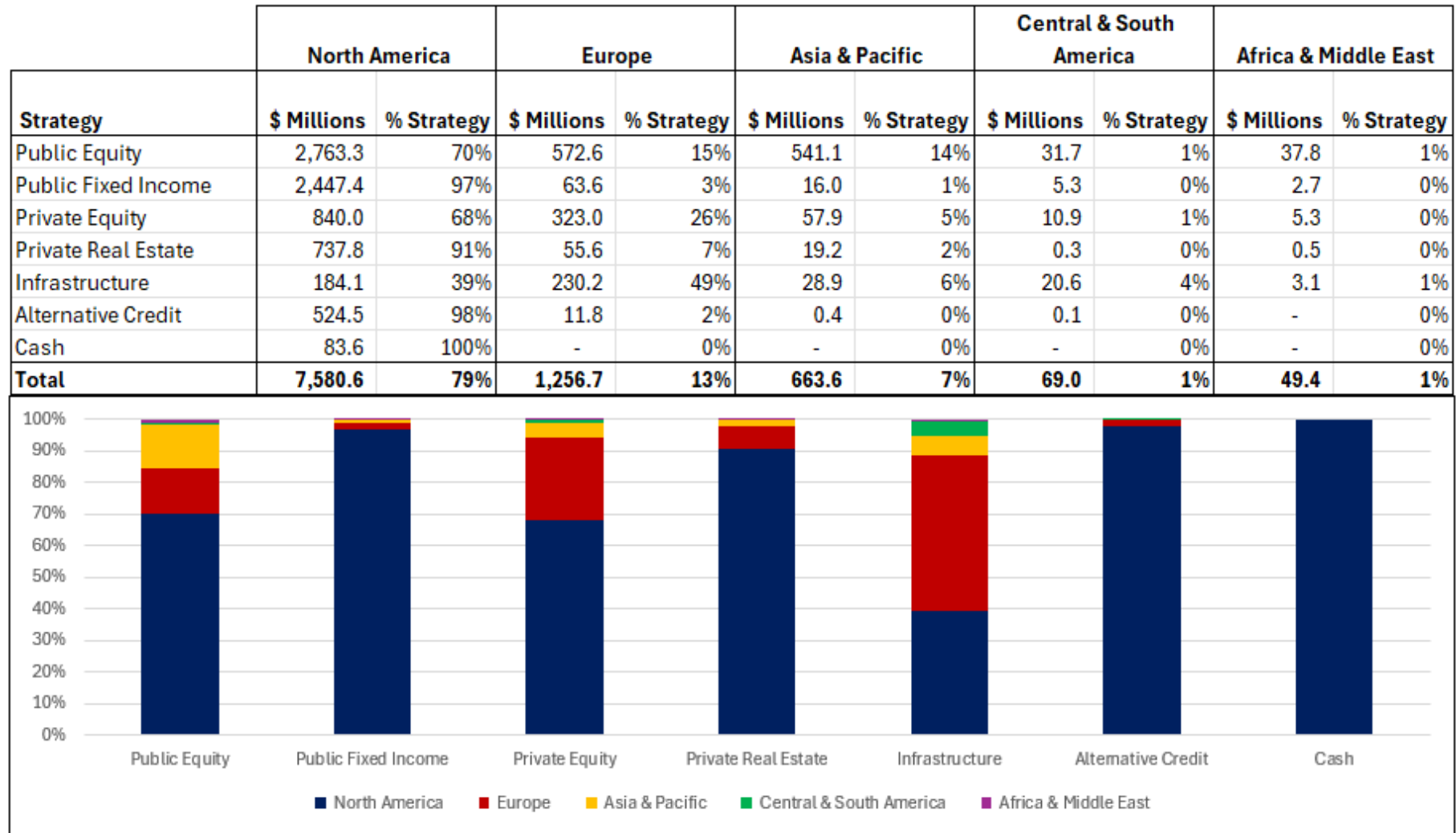
Source: SSB, Wilshire



BERS NET PLAN RETURNS AS OF 3/31/25



BERS REGIONAL EXPOSURE BY STRATEGY AS OF 3/31/25



Regional Exposure is measured by where the investment is domiciled. Public markets investments measured using SSB country of risk. Alternative strategy estimates sourced from Burgiss and SSB.



BERS NET PUBLIC MARKET RETURNS BY STRATEGY AS OF 3/31/25

Investment Strategy	AUM					
	(Millions)	3 Month	1 Year	3 Year	5 Year	10 Year
U.S. Equity	2,660	(4.7)	6.5	7.9	17.7	11.6
World ex-U.S.	699	0.9	1.1	2.3	10.5	6.1
Emerging Markets	354	0.8	7.3	2.0	8.4	3.8
Core Fixed Income	1,934	2.7	5.2	0.8	(0.4)	1.9
High Yield	561	1.1	7.3	5.1	7.8	5.0
Cash	84	1.1	5.6	4.7	2.9	2.1



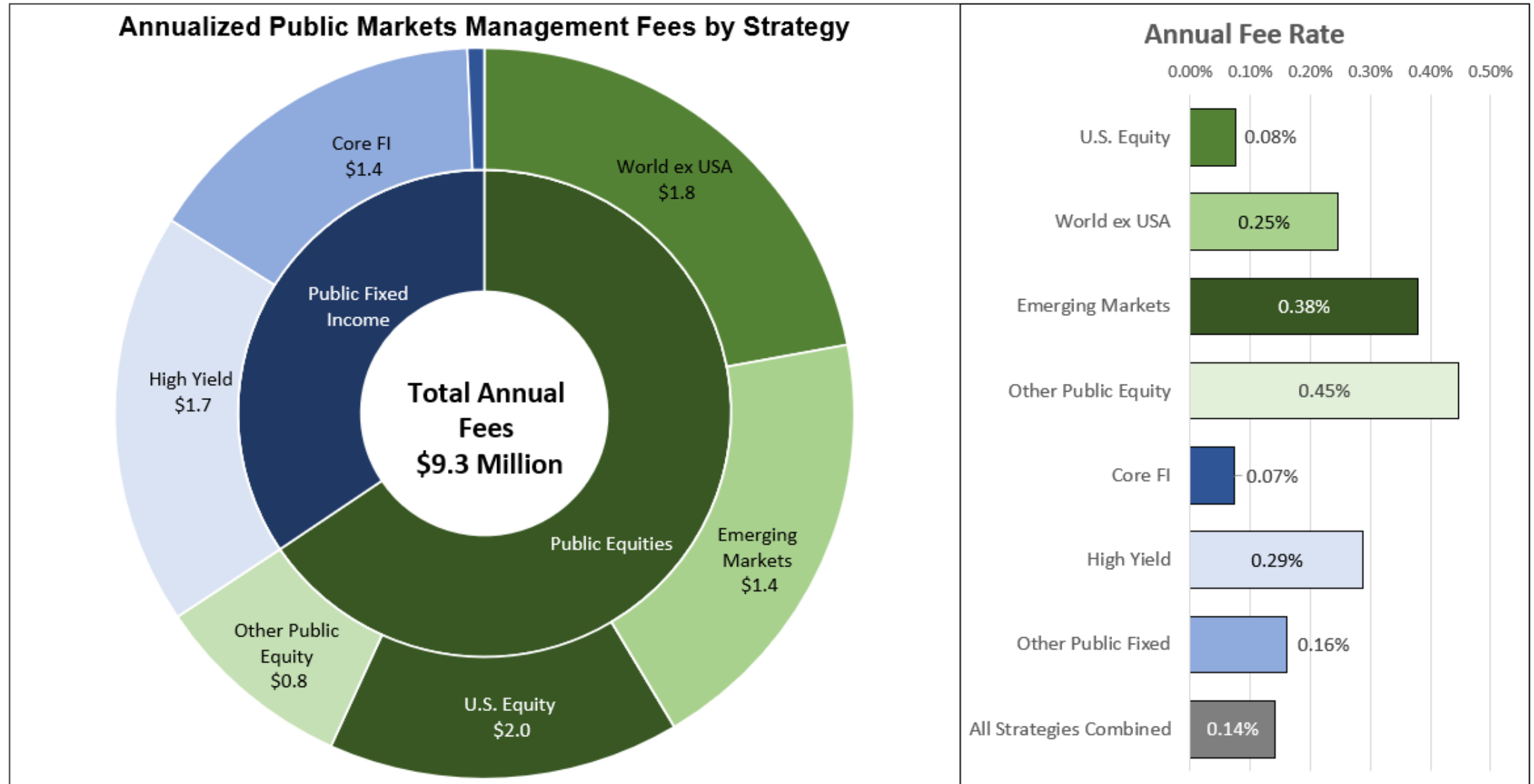
BERS PUBLIC MARKETS EXCESS RETURNS IN BP AS OF 3/31/25

Investment Strategy	Benchmark	3 Month Excess	1 Year Excess	3 Year Excess	5 Year Excess	10 Year Excess
U.S. Equity	Russell 3000	4	(75)	(30)	(52)	(18)
World ex-U.S.	MSCI World ex-U.S. IMI	(491)	(400)	(270)	(145)	81
Emerging Markets	MSCI Emerging Markets	(213)	(77)	57	48	6
Core Fixed Income	NYC Custom Structured Index	(7)	27	26	9	(16)
High Yield	NYC Custom High Yield Benchmark	8	(44)	17	52	18
Cash	ICE BofA US 3-Month Treasury Bill	11	59	43	32	23

Source: State Street



BERS PUBLIC MARKETS FEES AS OF 3/31/25



BERS NET PRIVATE MANAGER RETURNS BY STRATEGY

Investment Strategy	1 Year	3 Year	5 Year	10 Year	Since Inception
Private Equity	n/a	n/a	n/a	n/a	12.9
Private Real Estate	n/a	n/a	n/a	n/a	7.3
Infrastructure	n/a	n/a	n/a	n/a	11.3
Alternative Credit	11.8	9.5	n/a	n/a	13.3

Returns for periods ended December 31, 2024.

Note: Periodic returns not available from specialty consultant.

Source: State Street



BERS PRIVATE MARKETS EXCESS RETURNS IN BP

Investment Strategy	Benchmark	1 Year Excess	3 Year Excess	5 Year Excess	10 Year Excess	Inception Excess
Private Equity	Russell 3000 + 300bp	n/a	n/a	n/a	n/a	(265)
Private Real Estate	NCREIF ODCE Net	n/a	n/a	n/a	n/a	228
Infrastructure	5-year Rolling CPI +400bp	n/a	n/a	n/a	n/a	306
Alternative Credit	50% JPM Gbl HY/50% CS Levered Loan	249	204	n/a	n/a	538

Returns vs. benchmark for periods ended December 31, 2024.

Note: Periodic returns not available from specialty consultant.

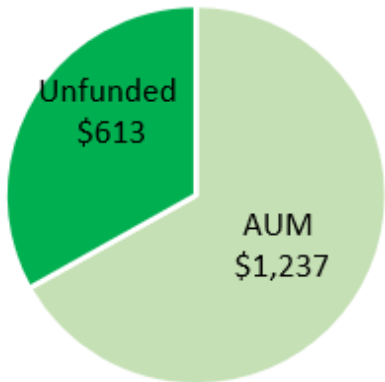
Source: State Street



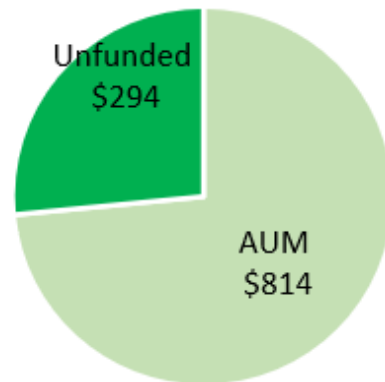
BERS PRIVATE MARKETS EXPOSURE SUMMARY AS OF 3/31/25

Investment Strategy	AUM (\$ Millions)	Unfunded Commitments (\$ Millions)	Total Exposure (\$ Millions)
Private Equity	1,237	613	1,850
Private Real Estate	814	294	1,107
Infrastructure	467	422	889
Opportunistic Fixed	537	433	970
All Strategies Combined	3,054	1,761	4,816

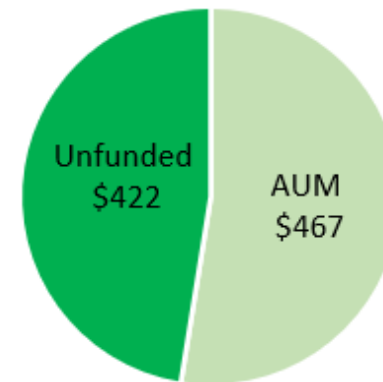
Private Equity
Total Exposure: \$1,850 Million



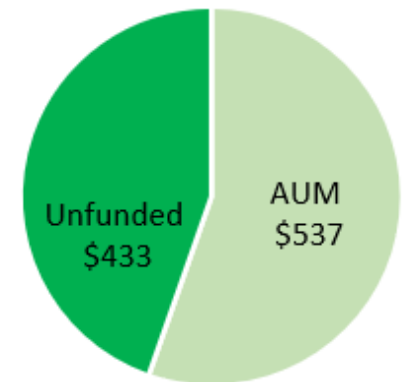
Private Real Estate
Total Exposure: \$1,107 Million



Infrastructure
Total Exposure: \$889 Million



Opportunistic Fixed
Total Exposure: \$970 Million



Source: BAM Risk, State Street



RISK MANAGEMENT

QUARTERLY REVIEW

BERS: TOTAL PLAN SUMMARY

Summary	1. Market Portfolio		2. Policy Benchmark		3. BERS	
	Q1 '25	Change	Q1 '25	Change	Q1 '25	Change
Portfolio Construction						
Equity Allocation	65.0%	+0.0%	67.0%	+0.0%	67.2%	-0.2%
Interest Rates Duration (*)	2.1	+0.01	1.5	+0.00	1.4	+0.01
Credit Spread Duration (*)	1.2	-0.02	0.9	-0.01	0.9	-0.03
Portfolio Risks						
Total Risk (Forecast of Total Return)	9.8%	-0.4%	9.5%	-0.0%	9.8%	-0.0%
Active Risk (Forecast of Excess Return)	n/a	n/a	n/a	n/a	2.2%	-0.0%
Beta to S&P 500	0.62	-0.01	0.60	-0.00	0.60	-0.00

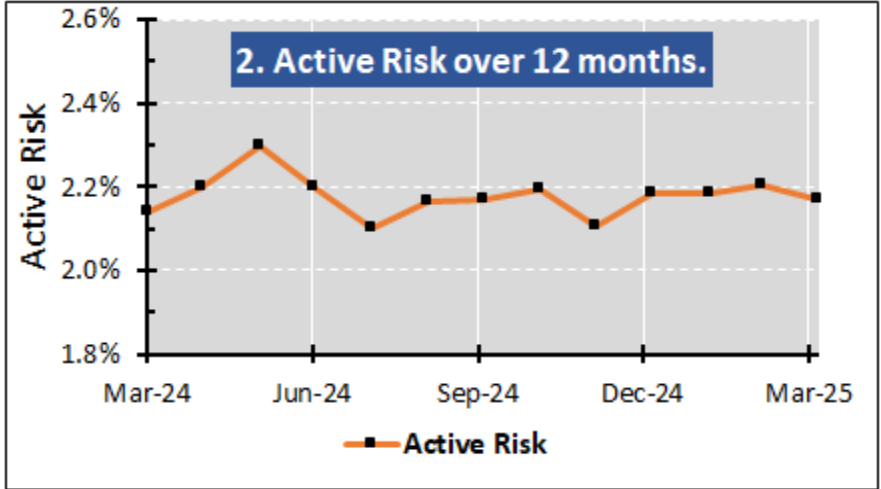
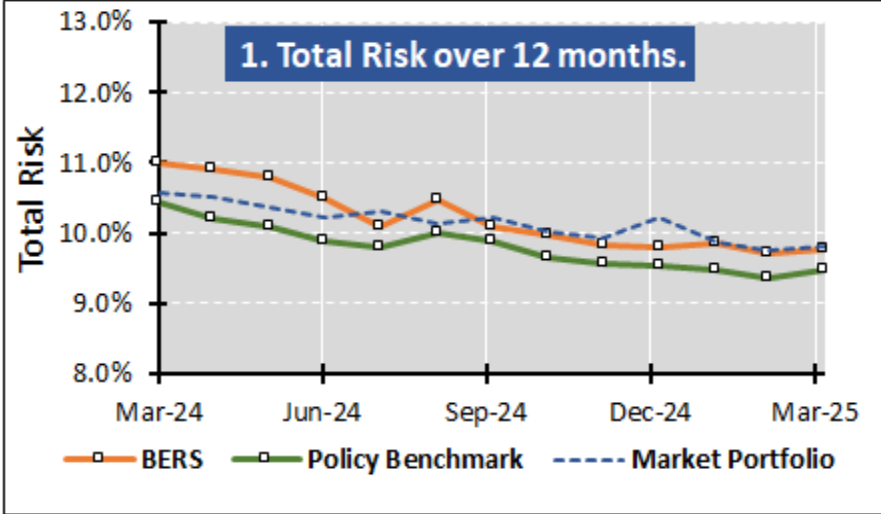
Notes

(*) - Public Markets Only

Market Portfolio: 65% MSCI ACWI + 35% Barclays US Agg

Policy Benchmark:

34% US Equity + 9% Developed Equity + 4% EM Equity + 21.5% Core FI + 6% HY + 8% Private Equity + 8% RE + 4% Infrastructure + 5% Private Credit

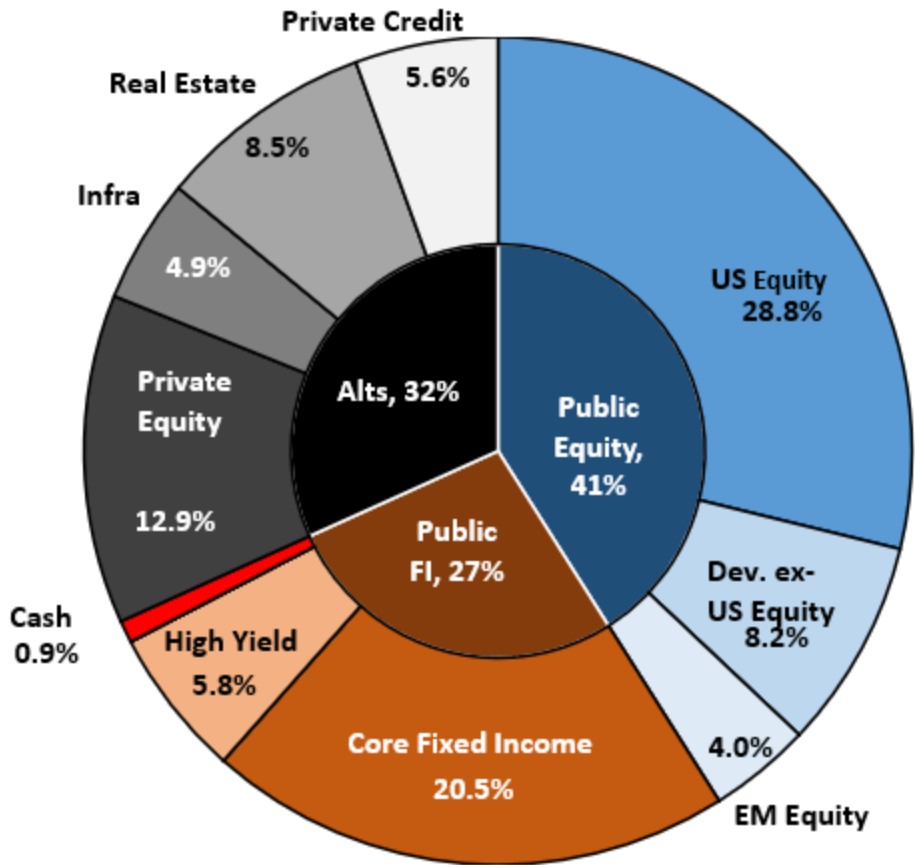


Source: MSCI BarraOne

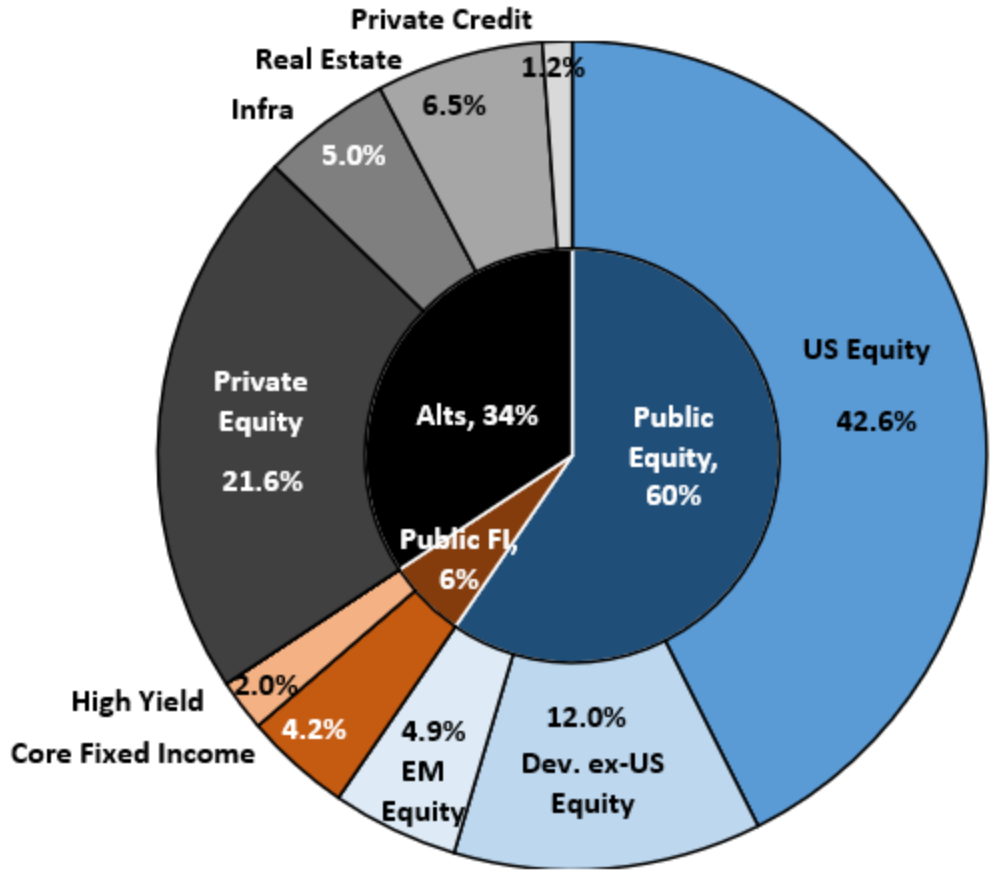


BERS: TWO VIEWS OF PORTFOLIO ALLOCATION

1. Asset Allocation *(exposure by Market Value)*

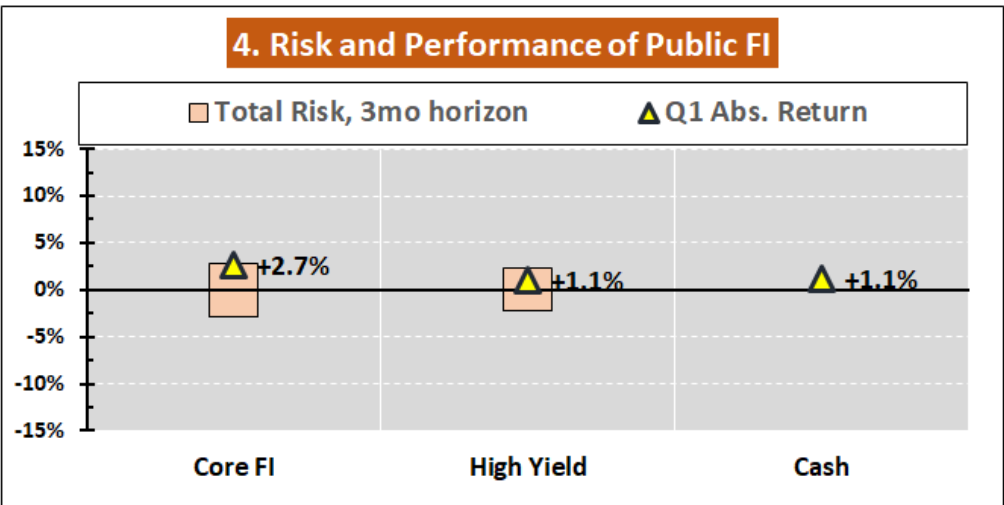
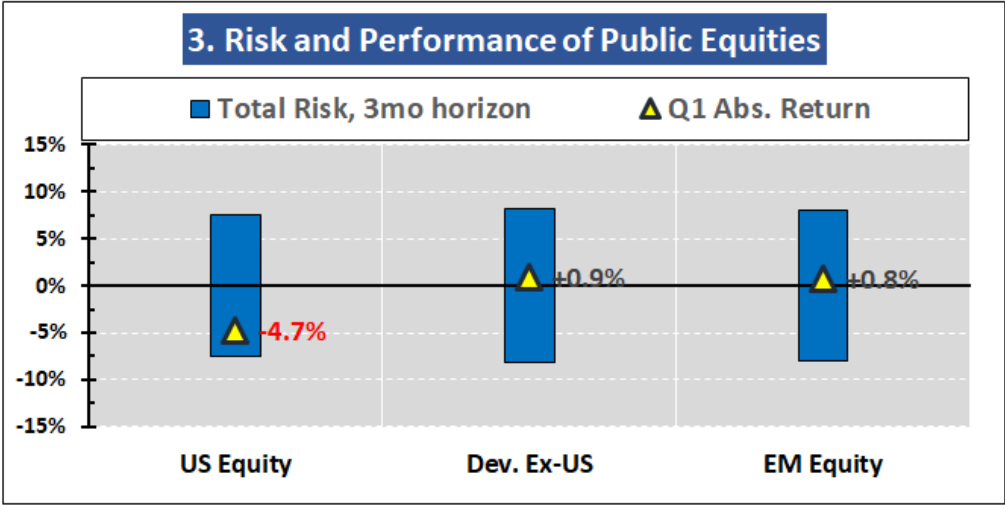
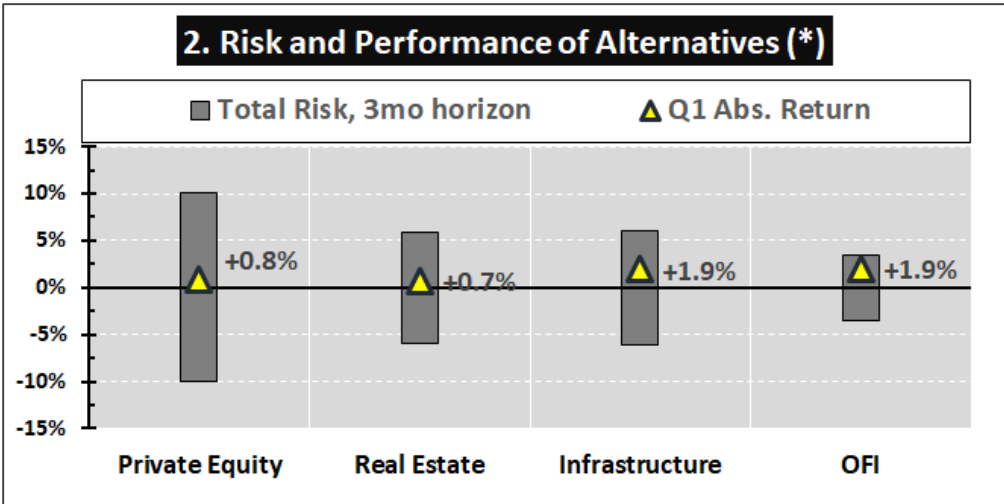
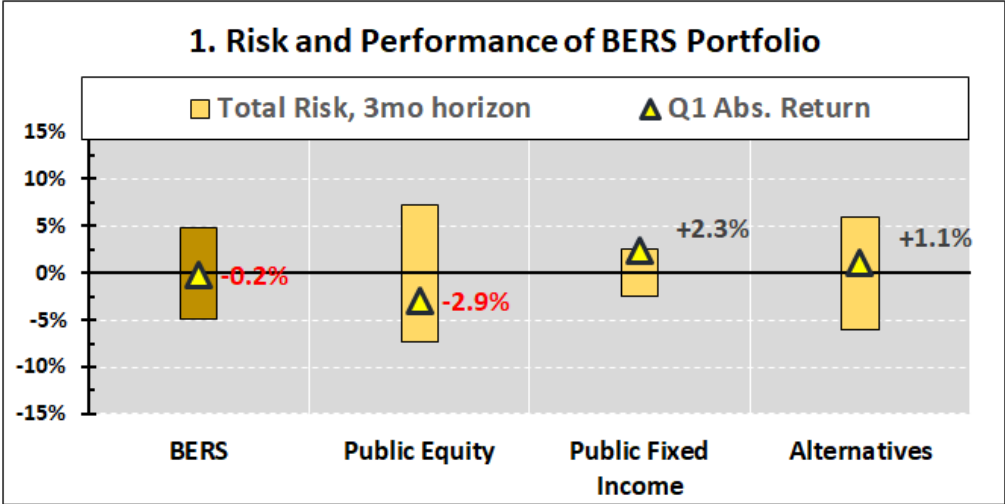


2. Risk Allocation *(forecast of Total Return)*



BERS: TOTAL RISK AND RETURN

How does 3mo Total Risk forecast compare to the Q1 2025 Total Returns?



New MWBE Definitions Memo:



OFFICE OF NEW YORK CITY COMPTROLLER BRAD LANDER

Steven Meier, Deputy Comptroller for Asset Management & Chief Investment Officer

Bureau of Asset Management | 1 Centre Street Room 800, New York, NY 10007-2341 | www.comptroller.nyc.gov

Telephone: (212) 669 – 3257 | Email: smeier@comptroller.nyc.gov

TO: Trustees of the Board of Education Retirement System of the City of New York (BERS)
FROM: Taffi Ayodele, Head of Diverse & Emerging Manager Strategy
DATE: May 5, 2025
RE: Revised MWBE and DVBE Definitions Fiscal Year 2025 Effective July 1, 2024

I. RECOMMENDATION

This memo outlines the newly revised definitions for Minority and/or Women-Owned Business Enterprises (MWBE) and Diverse Managers, effective July 1, 2024. These definitions apply to all direct investments, co-investments, and investments made through Fund of Funds. All Emerging Manager Program Partners are required to apply these definitions in their quarterly reporting.

In alignment with the Bureau's ongoing commitment to inclusion and opportunity, this memo also introduces an aspirational goal of 3% of total AUM for Disabled Veteran-Owned (DVBE) firms.

Key Definitions:

1. Majority Owned MWBE Manager (Public or Private Markets Firm):

U.S.-based public or private markets firms that are 51%+ owned and controlled by U.S. citizens or residents who are women and/or members of minority groups. These groups include African American/Black, Asian American, Hispanic/Latinx, Middle Eastern/North African, Indigenous People, and Two or More Races. Individuals must also hold investment decision-making and/or executive leadership authority.

2. Substantially Owned MWBE Manager (Private Markets Firm):

U.S.-based private market firms that are at least 33% owned and controlled by U.S. citizens or residents who are women and/or members of minority groups. These groups include African American/Black, Asian American, Hispanic/Latinx, Middle Eastern/North African, Indigenous Peoples, and Two or More Races. These individuals must have demonstrable investment decision-making and/or executive leadership authority.

3. Diverse Economics MWBE Manager (Private Markets Firm):

U.S.-based private market firms where U.S. citizens or residents who are women and/or members of minority groups (African American/Black, Asian American, Hispanic/Latinx, Middle Eastern/North African, Indigenous Peoples, and Two or More Races) have at least 33% participation in fund economics or carry.

4. **MBE (Minority Business Enterprise):** designates a firm majority or substantially owned by a member of a minority group (African American/Black, Asian American, Hispanic/Latinx, Middle Eastern/North African, Indigenous Peoples, and Two or More Races) regardless of gender.



5. **WBE (Women's Business Enterprise):** designates a firm majority or substantially owned by a woman or women regardless of race or ethnicity.

MWBE and Diverse: Commonly Interchanged Terms

In practice, the terms "MWBE" (Minority and Women-Owned Business Enterprises) and "Diverse" are often used interchangeably when describing the ownership structure of firms led by underrepresented groups. However, it is important to note the distinctions between these terms in NYC's context.

MWBE(Minority and Women Business Enterprise): According to NYC's definition, an MWBE is a business that is at majority or substantially owned, operated, controlled and/or have substantial economic participation in fund economics by one or more U.S. citizens or residents who are women and/or belong to one of the following racial/ethnic groups: African American/Black, Asian American, Hispanic/Latinx, Middle Eastern/North African, Indigenous People, or Two or More Races.

Diverse (Ethnic/Racial Definition): The term "diverse" generally refers to firms that are majority or substantially owned, operated, controlled and/or have substantial economic participation in fund economics by individuals who belong to underrepresented racial/ethnic groups, including African American/Black, Asian American, Hispanic/Latinx, Middle Eastern/North African, Indigenous People, and Two or More Races. While diversity can also encompass gender, socio-economic background, and other factors, in the context of this memo, it is specifically focused on racial and ethnic diversity.

Understanding the overlap and the distinctions between these terms is critical for accurate reporting and compliance with the new guidelines.

Legacy Rule:

For any direct, co-investment or sub-manager private markets relationships established before **July 1, 2024**, the previous standard of 25% ownership and control by women and/or minority group members will be given legacy status. Legacy managers must maintain a 25% MWBE ownership stake.

Each Emerging Manager Program Partner must ensure that the data they report on Diverse and Emerging Managers aligns with these definitions. **Any exceptions to these definitions must be approved by the Director of Diverse and Emerging Manager Strategy and/or the DCIO for Responsible Investing. (Please note that Emerging Manager definitions are separate from MWBE and Diverse Manager definitions and should not be conflated or confused).**

Please ensure that your teams are familiar with these updated definitions and that all future reports adhere to these new standards. Should you have any questions or require further clarification, feel free to reach out to the Director of Diverse and Emerging Manager Strategy.



Race and Ethnicity	Definitions
Asian American	Individuals with origins in Northern Asia, East Asia, Southeast Asia and the Indian subcontinent. For example, Bangladeshi, Cambodian, Chinese, Indian, Indonesian, Japanese, Korean, Malaysian, Pakistani, Filipino, Sri Lankan, Taiwanese, Thai, Vietnamese
African American/Black	Individuals with origins in any of the black racial groups of Sub-Saharan Africa. For example, African American, Black British, Barbadian, Ethiopian, Haitian, Ghanaian, Jamaican, Kenyan, Liberian, Nigerian, Somali
Hispanic / Latinx ¹	Hispanic persons of Mexican, Puerto Rican, Dominican, Cuban, Central or South American of either Indian or Hispanic origin, regardless of race
Indigenous People	Individuals with cultural or historic ties to groups that existed in a territory prior to colonization or formation of a nation state, specific to certain domiciles. For example, Native American, Hawaiian, Samoan, Alaska Native, First Nations, Inuit, Māori, Métis, Aboriginal, Torres Strait Islander
Middle Eastern / North African	Individuals with origins from countries in Southwest Asia, the Middle East or North Africa. For example, Afghan, Arab, Bahrain, Egyptian, Iranian, Iraqi, Israeli, Jordanian, Kuwaiti, Lebanese, Moroccan, Syrian, Tunisian, Turkish
White	Individuals with origins in Europe. For example, English, French, Portuguese, German, Hungarian, Irish, Italian, Polish, Norwegian, Swedish, Spanish, Russian.
Two or More Races	Individuals with origins that include two or more of the categories listed above; for example, White / Asian or Hispanic / Black, Afro-Latino Persona of Two or More Races fully count as diverse.
Other	A person of any racial or ethnic group not categorized by the above

¹ <https://www.nysenate.gov/legislation/bills/2009/a11626>



Gender	
Female	An individual self-identifying as a woman, not exclusively cisgender individuals.
Male	An individual self-identifying as a man, not exclusively cisgender individuals.
Non-Binary	An individual self-identifying as having a gender that falls outside the categories of male or female, e.g., two (or more) genders, non-gendered, gender fluid, gender non-conforming or otherwise non male or female
Information Not Collected / Prefer Not to Provide	Information on gender identity has not been collected or individuals have elected not to provide

II. INCLUSION GOAL: DISABLED VETERAN-OWNED FIRMS

To further the commitment to inclusivity in asset management, the Comptroller's Office is adopting an aspirational goal of 3% of total AUM allocated to Disabled Veteran-Owned firms across each of the five systems: TRS, NYCERS, Police, Fire, and BERS.

1. Disabled Veteran-Owned Business Enterprise (DVBE):

A U.S.-based asset management firm that is at least 51% owned, operated, and controlled by one or more disabled veterans. A disabled veteran is defined as an individual who has served on active duty in the U.S. Armed Forces, was discharged under conditions other than dishonorable, and has a service-connected disability as determined by the U.S. Department of Veterans Affairs. These individuals must also hold investment decision-making or executive leadership authority.

III. DISCLOSURES

The information contained in this memo is confidential, may not be distributed to unauthorized persons, and may contain material non-public information pertaining to certain investment activities, brokers and portfolio companies. Federal, state, and/or foreign securities laws prohibit any person who has received such information from purchasing or selling such securities based on material non-public information or from communicating such information to any other person under circumstances in which it is reasonably foreseeable that such person is likely to purchase or sell such securities. Statements are current as of the date of this memorandum only. Past performance does not guarantee the future performance of any broker, manager or trading strategy. The trade performance results and historical information provided herein may have been adversely or favorably impacted by events and economic conditions that will not prevail in the future. Therefore, these results are not indicative of the future performance of any strategy, index, fund, manager or group of managers.

Net Zero Update:



BERS Annual Climate Report FY2024



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Message from the Comptroller

As I write this, the risks of climate change – and threats to climate progress – have never been more acute. Last year was once again the hottest year on record. And 2025 has made no secret of how high the stakes remain. As devastating wildfires raged on across Los Angeles, with thousands of residents seeking shelter and billions of dollars in record property damage continuing to rack up, President Trump signed an Executive Order withdrawing the U.S. from the Paris Climate Agreement. From President Trump’s “drill baby drill” mantra on oil and gas production to his attempt to end all new offshore wind projects, the new federal administration has laid its own path of destruction in the weeks since.



The threats that climate change pose to our communities, the global economy, and the BERS investment portfolio are clear. The cascading impacts – on physical assets, the supply of food and water, the availability and affordability of property insurance, and so many other aspects of the economy – will continue to worsen in ways that are individually unpredictable and yet utterly predictable in their overall scope until and unless we take bold steps to mitigate global warming.

BERS remains committed to addressing the financial risks that climate change brings, in spite of, and indeed spurred by, the obvious headwinds. As the effects of climate change magnify, destroying critical ecosystems, pillaging resources, and upending increasing numbers of lives, the Trump Administration acts as if climate change is not happening at all. Anti-ESG efforts of aligned state officials serve to intimidate investor collaborations such as the Net Zero Asset Managers Initiative and spur investor withdrawals from Climate Action 100+. Too many companies with announced net zero targets are failing to take concrete actions to put themselves on pathways to achieve those targets.

In 2023 BERS issued its AMBITIOUS [Net Zero Implementation Plan](#) to decarbonize its portfolio, achieve net zero greenhouse gas emissions, and support climate transition on the timeline of the Paris Accords. The plan builds on the 2021 vote to divest from fossil fuel reserve owners, with meaningful commitments to disclosure, active engagement with asset managers and portfolio companies to set science-based targets, and significantly greater investments in climate solutions.

This report, our 2nd annual, shows the progress we have made over the last year. And amidst the rollbacks at the national level, I am pleased there is cause for some optimism. BERS has exceeded its objectives for reducing Scopes 1 and 2 greenhouse gas financed emissions intensity in its portfolio and for investments in climate solutions *one year ahead of schedule*. While this progress is surely welcome, we know that there is much work left to do to achieve the real-world decarbonization needed to reverse the unmistakable warming trends in the global climate and create the basis for generating the long-term sustainable investment returns we need to pay the System’s pension obligations for generations to come. As I have stated before, this is work we cannot do and outcomes we cannot achieve alone. We need other asset owners, our investment managers, governments here and around

the world pulling in the same direction to mitigate the risks of climate change.

Make no mistake: we will continue to lead. Last fall I proposed that BERS adopt a policy adding future midstream and downstream fossil fuel infrastructure to the existing exclusion of upstream in private markets investments. My office's Bureau of Asset Management is currently researching and developing this policy and will bring it to the BERS Board for its consideration in 2025. Excluding investments such as oil and gas pipelines and LNG terminals, where consistent with our fiduciary duties, is another concrete step BERS can take to help mitigate the systemic risks that climate change poses to the global economy.

It is with that determined spirit and commitment to innovate that BERS will do everything in its power consistent with its fiduciary duties to maximize risk-adjusted returns while investing in the needed climate transition. We will continue to mitigate the systemic as well as the company-specific risks that climate change poses to our portfolios. The future depends on us doing our part.

With deep resolve and determination,

A handwritten signature in black ink, appearing to read "Brad Lander", with a stylized, cursive script.

Brad Lander
New York City Comptroller

Executive Summary

This is the second annual report of the progress that BERS is making under the Net Zero Implementation Plan (“Plan”) the Board adopted in 2023 to achieve net zero portfolio greenhouse gas (GHG) emissions by 2040.

The Plan commits BERS to:

- annual disclosure of our GHG emissions and progress towards our emissions reduction targets;
- engagement with our portfolio companies and asset managers to make progress towards net zero
- increased investments in climate change solutions
- divestment from fossil fuel reserve owners and private markets investments in the production, exploration or extraction of fossil fuels.

Consistent with its fiduciary duties to invest solely in the interests of its participants and beneficiaries and to maximize long-term investment returns in order to fund the pension benefits earned, the Board remains committed to the belief that its role as a fiduciary obligates it to mitigate the risks, take advantage of opportunities, and reduce the contributions our investments make to climate change.

This report details BERS’ activities and progress towards Net Zero during calendar 2024, and plans for 2025, in portfolio company and investment manager engagement, as well as investments in climate solutions and disclosure of our Scopes 1, 2 and 3 carbon footprint and related metrics for fiscal year 2024 that ended June 30, 2024.

Summary of 2024 Accomplishments

Emissions Reductions: BERS reduced Scopes 1 and 2 financed emissions intensity by 28.31% since the baseline of December 31, 2019, surpassing the interim target of 22% by 2025.

- BERS' Scope 1 and 2 financed emissions intensity in our public equity and corporate bonds portfolio decreased by 21.9% between July 1, 2023, and June 30, 2024.
- The divestment from fossil fuel reserve owners was the largest driver of emissions reductions.
- Utilities and consumer staples saw an average decrease in actual emissions between 2019 and 2024, among the high emitting companies that were held between 2019 and 2024.
- Scope 3: Scope 3 financed emissions intensity decreased 13.94% from 2023 to 2024. BERS aims to set Scope 3 interim emissions reductions targets next year once there are three years of portfolio data to base the targets on.

Climate Solutions: One of the key pillars of the Net Zero Plan is to grow BERS' investments in climate solutions. BERS had an interim target of \$400 million in climate solutions by 2025, with an ultimate goal of \$1.8 billion by 2035.

- During FY 2024, BERS increased investments in climate solutions by \$178 million of total exposure.
- With a current total exposure of \$608 million in climate solutions as of June 30, 2024, BERS exceeded its 2025 interim target of \$400 million.

Climate Banking Engagement: BERS filed shareholder proposals at six large North American banks calling on them to disclose their ratio of clean energy financing to fossil fuel energy financing. Three banks—JP Morgan, Citi and Royal Bank of Canada—agreed to disclose their ratio, and JP Morgan became the first to publish these data in 2024. Shareholder proposals advanced to a vote at Bank of America, Goldman Sachs, and Morgan Stanley, where they garnered an average vote of 25.9%. In 2025, BERS is re-filing proposals with these three banks, as well as Wells Fargo, for disclosure of their clean energy to fossil fuel energy financing ratios.

Science-Based Targets: The BERS Net Zero Plan highlights the importance of companies and asset managers setting science-based targets (SBTs) as a first step for creating a clear roadmap toward a net zero portfolio by 2040. In 2024, the Bureau of Asset Management (BAM) continued robust engagement with portfolio companies and asset managers to adopt SBTs, with a goal of achieving SBTs for 70% of BERS' Scopes 1 and 2 public equity and corporate bonds financed emissions by 2025.

- The percent of BERS' financed emissions in Scopes 1 and 2 that are covered by validated SBTs decreased from 20.4% to 18.3% from 2023 to 2024, while the commitments to SBTs increased from 14.5% to 20.1%, for a total of 38.4% validated or committed. While the slight increase in validated SBTs is welcome, the overall trend is not on track to achieve the 70% goal by 2025.
- To marshal broader support for SBTs, BAM continued to actively engage high-emitting portfolio companies on behalf of BERS. Comptroller Lander sent letter requesting third-party verified science-based targets to 58 companies, in addition to continuing the engagement with investor-owned utilities that began in 2023. BAM is serving as technical advisor for the development of a new target setting protocol, known as SMARTargets, led by the Electric Power Research Group ("EPRI").

Asset Manager Engagement: As a universal investor with virtually 100% externally-managed assets, BERS must work with our asset managers to decarbonize our portfolio and drive decarbonization at portfolio companies. Once again this year, BAM sent a letter to all asset managers communicating BERS' clear and ambitious expectations regarding net zero commitments and implementation plans, along with our annual ESG questionnaire regarding net zero and science-based target (SBT) commitments, the collection of carbon emissions data, and physical climate risk assessments.

- BAM received a response from asset managers representing 92% of assets under management (AUM).
- The questionnaire results show that 48% of BERS' investment funds that comprise 37% of total AUM currently measure and report Scopes 1 and 2 emissions for a majority of the investments they manage for BERS.
- The questionnaire results also indicate that 31% of investment funds that comprise 40% of BERS' AUM have adopted a net zero goal or intend to adopt one in the near future.
- BAM has been using the questionnaire results along with the BERS carbon footprint data to focus engagement on managers that are contributing the most to BERS' portfolio GHG emissions without requisite policies and processes in place to reduce real world emissions.

We are proud of the work that we have accomplished to exceed our emissions reduction targets ahead of schedule. Our carbon footprint results demonstrate that divestment from fossil fuels improves climate outcomes in our portfolio, while our investment results since we carried out the divestment demonstrate that we continue to outperform our returns targets.¹ Beyond our own investment portfolio, we remain committed to driving real world

¹ BERS earned net returns of 8.55% in FY 2023 and 10.55% in FY 2024, exceeding the annual 7% actuarial rate of return. BERS [ACFR FY2023](#), p. 83 and [ACFR FY2024](#), p. 85.

decarbonization as the only way to meaningfully address the systemic financial risk that climate change poses to the long-term investment returns that the Retirement System needs to produce to fund our members' pensions. We know that real world decarbonization is a huge challenge that requires collective action across the global economy. We remain steadfast in our commitment to fulfilling our role, consistent with our fiduciary duties, in helping to lead the transition with the help of our asset managers, fellow asset owners, as well as governments here and abroad—even in the face of political headwinds.

BERS hopes this annual report will offer additional support and evidence to inspire other investors to join us in our efforts to prevent climate change from further harming the planet on which we all depend to create long-term, sustainable economic growth.

Summary of 2024 BERS Net Zero Actions

DISCLOSE Emissions and Risk

As of June 30, 2024, BERS' Scope 1 and 2 financed emissions intensity (tons of financed emissions / million dollars invested (FE/\$m)) was 58.03, marking a decrease of 21.9% from June 30, 2023. Compared to the December 31, 2019 baseline, BERS has observed a reduction of 28.31% in Scope 1 and 2 financed emissions intensity, against an interim target of 22% reduction by June 2025. **BERS has hit its interim emissions reduction target for Scope 1,2 intensity for public equity and corporate bonds a year early!**

As of June 30, 2024, BERS' Scope 3 financed emissions intensity was 350.11, marking a decrease of 13.94% from June 30, 2023.

Active equity accounted for almost two-thirds of decrease in financed emissions for Scopes 1 and 2 and almost one-third of Scope 3 for BERS in FY2024. Active equity holdings changed both as a result of new strategic asset allocation as well as business as usual changes.

ENGAGE for Alignment and Action

As of June 30, 2024, 18.3% of BERS' absolute Scope 1 and 2 financed emissions in public equity and corporate bonds are covered by science-based targets validated by the SBTi with an additional 20.1% committed to setting science-based targets with SBTi within the next two years. This results in 38.4% of absolute Scope 1 and 2 financed emissions in BERS' public equity and corporate bonds portfolio being covered by SBTi-approved science-based targets or commitments to set such targets in the next two years, which is 3.5% greater than the 2023 total. Our goal is 70% of Scope 1 & 2 portfolio emissions with science-based targets by 2025.

Comptroller has engaged with 35 utilities without SBTs. Utilities represent 32% of Scopes 1 & 2 financed emissions.

Comptroller is serving as the thematic lead for Climate Action 100+ on the topic of science-based targets and net zero.

48% of managers covering 37% of BERS AUM stated they measure and report Scope 1 and 2 emissions for the majority of the investments of the fund/product they manage for the System. 31% of managers representing 40% of BERS' AUM stated they have adopted a net zero goal or intend to adopt one in the near future.

INVEST in Climate Change Solutions

As of June 30, 2024, BERS has a total of \$608 million in invested and unfunded commitments in climate change solutions across all asset classes, **surpassing the interim goal of \$400 million by 2025**. The 2035 goal is \$1.8 billion.

DIVEST to De-Risk

The divestment of fossil fuel reserve owners that BERS carried out in 2022 and 2023 was the largest driver of reductions in the portfolio's Scopes 1 and 2 financed emissions intensity between the baseline of 2019 and 2024.

Section 1: Disclose Emissions and Risks

Public Equity and Corporate Bonds Interim Scope 1 and 2 Emissions Reduction Targets and Annual Carbon Footprint Analysis

We are pleased to share that BERS has achieved emission intensity reduction as of Jun 30, 2024 that surpasses the interim emission reduction target set for Jun 30, 2025. BERS' Scope 1 and 2 financed emissions intensity decreased by 21.9% between Jun 30, 2023, and June 30, 2024, yielding a total reduction of 28.31% from the baseline of Dec 31, 2019. While we welcome this decrease in our portfolio's footprint, it is important to understand and acknowledge the drivers of this change: most of this emission reduction is driven by portfolio changes (including fossil fuel divestment and changes in strategic asset allocation) while actual company emission reductions had a much smaller contribution. (See pp. 14-15 for more detail on the attribution analysis.)

In our Net Zero Implementation Plan, BERS set targets to reduce the Scope 1 and 2 financed emissions intensity in our public equity and corporate bonds portfolio (including investment grade and high yield bonds) by 22% by 2025, 49% by 2030, and 100% by 2040, using a baseline of December 31, 2019. For these interim emissions reduction targets, BERS uses "financed emissions intensity" (tons of CO₂ equivalent emissions/\$million invested) based on Enterprise Value Including Cash (EVIC) as the primary metric for emissions. We also report, measure and evaluate changes in absolute financed emissions (which will be also referred to as financed emissions or FE in this report) and weighted average carbon intensity (WACI) (tons of CO₂/\$million sales) and strive toward comparable progress among all metrics. Scope 3 emissions and target-setting are discussed in the subsection further below. For definitions of Scopes 1, 2 and 3, please see Appendix E.

Public Equity and Corporate Bonds Annual Carbon Footprint Analysis

On behalf of BERS, BAM conducted an annual updated carbon footprint analysis of the System's public equity and corporate bond portfolios and a blended benchmark portfolio. We do not yet have complete and accurate data for measuring GHGs in private markets, and there is no accepted methodology for measuring GHGs in mortgage and government fixed income portfolios (comprising the remainder of the public markets portfolio). The analysis used holdings data as of June 30, 2024 and MSCI's carbon footprint data and analytics (which includes PCAF-aligned metrics for 2024).² Public equity and corporate bonds constituted 52.3% of BERS' total assets as of June 30, 2024. Corporate bonds include 1) investment grade and 2) high yield.

² MSCI's Total Portfolio Footprinting (TPF) methodology was used to obtain PCAF-aligned emissions metrics for 2024. 2019 baseline was also updated through similar adjustments.

1.1 Scope 1 and 2 – Financed Emissions and Intensity

During Fiscal Year 2024 BERS' public portfolio emissions intensity experienced a greater reduction than the blended benchmark, as depicted in Table 1. Most of this decrease was driven by portfolio level changes: changes in strategic asset allocation; business as usual changes in the actively managed securities; highly concentrated expansion in BERS portfolio value (where the Top 10 companies drove majority of the increase in portfolio's market value). Overall emissions in developed economies decreased in 2023, which also helped.³

BERS' public equity and corporate bonds absolute financed emissions (FE) also decreased more than the benchmark's total FE during Fiscal Year 2024. Actively managed equities alone accounted for 66% of the reduction in BERS' financed emissions during FY 2024. Delving deeper into the changes in actively managed equities for BERS, we learned that the Top 30 highest emitters from FY 2023 experienced an average of 22% increase in Enterprise Value (EVIC) between FY 2023 and FY 2024, and a 1% reduction in average company emissions (Scope 1,2). BERS' portfolio also saw an average of 52% decrease in the units of shares held in the same Top 30 high emitting companies, manifesting the change in BERS' strategic asset allocation as well as business as usual trading in active equity.

Table 1: Public Equity and Corporate Bonds Scope 1 and 2 Financed Emissions and Intensity

BERS - Financed Emissions Intensity - Scope 1 and 2		
	BERS Portfolio Tons carbon emissions/\$m invested	Blended Benchmark Tons carbon emissions/\$m invested
31-Dec-19	80.95	81.01
30-Jun-22	69.81	61.50
30-Jun-23	74.30	67.10
30-Jun-24	58.03	55.53
Change % (2019-2024)	-28.31%	-31.45%
Change % (2023-2024)	-21.90%	-17.24%

BERS - Financed Emissions - Scope 1 and 2		
	BERS Portfolio Tons carbon emissions	Blended Benchmark Tons carbon emissions
31-Dec-19	295,390	339,056
30-Jun-22	323,849	274,940
30-Jun-23	358,822	324,335
30-Jun-24	284,059	271,341
Change % (2019-2024)	-3.84%	-19.97%
Change % (2023-2024)	-20.84%	-16.34%

³ <https://www.iea.org/reports/co2-emissions-in-2023/emissions-in-advanced-economies-fell-to-their-level-of-50-years-ago>

Like earlier years, the highest emitting sectors in BERS' portfolio are materials, utilities, energy, and industrials, collectively representing almost 86% of financed emissions for Scope 1 and 2, as suggested in Table 2 below. On behalf of BERS, BAM is pursuing active engagement with portfolio companies in these high emitting sectors (see more details in the engagement section).

BERS Portfolio - High Emitting Sectors' Financed Emissions (Scope 1 and 2)		
	2024	2023
Utilities	32%	21.2%
Materials	24%	36.1%
Energy	18%	19.4%
Industrials	12%	7.4%
Combined contribution of top 4 sectors	86%	84.1%

Figure 1 below shows the percentage of Scope 1 and 2 emissions reductions pathways for the public equity and corporate bonds portfolios each year to achieve the interim emissions reduction targets of 2025 and 2030 and net zero emissions by 2040. As Figure 1 makes clear, BERS has surpassed the 2025 emissions reduction targets ahead of schedule. Figure 2 summarizes the timeline and drivers of emissions intensity changes between 2019 and 2024.

Fig 1: BERS – Realized and Projected Emissions Reduction Targets (Scope 1 and 2)

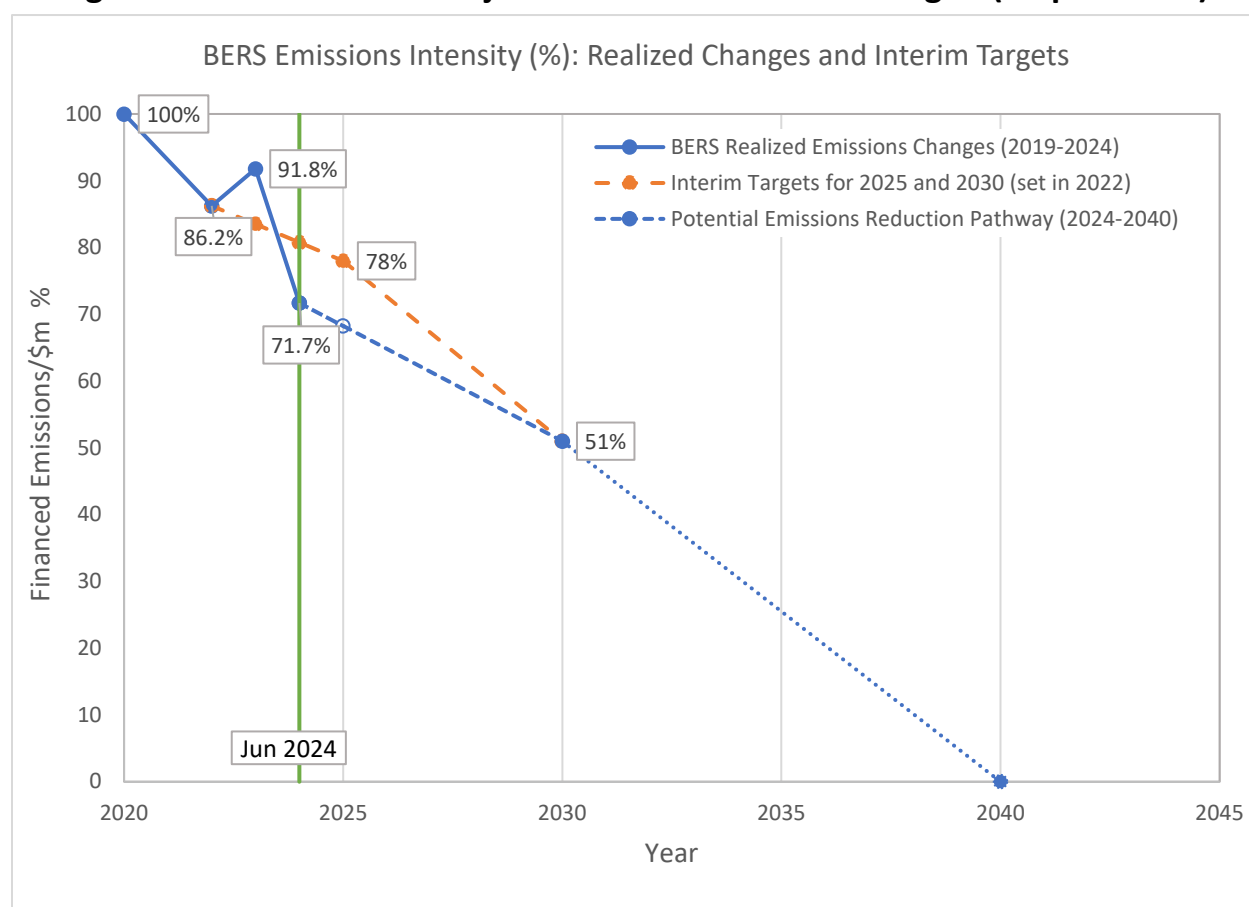
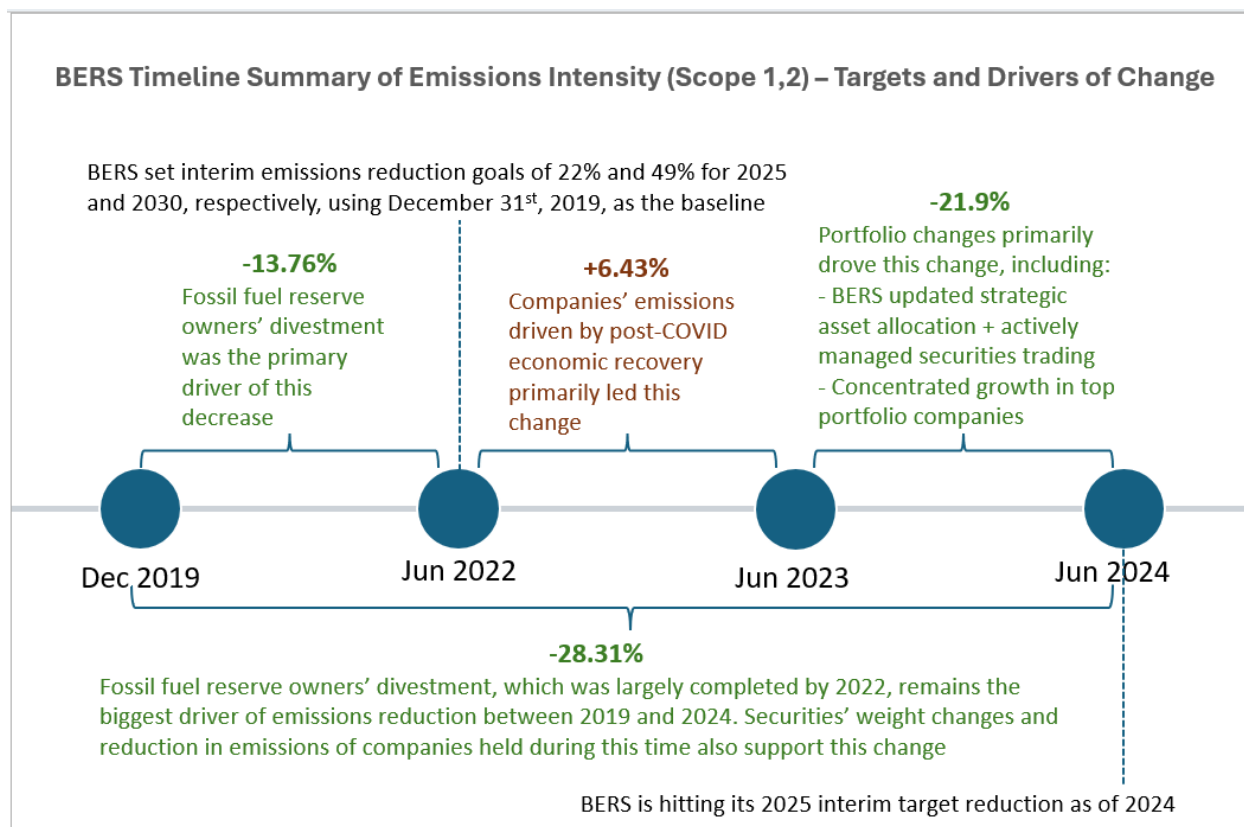


Fig 2: BERS – Timeline of Emissions Intensity (Scope 1 and 2)
– Milestones and Drivers of Change



To further our understanding of the drivers of reduction in this emissions intensity between 2019 and 2024, we pursued a detailed attributional analysis⁴ by separating the effect of each factor that affects the emissions intensity calculation (a ceteris paribus analysis, i.e. changing one factor at a time from 2019 to 2024, assuming everything else is held constant). We compared the Dec 31, 2019 and Jun 30, 2024 portfolios and formed three sub-sets:

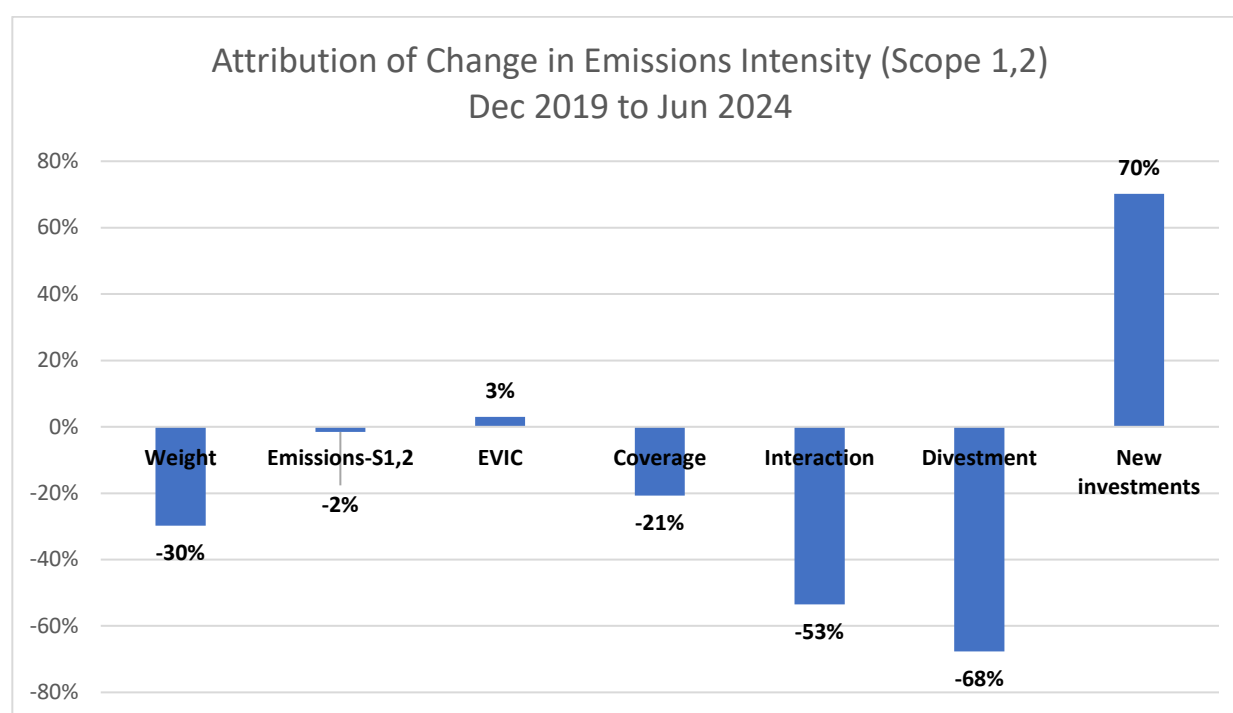
- **Fossil Fuel divestments:** securities in the portfolio in 2019, but not in 2024. BERS no longer holds those securities due to multiple reasons including fossil fuel divestment, changes in strategic asset allocation, and regular business changes, such as changes in actively managed accounts by managers, or changes of managers or securities.
- **New investments:** securities that weren't present in 2019 but are held in the 2024 portfolio for multiple reasons, including regular business changes
- **Securities held between 2019 and 2024:** subject to a detailed attributional analysis that breaks down the marginal impact of changes in individual factors (company emissions, EVIC, weight,

⁴ Along the lines of MSCI's 'Framework for Attributing Changes in Portfolio Carbon Footprint'
<https://www.msci.com/www/research-report/a-framework-for-attributing/03802978549>

and portfolio coverage), affecting portfolio financed emissions changes. The interaction term captures the effect of simultaneously changing multiple factors.

Figure 3 summarizes the findings of the attribution analysis, highlighting ‘divestments’ as the single biggest driver of emissions reduction, followed by increase in the Enterprise Value of the portfolio companies that were held from 2019 through 2024. As noted earlier, decrease in actual company emissions only had a small bearing on overall portfolio emissions decrease. While all sectors saw a decrease in their emissions intensity (i.e. actual emissions as a ratio of size/EVIC), utilities and consumer staples are the only sectors (among the 100 highest emitters) that saw an average decrease in actual emissions between 2019 to 2024 for the securities that were held in BERS’ portfolio during this time.

Fig 3: BERS – Attribution Analysis of Change in Emissions Intensity (Scope 1 and 2) – Dec 2019 to Jun 2024



1.2 Scope 3 – Financed Emissions and Intensity

During Fiscal Year 2024 BERS’ Scope 3 public portfolio emissions intensity experienced a slightly smaller reduction than the blended benchmark, as depicted in Table 3. Most of this decrease was driven by portfolio level changes: changes in strategic asset allocation; business as usual changes in the actively managed securities; highly concentrated expansion in BERS portfolio value.

BERS’ public equity and corporate bonds absolute financed emissions (FE) also decreased albeit a little less than the benchmark’s total FE during Fiscal Year 2024. Actively-managed equities, passively-invested equities, and fixed income accounted for almost a third (respectively) of the reduction in BERS Scope 3 financed emissions during FY 2024.

Table 3: Public Equity and Corporate Bonds Scope 3 Financed Emissions and Intensity

BERS - Financed Emissions Intensity - Scope 3		
	BERS Portfolio Tons carbon emissions/\$m invested	Blended Benchmark Tons carbon emissions/\$m invested
30-Jun-22	292.94	383.90
30-Jun-23	406.80	428.90
30-Jun-24	350.11	361.20
Change % (2023-2024)	-13.94%	-15.78%

BERS - Financed Emissions - Scope 3		
	BERS Portfolio Tons carbon emissions	Blended Benchmark Tons carbon emissions
30-Jun-22	1,363,932	1,716,811
30-Jun-23	1,965,756	2,072,283
30-Jun-24	1,713,932	1,764,999
Change % (2023-2024)	-12.81%	-14.83%

BERS has not yet set interim Scope 3 emissions reductions goals because we do not yet have enough data, though Scope 3 data has been improving recently. We plan to set such goals for 2025 as data availability and quality improve further.

Section 2: Invest in Climate Change Solutions

BERS' investment in climate solutions has been an integral part of our net zero ambitions. BERS has a goal of investing a total of \$1.8 billion in climate change solutions by 2035, and had an interim goal of \$400 million by 2025, consistent with our fiduciary duties and our investment objectives. **As of June 30, 2024, BERS has a total of \$608 million in invested and unfunded commitments in climate change solutions across all asset classes, an increase of 41.5% over year FY2023.** As noted, BERS has already surpassed its 2025 target of \$400 million. Table 4 shares the climate solutions exposure by each asset class for Jun 30 2024, as well as changes from FY2023.⁵

⁵ For real estate climate solutions, we expanded our coverage of managers that were reporting since last year, and private equity climate solutions reporting also improved in FY24

Table 4: BERS Climate Solutions Investments – Jun 2024

BERS - Climate Solutions Investments (\$million) - Jun 30, 2024								
	Total Portfolio	Public Equity Active	Public Equity Passive	Public Fixed Income	Alternative Credit	Private Equity	Real Estate	Infrastructure
2Q 2024 (1Q24 data for infrastructure; 4Q23 data for real estate) - Including unfunded commitments								
06/30/24 total NAV	9,363	1,596	2,361	2,631	439	1,152	754	430
06/30/24 climate exposure	608	51	240	47	38	32	93	108
06/30/24 climate %	6.50%	3.18%	10.15%	1.78%	8.71%	2.79%	12.27%	25.17%

BERS - Climate Solutions Investments (\$million) - Jun 30, 2023								
	Total Portfolio	Public Equity Active	Public Equity Passive	Public Fixed Income	Alternative Credit	Private Equity	Real Estate	Infrastructure
2Q 2023 (1Q23 data for infrastructure) - Including unfunded commitments								
06/30/23 total NAV	8,485	1,666	2,218	2,297	277	976	747	304
06/30/23 climate exposure	430	61	152	53	3	23	79	58
06/30/23 climate %	5.07%	3.66%	6.85%	2.31%	1.15%	2.35%	10.64%	19.21%

Analysis of Changes from Jun 2023 to Jun 2024								
	Total Portfolio	Public Equity Active	Public Equity Passive	Public Fixed Income	Alternative Credit	Private Equity	Real Estate	Infrastructure
Total NAV % Change	10.3%	-4.2%	6.5%	14.5%	58.4%	18.0%	0.9%	41.5%
Climate exposure % Change	41.5%	-16.8%	57.7%	-11.8%	1101.6%	39.8%	16.5%	85.4%

Some examples of climate solutions investments in BERS portfolio include:

Peregrine Energy Solutions: An innovative and technology clean energy platform with a unique focus on utility scale energy storage

LJP Waste Solutions: Leading provider of non-hazardous solid waste and recycling services with a focus on sustainable zero landfill and waste-to-energy solutions

Saber Power: Engineering-led and construction-focused professional services company specializing in complex medium and high voltage electrical infrastructure

Matrix Renewables: Operator of renewable energy platform dedicated to acquiring and developing solar, clean energy infrastructure projects and renewable energy assets

Section 3: Public Portfolio Company Engagement

BERS' net zero plan articulates the critical role that Corporate Engagement plays in meeting the systems' net zero goals. All of BAM's net zero corporate engagement work is predicated upon the understanding that as long-term investors and fiduciaries, BERS must be a strategic partner for its portfolio companies throughout the net zero transition.

The plan directs BAM to pursue a two-pronged approach to accelerating decarbonization in its public portfolio in pursuit of net zero by 2040:

1. Ensure the adoption of science-based targets in material sectors as a first step for creating a clear roadmap to decarbonization, and
2. Engage with the financial sector relative to the financing of fossil fuel projects and Scope 3 emissions.

In 2024, BAM demonstrated significant progress and global leadership in both areas.

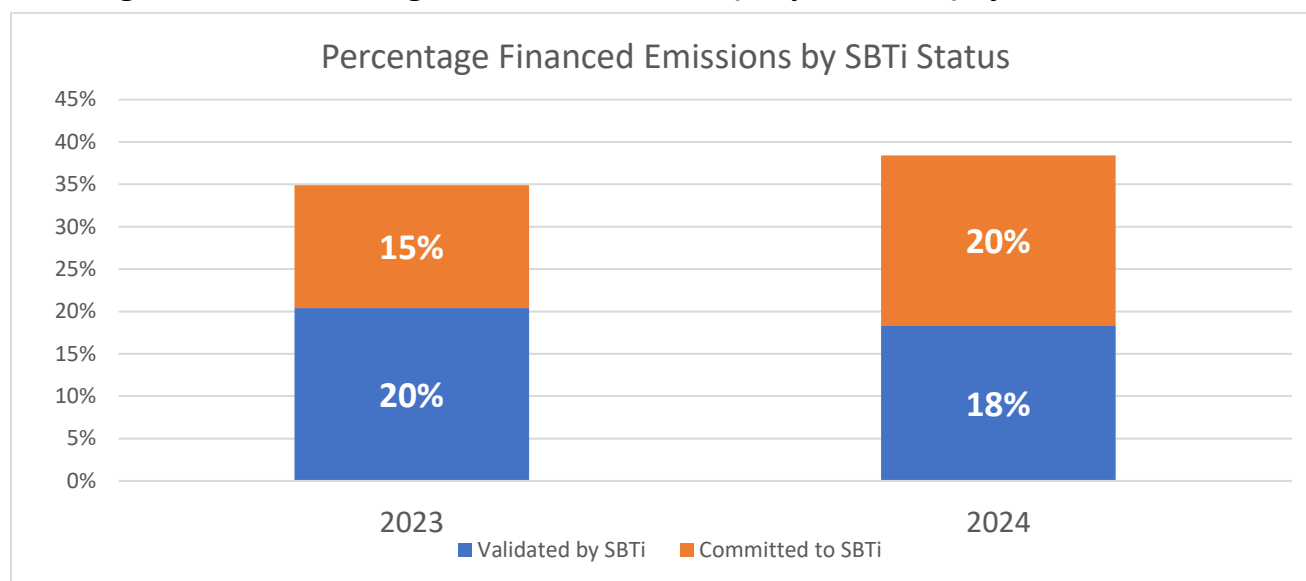
3.1 Science-Based Emissions Reductions Targets

In year two of BERS net zero implementation work, BAM continued to engage portfolio companies in material sectors, sector-based industry groups, and other investors to accelerate the adoption of science-based short-, medium-, and long-term emissions reductions targets. Targets, based on shared definitions and validated by an independent body, provide BERS and other investors a critical accountability mechanism as BERS continues its journey to net zero.

In engagements with individual companies and sector-based industry groups, BAM continued to communicate the fact that independently validated targets, based on best available science and aligned to the Paris agreement goals, remain the best way to bring confidence to investors that companies are moving in the right direction towards net zero.

3.1.1 Progress towards 2025 Goal

The share of BERS' portfolio covered by science-based targets, as measured by the percentage of Scopes 1 and 2 financed emissions as validated by the Science-based Targets Initiative (SBTi), decreased to 18.3% (from 20.4%) in 2024 with an additional 20.1% committed to setting targets with SBTi within the next two years. These totals represent a decrease in validated targets with an increase in validated plus commitments, from 34.9% to 38.4%. These mixed results stem in part from market fluctuations in the portfolio, but we believe also indicate a slow-down in new corporate commitments to adopting SBTi-validated targets.

Fig 4: BERS – Percentage Financed Emissions (Scopes 1 and 2) by SBTi Status

Through ongoing engagement in 2024, it is BAM's view that SBTi status alone does not give a complete picture of the portfolio. Specific material sectors are utilizing, or plan to utilize, other protocols and methodologies to set targets and, in some cases, have those targets validated. In pursuit of BERS' goal for 70% of its Scopes 1 and 2 financed emissions to be covered by independently validated, science-based targets, BAM continues to evaluate and consider other target setting methodologies that meet BERS' needs and in 2025 will report on the percentage of financed emissions covered by SBTi and other methodologies.

3.1.2 Direct Portfolio Company Engagement

In 2024, BAM continued to actively engage individual portfolio companies representing large shares of BERS financed emissions. In 2024, Comptroller Lander sent letters requesting third-party verified targets to an additional 58 public portfolio companies in material subsectors including Energy, Steel, Metals, Chemicals, Transportation and Shipping, and Aerospace. In total, when combined with the outreach completed in 2023, the Comptroller has sent 88 letters to 100 individually listed companies and received some form of response from nearly two thirds of these. BAM continues to directly engage companies following these letters and as a result has been evaluating target setting protocols and methodologies the companies would like to use to meet BERS' request.

3.1.3 Leadership and Collaboration with Other Investors

BAM, on behalf of BERS, has assumed a leadership role within the Climate Action 100+ (CA100+) as the thematic lead for science-based targets. In this capacity, BAM serves as the lead investor in engagements on this topic for CA100+ target companies, across sectors, through direct engagement with companies and by supporting other investors in their engagements on this topic. BAM regularly briefs other investors individually and through monthly sector-based CA100+ working groups. In 2024, a significant share of this work was focused on the electric power sector. New York State Common

Retirement Fund serves as a co-lead for this sector on the topic of science-based targets.

3.1.4 Investor Expectations for Targets

In 2024, in response to needs identified from BERS' own engagements and those identified by other CA100+ signatory investors, BAM organized a group of investors to develop a shared set of expectations for corporate target-setting methodologies. BAM led this work in partnership with other major US institutional investors and asset managers based on the understanding that articulating what net zero-focused investors need to see in target-setting protocols will allow for the landscape to evolve in a way that meets our needs as long-term shareholders and partners with our portfolio companies.

Among partner investors, there is clear agreement that companies should first identify the short-, medium-, and long-term emissions reduction levels necessary to align their operations with limiting warming to a particular temperature pathway, then identify the barriers to achieving those targets, and develop the strategies to address those barriers. This core principle recognizes that a target is in fact a goal that may not be achievable without facilitating conditions. It further recognizes that mutually acceptable definitions of alignment are critical to investors' ability to serve as a long-term partner to portfolio companies.

- Credible target-setting methodology should require:
- Clear and credible GHG emissions accounting using established methodology such as the GHG protocol
- Companies to target for reduction all emissions within their value-chain
- Short- and medium-term reduction targets, in addition to long-term targets and/or net zero goals
- The use of an appropriate baseline year

Along with other investors, BAM continues to view targets as a critical indicator for a company's alignment with net zero scenarios, the Paris agreement, and its management of climate-related risks. As such targets should be assessed for their alignment based on consensus-based scenarios and pathways such as the International Energy Agency's Net Zero Energy Scenario.

Throughout 2024, BAM continually engaged with third-party organizations, industry organizations, and individual portfolio companies on the establishment of new standards and protocols for target setting reflecting BERS' position as a nationally recognized leader on this topic.

In these dozens of conversations and formal events, BAM also focused on the necessity of third-party evaluation to produce an easy-to-understand indicator for financial institutions such as BERS. This is a body of work that BAM will continue to work on in 2025 in order to be able to accelerate the adoption of targets that fulfill the goals that the BERS board established in its implementation plan.

In addition to continued work to establish and evaluate target setting methodology that can

complement SBTi, BAM will continue to evaluate other indicators such as those developed by the Transition Pathways Initiative and MSCI to evaluate a company's alignment with net zero pathways.

3.1.5 Utility Engagement

As reported in last year's net zero annual report, BAM began engagement work on science-based targets within the utility sector because of its significant contribution to the BERS total financed emissions. In 2024, the utility sector represented 32% of the System's total financed emissions.

Continuing the work which began last year, BAM has continued to deeply engage the utility sector to identify methodologies that utilities are able to use and would fulfill BERS expectation that high-emitting portfolio companies have in place third-party validated science-based targets. As stated in the Net Zero Implementation Plan and repeatedly in this report, BERS remains open to other methodologies beyond SBTi that are science-based and where targets can be validated by an independent third-party; however, we will not sign off on any targets that serve to water down the net zero commitments of utilities.

Beginning in December 2023, BAM has served as a technical advisor for the development of a new target setting protocol, known as SMARTargets, led by the Electric Power Research Group (EPRI). Per EPRI, "the objective of SMARTargets is to develop a new methodology for companies to set GHG emissions reduction targets that are grounded in the relevant science, actionable in terms of considering company opportunities, constraints, and risks, and aligned with the global goals of limiting warming to well below 2°C, and pursuing efforts to limit warming to 1.5°C, as stated in the United Nations Framework Convention on Climate Change's Paris Agreement."

In January 2024, BAM represented NYCERS, TRS and BERS on a public launch of this project attended by over 300 unique individuals representing both investors and utilities. Throughout the course of 2024, BAM engaged in over a dozen public and private meetings with EPRI, relevant public stakeholders, and the formal technical advisory group and provided significant feedback to this process. BAM continues to serve as a resource for other investors interested in this effort and how it relates to corporate science-based targets in this sector.

This process continues and BAM is reserving judgement on whether SMARTargets will meet the needs of BERS towards its goals for portfolio coverage of science-based targets. Given the share of BERS Scopes 1 and 2 emissions attributable to utilities and their critical role in economy-wide decarbonization, BAM has and will continue to dedicate significant resources to this effort and will continue to urge companies to set targets that are grounded in relevant science and cover the full activities of their business.

At the end of 2024, Comptroller Lander sent update letters to utilities who received an initial letter from the Comptroller in 2023. This letter reiterated BERS' ongoing expectation that portfolio companies will set targets covering the emissions across their value chain, using sound methodology, and have those targets evaluated or verified by a third-party. BERS also filed shareholder proposals at three utilities requesting third-party evaluation of their existing targets for consideration at their respective 2025 annual meetings.

3.2 Banks Engagement on Financing

In the last year, BERS' efforts to engage financial institutions – specifically the large North American banks – on fossil fuel financing and the energy transition has evolved significantly and demonstrated strong progress, further establishing the System as a leader on this topic. In 2024, BERS adjusted its approach to this engagement from the 2023 shareholder proposals that requested that large North American banks disclose interim 2030 absolute GHG reduction targets for their lending and underwriting in the high-emitting sectors of oil and gas and power generation to a new proposal to disclose a Clean Energy Financing Ratio (“Ratio.”)

3.2.1 Clean Energy Financing Ratio

BERS filed shareholder proposals at Bank of America, Citigroup, Goldman Sachs, JP Morgan, Morgan Stanley, and Royal Bank of Canada requesting the disclosure of their Ratio. The Ratio is defined as the financing of low-carbon energy supply relative to financing of fossil-fuel energy supply. The proposal articulated that financing be defined to include equity and debt underwriting, and project finance. The proposals further suggested that lending be included in the Ratio if the Banks deem that to be methodologically sound.

These proposals significantly advanced engagements with these banks and established BERS as a clear leader on the topic of net zero and financial institutions. BERS and the other New York systems were the first shareholders to elevate this metric through filing a proposal. BERS did so because, unlike financed emissions which remain an important metric, the Ratio provides disclosure specific to relative financing of clean and fossil fuel energy supply, where decision-useful disclosure is currently limited. While the methodology and definitions would be within the bank's discretion, a metric that relies on the bank's internal data complements the commercially-available information published by BNEF. In requesting this disclosure, BERS sought self-disclosure for additional accountability and insight into the pace and scale of the banks' roles in the energy transition.

The Systems reached negotiated settlements with Citigroup, JP Morgan, and Royal Bank of Canada.

JP Morgan was the first institution to publish their ratio, which CEO Jamie Dimon described as “an excellent example of what ongoing engagements and pragmatic and reasonable requests can accomplish.” Their disclosure included detailed methodology and definitions, providing investors with a useful set of information that was previously unavailable.

In advance of the vote at the remaining institutions, BAM hosted a webinar articulating the need for this ratio attended by over 180 unique individuals representing voting shareholders across the globe. **The proposal went to a vote at the remaining banks, receiving 26% support at Bank of America, 28.8% support at Goldman Sachs, and 22.9% support at Morgan Stanley.** While the resolutions did not receive majority shareholder support, each vote represents a significant increase in the percentage of shareholders who voted in favor of the BERS proposal at these institutions relative to the proposals on absolute targets filed in 2023.

It was BERS' view that in addition to publishing their own ratio, the banks should take steps towards

methodological standardization. The 2024 proposals include suggestions to this effect. At the end of 2024, the Institute of International Finance published a paper⁶ outlining methodological considerations for the ratio, which is the first time this topic has been considered at the industry level.

BAM remains committed to this effort and will continue to advocate for the Ratio's disclosure at additional financial institutions and has refiled this proposal at the insitutions that did not settle with BERS in 2024. It is BERS' view that this proposal significantly benefits shareholders because:

- As linchpins of the global economic system, large banks are broadly exposed to financial stability risks posed by climate change
- The Ratio enhances investors' ability to assess the bank's transition risks and opportunities, progress towards its net zero commitments and the pace and scale of its support for energy transition
- The energy transition is a significant profit-generating opportunity that has been turbocharged in the U.S. by Inflation Reduction Act
- All of the represented banks have made robust commitments to sustainable finance, but investors need enhanced disclosure to track actual clean energy financing
- The Ratio provides investors with a reliable, decision-useful clean energy financing ratio from the bank itself, not third-party estimates
- The Ratio complements and supplements banks' climate-related financial disclosures
- The Ratio provides opportunity to demonstrate leadership in financing the energy transition
- Voluntary disclosure benefits investors in the near term and does not preclude standardization of Ratio methodology

Citi, JP Morgan and RBC's commitment demonstrates not only feasibility but the ability for BERS to utilize its role as a long-term shareholder to secure disclosure and information from portfolio companies that allow for greater transparency and partnership in the coming decades.

Section 4: Asset Managers: Net Zero Plans by 2025

BERS' Net Zero Implementation Plan set the following expectations for our asset managers:

- All our public and private markets asset managers to have a net zero goal or science-based targets, and an implementation plan covering, at a minimum, assets managed for the System, by June 30, 2025. We expect public markets managers to have their goals, targets and plans in

⁶ BankTrack – Energy supply financing ratios: the next milestone in banks' climate strategy

place by that date. For private markets managers the expectation will apply for commitments BERS makes from that date forward.

- All managers to cover Scopes 1 and 2 emissions and material Scope 3 emissions of underlying investments in their targets and plans.
- BAM will review the proxy voting record of public markets asset managers related to climate change, including shareholder proposals and director elections.
- To help achieve these expectations, BAM integrates consideration of climate risks and opportunities and net zero alignment in asset manager due diligence, monitoring and engagement and will annually report a summary of the status of the System's managers to the Board.

4.1 Monitoring and Engagement of Asset Managers

In July 2023 and also in June 2024, BAM sent a letter to all of BERS' current managers ensuring they are aware of the Systems' Net Zero by 2040 expectations and encouraging them to align with these expectations consistent with fiduciary duty and their investment objectives.

In the 2024 letter, BAM provided clarification of some key elements of these expectations for public markets and private markets managers. The content of this letter is included as Appendix __ of this report. BAM will continue to develop guidance for asset managers on prudent approaches to meet the System's expectations that will take into account differences among asset classes, investment strategies and asset types.

Along with the letter, BAM sent managers the annual ESG questionnaire. The questionnaire includes specific questions related to climate and net zero alignment on topics such as:

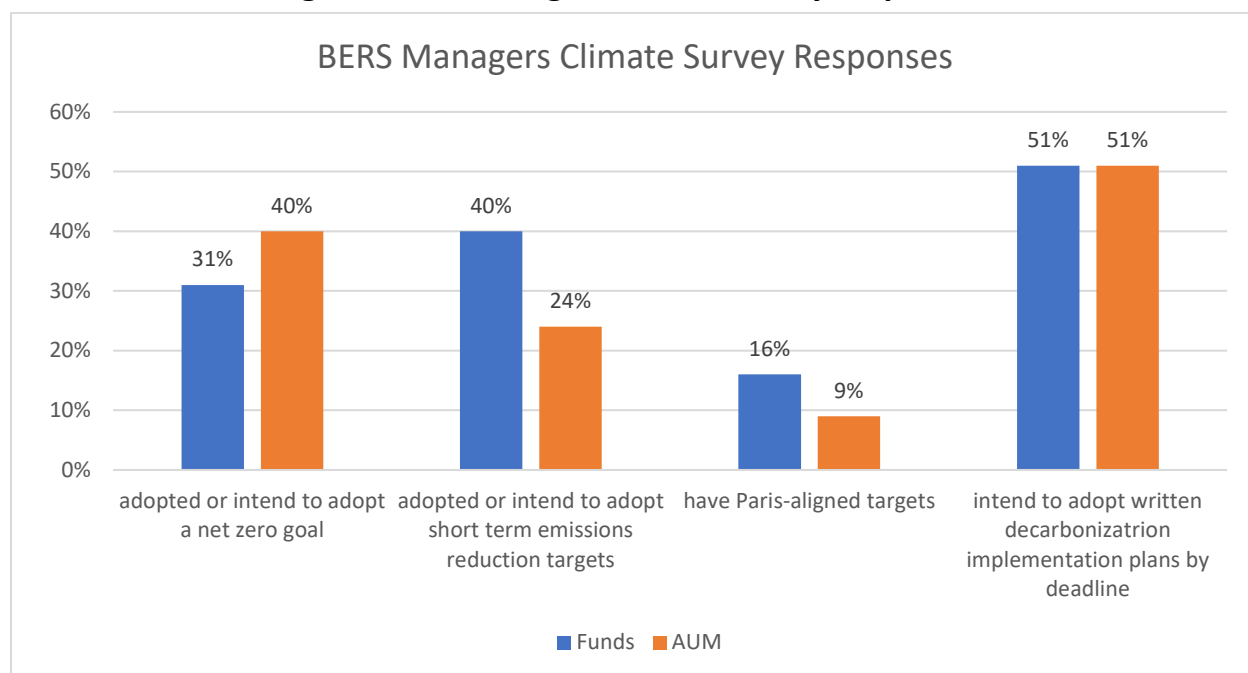
- The managers' adoption of a net zero goal, science-based targets, or alternative decarbonization goals for the funds and strategies in which the System invests as well as the managers' total AUM.
- The managers' adoption of a written implementation plan to achieve any formal decarbonization goals.
- The percentage of total Scope 1, 2, and 3 emissions currently measured for the funds/products managed for the System as well as for the managers' total AUM.
- The assessment of physical climate risk, transition risk, nature-related impacts and dependencies, and water-related risks and stewardship.

BAM received responses from 159 managers for 440 funds that represent 92% of BERS' AUM.

The following percentages of managers stated they have adopted, or intend to adopt in the next 18 months, net zero goals, science-based targets, other decarbonization goals or implementation plans.

The goals and targets apply to the funds or products the managers invest in for BERS:

Fig 5: BERS – Managers Climate Survey Responses

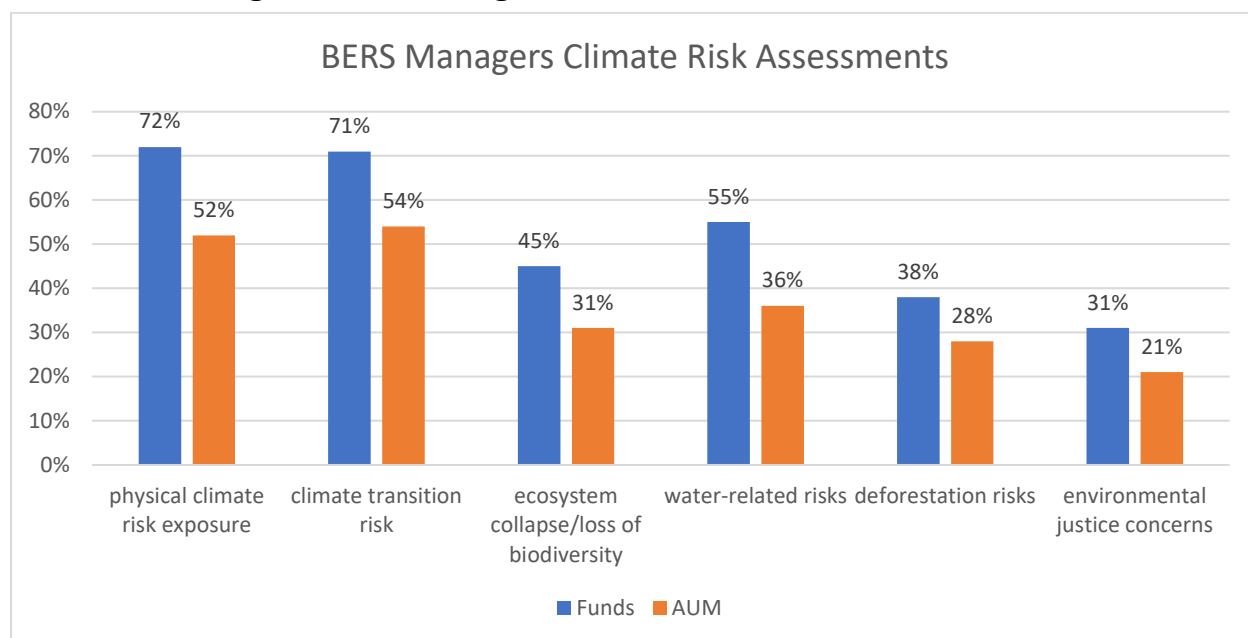


These numbers, which were reported in the summer of 2024, have improved with continued communication of our net zero expectations and with targeted engagement of managers. BAM has prioritized engagement of public markets managers that had not expressed an intention to submit a written implementation plan to support their decarbonization goals by June 30, 2025; had not expressed an intention to engage holdings to align with an economy-wide net zero by 2050 (or sooner) decarbonization pathway; or do not measure and report Scope 1 and Scope 2 GHG emissions. From early 2024 to the release of this report, BAM engaged 53% of 55 total public markets managers including 70% of Public Equity managers and 17% of Fixed Income managers (investment grade, high yield corporate bonds and convertible bonds). All managers engaged by BAM have expressed a willingness to submit a written implementation plan to support decarbonization goals by June 30, 2025 consistent with their fiduciary duties and investment objectives.

For GHG emissions disclosure, about 48% of managers covering 37% of BERS AUM stated they measure and report Scope 1 and 2 emissions for 51% to 100% of the investments of the fund/product they manage for the System. 31% of managers covering 26% of the AUM stated they measure and report Scope 3 emissions for 51% to 100% of the fund/product.

Many of BERS managers are already assessing or planning to assess the impacts of climate change and related risks in their portfolio.

The following percentages of NYCERS managers currently or intend to assess the following climate-related risks as part of investment due diligence, research and monitoring:

Fig 6: BERS – Managers Climate-Related Risk Assessments

BAM continues to engage managers to encourage and support further adoption of net zero goals, science-based targets or other decarbonization goals along with written implementation plans. In addition, BAM will seek to further understand managers' integration and pricing of physical, transition, nature, and water risks.

BAM has increased its participation, on behalf of the System, in industry initiatives to develop frameworks and guidance for net zero alignment with asset managers across asset classes. In 2024, BAM was invited to join a working group of 8-10 limited partners jointly hosted by the Institutional Limited Partners Association (ILPA) and the Principles for Responsible Investment (PRI) to address approaches to climate in investment due diligence and monitoring. BAM will continue to seek appropriate opportunities for identifying and developing best practices and ideas on supporting net zero alignment consistent with fiduciary duty and annually report progress of these initiatives to the Board.

4.2 Due Diligence of Asset Managers

BAM conducts due diligence of material environmental, social, and governance (ESG) factors, including climate change-related risks and opportunities, for all asset managers across all asset classes as part of the overall diligence process conducted prior to recommendations and approvals of investments to the Board. Climate change poses both systemic and idiosyncratic risks for the investment portfolio and is, therefore, actively assessed in the diligence for all managers and strategies and explored in more depth where it may be more financially material.

As a starting point for diligence, BAM utilizes the Due Diligence Questionnaire template of the Institutional Limited Partners Association (ILPA) for private markets managers and a similar template for public markets managers. The ILPA-based template is used along with a BAM-specific supplemental questionnaire. These questionnaires collect written disclosures of how managers consider climate

change-related risks and opportunities in diligence and portfolio management, whether and how they measure the GHG emissions of their investments, what climate commitments or targets they have and whether they report in line with the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations. During diligence, the BAM team asks clarifying questions about the written responses as well as questions about the managers' climate-related practices using specific investments as examples.

BAM looks at the managers' management and governance of the exposure to physical risks stemming from climate change as well as the management and governance related to climate-related transition risks stemming from evolving regulation and market preferences. In addition, BAM diligences the managers' future plans to integrate and price-in climate-related physical and transition risks and opportunities where material.

BAM also looks at the managers' progress in decreasing their contribution to the systemic risks of climate change and evolving market preferences through emissions reduction pathways. BAM's supplemental diligence questions related to climate change and net zero alignment include whether managers measure the Scope 3 emissions of their investments; whether they have specifically adopted net zero goals, science-based targets or other emissions reduction targets for their investments; whether they have a written plan to support these goals or targets; and whether their goals or targets cover Scope 3 emissions of their investments. For specific high emitting sectors, we conduct deeper diligence. BAM summarizes and reports findings related to climate-related ESG diligence in investment memoranda to the Board.

In recognition of the importance of nature as a vital carbon sink and subject of the cascading impacts of climate change, BAM has been monitoring the implementation of the final Task Force on Nature-Related Financial Disclosures (TNFD framework), which is harmonized with the TCFD/ISSB S2 framework, and continues to seek approaches to help mitigate the systemic risk from large-scale ecosystem collapse. BAM asks managers about their assessment of nature dependencies and biodiversity mainly in the context of real assets or other sectors with material impact on nature and biodiversity.

Appendices

Appendix A – Climate Solutions Investments

Public Equity: Companies that derive revenue from MSCI’s Environmental Impact categories of alternative energy, energy efficiency, green building, pollution prevention, or sustainable water. New weighted average method adopted as of 4Q 2022.

Public Fixed Income: Companies that derive revenue from MSCI’s Environmental Impact categories of alternative energy, energy efficiency, green buildings, sustainable water, pollution prevention, or sustainable agriculture, as analyzed by Risk Management. New weighted average method adopted as of 4Q 2022.

Also includes green bonds based on manager surveys conducted by Fixed Income Team. Managers were allowed discretion in defining green bonds.

Alternative Credit: OFI market values are based on manager surveys conducted by Alternative Credit Team. The definition of climate solutions used for OFI is “investments in companies that generate 50% or more revenue from clean and renewable energy technologies and assets including (1) renewable energy such as solar, wind, geothermal and hydropower; (2) energy efficiency and energy smart technologies such as power storage, fuel cells and carbon capture and storage; (3) energy efficient transport and (4) low carbon buildings.” This definition is a summary of the MSCI and Burgiss definitions as well as a reflection of a definition by Ceres. Total OFI NAV based on data from Alternative Credit Team.

Private Equity: Companies predominantly focused on a business activity classified under the Burgiss category of “Eco Friendly” activities, including renewable energy, biofuel and other clean tech or associated companies. All data is NAV. We also included companies that largely aligned with our definition of climate solutions in public markets.

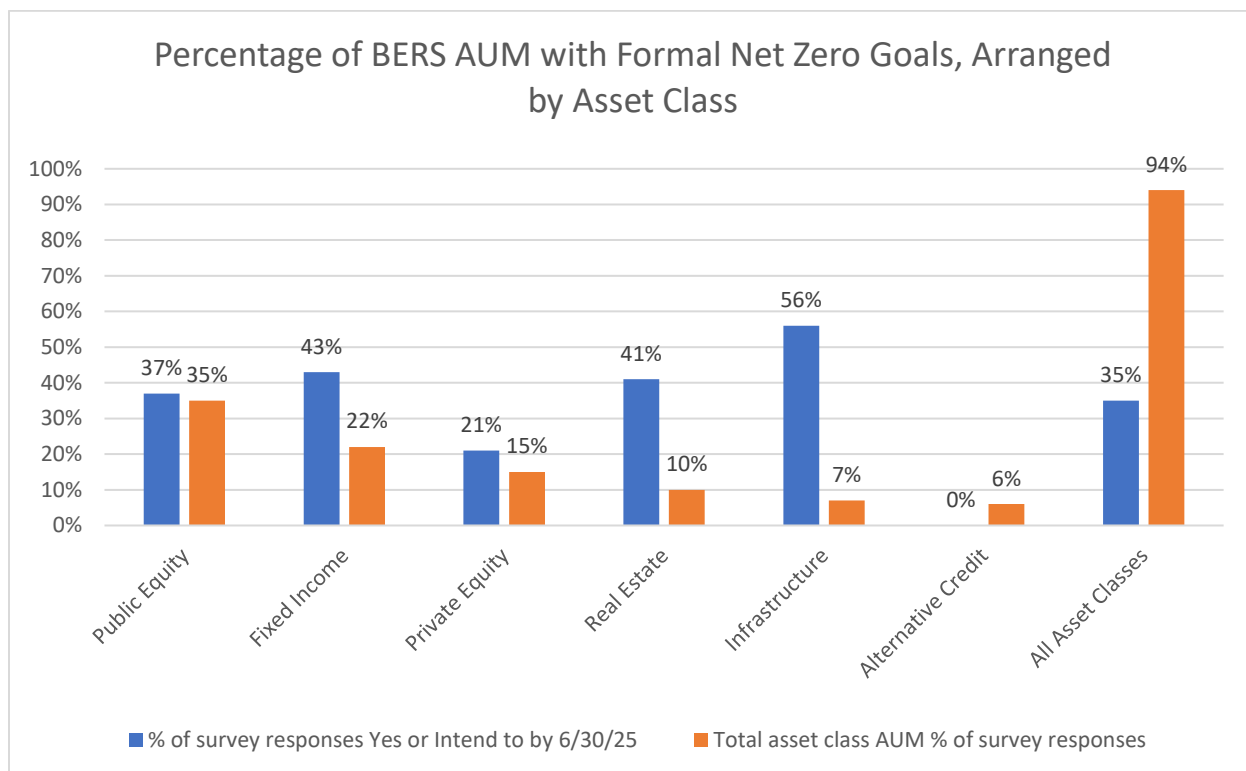
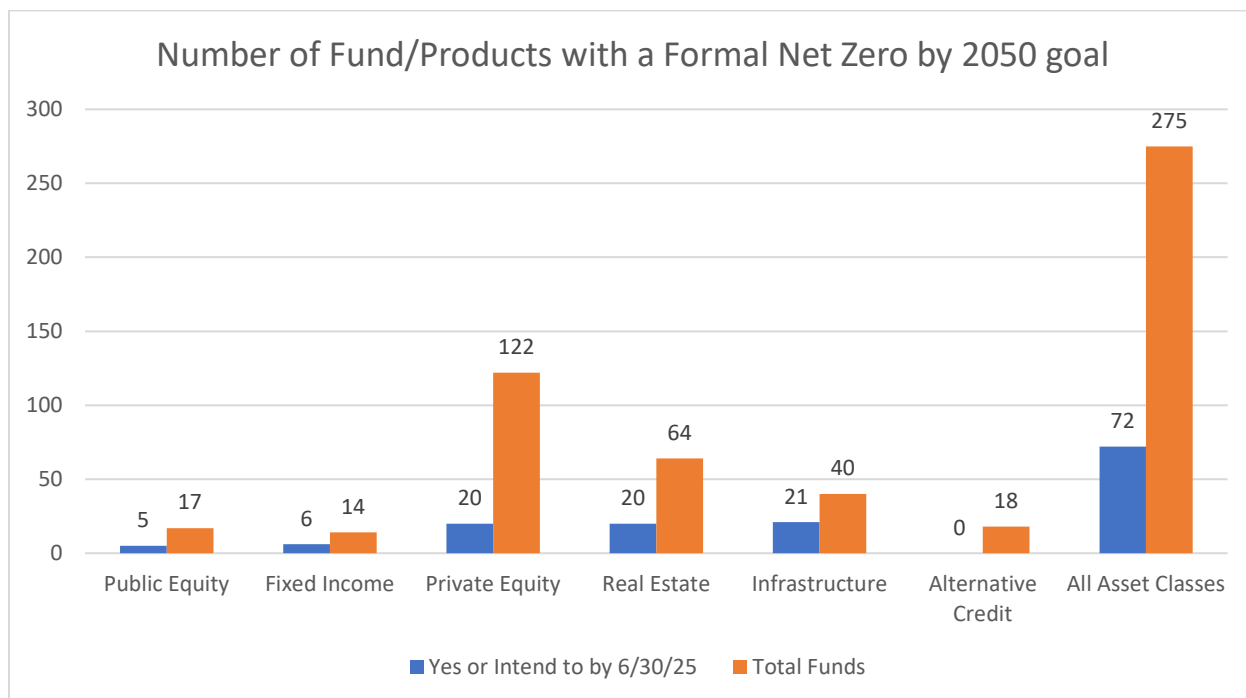
Real Estate: Properties certified as Energy Star or having a score above 75. Includes properties certified as LEED only if they are also certified as Energy Star. All data is based on manager surveys conducted by the Real Estate Team. All data is NAV.

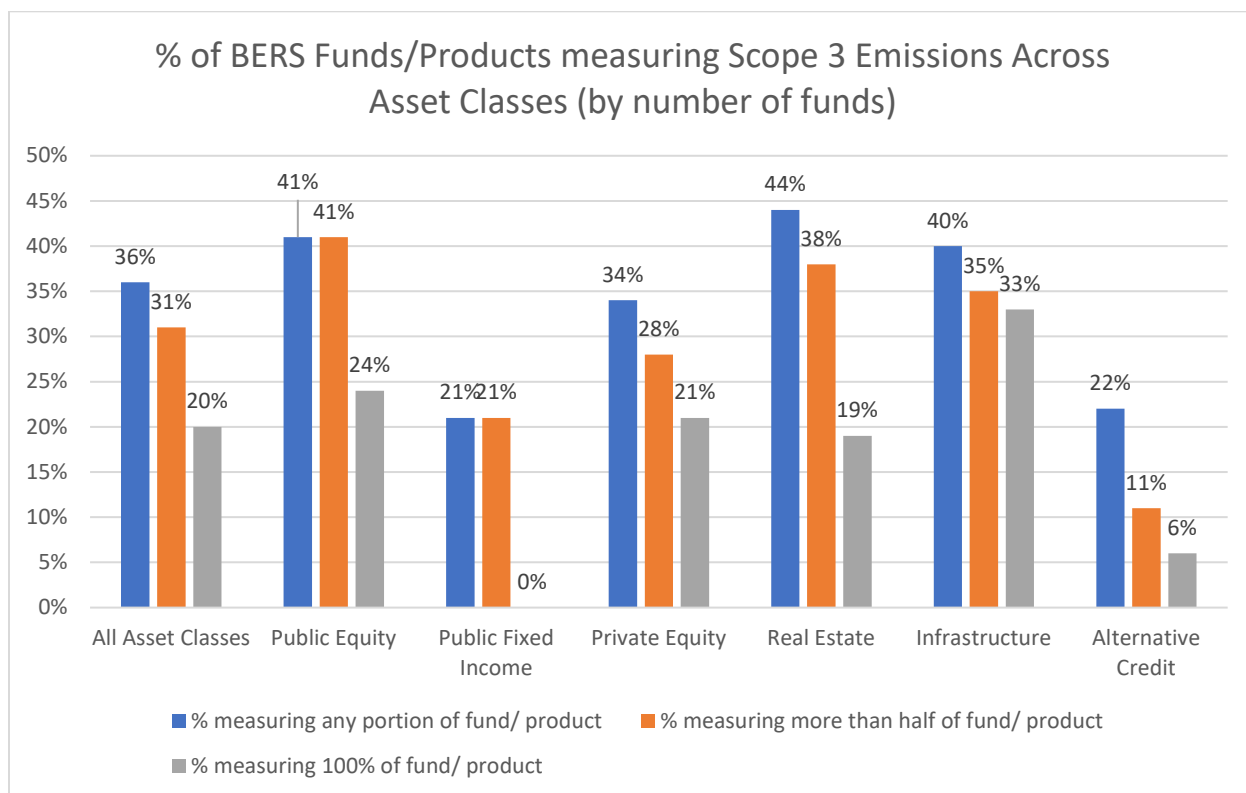
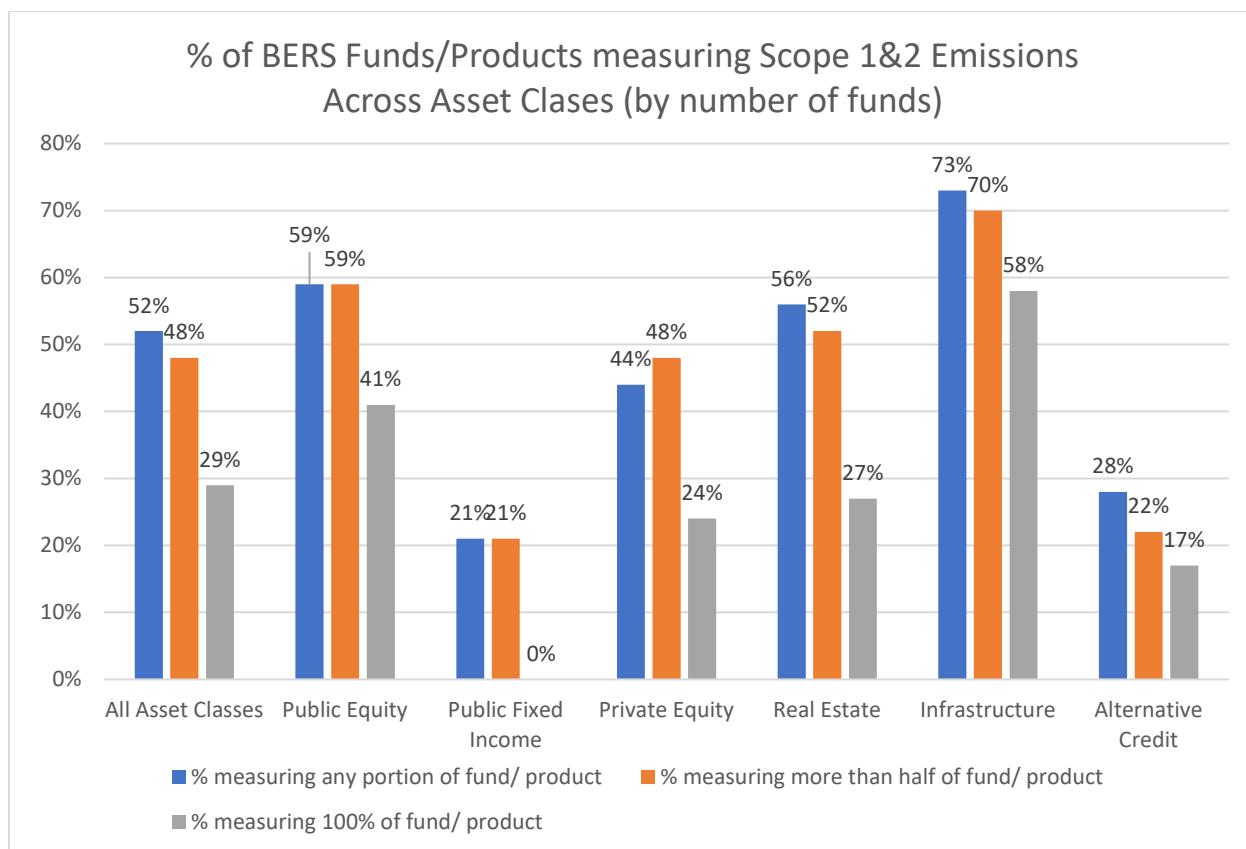
Infrastructure: Includes categories of alternative energy, energy efficiency, green buildings, sustainable water, pollution prevention, and sustainable agriculture. Data for 2Q 2024 is based on 1Q 2024. Climate solutions identified by Infrastructure Consultant for 1Q 2024.

Economically Targeted Investments (ETI): ETI data is incorporated in the data for Public Fixed Income and Real Estate due to the portfolio’s investment structure.

The calculations include only assets for which BAM provides investment advice and, therefore, does not include VSFs.

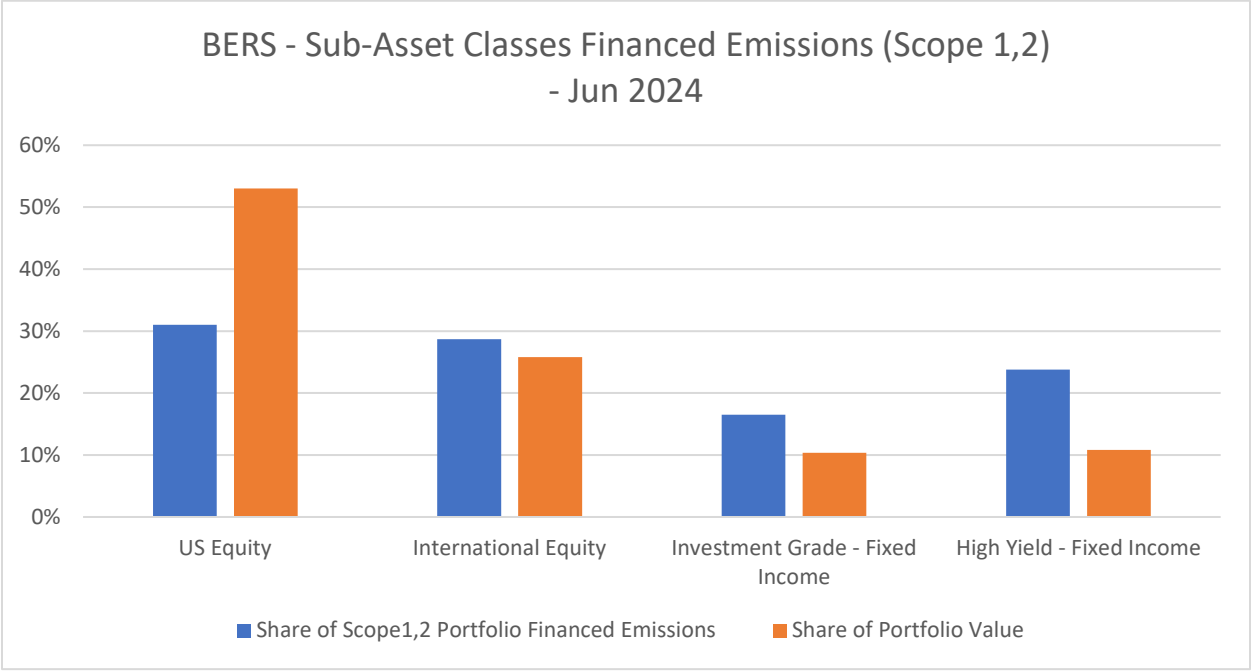
Appendix B – Annual ESG Questionnaire Net Zero Results by Asset Class





Appendix C – Scope 1,2 Financed Emissions Breakdown

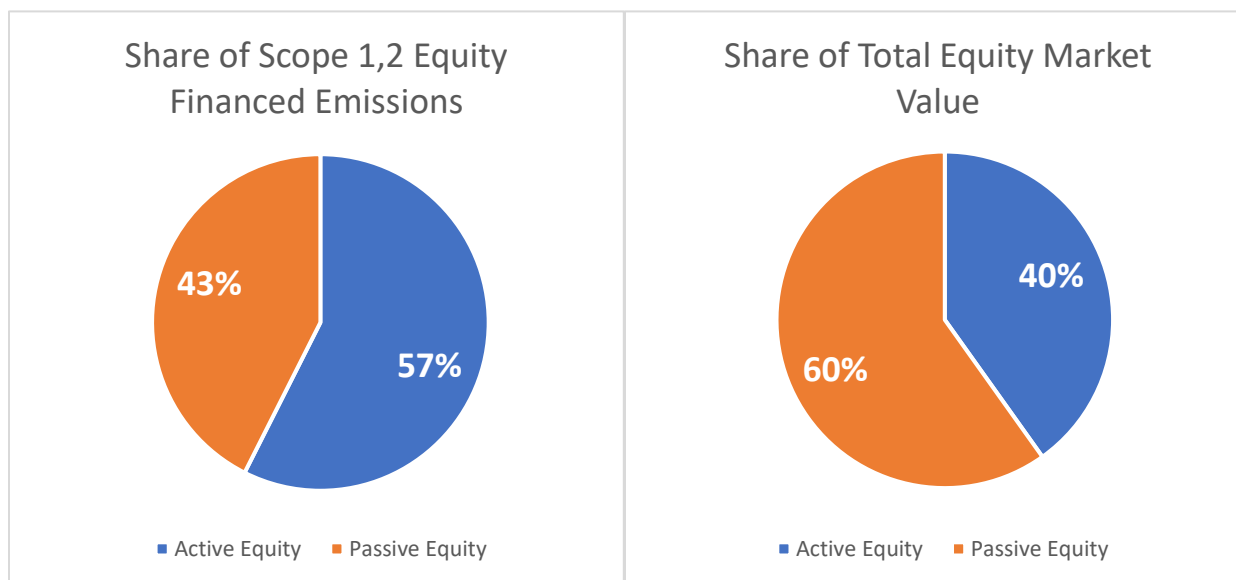
As of June 30, 2024, total public equity and corporate bonds represent about 79% and 21% of the measured public security portfolio’s market value, but their contributions to Scope 1 and 2 financed emissions are 60% and 40%, respectively. U.S. equity has higher total financed emissions but lower financed emissions intensity than international equity. Within fixed income, high yield has higher total financed emissions and higher emissions intensity than investment grade corporate bonds.



Between June 2023 and June 2024, public equities’ financed emissions decreased much for the BERS portfolio, while overall fixed income’s financed emissions decreased slightly.

While the portfolio’s total passive equity market value is much greater than the active equity market value, the contribution of actively managed equity to Scope 1 and 2 financed emissions is greater than that of the passive equity.

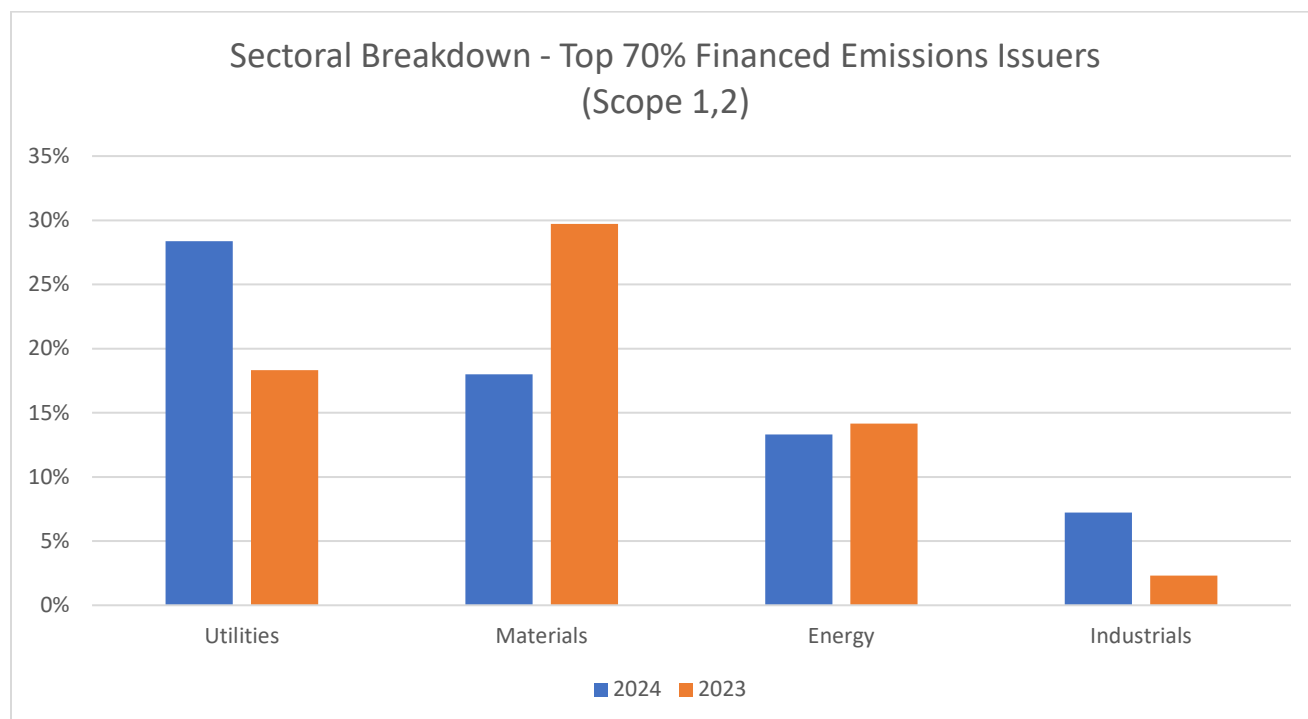
Active vs Passive Equity Financed Emissions (Scope 1 and 2) – Jun 30, 2024



Between June 2023 and June 2024, the decrease in active public equity financed emissions was the primary driver of the overall portfolio's financed emissions reduction, though passive equity financed emissions decreased too.

The top 70% of Scope 1 and 2 financed emissions are attributed to 121 issuers in the BERS portfolio, and the high emitting sectors in the top 70% financed emissions companies mirror the overall portfolio's high emitting sectors.

Sector Contribution to Top 70% Financed Emissions (Scope 1 and 2)
Jun 2024 and Jun 2023



The Utilities and Materials sectors are the highest emitting sectors among the top 70% of financed emissions, representing 28% and 18% financed emissions of the group, respectively. This information continues to be critical to our engagement activities towards the BERS goal to have 70% of Scope 1 and 2 financed emissions covered by science-based targets by June 30, 2025.

Weighted Average Carbon Intensity (WACI) – Scope 1 and 2

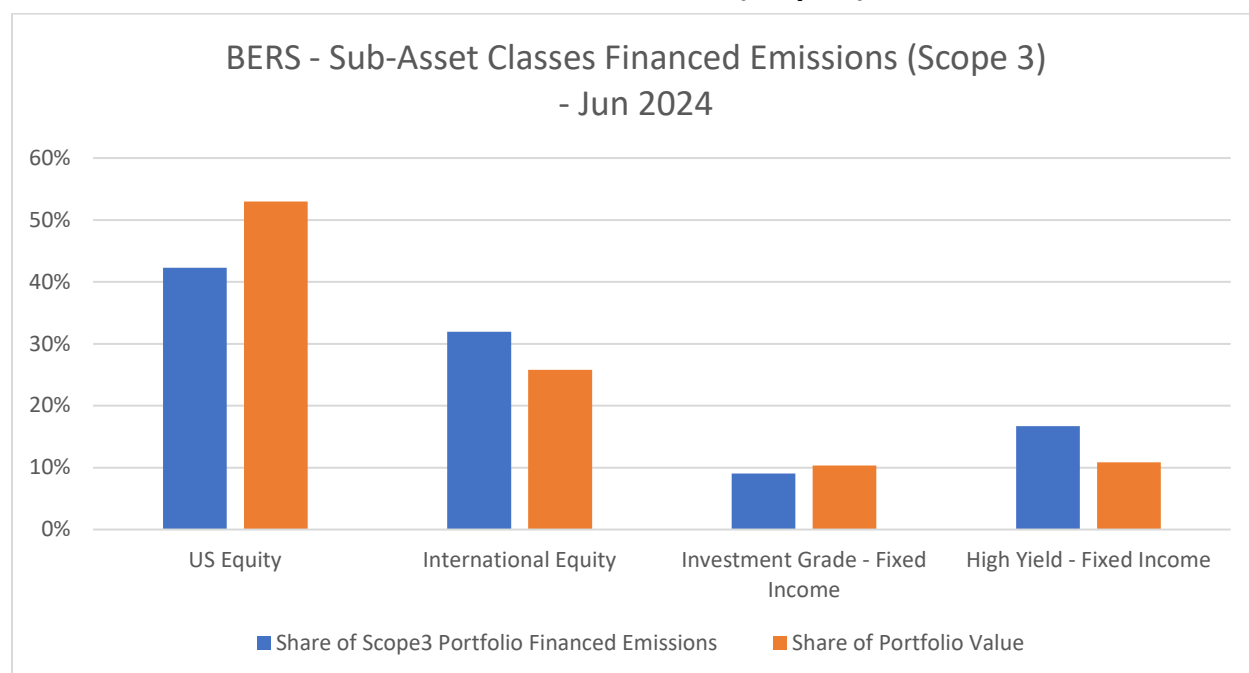
BERS - Weighted Average Carbon Intensity - Scope 1 and 2		
	BERS Portfolio Tons carbon emissions/\$m sales	Blended Benchmark Tons carbon emissions/\$m sales
31-Dec-19	218.18	187.03
30-Jun-22	187.85	179.70
30-Jun-23	158.20	164.90
30-Jun-24	148.60	139.20
Change % (2019-2024)	-31.89%	-25.57%
Change % (2023-2024)	-6.07%	-15.59%

Weighted Average Carbon Intensity (WACI) (financed emissions per million dollars of sales) decreased by 6.07% for Scopes 1,2 during the year 2023-2024.

Appendix D – Scope 3 Financed Emissions Breakdown

As of June 30, 2024, public equity and corporate bonds represent approximately 79% and 21% respectively of their combined market value, but their contributions to Scope 3 financed emissions are 74% and 26%, respectively. U.S. equity has higher Scope 3 financed emissions but lower emissions intensity than international equity. Within corporate bonds, high yield has much higher total financed emissions and emissions intensity than investment grade corporate bonds.

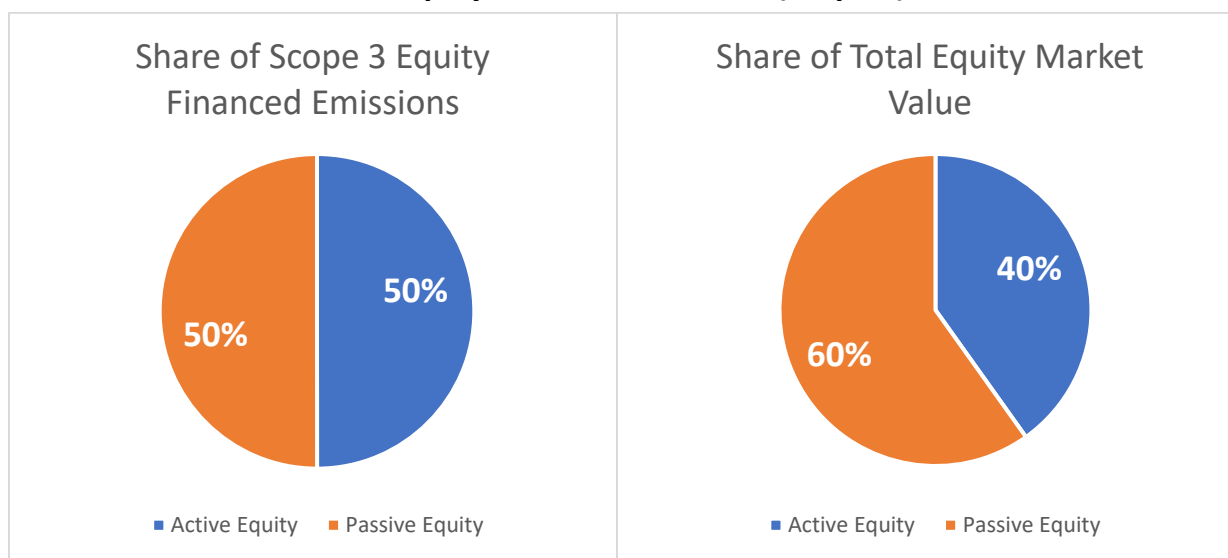
Sub-Asset Classes Financed Emissions (Scope 3) – Jun 30, 2024



Between June 2023 and June 2024, both public equities' financed emissions and fixed income's financed emissions decreased much for the BERS portfolio.

While the portfolio's total passive equity market value is much greater than the active equity market value, the contribution of actively managed equity to Scope 3 financed emissions is not far off from that of the passive equity.

Active vs Passive Equity Financed Emissions (Scope 3) – Jun 30, 2024



Between June 2023 and June 2024, the decrease in active public equity financed emissions, decrease in passive equity financed emissions, and the decrease in fixed income financed emissions, all collectively drove the overall portfolio's financed emissions reduction.

Weighted Average Carbon Intensity (WACI) – Scope 3

BERS - Weighted Average Carbon Intensity - Scope 3		
	BERS Portfolio Tons carbon emissions/\$m sales	Blended Benchmark Tons carbon emissions/\$m sales
30-Jun-22	705.61	817.80
30-Jun-23	675.30	783.30
30-Jun-24	605.60	698.80
Change % (2023-2024)	-10.32%	-10.79%

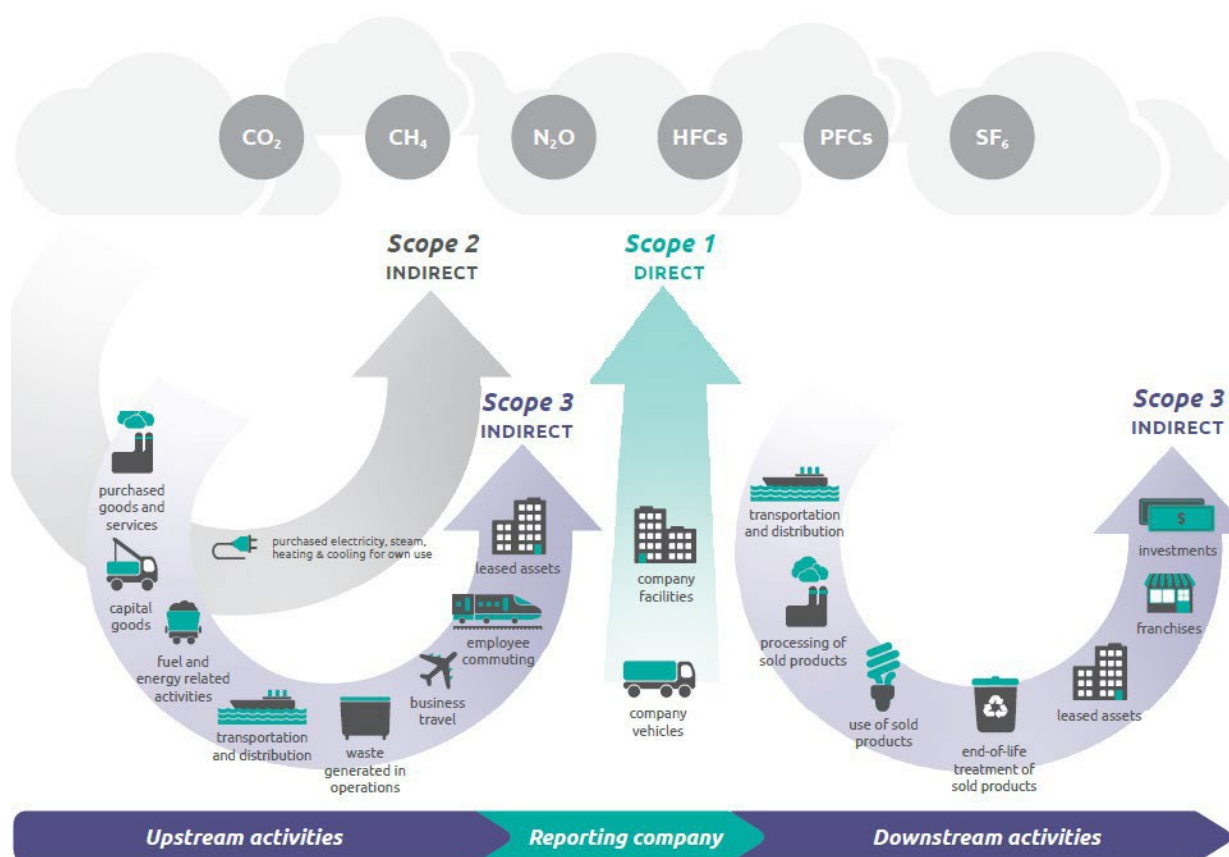
Weighted Average Carbon Intensity (WACI) (financed emissions per million dollars of sales) decreased by 10.32% for Scope 3 during the year 2023-2024.

Appendix E: Definitions of GHG Emissions and their Categories (Scopes 1, 2 and 3)

Scopes 1, 2 and 3 are ways of categorizing the different sources of GHG emissions from a company's direct operations and its wider value chain.

Scope 1	Scope 2	Scope 3
Covers the direct emissions from sources owned or controlled by a company – for example, by running its boilers and vehicles	Covers indirect emissions from the generation of energy a company purchases	Covers all other indirect emissions up and down a company's supply and value chain. For example, a petroleum company's Scope 3 emissions include the emissions from the gasoline they produce when it is burned by a customer's car. A bank's Scope 3 emissions include those from extracting fossil fuels from projects they finance. It is estimated that Scope 3 emissions constitute 75% of firms' emissions on average ¹⁰ .

Illustration of Scopes 1, 2 and 3 emissions



Source: Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011)

Appendix F: 2024 ESG Letter to BERS Asset Managers Communicating Net Zero Expectations

For public equity and corporate fixed income managers, TRS, NYCERS, and BERS have decarbonization expectations that include, at a minimum, the following three elements:

1. **Systematic engagement with issuers in TRS, NYCERS, and BERS’** portfolios to align with economy-wide net zero by 2050 (or sooner) decarbonization pathways. While a Firm-wide engagement approach is welcome, TRS, NYCERS, and BERS’ expectation is that decarbonization-related engagement will, at a minimum, be applied to the assets managed for them. Engagement can follow a maturity scale, starting with disclosure of carbon emissions and decarbonization targets and progressing to implementation of issuers’ stated decarbonization targets. Decarbonization progress may vary according to the portfolio asset’s context, including, but not limited to, the starting emissions profile of the holding, the sector, market positioning, and geography.
2. A plan to **measure scopes 1, 2, and material scope 3 financed emissions** for at least the assets managed for TRS, NYCERS, and BERS as suitable data becomes available, and
3. **A written implementation plan** detailing key time-bound milestones of your product’s plan to achieve these expectations.

An executive summary of the written implementation plan should be submitted to TRS, NYCERS, and BERS **by June 30, 2025**. After that date, the Bureau of Asset Management will monitor managers’ progress executing on the submitted plans. The Bureau of Asset Management will recommend potential actions to the TRS, BERS, and NYCERS boards for managers who do not meet these minimum expectations.

For private markets managers with control investments, TRS, NYCERS, and BERS expect all general partners that receive new fund commitments (starting July 1, 2025 for NYCERS and BERS and July 1, 2026 for TRS) to:

1. **Set portfolio assets on a decarbonization pathway** aligned with an economy-wide outcome of net zero by 2050 or sooner. Decarbonization progress during the holding period may vary according to the portfolio asset’s context, including, but not limited to, the starting emissions profile of the holding, the sector, market positioning, and geography. Decarbonization pathways could begin with measuring emissions or mapping out decarbonization-based value creation levers and progress to setting and implementing Paris-aligned quantitative decarbonization targets. While a Firm-wide approach is welcome, TRS, NYCERS, and BERS’ expectation is that the decarbonization plan will, at a minimum, be applied to the assets managed for them.

2. Have a plan to **measure scopes 1, 2, and material scope 3 financed emissions** for holdings as suitable data becomes available, and
3. Prepare a **written executive summary** detailing the fund's time-bound plan to achieve these expectations. Plans should be submitted to the Bureau of Asset Management during new fund diligence. The Bureau of Asset Management will monitor managers' progress executing on the submitted plans.

For private markets managers with non-control investments, TRS, NYCERS, and BERS recognize that there are varying levels of influence based on the investment strategy and type of assets. The Systems expect general partners that receive new fund commitments (starting July 1, 2025 for NYCERS and BERS and July 1, 2026 for TRS) to:

1. **Engage**, to the best of the manager's abilities, **with issuers or portfolio assets** to **advance** alignment with **decarbonization pathways** consistent with an economy-wide outcome of net zero by 2050 or sooner. Decarbonization progress may vary according to the portfolio asset's context, including, but not limited to, the starting emissions profile of the holding, the sector, market positioning, and geography. Engagement can follow a maturity scale, starting with disclosure of carbon emissions and decarbonization targets and progressing to implementation of the issuers or portfolio companies' stated decarbonization targets. While a Firm-wide engagement approach is welcome, TRS, NYCERS, and BERS' expectation is that decarbonization-related engagement will, at a minimum, be applied to the assets managed for them.
2. A plan to **measure scopes 1, 2, and 3 financed emissions** during the holding period as suitable data becomes available, and
3. A **written executive summary** detailing the fund's time-bound plan to achieve these expectations to be submitted to the Bureau of Asset Management during diligence. The Bureau of Asset Management will monitor managers' progress executing on the submitted plans.

We expect that all our asset managers will create clear, credible climate action plans tailored to their specific strategy. Hence, each manager's approach may be different. While not suitable for all strategies, some of the components of a strong climate action plan are:

- Assessing and pricing in physical and transition climate risk exposure
- A plan to incorporate the protection or restoration of natural carbon sinks and biodiversity
- A plan to incorporate considerations of a Just Transition

We encourage managers to participate in and maintain their commitment to initiatives such as Climate Action 100+, The Net Zero Asset Managers Initiative, UN Principles for Responsible Investment, and Initiative Climat International, or to join the appropriate initiatives if they have not done so yet.

Appendix G: Reporting in Accordance with Task Force on Climate-Related Financial Disclosures (TCFD) / IFRS S2 Recommendations

BERS follows the TCFD / IFRS S2 recommendations in disclosing its governance and strategies to identify, assess and manage climate-related risks and opportunities and its annual progress in this area. This disclosure includes key information presented in BERS' Annual Climate Report. Additional details about BERS' actions and progress related to climate consistent with TCFD recommendations are available in this Appendix.

1. Board oversight of climate-related risks and opportunities

The BERS Board of Trustees (Board) oversees climate-related issues in the investment process, approves climate-related policies and investment actions and delegates implementation and advisory responsibilities to the Bureau of Asset Management (BAM).

On October 20, 2021, BERS voted to commit to achieve net zero greenhouse gas emissions (GHG) emissions by 2040 across our investment portfolio and approved a Climate Action Plan outlining the key elements of this commitment. This action was designed to mitigate the systemic risks of climate change to our investments and the real economy, taking into account the best available scientific knowledge while acting consistently with BERS' fiduciary duties. We added our net zero goal and Climate Action Plan to our Investment Policy Statement as an appendix.

To fulfill this commitment, BERS directed BAM to develop an implementation plan for the net zero goal that prudently considers climate change risk and opportunity as well as material environmental, social and governance (ESG) factors in our investment portfolio, along with all additional risks and investment considerations, and annually report on the plan and its progress. The Board approved this net zero implementation plan on April 18, 2023. The Board received its first Annual Climate Report from BAM on April 4, 2024 and continues to receive comprehensive reports on progress toward goals annually and additionally as needed. The Board approves any recommended changes to the net zero commitment and implementation plan.

The Board also regularly considers climate-related issues when reviewing and approving recommended commitments and allocations to funds and products across the portfolio. The Board delegates to BAM the responsibility to perform due diligence of how asset managers consider climate-related risks and opportunities in funds and products. Investment memoranda to the Board incorporate climate-related issues.

2. Management's role in assessing and managing climate-related risks and opportunities

The Board delegates advisory and implementation responsibilities related to climate risks and opportunities to BAM. The executive staff and each asset class head and their teams are responsible for ensuring climate-related issues are prudently considered and integrated in the investment process.

These objectives are formalized across the bureau in BAM's Annual Strategic Plan which includes working toward our Net Zero by 2040 plan, meeting interim climate targets and seeking investments in climate solutions.

BAM has an Office of ESG with 12 professionals dedicated to integrating ESG priorities in different aspects of the investment process. Two members of the ESG team are fully dedicated to climate while all other members have climate, along with other ESG priorities, incorporated in varying degrees in their responsibilities. The ESG team works collaboratively across all functions of the office including with asset class teams, risk management, compliance and operations.

BAM's Investment Committee, Greenlight Committee and Operations Committee include representation from the Office of ESG and consider climate when reviewing prospective investments or other matters in the portfolio.

3. Climate-related risks and opportunities the organization has identified over the short, medium, and long term

As a large, diversified fund with broad exposure across the economy, we have a direct economic interest in the overall strength of the financial markets and broader economy in which the System invests. As a pension fund with long-term obligations to our beneficiaries extending for decades, we are obligated to pay attention to long-term risks and opportunities. We have a fiduciary duty, therefore, to protect against downside and systemic risks and foster stable financial markets and long-term economic growth essential to the performance of the System's investments. In addition to long-term risks, climate change poses short- to medium-term risks to our portfolio with accelerating frequency of extreme weather and environmental impacts globally.

Climate change is generating increasingly devastating effects that risk undermining the stability and health of the global economy. We regard these climate change-related risks as systemic— that is, we cannot diversify them away—and severe, as they can lead to the failure of broad segments of the market and economy. The Intergovernmental Panel on Climate Change (IPCC) confirmed, based on the best available scientific knowledge, that limiting temperature rise to 1.5° C is necessary to avoid the worst climate impacts and preserve livable conditions.^[6] To achieve this goal, the world must reach net zero GHG emissions by 2050. Reaching net zero by 2040 substantially improves the probability of limiting warming to 1.5° C and avoiding temporary overshoots of 1.5° C that would have irreparably harmful impacts.^[7] The System's goal of net zero emissions by 2040 seeks to contribute to more concerted and ambitious action in the real economy and markets toward systemic change needed to protect the interests of our beneficiaries.

In 2018, BERS completed a comprehensive climate risk assessment of its portfolio with an external consultant. This assessment identified climate change investment risk factors that included physical risks, such as extreme weather events and resource availability, and transition risks, such as technological transformation and policy change. It also evaluated potential impacts to the portfolio in the different climate scenarios of 2°C, 3°C and 4°C and assessed risks related to assets classes and industries. Furthermore, it identified opportunities and benefits of investing in climate change solutions.

In 2020, BERS completed a detailed assessment of the risks of securities issued by fossil fuel reserve owners with an external consultant. This analysis evaluated climate and financial risk and applied climate scenario analysis to our public markets portfolio using 1.5°C and 3.0° scenarios and potential impacts of these scenarios on our portfolio.

4. The impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning and resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

On October 20, 2021, BERS voted to commit to achieve net zero greenhouse gas emissions (GHG) emissions by 2040 across our investment portfolio and approved a Climate Action Plan outlining the key elements of this commitment. To fulfill this commitment, BERS directed BAM to develop an implementation plan for the net zero goal that prudently considers climate change risk and opportunity as well as material environmental, social and governance (ESG) factors in our investment portfolio, along with all additional risks and investment considerations, and annually report on the plan and its progress. The Board approved this net zero implementation plan on April 18, 2023. This plan outlines climate-related goals and processes integrated into our investment process and planning. Goals include emissions reduction targets in public markets investments, increasing science-based targets coverage in public markets and 100% of asset managers across all asset classes having a net zero goal, science-based targets or other appropriate decarbonization objective and strategy for assets managed for the System by June 30, 2025.

BERS has joined leading industry organizations to support its net zero goal. In 2021, BERS adopted the Net Zero Asset Owner Commitment^[3] of the Paris Aligned Investment Initiative (PAII), a formal partner of the United Nations Framework Convention on Climate Change's (UNFCCC's) Race to Zero campaign,^[4] allowing us to collaborate with and learn from other large asset owners and leading practitioners. As a PAII signatory, BERS considers the PAII Net Zero Investment Framework and supplementary guidance ("NZIF")^[5] in implementing our net zero goal.

BERS has a goal of investing across all asset classes a total of \$1.8 billion in climate change solutions by 2035 with an interim goal of \$400 million by 2025 consistent with our fiduciary duties and our investment objectives. BERS has met and exceeded its 2025 goal. BERS periodically assesses and may update climate change solutions investment goals in consultation with our investment advisors, taking into account the System's asset allocation, pipeline and opportunity sets for each asset class, including public and private markets. Climate change solutions are investments in economic activities that contribute substantially to mitigating, remediation, adaptation and/or resilience in relation to climate change impacts. Such activities include but are not limited to renewable energy, energy efficiency, sustainable water, and pollution prevention. BERS directed BAM to periodically review the definitions for climate change solutions investments by asset class to ensure that they accurately reflect investments that are contributing to achieving the goals of the Paris Climate Agreement to keep global warming below 1.5° C.

BERS has approved certain exclusion policies to mitigate climate risks and stranded asset risks in our portfolio. In 2015, BERS began excluding from our portfolio publicly-traded companies which derive at least 50% of their revenue from thermal coal production, mining and/or processing. In 2018, we voted

to divest from fossil fuel owners in publicly-traded equity and fixed income securities within five years and completed that divestment in 2022. In addition, BAM asks all private markets managers recommended for Board approval to commit across the recommended fund to exclude investments in exploration, extraction or production of oil, gas or thermal coal, or to otherwise provide BERS with the ability to opt out of such investments. If a manager does not agree to either condition, BAM will communicate the manager's position to the Board, which shall determine whether to approve the investment, consistent with our fiduciary duties.

As described in the prior section, BERS has conducted climate scenario analysis to evaluate how resilient our portfolio may be in different scenarios. In 2018, BERS completed a comprehensive climate risk assessment that evaluated potential impacts to the portfolio in the different climate scenarios of 2°C, 3°C and 4°C and assessed risks related to asset classes and industries. Furthermore, it identified opportunities and benefits of investing in climate change solutions. Our 2021 assessment of the risks of securities issued by fossil fuel reserve owners applied climate scenario analysis to our public markets portfolio using 1.5°C and 3.0° scenarios. We will continue to explore effective ways of using climate scenario analysis to evaluate the resiliency of our portfolio to climate change.

5. The organization's processes for identifying, assessing and managing climate-related risks.

On behalf of BERS, BAM conducts and reports annual carbon footprint analyses of our public equity and corporate bond (including investment grade, high yield and convertible bonds) portfolios measuring Scopes 1, 2 and 3 financed emissions (emissions/\$million invested) with Enterprise Value Including Cash. BAM also measures, evaluates and reports changes in absolute emissions and weighted average carbon intensity.

BAM integrates consideration of climate risks and opportunities and net zero alignment in asset manager due diligence, monitoring and engagement and annually reports a summary of the status of the System's managers to the Board.

Due Diligence of Asset Managers

BAM conducts due diligence of material environmental, social, and governance (ESG) factors, including climate change-related risks and opportunities, for all asset managers across all asset classes as part of the overall diligence process conducted prior to recommendations and approvals of investments to the Board. Climate change poses both systemic and idiosyncratic risks for the investment portfolio and is, therefore, actively assessed in the diligence for all managers and strategies and explored in more depth where it may be more financially material.

As a starting point for diligence, BAM utilizes the Due Diligence Questionnaire template of the Institutional Limited Partners Association (ILPA) for private markets managers and a similar template for public markets managers. The ILPA-based template is used along with a BAM-specific supplemental questionnaire. These questionnaires collect written disclosures of how managers consider climate change-related risks and opportunities in diligence and portfolio management, whether and how they measure the greenhouse gas emissions of their investments, what climate commitments or targets they have and whether they report in line with the Task Force on Climate-Related Financial Disclosures

(TCFD) recommendations. During diligence, the BAM team asks clarifying questions about the written responses as well as questions about the managers' climate-related practices using specific investments as examples.

BAM looks at the managers' management and governance of the exposure to physical risks stemming from climate change as well as the management and governance related to climate-related transition risks stemming from evolving regulation and market preferences. In addition, BAM diligences the manager's future plans to integrate and price-in climate-related physical and transition risks and opportunities where material.

BAM also looks at the manager's progress in decreasing its contribution to the systemic risks of climate change and evolving market preferences through emissions reduction pathways. BAM's supplemental diligence questions related to climate change and net zero alignment include whether managers measure the Scope 3 emissions of their investments; whether they have specifically adopted net zero goals, science-based targets or other emissions reduction targets for their investments; whether they have a written plan to support these goals or targets; and whether their goals or targets cover Scope 3 emissions of their investments. For specific high emitting sectors, we conduct deeper diligence. BAM summarizes and reports findings related to climate-related ESG diligence in investment memoranda to the Board.

In recognition of the importance of nature as a vital carbon sink and subject of the cascading impacts of climate change, BAM has been monitoring the implementation of the final Task Force on Nature-Related Financial Disclosures (TNFD framework), which is harmonized with the TCFD/ISSB S2 framework, and continues to seek approaches to help mitigate the systemic risk from large-scale ecosystem collapse. BAM asks managers about their assessment of nature dependencies and biodiversity mainly in the context of real assets or other sectors with material impact on nature and biodiversity.

Monitoring of Asset Managers

BAM sends all managers an annual ESG questionnaire that includes questions related to climate and net zero alignment on topics such as:

- The managers' adoption of a net zero goal, science-based targets, or alternative decarbonization goals for the funds and strategies in which the System invests as well as the managers' total AUM.
- The managers' adoption of a written implementation plan to achieve any formal decarbonization goals.
- The percentage of total Scope 1, 2, and 3 emissions currently measured for the funds/products managed for the System as well as for the managers' total AUM.
- The assessment of physical climate risk, transition risk, nature-related impacts and dependencies, and water-related risks and stewardship.

Engagement of Listed Companies

It is the goal of the Board that by 2025 companies representing 70% of Scopes 1 and 2 financed emissions in our public equity and corporate bond portfolios, and by 2030 companies representing 90% of Scopes 1, 2 and 3 financed emissions in those portfolios will have adopted science-based targets, to be approved by SBTi or otherwise independently verified with globally established science-based standards.

Corporate engagement is central to our ability to achieve the goal of net zero by 2040. BERS will seek to achieve our emissions reduction targets by supporting real economy emissions reductions and increasing the alignment of our investments with science-based pathways to limit global warming to 1.5° C.

To focus resources efficiently toward engagement, BERS focuses on portfolio companies in the highest emitting sectors in developed markets as well as the largest emerging markets portfolio companies in those sectors by market capitalization.

For 2023 and 2024, a prime focus of BERS' shareholder engagement was on banks which have adopted net zero targets but continue to finance or underwrite new fossil fuel supply projects, in defiance of the admonition of the International Energy Agency of the need to cease such funding to limit global temperature rise to 1.5° C

To focus resources efficiently toward engagement, BERS directs BAM to prioritize identifying and engaging high-emitting corporate portfolio companies in the Russell 1000 and the ACWI World- ex USA IMI, and the largest portfolio companies by market capitalization in the MSCI Emerging Markets indices in the highest emitting sectors. These sectors shall include, at a minimum, energy, utilities, industrials and materials, as the highest emitting sectors of portfolio Scopes 1 and 2 emissions and the financial sector, as a high source of Scope 3 emissions. This does not preclude BAM from engaging with companies outside of this universe but conveys the belief of the Board that focusing on companies in the highest emitting sectors where the System has the most potential influence will generate the greatest impact on reducing real world emissions.

These prudent efforts to enhance shareholder value, particularly in coalition with other asset owners such as our participation in Climate Action 100+, will be based on our proxy voting principles. Climate Action 100+ is an ambitious global investor collaboration through which more than 700 global investors with at least \$68 trillion in assets across 33 markets encourage the world's 166 highest emitting companies — responsible for an estimated 80 percent of global emissions — to take necessary action on climate change. Every year we strategize and collaborate with other investors, and report on our engagement results in our annual reports (the annual shareholder initiatives post-season report and the Climate Annual Report).

Exclusion Policies

BAM's Risk Management Team annually analyzes and updates the exclusion policy and list of excluded securities. The Risk Management Team annually presents this analysis, which includes analysis of potential impacts to the portfolio, to BAM's Investment Committee for review and recommendation to the Board, which votes on whether to approve the update to the list of excluded securities.

6. Targets and metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.

BERS reports its climate-related targets and metrics in its Net Zero Implementation Plan and Annual Climate Reports. Below is a summary of our targets, metrics and progress toward targets based on information in our Fiscal Year 2024 Annual Climate Report. Additional information about our targets, metrics and progress can be found in our Fiscal Year 2024 Annual Climate Report.

Emissions Reduction Targets, Metrics & Progress

Emissions Reduction Targets

BERS set targets to reduce the Scope 1 and 2 financed emissions intensity in our public equity and corporate bonds portfolio (including investment grade, high yield and convertible bonds) by 22% by 2025, 49% by 2030, and 100% by 2040, using a baseline of December 31, 2019.

Emissions Reduction Metrics

For these interim emissions reduction targets, BERS uses "financed emissions intensity" (tons of CO₂ equivalent emissions/\$million invested) based on Enterprise Value Including Cash (EVIC) as the primary metric for emissions. We also report, measure and evaluate changes in absolute financed emissions (which will be also referred to as financed emissions or FE in this report) and weighted average carbon intensity (WACI) (tons of CO₂/\$million sales) and strive toward comparable progress among all metrics.

Definitions of GHG Emissions and their Categories (Scopes 1, 2 and 3)

Scopes 1, 2 and 3 are ways of categorizing the different sources of GHG emissions from a company's direct operations and its wider value chain.

Scope 1	Scope 2	Scope 3
Covers the direct emissions from sources owned or controlled by a company – for example, by running its boilers and vehicles	Covers indirect emissions from the generation of energy a company purchases	Covers all other indirect emissions up and down a company's supply and value chain.

Scope 1 & 2 Emissions Reduction Progress

During Fiscal Year 2024 BERS' public portfolio emissions intensity experienced a greater reduction than the blended benchmark, as depicted in the table below. BERS' public equity and corporate bonds absolute financed emissions (FE) also decreased more than the benchmark's total FE during Fiscal Year 2024.

Public Equity and Corporate Bonds Scope 1 and 2 Financed Emissions and Intensity

BERS - Financed Emissions Intensity - Scope 1 and 2		
	BERS Portfolio Tons carbon emissions/\$m invested	Blended Benchmark Tons carbon emissions/\$m invested
31-Dec-19	80.95	81.01
30-Jun-22	69.81	61.50
30-Jun-23	74.30	67.10
30-Jun-24	58.03	55.53
Change % (2019-2024)	-28.31%	-31.45%
Change % (2023-2024)	-21.90%	-17.24%

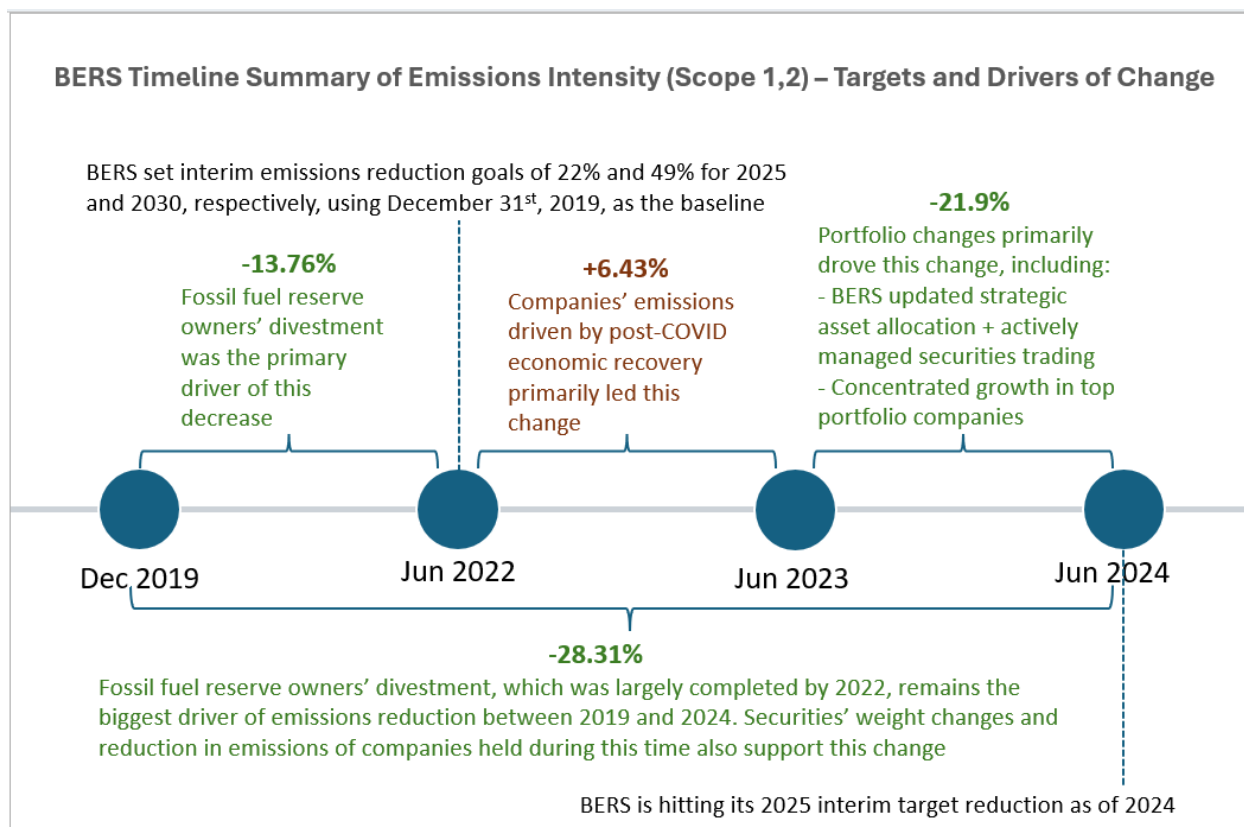
BERS - Financed Emissions - Scope 1 and 2		
	BERS Portfolio Tons carbon emissions	Blended Benchmark Tons carbon emissions
31-Dec-19	295,390	339,056
30-Jun-22	323,849	274,940
30-Jun-23	358,822	324,335
30-Jun-24	284,059	271,341
Change % (2019-2024)	-3.84%	-19.97%
Change % (2023-2024)	-20.84%	-16.34%

We do not yet have complete and accurate enough data for measuring GHGs in private markets, and there is no accepted methodology for measuring GHGs in mortgage and government fixed income portfolios (comprising the remainder of the public markets portfolio). The analysis used holdings data as of June 30, 2024 and MSCI's carbon footprint data and analytics (which includes PCAF-aligned metrics for 2024).

To further our understanding of the drivers of reduction in this emissions intensity between 2019 and 2024, we pursued a detailed attributional analysis by separating the effect of each factor that affects the emissions intensity calculation (a ceteris paribus analysis, i.e. changing one factor at a time from 2019 to 2024, assuming everything else is held constant). We compared the Dec 31, 2019 and Jun 30, 2024 portfolios and formed three sub-sets:

- **Fossil Fuel divestments:** securities in the portfolio in 2019, but not in 2024. BERS no longer holds those securities due to multiple reasons including fossil fuel divestment, changes in strategic asset allocation, and regular business changes, such as changes in actively managed accounts by managers, or changes of managers or securities.
- **New investments:** securities that weren't present in 2019 but are held in the 2024 portfolio for multiple reasons, including regular business changes
- **Securities held between 2019 and 2024:** subject to a detailed attributional analysis that breaks down the marginal impact of changes in individual factors (company emissions, EVIC, weight, and portfolio coverage), affecting portfolio financed emissions changes. The interaction term captures the effect of simultaneously changing multiple factors.

BERS – Timeline of Emissions Intensity (Scope 1 and 2) – Milestones and Drivers of Change



Scope 3 Emissions Reduction Progress

During Fiscal Year 2024 BERS' Scope 3 public portfolio emissions intensity experienced a slightly smaller reduction than the blended benchmark, as depicted in the table below. BERS' public equity and corporate bonds absolute financed emissions (FE) also decreased albeit a little less than the benchmark's total FE during Fiscal Year 2024.

Public Equity and Corporate Bonds Scope 3 Financed Emissions and Intensity

BERS - Financed Emissions Intensity - Scope 3		
	BERS Portfolio Tons carbon emissions/\$m invested	Blended Benchmark Tons carbon emissions/\$m invested
30-Jun-22	292.94	383.90
30-Jun-23	406.80	428.90
30-Jun-24	350.11	361.20
Change % (2023-2024)	-13.94%	-15.78%

BERS - Financed Emissions - Scope 3		
	BERS Portfolio Tons carbon emissions	Blended Benchmark Tons carbon emissions
30-Jun-22	1,363,932	1,716,811
30-Jun-23	1,965,756	2,072,283
30-Jun-24	1,713,932	1,764,999
Change % (2023-2024)	-12.81%	-14.83%

BERS has not yet set interim Scope 3 emissions reductions goals due to inadequate coverage and quality of data.

Climate Solutions Investments Targets, Metrics & Progress

BERS has a goal of investing a total of \$1.8 billion in climate change solutions by 2035, and had an interim goal of \$400 million by 2025, consistent with our fiduciary duties and our investment objectives. **As of June 30, 2024, BERS has a total of \$608 million in invested and unfunded commitments in climate change solutions across all asset classes, an increase of 41.5% over year FY2023.**

Climate Solutions Investments Definitions

Public Equity: Companies that derive revenue from MSCI's Environmental Impact categories of alternative energy, energy efficiency, green building, pollution prevention, or sustainable water. New weighted average method adopted as of 4Q 2022.

Public Fixed Income: Companies that derive revenue from MSCI’s Environmental Impact categories of alternative energy, energy efficiency, green buildings, sustainable water, pollution prevention, or sustainable agriculture, as analyzed by Risk Management. New weighted average method adopted as of 4Q 2022.

Also includes green bonds based on manager surveys conducted by Fixed Income Team. Managers were allowed discretion in defining green bonds.

Alternative Credit: OFI market values are based on manager surveys conducted by Alternative Credit Team. The definition of climate solutions used for OFI is “investments in companies that generate 50% or more revenue from clean and renewable energy technologies and assets including (1) renewable energy such as solar, wind, geothermal and hydropower; (2) energy efficiency and energy smart technologies such as power storage, fuel cells and carbon capture and storage; (3) energy efficient transport and (4) low carbon buildings.” This definition is a summary of the MSCI and Burgiss definitions as well as a reflection of a definition by Ceres. Total OFI NAV based on data from Alternative Credit Team.

Private Equity: Companies predominantly focused on a business activity classified under the Burgiss category of “Eco Friendly” activities, including renewable energy, biofuel and other clean tech or associated companies. All data is NAV. We also included companies that largely aligned with our definition of climate solutions in public markets.

Real Estate: Properties certified as Energy Star or having a score above 75. Includes properties certified as LEED only if they are also certified as Energy Star. All data is based on manager surveys conducted by the Real Estate Team. All data is NAV.

Infrastructure: Includes categories of alternative energy, energy efficiency, green buildings, sustainable water, pollution prevention, and sustainable agriculture. Data for 2Q 2024 is based on 1Q 2024. Climate solutions identified by Infrastructure Consultant for 1Q 2024.

Economically Targeted Investments (ETI): ETI data is incorporated in the data for Public Fixed Income and Real Estate due to the portfolio’s investment structure.

The calculations include only assets for which BAM provides investment advice and, therefore, does not include VSFs.

Asset Manager Net Zero Expectations & Progress

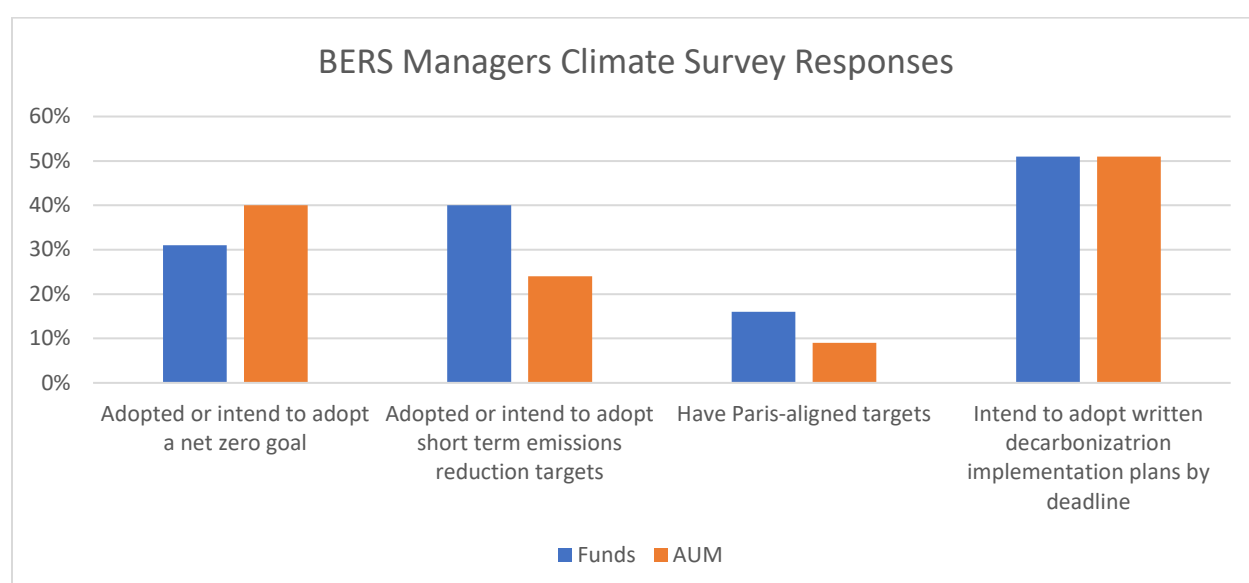
BERS’ Net Zero Implementation Plan set the following expectations for our asset managers:

- All our public and private markets asset managers to have a net zero goal or science-based targets, and an implementation plan covering, at a minimum, assets managed for the System, by June 30, 2025. We expect public markets managers to have their goals, targets and plans in place by that date. For private markets managers the expectation will apply for commitments BERS makes from that date forward.

- All managers to cover Scopes 1 and 2 emissions and material Scope 3 emissions of underlying investments in their targets and plans.
- BAM will review the proxy voting record of public markets asset managers related to climate change, including shareholder proposals and director elections.

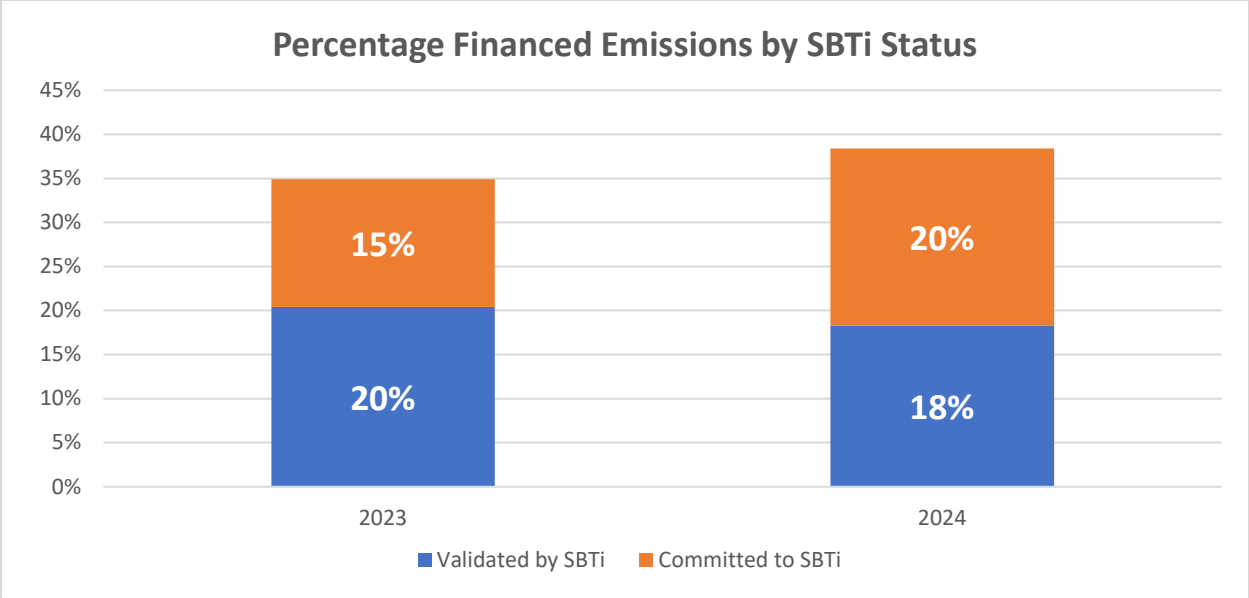
To help achieve these expectations, BAM integrates consideration of climate risks and opportunities and net zero alignment in asset manager due diligence, monitoring and engagement and will annually report a summary of the status of the System's managers to the Board.

The following percentages of managers stated they have adopted, or intend to adopt in the next 18 months, net zero goals, science-based targets, other decarbonization goals or implementation plans. The goals and targets apply to the funds or products the managers invest in for BERS:



Science-Based Targets Portfolio Coverage Target and Progress

BERS has a goal for 70% of its Scopes 1 and 2 financed emissions in public markets to be covered by independently validated, science-based targets. The share of BERS' portfolio covered by science-based targets, as measured by the percentage of Scopes 1 and 2 financed emissions as validated by the Science-based Targets Initiative (SBTi), decreased to 18.3% (from 20.4%) in 2024 with an additional 20.1% committed to setting targets with SBTi within the next two years. These totals represent a decrease in validated targets with an increase in validated plus commitments, from 34.9% to 38.4%.







NYCERS INVESTMENT MEETING

PUBLIC SESSION



June 18, 2025

NYCERS and BERS

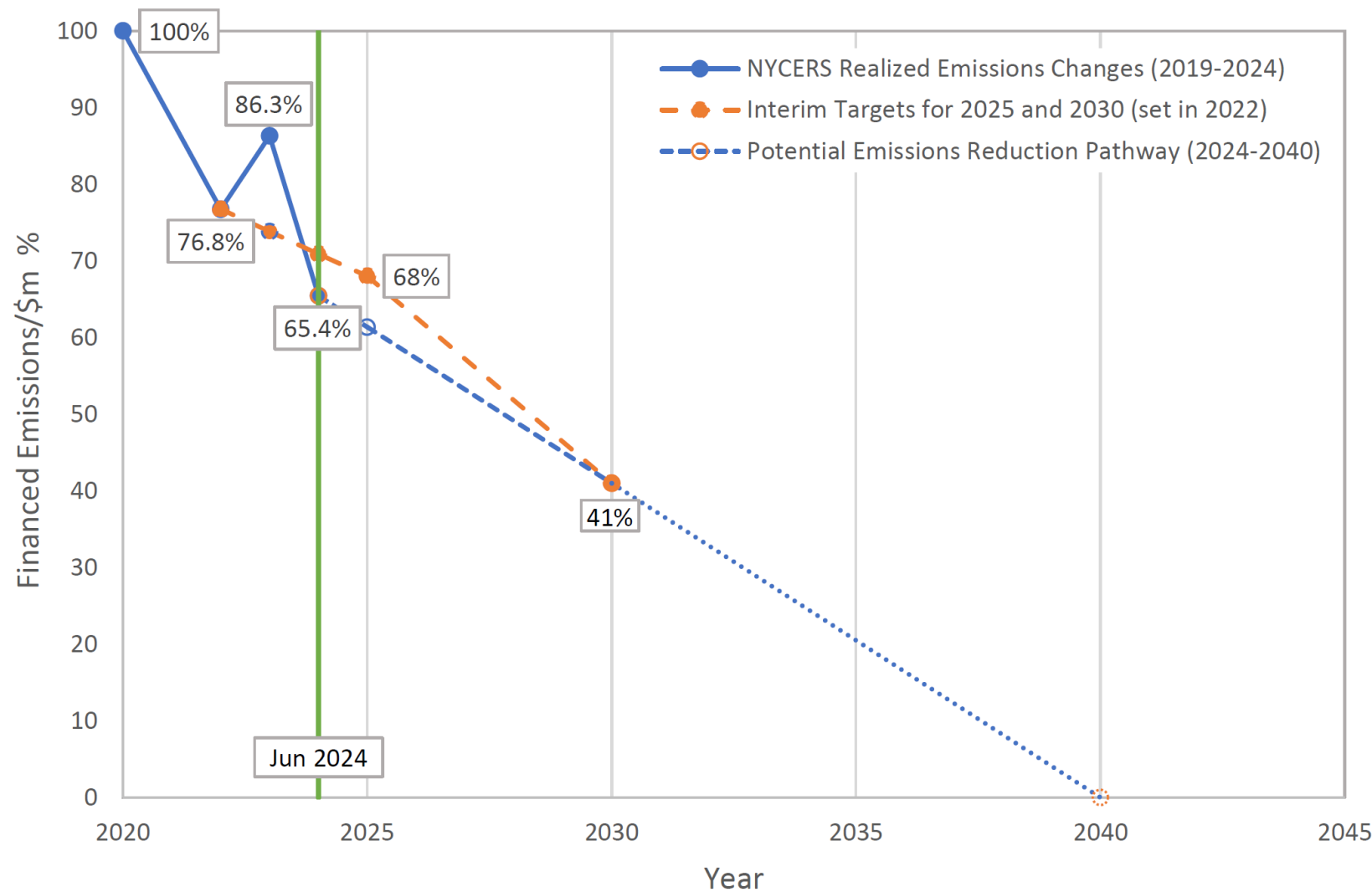
Net Zero Report and Recommendations



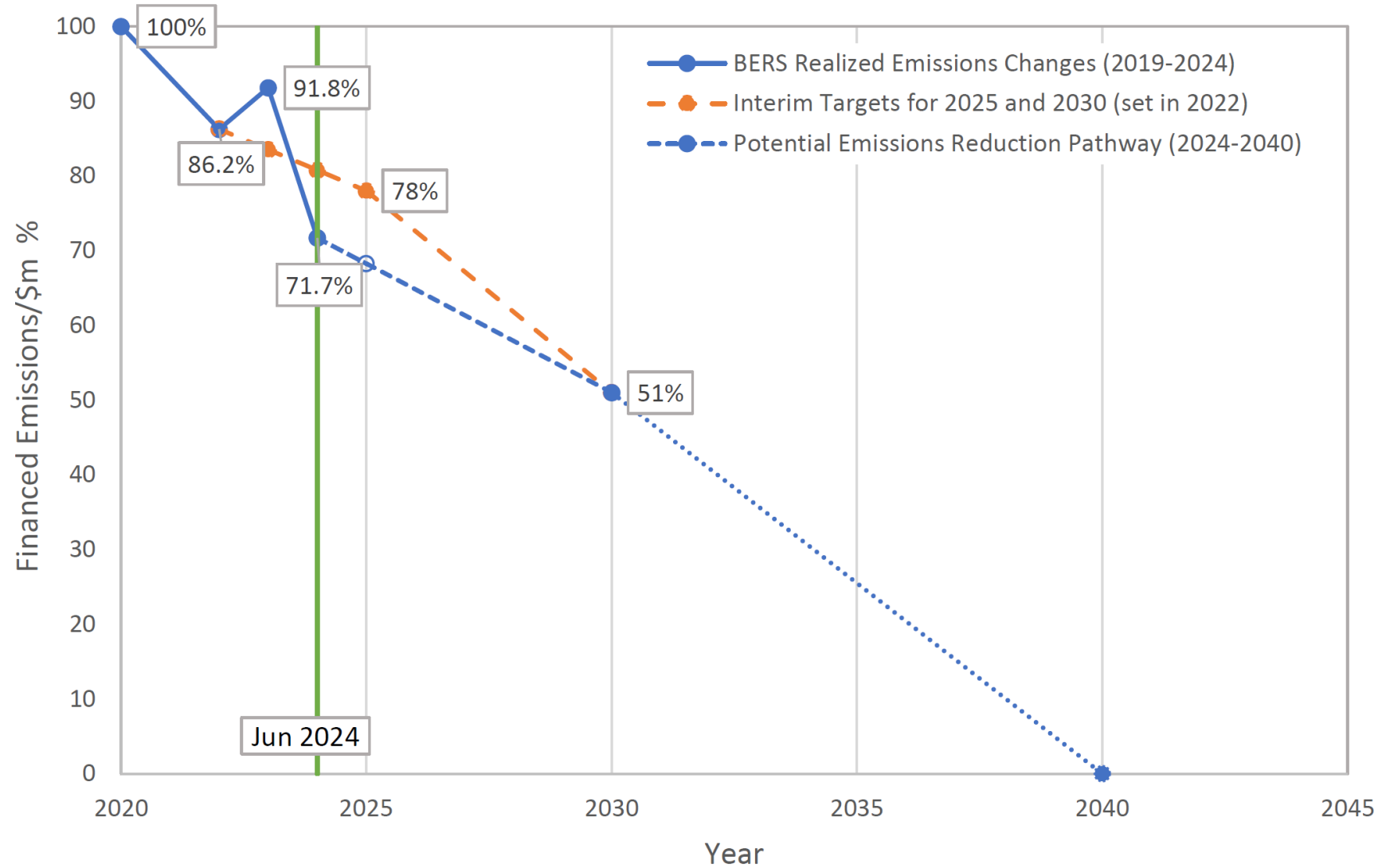
2024 Net Zero Annual Reports

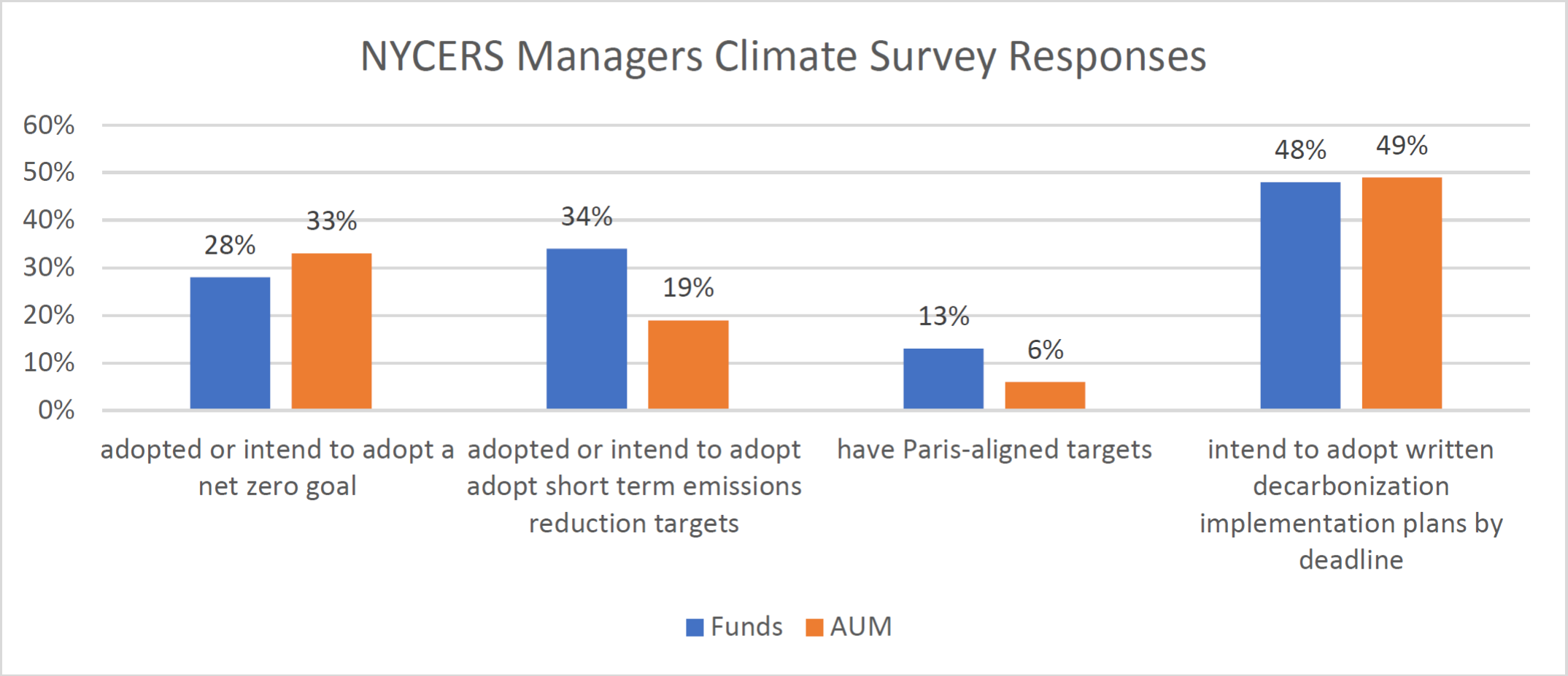


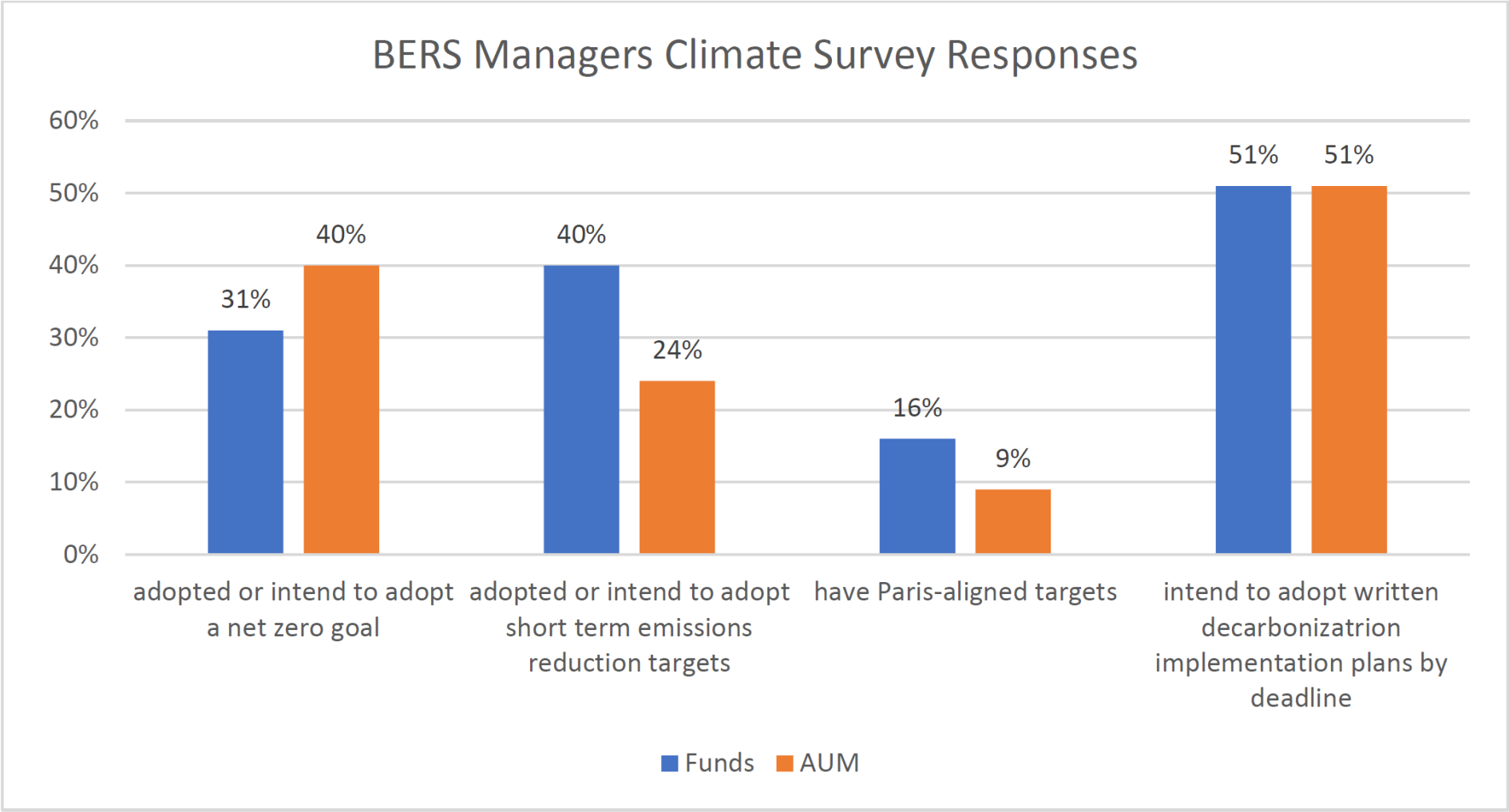
NYCERS – REALIZED AND PROJECTED EMISSIONS REDUCTION TARGETS (SCOPE 1 AND 2)

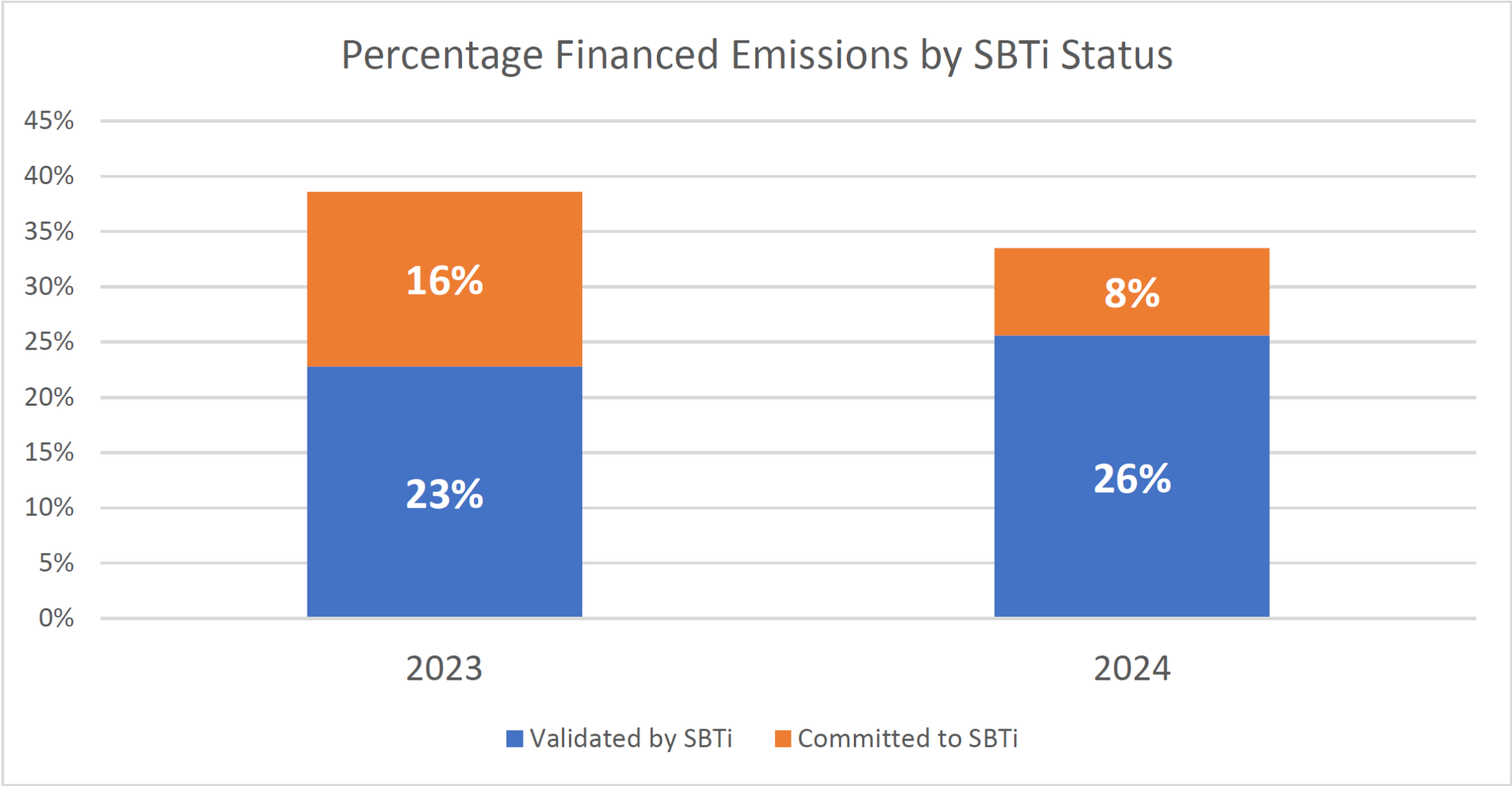


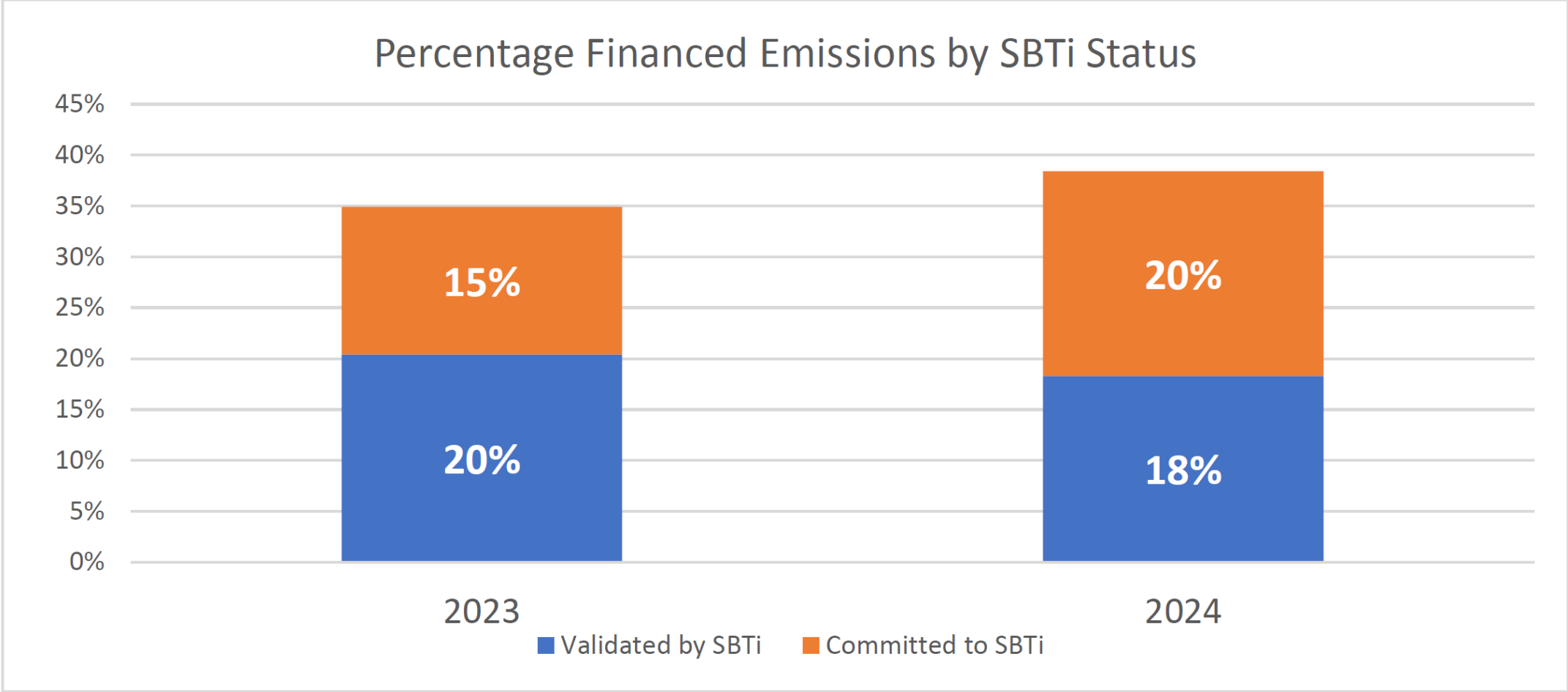
BERS – REALIZED AND PROJECTED EMISSIONS REDUCTION TARGETS (SCOPE 1 AND 2)











- In 2023 and 2024 Comptroller Lander sent a total of 88 letters to 100 individually listed companies in high-emitting sectors including Utilities, Energy, Steel, Metals, Chemicals, Transportation and Shipping, and Aerospace. BAM continues to directly engage companies following these letters and as a result has been evaluating target setting protocols and methodologies the companies would like to use to meet the request of NYCERS and BERS.
- After JP Morgan, Citi and RBC agreed to disclose the ratio of financing of low-carbon energy supply to fossil-fuel energy supply in 2024, this year TRS, NYCERS, BERS and Police filled shareholder proposals at 4 major banks urging adoption of such disclosure. These proposals, which received an average shareholder vote of 26% in 2024, received average shareholder support of 15.5% this year.
- BAM, on behalf of NYCERS, BERS and TRS, is serving as lead investor for Climate Action 100+ for science-based targets. We have led a partnership of institutional investors and asset managers to develop a shared set of expectations for corporate target-setting methodologies as a critical indicator for how companies manage climate-related risks.



UTILITY ENGAGEMENT

- BAM began engagement work in 2023 on science-based targets within the utility sector because it represents a significant portion of total Scopes 1 & 2 financed emissions of NYCERS (24%) and BERS (32%) in 2024.
- BAM has continued to represent TRS, NYCERS and BERS on the stakeholder advisory group for the development of SMARTargets, a new methodology led by the Electric Power Research Institute (EPRI) to set GHG emissions reduction targets aligned with the Paris Agreement. It is not yet clear whether SMARTargets will meet the needs of NYCERS, BERS and TRS for science-based targets for the utility sector.
- In 2025 NYCERS, BERS and TRS filed shareholder proposals at three utilities requesting 3rd party evaluation of their targets. They received an average 9.3% vote.



NYCERS CLIMATE SOLUTIONS INVESTMENTS

NYCERS - Climate Solutions Investments (\$million) - Dec 31, 2024								
	Total Portfolio	Public Equity Active	Public Equity Passive	Public Fixed Income	Alternative Credit	Private Equity	Real Estate	Infrastructure
4Q 2024 (3Q24 data for infrastructure; 2Q24 data for real estate) - Including unfunded commitments								
12/31/24 total NAV	87,851	17,093	17,952	29,947	4,375	9,633	6,168	2,682
12/31/24 climate exposure	4,802	625	1,800	627	183	197	705	664
12/31/24 climate %	5.5%	3.7%	10.0%	2.1%	4.2%	2.0%	11.4%	24.8%
NYCERS - Climate Solutions Investments (\$million) - Jun 30, 2024								
	Total Portfolio	Public Equity Active	Public Equity Passive	Public Fixed Income	Alternative Credit	Private Equity	Real Estate	Infrastructure
2Q 2024 (1Q24 data for infrastructure; 4Q23 data for real estate) - Including unfunded commitments								
06/30/24 total NAV	87,537	17,953	18,061	29,844	4,152	9,220	5,882	2,424
06/30/24 climate exposure	4,473	606	1,654	656	154	179	662	561
06/30/24 climate %	5.1%	3.4%	9.2%	2.2%	3.7%	1.9%	11.2%	23.1%
Analysis of Changes from Jun 2024 to Dec 2024								
	Total Portfolio	Public Equity Active	Public Equity Passive	Public Fixed Income	Alternative Credit	Private Equity	Real Estate	Infrastructure
Climate exposure % change	7.4%	3.1%	8.8%	-4.4%	19.0%	10.1%	6.6%	18.4%



BERS CLIMATE SOLUTIONS INVESTMENTS

BERS - Climate Solutions Investments (\$million) - Dec 31, 2024								
	Total Portfolio	Public Equity Active	Public Equity Passive	Public Fixed Income	Alternative Credit	Private Equity	Real Estate	Infrastructure
4Q 2024 (1Q24 data for infrastructure; 2Q24 data for real estate) - Including unfunded commitments								
12/31/24 total NAV	9,605	1,557	2,459	2,668	471	1,220	798	430
12/31/24 climate exposure	667	55	273	45	45	34	107	108
12/31/24 climate %	6.95%	3.55%	11.12%	1.69%	9.47%	2.75%	13.44%	25.17%
BERS - Climate Solutions Investments (\$million) - Jun 30, 2024								
	Total Portfolio	Public Equity Active	Public Equity Passive	Public Fixed Income	Alternative Credit	Private Equity	Real Estate	Infrastructure
2Q 2024 (1Q24 data for infrastructure; 4Q23 data for real estate) - Including unfunded commitments								
06/30/24 total NAV	9,363	1,596	2,361	2,631	439	1,152	754	430
06/30/24 climate exposure	608	51	240	47	38	32	93	108
06/30/24 climate %	6.50%	3.18%	10.15%	1.78%	8.71%	2.79%	12.27%	25.17%
Analysis of Changes from Jun 2024 to Dec 2024								
	Total Portfolio	Public Equity Active	Public Equity Passive	Public Fixed Income	Alternative Credit	Private Equity	Real Estate	Infrastructure
Climate exposure % change	9.7%	8.8%	14.1%	-3.9%	16.7%	4.6%	15.9%	0.0%



QUESTIONS?



Update on Economically Targeted Investments:



BERS INVESTMENT MEETING

PUBLIC SESSION



June 18, 2025

VALERIE RED-HORSE MOHL
DCIO, Responsible Investing

RESPONSIBLE INVESTING UPDATE AND DISCUSSION

ROLE OVERVIEW & LISTENING TOUR

- I joined as Deputy Chief Investment Officer, Responsible Investing, on Feb 10, 2025
- Responsible for ETIs, Diverse/Emerging Managers, ESG, and Climate
- Completed extensive learning and listening tour; met with BAM staff, some trustees, consultants, external partners and managers
- Reviewed IPS, pacing plans, greenlight and IC memos, and manager pipeline



ECONOMICALLY TARGETED INVESTMENTS (ETIS)

Key Issues

- Only ~\$3.6B of \$5.7B (2% of AUM) target is allocated; limited to housing/real estate
- ETIs are typically not included in annual pacing plans and face understandable challenges trying to insert into existing asset classes
- Seeks to offer returns in line with NYCERS' targets and benchmarks but may not be at the highest end of ranges
- There are a lot of opportunities to explore



ECONOMICALLY TARGETED INVESTMENTS (ETIS)

ETIs are designed to offer a quadruple bottom line

- Risk Adjusted Financial Returns in line with Targets/Benchmarks
- Often Strategies led by Experienced Diverse Managers
- Strategies offer Measurable Collateral Benefits
- Placed based priority into NYC and surrounding counties

In most cases these will be special customized programs as an SMA or Single LP

Other NY based funds have asked to see our ETI opportunities as they also have interest



ECONOMICALLY TARGETED INVESTMENTS (ETIS)

Potential Solutions Identified

- Strengthen Responsible Investing Team (fill current open roles)
- Work with general consultants and BAM in collaborative diligence to present 2-3 ETIs in 2025 (proposals received)
- Work with general consultants to establish 2026 ETI pipeline
- ETIs require curated, targeted sourcing (i.e. quadruple bottom line)
- ETI collateral benefits should be measured/reported in an annual report
- Most ETIs are multi-strategy and do not fit squarely into existing asset classes; may need to discuss changes



ECONOMICALLY TARGETED INVESTMENTS (ETIS)

- Further Opportunity for ETI Risk Mitigation
- Non-profits have expressed interest in exploring financial support whereby they can offer NYCERS guarantees or first loss protections on our ETIs through their Program Related Investments (PRIs) — discussions ongoing



ECONOMICALLY TARGETED INVESTMENTS (ETIS)

ETI Pipeline

(2025):

- Community Healthcare | Private Equity/Alt Credit | MWBE
- Community Banks/Small Business Lending | Direct Lending | MWBE
- Start Up funding in NY areas | Fund of Funds | MWBE

(2026):

In Development

- Homes for City Workers: Diverse experienced team | Workforce Housing Real Estate focus (MWBE)
- Private Equity investments into Diverse Founders in NY
- Climate investments into NY

In Research Phase

- Student Loan Lending: NY based students (with guarantees)
- Reup in Public Fixed Income RE | MWBE



DIVERSE AND EMERGING MANAGERS

Potential Opportunities

- Opportunity to further curate outreach and identification
- Opportunity for further specific direction to asset class teams on goals/structures for pacing plans
- Partner Emerging/Diverse Fund-of-Funds Programs – opportunity for greater collaboration



DIVERSE AND EMERGING MANAGERS

Potential Solutions Identified:

- Launch curated network for shared peer recommendations, leverage external databases, increase efficiency of existing database, increase efficiency of introductions
- Review and Assess each Funds of Funds partner relationships; (Emerging and Diverse Manager Programs); more involvement from RI; add RI teams to pipeline calls
- Build experienced qualified diverse managers into pacing plans; utilize expertise of RI team in collaboration with consultants and asset class heads



More to Come!

REACH OUT TO ME ANYTIME

VALERIE RED-HORSE MOHL

NON-INVESTMENT MATERIAL -
QUARTERLY PERFORMANCE
REPORTING SECTION (Public Reports):

State Street Quarterly Fund Performance Overview (Public):



New York City
Board of Education Retirement System
Performance Overview as of March 31, 2025

Total Fund Overview



New York City Board of Education Retirement System

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Through March 31, 2025



New York City Board of Education Retirement System (BERS)
Consultant's Commentary – Through March 31, 2025

Total Fund Performance

The Board of Education Retirement System (BERS) Total Fund returned -0.21% net of fees for the quarter ending March 31, 2025, versus the policy benchmark's return of +0.56%. The Fund's fiscal year to date as of March 31, 2025 returned +4.24% net of fees, below the benchmark return of +6.01%.

Total Fund Asset Allocation

As of March 31, 2025, the BERS Total Fund had \$9.6 billion, flat from \$9.6 billion as of December 31, 2024. For the quarter, the asset allocation was slightly negative, and the manager return versus benchmark was negative. Relative to the benchmark, the largest drag in returns came from international equities (-35 basis points), private equity (-34 bps), emerging markets equities (-8 basis points), and to a lesser extent private real estate (-3 basis points).

Similarly, for the fiscal year to date, the asset allocation was slightly negative, and the manager return versus benchmark was negative. Relative to the benchmark, the largest drag in returns came from private equity (-133 basis points), international equities (-29 basis points), U. S equities (-14 basis points), private real estate (-11 basis points) and to a lesser extent emerging markets (-5 basis points) and high yield (-4 basis points).

U.S. Equity Commentary

As of March 31, 2025, U.S. Equity was \$2.7 billion or represented 27.7% of the BERS Total Fund. The U.S. equity composite was negative in the first quarter of 2025 returning -4.68% net of fees. This performance was slightly ahead of the Russell 3000 index return of -4.72%. For the fiscal year to date, the U.S. equity composite returned +3.41% net of fees versus the index return of +3.88%.

Active U.S. Equity Managers

Earnest returned -3.64% net of fees during the quarter, below the Russell Mid Cap Index return of -3.40%.

- Relative underperformance for the period was largely a function of the strategy being underweight three of the four best-performing sectors, consumer staples, utilities and energy. This relative underweight was partially offset by favorable stock selection in several sectors, including Consumer Discretionary and Industrials.

Wasatch returned -9.65% net of fees during the quarter, better than the Russell 2000 Growth Index return of -11.12%. For the fiscal year to date as of March 31, 2025, Wasatch returned +1.64% net of fees versus -2.00% for the Russell 2000 Growth Index.

- For the quarter, stock selection in Technology and Financial services was the largest relative detractor to performance, which was offset by selection in Industrials.
- Globant SA, a global IT consulting firm, was the largest detractor from strategy performance. Other detractors included Agilysys, Inc., a hospitality software company, and



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- Freshpet, Inc., a pet food company.
- The top contributor was Intra-Cellular Therapies, Inc., a pharmaceutical company. Other contributors included Dutch Bros, Inc., a drive-through coffee company, and RBC Bearings, Inc., a manufacturer that sells to industrials, defense and aerospace industries.

Legato returned -10.88% net of fees during the quarter, below the Russell 2000 (Daily) return of -9.48%. For the fiscal year to date as of March 31, 2025, Legato returned -0.44% net of fees versus -0.75% for the Russell 2000 (Daily).

- All managers within the fund performed negatively for the quarter. The largest detractors to performance during the quarter were Lisanti Capital Growth (-16.78%), Essex Investment Management Company (-13.89%), and Nicholas Investment Partners (-12.83%).
- Sector allocation and stock selection were both negative for the quarter. Stock selection in Consumer Discretionary, stock selection and an overweight allocation to Technology, and stock selection and an underweight allocation to Financials were the largest detractors. This was somewhat offset by stock selection in Healthcare.

World ex-USA Commentary

As of March 31, 2025, World ex-USA Equity was \$698. million (7.3% of assets) of the BERS Total Fund. World ex-USA Equity returned +0.91% net of fees in the first quarter of 2025 versus +5.82% for the NYC Developed Equity benchmark. For the fiscal year to date, World ex-USA equity returned +2.01% net of fees versus the index return of +5.85%.

Active World ex-USA Equity Managers

Sprucegrove returned +3.38% net of fees during the quarter versus +6.20% for NYC Developed Value Benchmark. For the fiscal year to date as of March 31, 2025, Sprucegrove returned +2.50% net of fees versus +5.94% for the NYC Developed Value Benchmark.

- For the quarter, an underweight position and to a lesser degree stock selection within Financials were among the top detractors.
- Stock selection within Industrials also negatively impacted performance, due primarily to a lack of exposure to strong performing European defense-related stocks. This was partially offset by positive contributions from Healthcare and Materials holdings.

Baillie Gifford returned -2.83% net of fees in the quarter versus +6.20% for NYC Developed Growth Benchmark. For the fiscal year to date as of March 31, 2025, Baillie Gifford returned +0.12% net of fees versus +5.94% for the NYC Developed Growth Benchmark.

- For the quarter, exposure to technology-oriented companies, in particular those involved in the semiconductor value chain, and several software services companies contributed to the weak performance.
- Holdings including Spotify, Adyen, and TSMC continue to have strong business performance and partially offset the negative performance for the quarter.



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Acadian performed above the index for the quarter, +4.49% net of fees versus +3.78% for the S&P EPAC Small Cap Index. For the fiscal year to date as of March 31, 2025, Acadian returned +6.09% net of fees versus +1.98% for the S&P EPAC Small Cap Index.

- Key sources of negative active return included an opportunistic exposure to Taiwan, stock selection in Switzerland, and a combination of stock selection and an underweight position in Japan. Leading declines within these markets respectively included a position in Asia Optical, a holding in Logitech International, and an investment in JVCKenwood. Contributors included a combination of stock selection and an underweight position in Australia, a combination of stock selection and an underweight position in South Korea, and a combination of stock selection and an overweight position in Italy. Leading advances within these markets in turn included a position in Pereus Mining, a holding in PSK, and an investment in Hera.
- From a sector perspective, key sources of negative active return included a combination of stock selection and an overweight position in information technology, stock selection in financials, and stock selection in communication services. Leading declines within these sectors respectively included a position in Logitech International, a holding in Hub24, and an investment in CTS Eventim. Contributors included stock selection in materials, a combination of stock selection and an underweight position in health care, and stock selection in real estate. Leading advances within these sectors in turn included a position in thyssenkrupp, a lack of exposure to Zealand Pharma, and an investment in Klepierre.

Emerging Markets Equity Commentary

As of March 31, 2025, Emerging Markets Equity was \$354.5 million or represented 3.7% of the BERS Total Fund. Emerging Markets returned +0.80% net of fees for the quarter versus +2.93% for the MSCI Emerging Markets, Net Index. For the fiscal year to date, Emerging Markets returned +1.81% net of fees versus the index returns of +2.95%.

Emerging Markets Equity Managers

Acadian returned +0.04% net of fees for the quarter versus +2.93% for the MSCI Emerging Markets, Net Index. For the fiscal year to date as of March 31, 2025, Acadian returned +2.23% net of fees versus +2.95% for the MSCI Emerging Markets, Net Index.

- Key sources of negative active return included a combination of stock selection and an underweight position in India, an overweight position in Taiwan, and stock selection in China. Leading declines within these markets respectively included a position in Infosys and an investment in Lenovo Group. Contributors included a combination of stock selection and an underweight position in South Korea, stock selection in Thailand, and a combination of stock selection and an overweight position in Hungary. Leading advances within these markets in turn included a lack of exposure to HLB and an investment in OPT Bank Nyrt.
- From a sector perspective, key sources of negative active return included an overweight position in information technology, an underweight position in materials, and a combination of stock selection and an underweight position in consumer discretionary. Leading declines within these sectors respectively included a position in MediaTek, a lack of



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exposure to AngloGold Ashanti Ord Shs, and an investment in PDD Holdings. Contributors included stock selection in energy and stock selection in health care. Leading advances within these sectors in turn included a position in Bharat Petroleum and a lack of exposure to HLB.

CONY GT EM BlackRock returned +2.94% versus +2.93% for the MSCI Emerging Markets, Net Index during the quarter. For the fiscal year to date as of March 31, 2025, CONY GT EM BlackRock returned +3.31% versus +2.95% for the MSCI Emerging Markets, Net Index.

JP Morgan returned +2.52% net of fees versus +2.93% for the MSCI Emerging Markets, Net Index during the quarter. For the fiscal year to date as of March 31, 2025, JP Morgan returned +0.87% net of fees versus +2.95% for the MSCI Emerging Markets, Net Index.

- Stock selection in India helped for the second consecutive quarter. Sentiment in the first two months remained weak but recovered in March led by a combination of purchasing domestic investors, an increase in foreign flows and better economic indicators. Stock selection in financials added to returns. In addition to holdings in India, positions in Brazil were a significant driver of performance.
- Stock selection in China detracted from performance. Not owning Xiaomi, a telecommunications/IT company, hurt performance. Concerns around tariffs and the U.S. macro environment weighed on industries. Stock selection in Taiwan was also a headwind.

Global Commentary

As of March 31, 2025, Global Equity was \$110.9 million (1.2% of assets) of the BERS Total Fund. Global Equity returned -1.92% net of fees in the first quarter of 2025 versus -1.32% for the MSCI AC World benchmark. For the fiscal year to date, Global Equity returned +6.17% net of fees versus the index returns of +4.16%.

Global Equity Managers

Morgan Stanley returned -1.41% net of fees versus -1.32% for the MSCI AC World Index, during the quarter. For the fiscal year to date as of March 31, 2025, Morgan Stanley outperformed returning +12.98% versus +4.16% for the MSCI AC World Index.

- For the three months ending March 31, 2025, the portfolios performed roughly in line with the benchmark as favorable stock selection offset unfavorable sector allocation. Global equities declined amid heightened volatility in response to increased macroeconomic uncertainty, driven by underperformance in the information technology, consumer discretionary and communication services sectors. The energy, utilities and financials sectors outperformed the benchmark.
- Stock selection in consumer discretionary and communication services and a sector underweight allocation to information technology were the greatest overall contributors to the relative performance of the portfolio during the period. Top individual contributors included Swedish audio streaming platform Spotify Technology SA, global mobility platform Uber Technologies, Latin American ecommerce platform MercadoLibre, food delivery platform DoorDash and Italian luxury brand Moncler SpA.



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- Stock selection in financials and information technology, and a sector overweight allocation to consumer discretionary were the greatest overall detractors from the relative performance of the portfolio. Top individual detractors included cloud software platform ServiceNow, financial technology company Block, Inc., Danish freight forwarder DSV A/S, French energy management solution Schneider Electric SE and homestay and experience marketplace Airbnb, Inc.

Fiera returned -2.47% net of fees versus -1.79% for the MSCI World Index, during the quarter. For the fiscal year to date as of March 31, 2025, Fiera returned -0.41% versus +4.29% for the MSCI World Index.

- As for the strategy's relative underperformance, security selection within the Communication Services, Health Care, and Financials sectors were the primary negative drivers. Within Financials, the strategy's underweight to banks and insurers (beneficiaries of the yield curve steepening) detracted from relative performance. Offsetting this was a positive security selection effect within Consumer Discretionary.
- Individual top relative detractors held in the strategy included Taiwan Semiconductor Manufacturing Company (TSMC) and Alphabet. As for relative contributors held in the strategy, AutoZone and Nestlé helped in the quarter. Additionally, not owning several mega cap benchmark constituents that underperformed rather meaningfully positively contributed to relative performance.

International Fund of Fund Manager

Xponance returned +5.10% net of fees versus +4.59% for the MSCI ACWI Ex USA IMI Net, during the quarter. For the fiscal year to date as of March 31, 2025, Xponance returned +6.20% versus +4.54% for the MSCI ACWI Ex USA IMI Net.

- Top contributors for the quarter included stock selection in Europe ex UK, stock selection in financial services, and stock selection in technology. Top detractors from relative performance included stock selection in emerging markets, stock selection in consumer discretionary, and stock selection in Japan.
- Of the top 10 holdings, Alibaba, Novartis, Sony Group, Euronext, and Tencent Holdings were among contributors while TSMC was the only detractor.

Fixed Income – Structured Manager Composite Commentary

As of March 31, 2025, the Total Structured Portfolio was \$1.7 Billion (17.7% of assets) of the BERS Total Fund. Structured Fixed Income returned +2.69% net of fees in the fourth quarter versus +2.75% for the NYC Custom Structured Index. For the fiscal year to date, the Structured Fixed Income returned +4.93% net of fees versus the index returns of +4.84%.

Fixed Income – Structured Manager Composite Managers

BlackRock (mortgages) returned +2.94% net of fees in the quarter versus the NYC Custom Mortgage Benchmark return of +3.06%. For the fiscal year to date as of March 31, 2025, BlackRock (mortgages)



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returned +5.40% net of fees versus +5.32% for the NYC Custom Mortgage Benchmark.

- Duration positioning (management of interest rate sensitivity) was the main detractor from performance. The allocation to non-agency residential mortgage-backed securities (RMBS) was the top contributor, namely exposures to single-family rentals and “non-qualifying” mortgages. Allocations to agency mortgage derivatives were also additive.
- At a high level, the allocation to non-agency RMBS was increased, primarily in sub-sectors such as non-qualifying mortgages and single-family rentals. The fund’s exposure to commercial mortgage-backed securities (CMBS) was also raised, namely in the form of single-asset/single-borrower (SASB) paper at the top of the capital structure. The allocation to AAA rated collateralized loan obligations was increased.

Bivium (Medalist Mortgages) returned +2.83% net of fees in the quarter versus the Bloomberg U.S. Mortgage-Backed Securities Index return of +3.06%. For the fiscal year to date as of March 31, 2025, Medalist returned +5.04% net of fees versus +5.32% for the Bloomberg U.S. Mortgage-Backed Securities Index.

Bivium (Integrity Credit) returned +2.67% net of fees in the quarter versus the Bloomberg U.S. Corporate Investment Grade Index return of +2.31%. For the fiscal year to date as of March 31, 2025, Integrity returned +5.12% versus +4.99% for the Bloomberg U.S. Corporate Investment Grade Index.

Bivium (New Century) returned +4.14% net of fees versus the NYC – Treasury Agency Plus Five Index returns of +4.11%. For the fiscal year to date as of March 31, 2025, New Century returned +4.10% net of fees versus +4.07% for the NYC- Treasury Agency Plus Five Index.

T. Rowe Price returned +2.44% net of fees in the quarter versus the Bloomberg U.S. Corporate Investment Grade Index return of +2.31%. For the fiscal year to date as of March 31, 2025, T. Rowe Price returned +5.38% net of fees versus +4.99% for the Bloomberg U.S. Corporate Investment Grade Index.

- Interest rate management had a positive relative impact on performance. Our overweight positioning in the belly of the curve aided performance as intermediate-term yields fell more than short- and long-term yields over the quarter. Sector allocation aided the account’s relative results in the first quarter. An out-of-benchmark allocation to the securitized sector was the largest contributor as the asset class outperformed corporates late in the quarter. An out-of-benchmark allocation to U.S. Treasuries also contributed to returns as the sector was not impacted by widening spreads. Selection within the insurance sector was a notable relative contributor. Top contributors within the sector include out-of-benchmark holdings of Athene Global Funding and overweight holdings of Centene Corporation.
- An underweight allocation to the banking sector hindered relative performance over the quarter. The sector performed well, and while we still have a sizable allocation to the sector, our underweight allocation hindered performance versus the benchmark. Selection within the communications sector detracted from relative performance over the first quarter. Overweight holdings of long duration debt like Rogers Communications and Crown Castle were large detractors within the sector. Selection within the technology sector detracted marginally from performance over the period. Overweight holdings of long duration debt



Through March 31, 2025



like Oracle Corporation, Fiserv Inc, and Salesforce were some of the sectors' largest detractors.

SSgA LI Treasury (governments) returned +4.13% net of fees in the quarter versus the +4.11% return for the NYC - Treasury Agency Plus Five. For the fiscal year to date as of March 31, 2025, the SSgA LI Treasury returned +4.03% net of fees versus +4.07% for the NYC- Treasury Agency Plus Five.

SSgA 1-10 Yr. Treasury/ Agency returned +2.48% net of fees in the quarter, in line with the +2.44% return for the FTSE USBIG Treasury/ Agency 1- 10 Yr. Index. For fiscal year to date as of March 31, 2025, SSgA 1-10 Yr. Treasury/ Agency returned +4.77% net of fees versus +4.75% return for the FTSE USBIG Treasury/ Agency 1-10 Yr. Index.

SSgA 1 -3 Yr. Treasury Index returned +1.61% net of fees in the quarter, in line with the FTSE USBIG Treasury 1 -3 Yr. Index return of +1.58%. For the fiscal year to date as of March 31, 2025, SSgA 1-3 Yr. Treasury Index returned +4.54% net of fees versus +4.46% returns for the FTSE USBIG Treasury 1-3 Yr. Index.

SSgA LT Treasury 10Y Plus returned +4.83% net of fees in the quarter versus the FTSE Treasury 10+ return of +4.76%. For the fiscal year to date as of March 31, 2025, SSgA LT Treasury 10Y Plus returned +3.13% net of fees versus +3.14% returns for the FTSE Treasury 10+.

High Yield Fixed Income Commentary

As of March 31, 2025, High Yield Fixed Income was \$561.1 million or 5.8% of the BERS Total Fund. High Yield Fixed Income returned +1.08% net of fees in the first quarter versus +1.00% for the High Yield Custom Benchmark. For the fiscal year to date, the High Yield Fixed Income returned +5.94% net of fees versus the index of +6.53%.

High Yield Fixed Income

Mackay Shields returned +1.09% net of fees in the quarter versus +1.00% for Bloomberg U.S. High Yield – 2% Issuer Cap Index. For the fiscal year to date as of March 31, 2025, Mackay Shields returned +5.38% net of fees versus +6.53% for the Bloomberg US High Yield – 2% Issuer Cap Index.

- The portfolio's underweight to lower-quality bonds contributed positively to returns over the quarter. Security selection was also positive across credit quality segments.
- In the Building Materials sector, selection added to performance due to an overweight position in QUIKRETE and the avoidance of Cornerstone Building—whose bonds fell in price following poor earnings and management changes. Within Support Services, the portfolio did not hold Hertz, whose bonds tumbled after reporting a larger-than-expected loss in Q4. The portfolio also avoided LABL bonds, which underperformed in the Printing & Publishing sector. Selection was positive in Health Facilities, driven by an underweight to Community Health Systems.
- Selection was negative in the Telecom-Wireline sector, as the portfolio did not own bonds of Altice France, which rallied following the announcement of a debt-for- equity swap with creditors. An underweight to Walgreens detracted from relative returns in Food & Drug Retailers, as its bonds recovered after the proposed acquisition by Sycamore Partners. An



Through March 31, 2025



overweight to Saks in Specialty Retail also detracted, amid concerns over reduced demand for high-end goods.

Nomura returned +1.03% net of fees in the quarter versus +1.00% for Bloomberg U.S. High Yield – 2% Issuer Cap Index. For the fiscal year to date as of March 31, 2025, Nomura returned +6.46% net of fees versus +6.53% for the Bloomberg US High Yield – 2% Issuer Cap Index.

- During the quarter, credit selection contributed to overall performance, particularly Bs and BBBs, while BBs detracted. From a sector perspective, key contributors included Pharmaceuticals, Electric Generation, and Transportation Services. Sectors that detracted included Media Content, Chemicals, and Oil Field Services.

Fixed Income – Core Manager

Pugh returned +2.59% net of fees in the quarter, versus the +2.78% return for Bloomberg U.S. Aggregate Index. For the fiscal year to date as of March 31, 2025, Pugh returned +4.92% net of fees versus the +4.81% return for the Bloomberg U.S. Aggregate.

- Sector allocation, security selection and duration positioning all contributed to the underperformance.
- Overweight positioning to Corporates and ABS detracted from performance as all spread sectors experienced negative excess returns in the “risk off” quarter.
- Negative contributions from security selection within Corporates and CMBS were driven by an overweight to lower quality securities.
- The portfolio reduced overweight positioning to Corporates and increased exposure to Treasuries throughout the quarter due to heightened market uncertainty and volatility.

At quarter end, portfolio duration was 6.02, in line with the benchmark.

ETI, Cash and Bank Loans Commentary

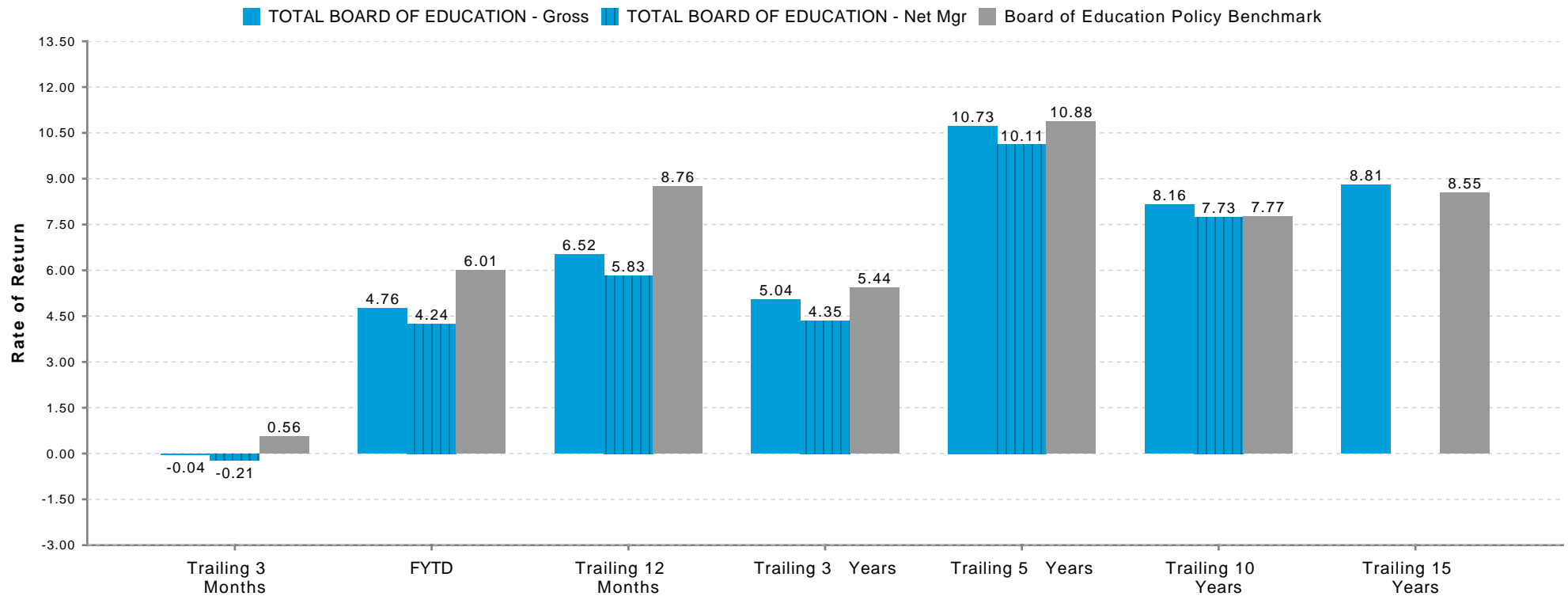
As of March 31, 2025, Fixed Income – ETI and Cash (Short Term) was \$123.6 million or 1.27% of the BERS Total Fund.



TOTAL BOARD OF EDUCATION

Market Value (Billions)

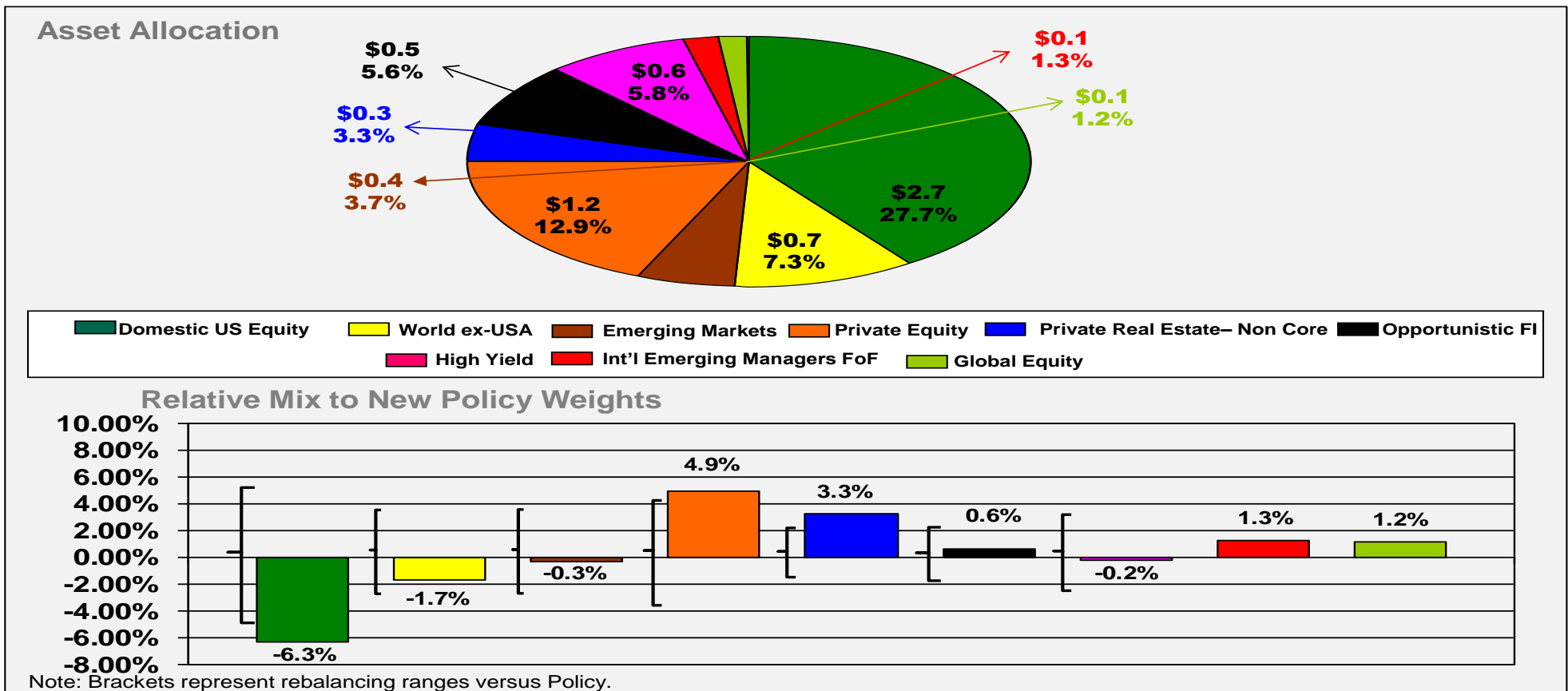
\$9.6



	Plan 3 Years	Benchmark 3 Years	Plan 5 Years	Benchmark 5 Years	Plan 10 Years	Benchmark 10 Years
Standard Deviation						
TOTAL BOARD OF EDUCATION	9.7	10.3	10.7	9.8	8.8	9.0

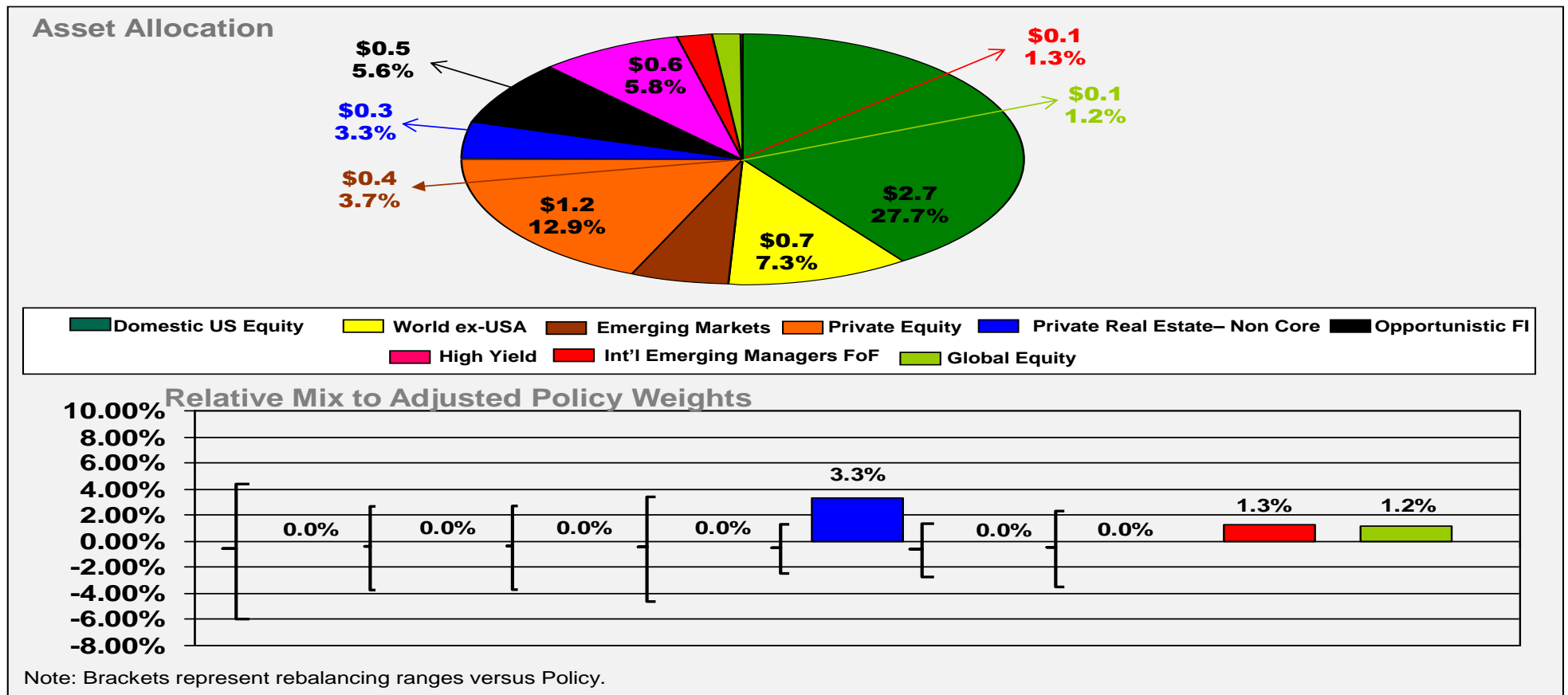


Portfolio Asset Allocation – Growth



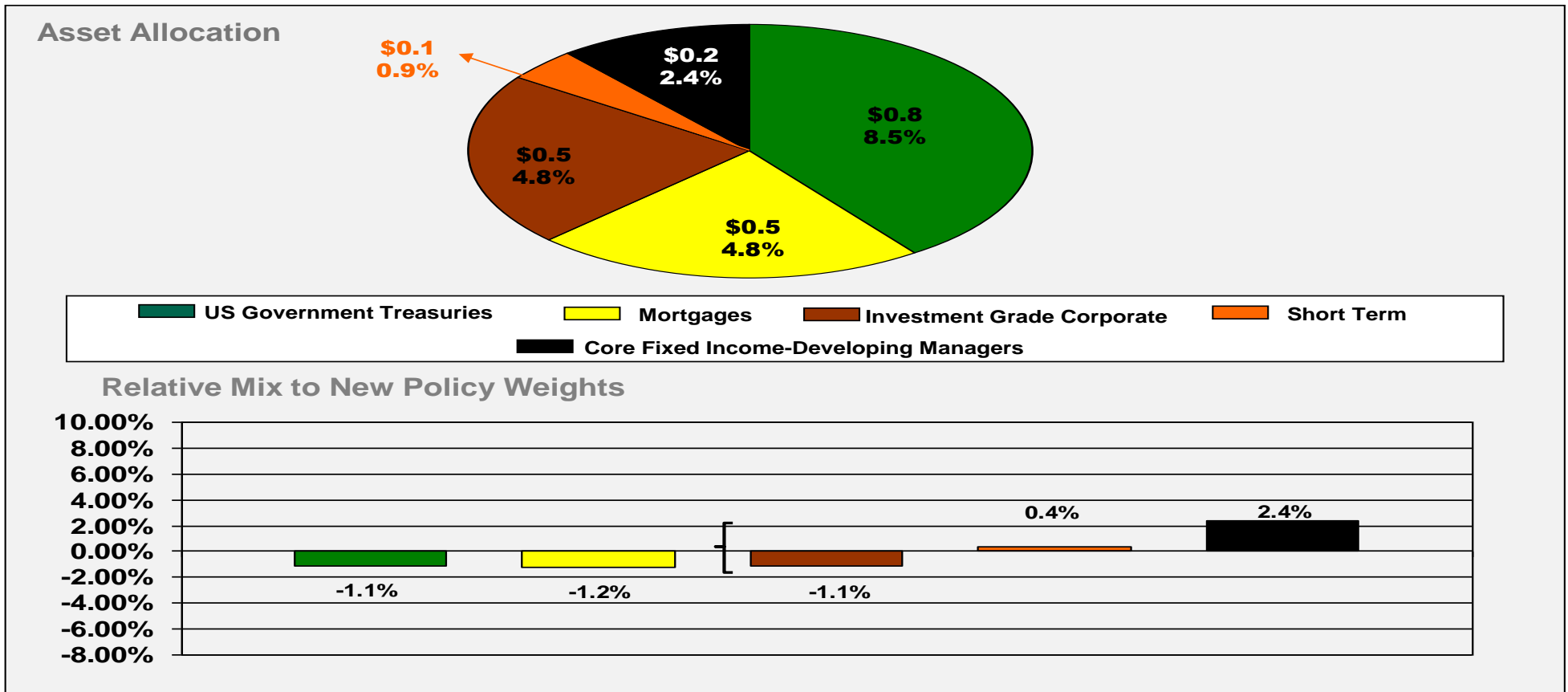


Portfolio Asset Allocation – Growth



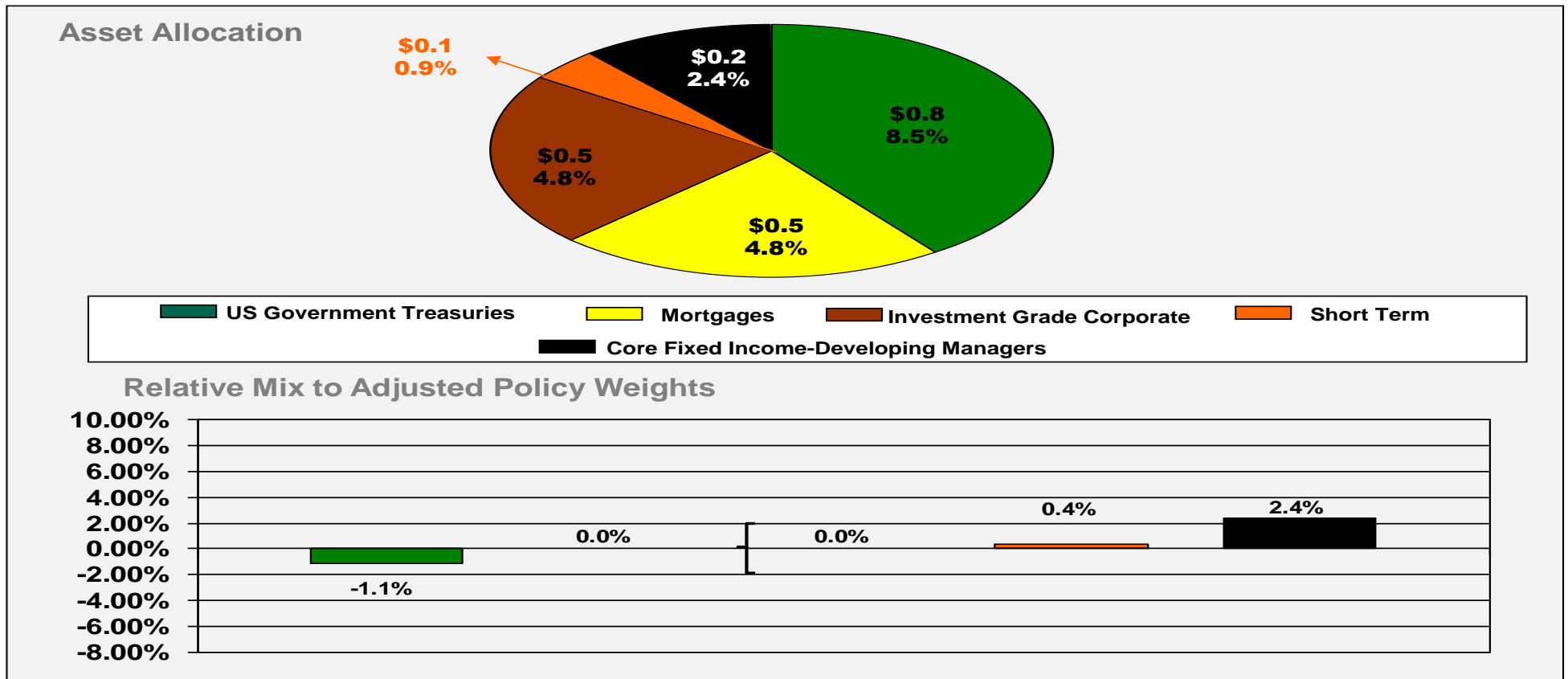


Portfolio Asset Allocation – Deflation Protection

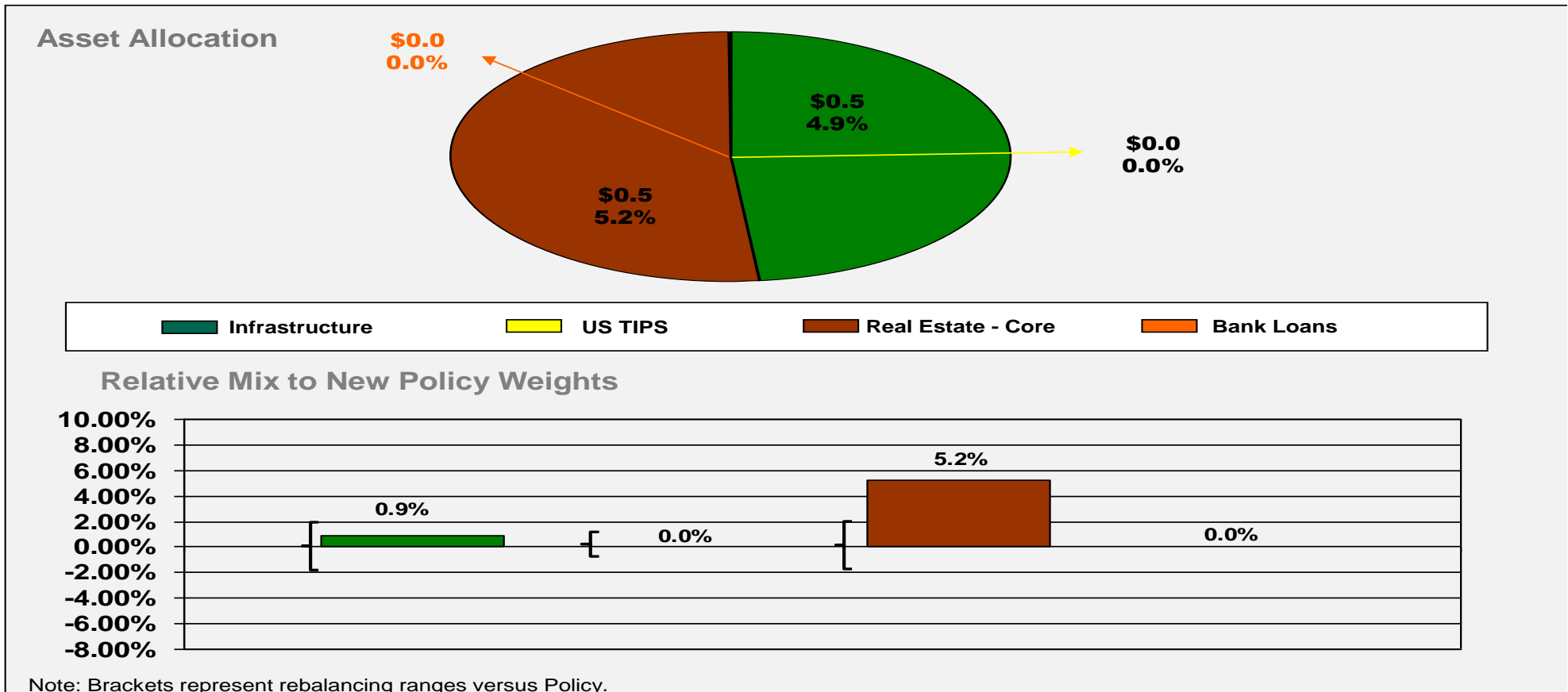




Portfolio Asset Allocation – Deflation Protection

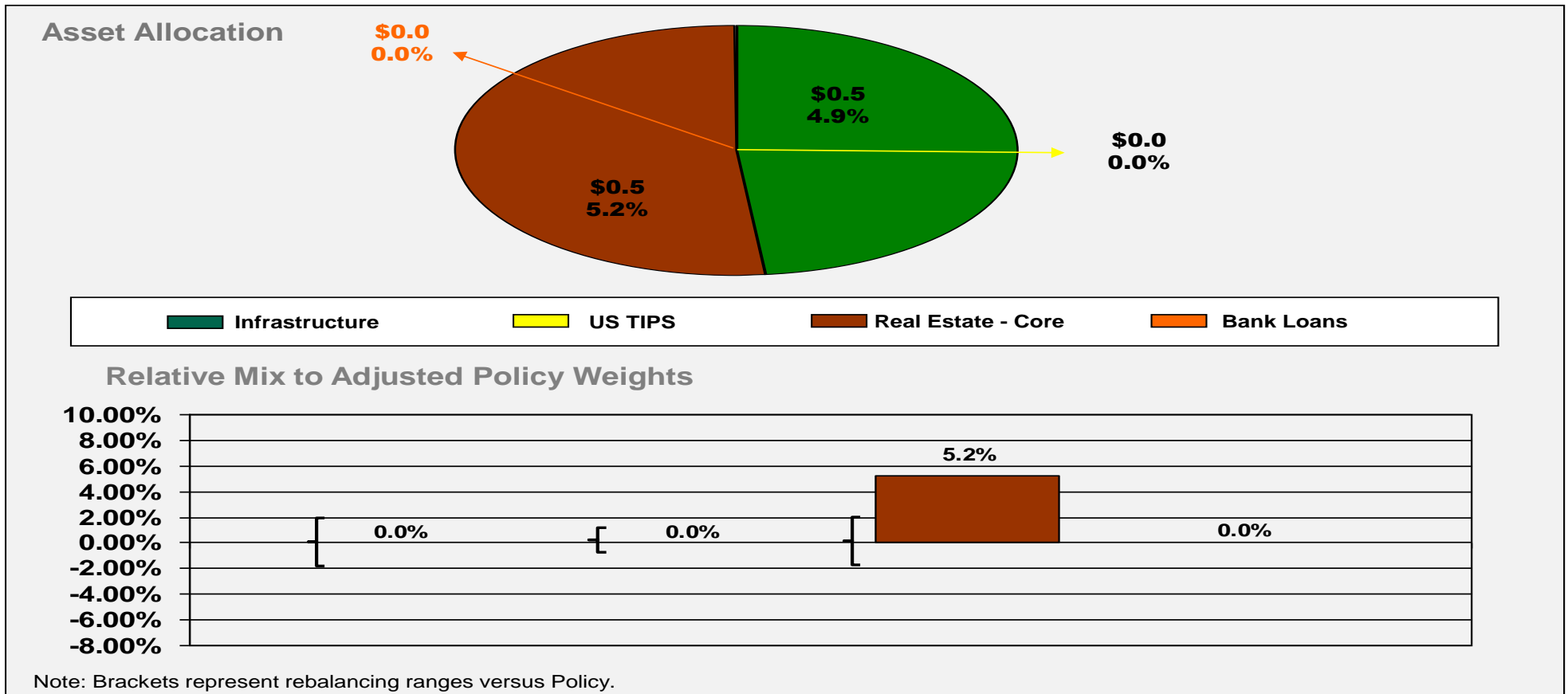


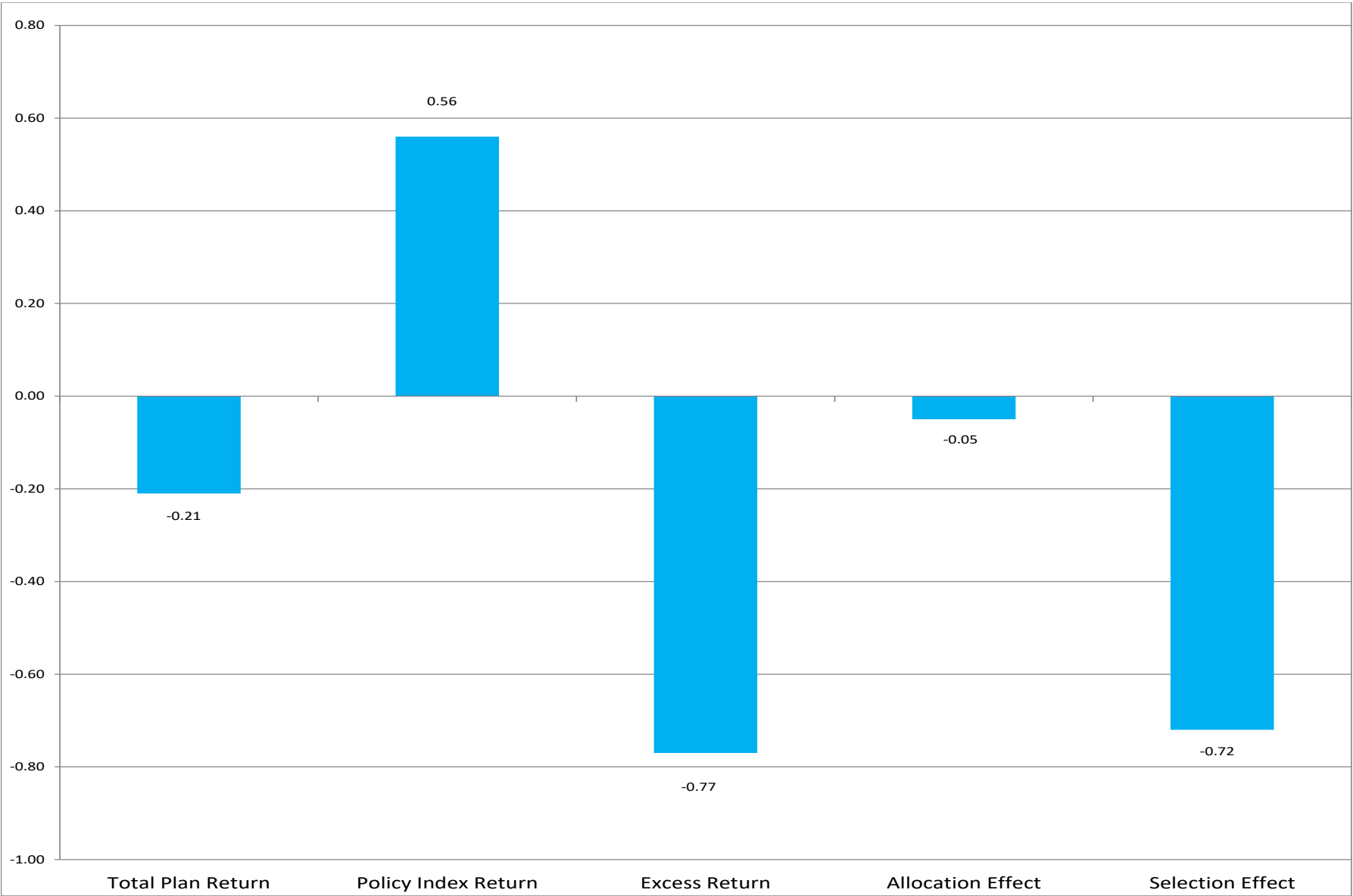
Portfolio Asset Allocation – Inflation Protection

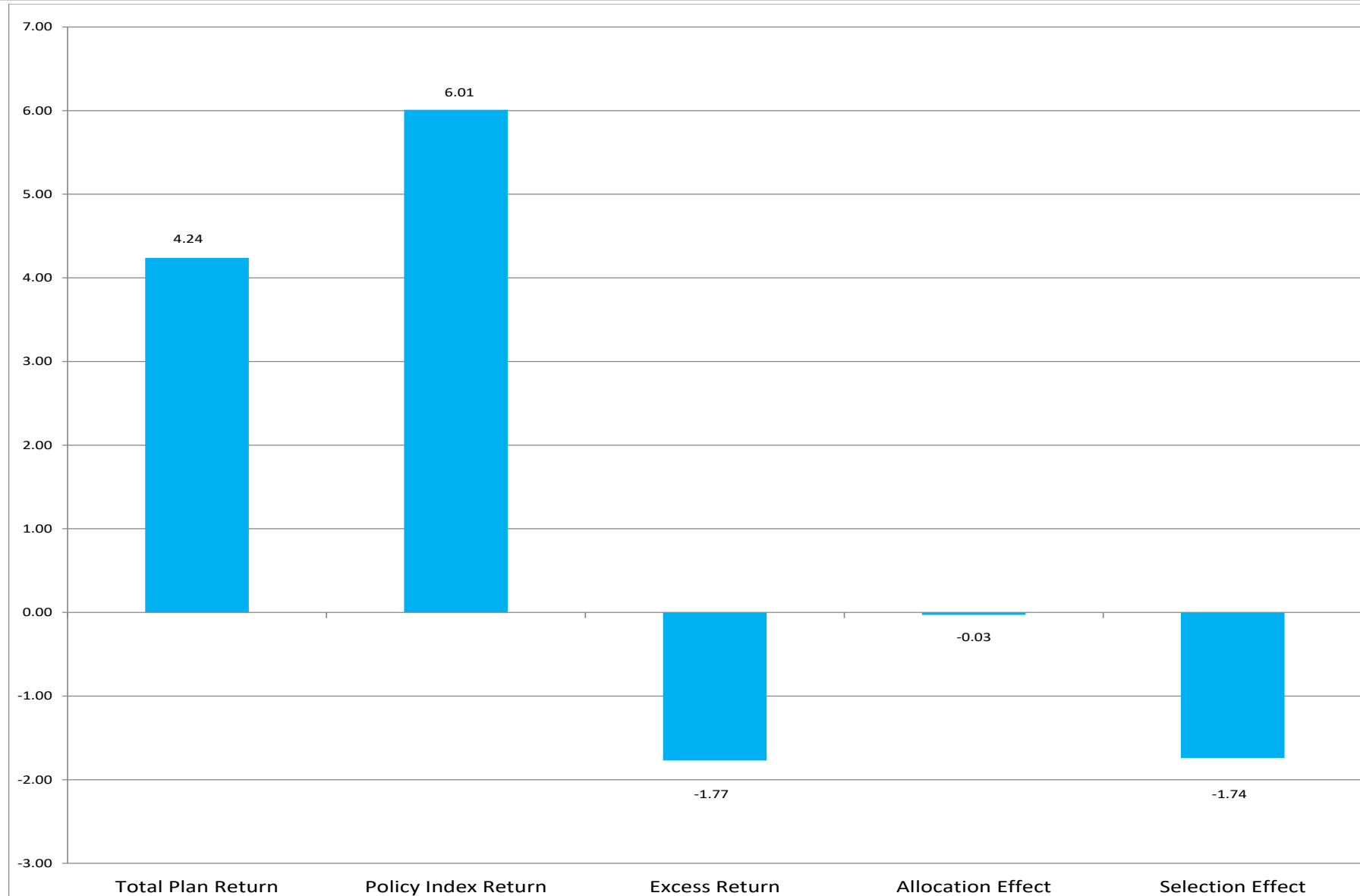


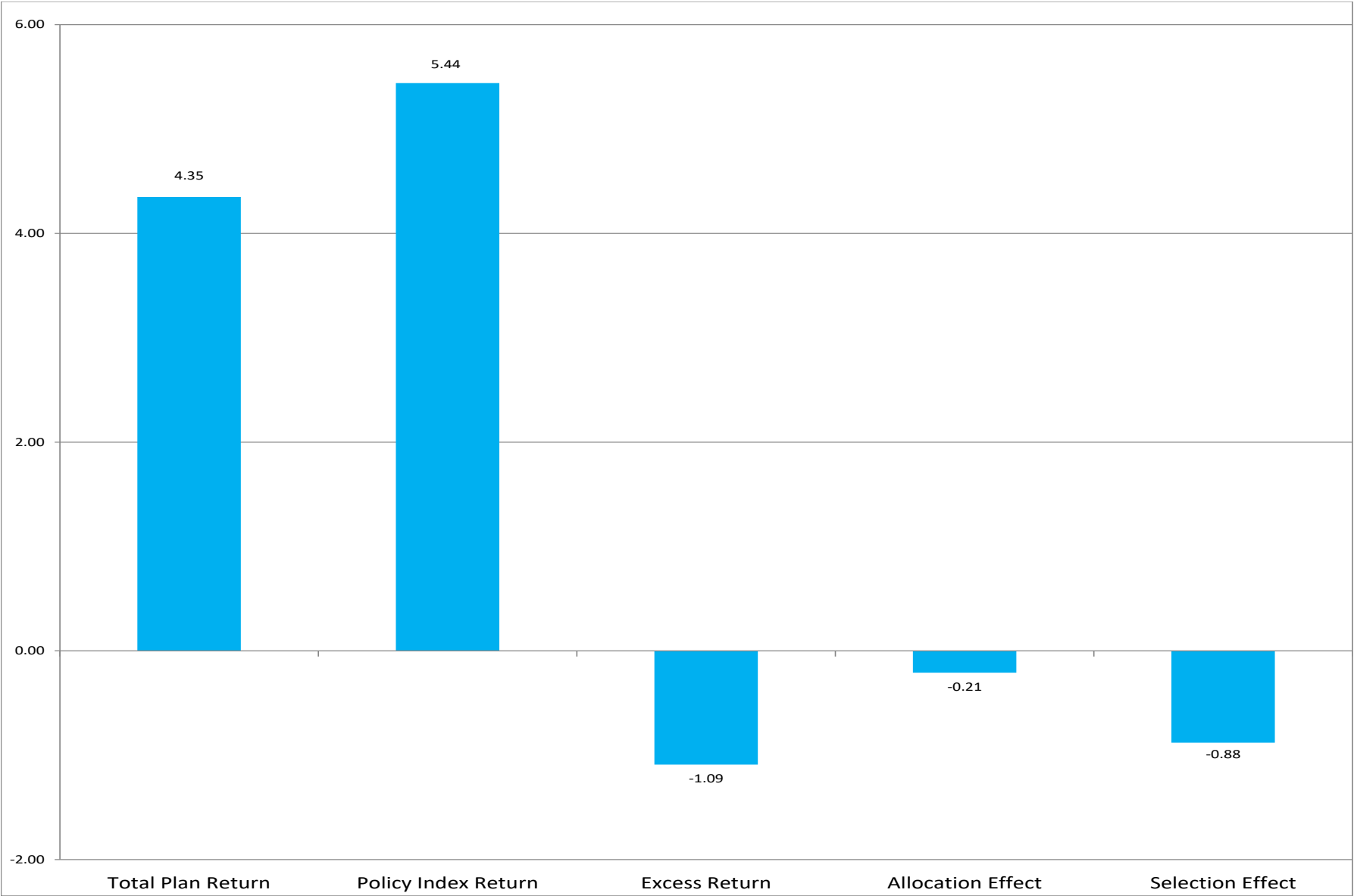


Portfolio Asset Allocation – Inflation Protection











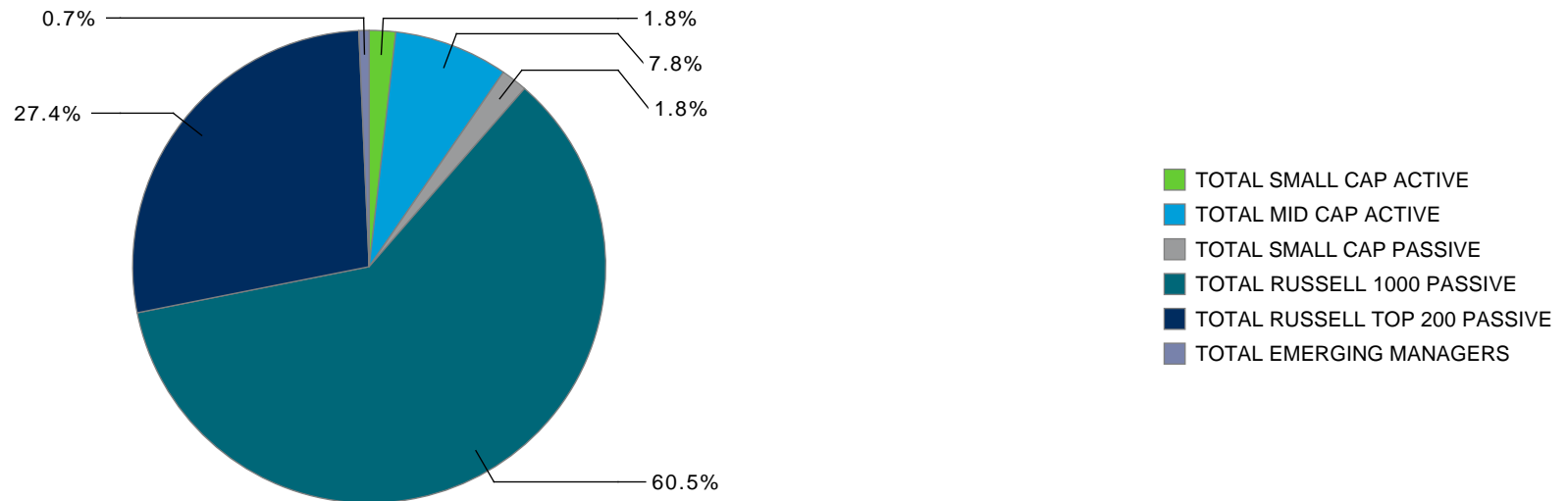
Allocation Effect - Asset Class Breakdown				
	Quarter	FYTD	3 Years	Benchmark
TOTAL BOARD OF EDUCATION	-0.05	-0.03	-0.21	Board of Education Policy Benchmark
TOTAL DOMESTIC EQUITY	0.04	0.01	-0.09	RUSSELL 3000 (DAILY)
TOTAL WORLD ex-USA	-0.08	0.00	-0.02	NYC Developed Equity Benchmark
TOTAL GLOBAL EQUITY	-0.02	-0.02	-0.01	MSCI AC WORLD (Daily Const)
TOTAL EMERGING MARKETS	-0.01	0.00	-0.01	MSCI EMERGING MARKETS
TOTAL INTERNATIONAL FOF	0.05	-0.02	-0.01	MSCI ACWI ex USA IMI Net
TOTAL PRIVATE EQUITY	0.00	0.01	0.02	NYC R3000 +3% Lagged
TOTAL PRIVATE REAL ESTATE	0.00	0.00	0.00	NCREIF NFI-ODCE NET + 100 BP
TOTAL INFRASTRUCTURE	0.00	0.00	0.00	CPI + 4%
TOTAL US TREASURY SHORT TERM	0.00	0.01	0.01	FTSE US Government Bond 1-3 Years Index
TOTAL US TREASURY INTERMEDIATE	0.00	0.00	0.00	USBIG TSY AGN 1-10
TOTAL ACTIVE GOVERNMENT	-0.04	0.02	0.07	NYC - Treasury Agency Plus Five
TOTAL US TREASURY LONG DURATION	0.00	0.00	0.00	FTSE US Government Bond 10+ Years Index
TOTAL IG CORPORATE	-0.01	0.00	0.03	NYC Custom IGC Benchmark
TOTAL MORTGAGE	-0.03	0.01	0.00	NYC Custom Mortgage Benchmark
TOTAL CORE FI- DEVELOPING MGRS	0.05	-0.03	-0.10	Bloomberg U.S. Aggregate
TOTAL ETI	0.01	0.00	0.00	BERS Custom Benchmark (No Cash)
TOTAL HIGH YIELD	0.00	0.00	0.01	High Yield Custom Benchmark
TOTAL BANK LOANS	0.00	0.00	0.00	S&P UBS Leveraged Loan Index
TOTAL OPPORTUNISTIC FIXED	0.00	0.00	0.00	Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 200
TOTAL CASH	0.00	0.00	0.01	ICE BofA US 3-Month Treasury Bill

Selection Effect - Asset Class Breakdown				
	Quarter	FYTD	3 Years	Benchmark
TOTAL BOARD OF EDUCATION	-0.72	-1.74	-0.88	Board of Education Policy Benchmark
TOTAL DOMESTIC EQUITY	0.01	-0.14	-0.09	RUSSELL 3000 (DAILY)
TOTAL WORLD ex-USA	-0.35	-0.29	-0.20	NYC Developed Equity Benchmark
TOTAL GLOBAL EQUITY	-0.01	0.02	0.04	MSCI AC WORLD (Daily Const)
TOTAL EMERGING MARKETS	-0.08	-0.05	0.03	MSCI EMERGING MARKETS
TOTAL INTERNATIONAL FOF	0.01	0.02	0.01	MSCI ACWI ex USA IMI Net
TOTAL PRIVATE EQUITY	-0.34	-1.33	-1.12	NYC R3000 +3% Lagged
TOTAL PRIVATE REAL ESTATE	-0.03	-0.11	-0.05	NCREIF NFI-ODCE NET + 100 BP
TOTAL INFRASTRUCTURE	0.02	0.09	0.09	CPI + 4%
TOTAL US TREASURY SHORT TERM	0.00	0.00	0.00	FTSE US Government Bond 1-3 Years Index
TOTAL US TREASURY INTERMEDIATE	0.00	0.00	0.00	USBIG TSY AGN 1-10
TOTAL ACTIVE GOVERNMENT	0.00	0.00	0.00	NYC - Treasury Agency Plus Five
TOTAL US TREASURY LONG DURATION	0.00	0.00	0.00	FTSE US Government Bond 10+ Years Index
TOTAL IG CORPORATE	0.01	0.02	0.01	NYC Custom IGC Benchmark
TOTAL MORTGAGE	-0.01	0.00	0.00	NYC Custom Mortgage Benchmark
TOTAL CORE FI- DEVELOPING MGRS	0.00	0.00	0.00	Bloomberg U.S. Aggregate
TOTAL ETI	0.00	0.00	0.00	BERS Custom Benchmark (No Cash)
TOTAL HIGH YIELD	0.00	-0.04	0.02	High Yield Custom Benchmark
TOTAL BANK LOANS	0.00	0.00	0.00	S&P UBS Leveraged Loan Index
TOTAL OPPORTUNISTIC FIXED	0.04	0.06	-0.04	Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 200
TOTAL CASH	0.00	0.00	0.00	ICE BofA US 3-Month Treasury Bill

Total Domestic Equity Asset Allocations: March 31, 2025

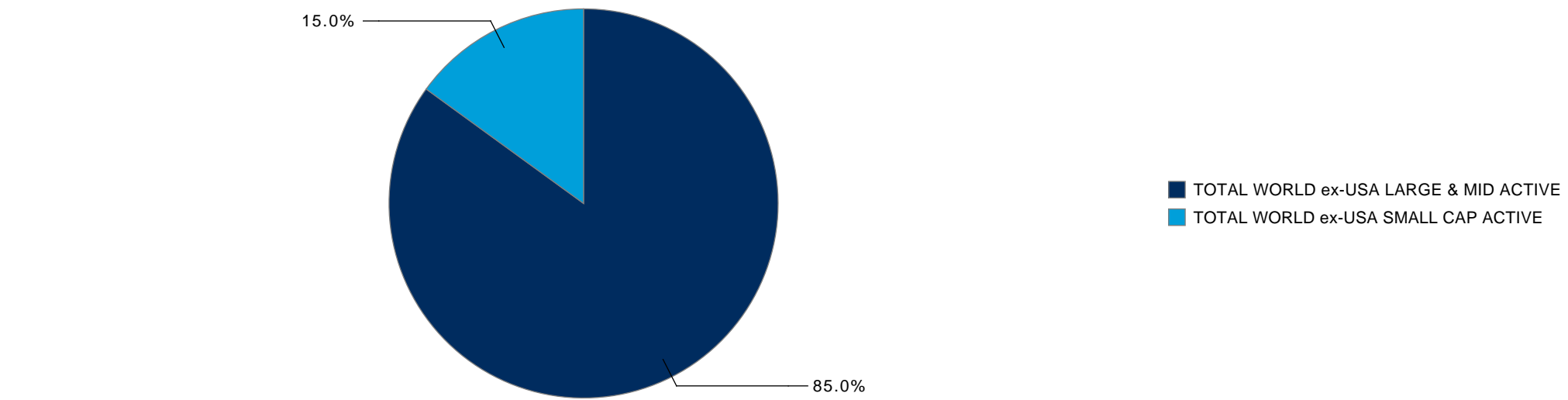


	<u>Market Value (Billions)</u>	<u>% of Plan</u>
TOTAL DOMESTIC EQUITY	\$2.7	27.7



	<u>Policy Weight</u>	<u>Actual Weight</u>	<u>Under/Over Weight</u>	<u>Quarterly Returns</u>		
				<u>Fund</u>	<u>Benchmark</u>	<u>Excess</u>
TOTAL SMALL CAP ACTIVE	2.9	1.8	(1.1)	(9.7)	(9.5)	(0.2)
TOTAL MID CAP ACTIVE	10.0	7.8	(2.2)	(3.6)	(3.4)	(0.2)
TOTAL SMALL CAP PASSIVE	2.9	1.8	(1.1)	(7.8)	(9.5)	1.7
TOTAL RUSSELL 1000 PASSIVE	55.0	60.4	5.4	(4.5)	(4.5)	(0.0)
TOTAL RUSSELL TOP 200 PASSIVE	28.7	27.4	(1.3)	(4.6)	(4.8)	0.1
TOTAL EMERGING MANAGERS	0.5	0.7	0.2	(10.9)	(9.5)	(1.4)

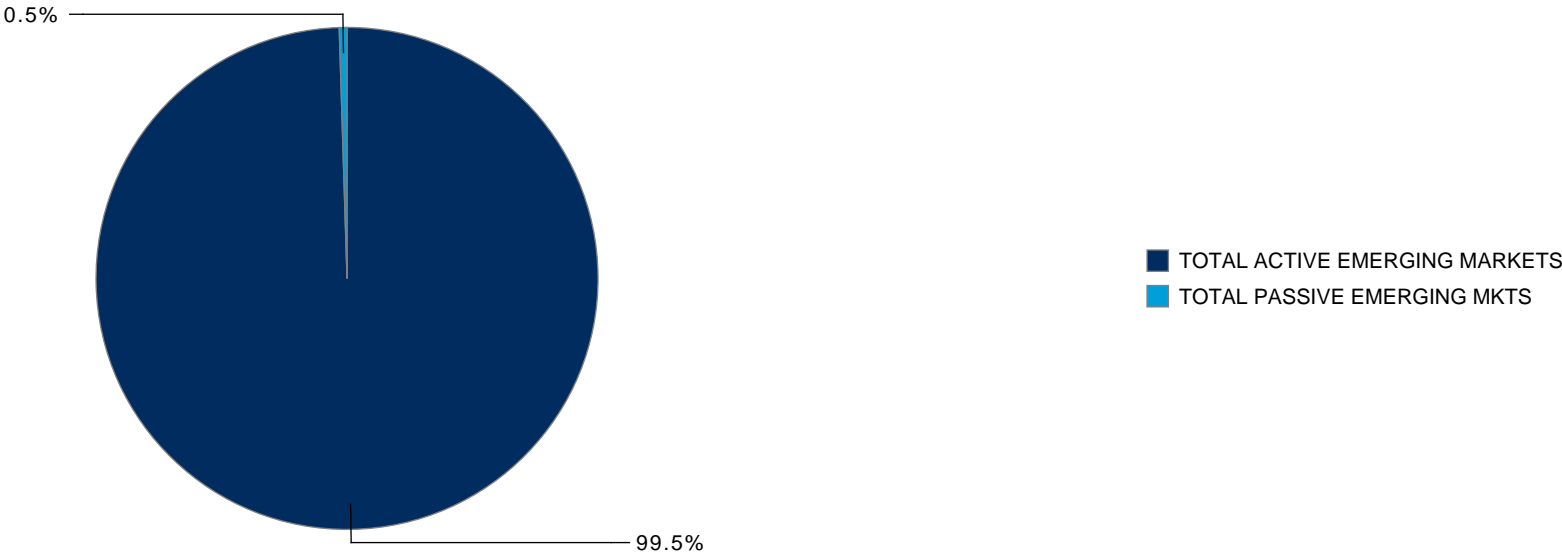
	Market Value (Millions)	% of Plan
TOTAL WORLD ex-USA	\$698.6	7.3



	Asset Weight	Quarterly Returns		
		Fund	Benchmark	Excess
TOTAL WORLD ex-USA LARGE & MID ACTIVE	85.03	0.31	6.20	(5.89)
TOTAL WORLD ex-USA SMALL CAP ACTIVE	14.97	4.47	3.78	0.69
TOTAL WORLD ex-USA	100.00	0.91	5.82	(4.91)



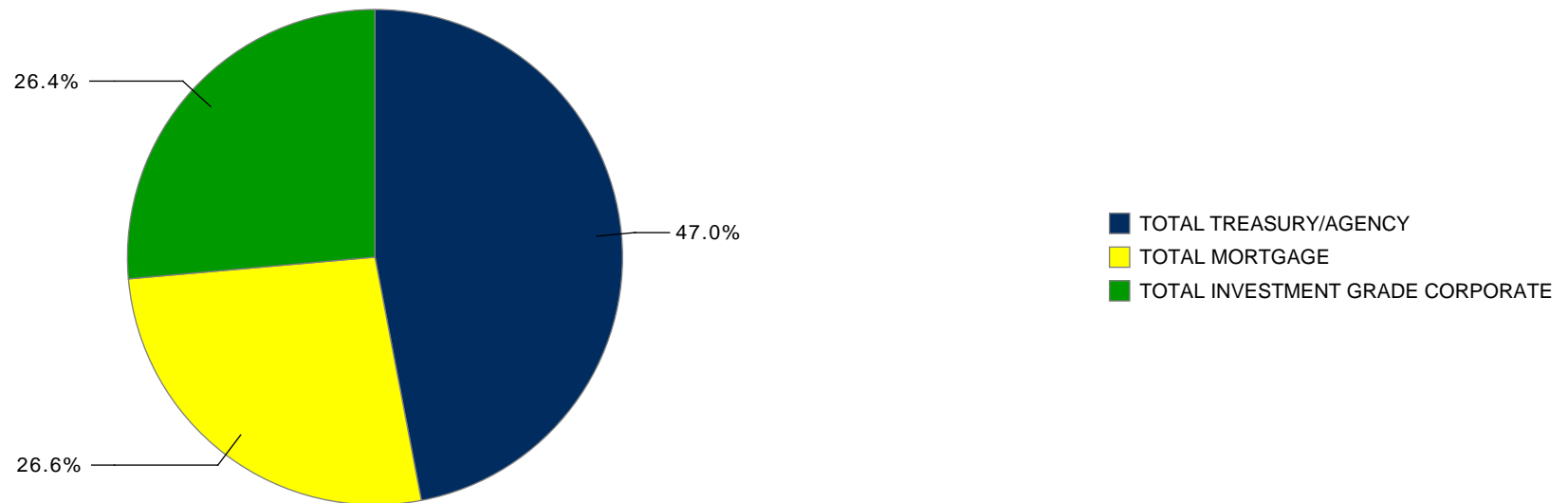
	<u>Market Value (Millions)</u>	<u>% of Plan</u>
TOTAL EMERGING MARKETS	\$354.5	3.7



	<u>Asset Weight</u>	<u>Quarterly Returns</u>		
		<u>Fund</u>	<u>Benchmark</u>	<u>Excess</u>
TOTAL ACTIVE EMERGING MARKETS	99.47	0.79	2.93	(2.14)
TOTAL PASSIVE EMERGING MARKETS	0.53	2.94	2.93	0.01
TOTAL EMERGING MARKETS	100.00	0.80	2.93	(2.13)



	<u>Market Value (Billions)</u>	<u>% of Plan</u>
TOTAL STRUCTURED + ETI	\$1.7	18.1



	<u>Policy Weight</u>	<u>Asset Weight</u>	<u>Under/Over Weight</u>	<u>Quarterly Returns</u>		
				<u>Fund</u>	<u>Benchmark</u>	<u>Excess</u>
TOTAL TREASURY/AGENCY	40.81	47.04	6.23	2.69	2.84	(0.15)
TOTAL MORTGAGE	29.94	26.56	(3.38)	2.94	3.06	(0.11)
TOTAL INVESTMENT GRADE CORPORATE	29.25	26.40	(2.85)	2.46	2.31	0.15

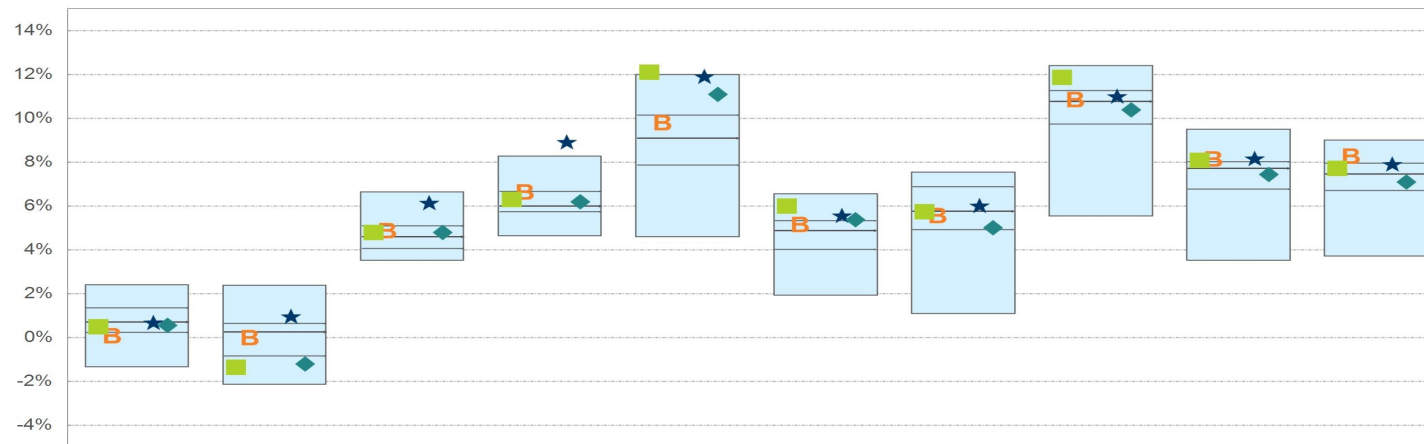


Through March 31, 2025



City of New York Performance Comparison

Total Returns of Master Trusts - Public : Plans > \$1 Billion
Cumulative Periods Ending : March 31, 2025



Percentile Rankings	1 Qtr	2 Qtrs	3 Qtrs	1 Year	2 Years	3 Years	4 Years	5 Years	7 Years	10 Years
5th	2.40	2.39	6.65	8.29	12.00	6.57	7.55	12.41	9.51	9.02
25th	1.35	0.64	5.09	6.67	10.16	5.34	6.88	11.28	8.03	7.95
50th	0.71	0.26	4.60	6.01	9.10	4.88	5.76	10.78	7.72	7.47
75th	0.23	-0.85	4.06	5.74	7.88	4.01	4.93	9.74	6.77	6.72
95th	-1.35	-2.14	3.53	4.65	4.61	1.94	1.10	5.54	3.53	3.71
No. Of Obs	72	69	68	66	66	61	60	60	49	49
B Total System - BOE	-0.04 (82)	-0.14 (54)	4.76 (39)	6.52 (31)	9.69 (35)	5.04 (41)	5.45 (60)	10.73 (55)	8.02 (25)	8.16 (14)
★ Board of Ed Policy Ben	0.56 (58)	0.84 (22)	6.03 (7)	8.80 (4)	11.79 (7)	5.45 (18)	5.89 (46)	10.89 (41)	8.04 (23)	7.78 (35)
■ Public Mkt Equiv 25	0.35 (68)	-1.49 (84)	4.67 (45)	6.17 (45)	11.98 (5)	5.87 (13)	5.61 (51)	11.75 (9)	7.96 (27)	7.60 (43)
◆ Public Mkt Equiv 35	0.42 (63)	-1.34 (82)	4.67 (45)	6.07 (46)	10.98 (11)	5.24 (28)	4.89 (75)	10.26 (63)	7.32 (58)	6.97 (64)

Wilshire Trust Universe Comparison Service® (TUCS®)

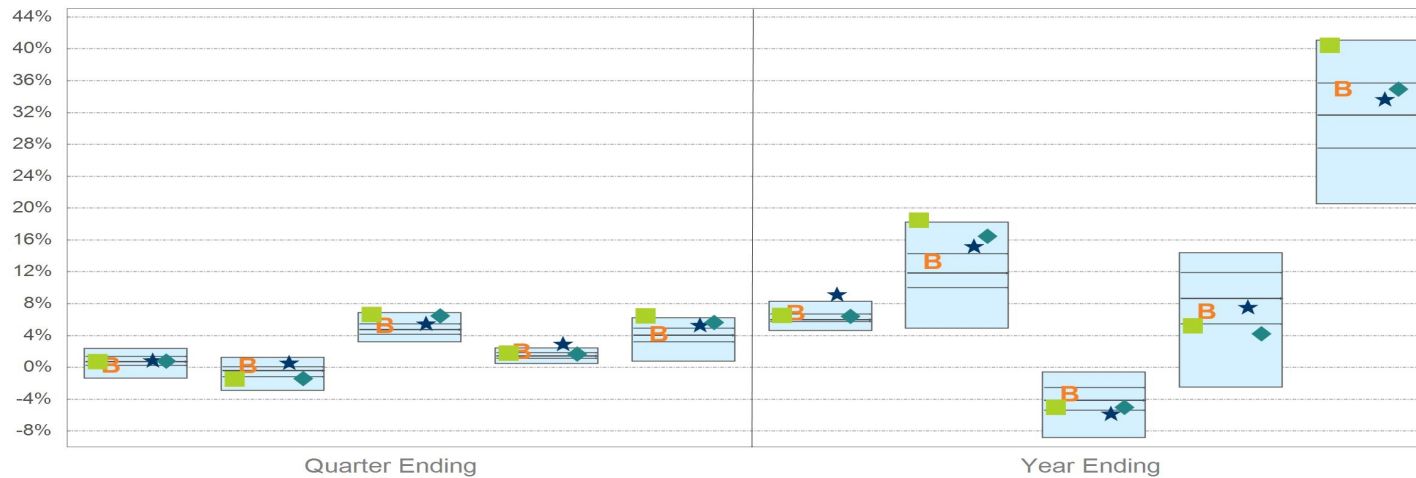


Through March 31, 2025



City of New York Performance Comparison

Total Returns of Master Trusts - Public : Plans > \$1 Billion
Consecutive Time Periods: March 31, 2025



Percentile Rankings	Mar 25	Dec 24	Sep 24	Jun 24	Mar 24	Mar 25	Mar 24	Mar 23	Mar 22	Mar 21
5th	2.40	1.27	6.89	2.42	6.24	8.29	18.26	-0.59	14.37	41.12
25th	1.35	0.07	5.43	1.84	4.92	6.67	14.25	-2.55	11.91	35.70
50th	0.71	-0.43	4.76	1.43	4.02	6.01	11.83	-4.14	8.67	31.68
75th	0.23	-1.15	4.14	1.12	3.22	5.74	10.04	-5.38	5.44	27.54
95th	-1.35	-2.89	3.20	0.48	0.79	4.65	4.90	-8.79	-2.48	20.56
No. Of Obs	72	70	72	71	73	66	73	65	68	69
B Total System - BOE	-0.04 (82)	-0.10 (27)	4.91 (44)	1.68 (33)	3.86 (52)	6.52 (31)	12.95 (34)	-3.69 (40)	6.68 (70)	34.64 (27)
★ Board of Ed Policy Ben	0.56 (58)	0.27 (16)	5.15 (37)	2.61 (3)	4.99 (22)	8.80 (4)	14.87 (15)	-6.18 (79)	7.23 (60)	33.32 (38)
■ Public Mkt Equiv 25	0.35 (68)	-1.84 (86)	6.26 (10)	1.43 (50)	6.09 (6)	6.17 (45)	18.11 (5)	-5.36 (73)	4.85 (81)	40.10 (9)
◆ Public Mkt Equiv 35	0.42 (63)	-1.75 (84)	6.10 (13)	1.33 (58)	5.26 (15)	6.07 (46)	16.12 (11)	-5.38 (75)	3.88 (84)	34.58 (27)

Wilshire Trust Universe Comparison Service® (TUCS®)



Through March 31, 2025

NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM INVESTMENT MANAGEMENT FEES INCURRED FOR FISCAL YEAR ENDED JUNE 30, 2024

INVESTMENT STYLE (PUBLIC MARKETS)	Avg. AUM FY 2024 in (\$MM)	Mgmt. Fees in (\$M)	Partnership Fees in (\$M)	Mgmt. & Part Fees in BPS	Perf / Carry Fees in (\$M)	Perf / Carry Fees in BPS	Total Invest. Fees in (\$M)	Total Invest Fees in BPS
PUBLIC EQUITIES								
Total Domestic Equities	2,591.51	1,034.45	-	3.99	833.23	3.22	1,867.68	7.21
Small Cap Active:	75.48	189.29	-	25.08	833.23	110.39	1,022.52	135.47
Small Cap Growth	75.48	189.29	-	25.08	833.23	110.39	1,022.52	135.47
Small Cap Value	-	-	-	-	-	-	-	-
Small Cap Core	-	-	-	-	-	-	-	-
Small Cap Fundamental Index	-	-	-	-	-	-	-	-
Mid Cap Active:	228.60	690.58	-	30.21	-	-	690.58	30.21
Mid Cap Growth	-	-	-	-	-	-	-	-
Mid Cap Value	-	-	-	-	-	-	-	-
Mid Cap Core	228.60	690.58	-	30.21	-	-	690.58	30.21
Other Active:	17.22	84.32	-	48.97	-	-	84.32	48.97
Russell 1000 Fundamental	-	-	-	-	-	-	-	-
Legato (Emerging Manager- Equity)	17.22	84.32	-	48.97	-	-	84.32	48.97
U.S. Environmental Managers	-	-	-	-	-	-	-	-
Total US Active Equities	321.30	964.19	-	30.01	833.23	25.93	1,797.42	55.94
Small Cap Passive:	66.02	2.84	-	0.43	-	-	2.84	0.43
Small Cap Passive	66.02	2.84	-	0.43	-	-	2.84	0.43
Mid Cap Passive:	-	-	-	-	-	-	-	-
Mid Cap Passive	-	-	-	-	-	-	-	-
Russell / S&P Passive:	2,204.19	67.41	-	0.31	-	-	67.41	0.31
Russell 1000 Growth Passive	-	-	-	-	-	-	-	-
Russell 1000 Value Passive	-	-	-	-	-	-	-	-
Russell 1000 Core Passive	1,453.67	29.07	-	0.20	-	-	29.07	0.20
Passive Russell 3000	-	-	-	-	-	-	-	-
Passive S&P 500	-	-	-	-	-	-	-	-
Passive Russell Top 200	750.52	38.35	-	0.51	-	-	38.35	0.51
Total US Passive Equities	2,270.22	70.26	-	0.31	-	-	70.26	0.31
Total International Equities	1,173.57	3,756.29	-	32.01	-	-	3,756.29	32.01
Total Global Equities	141.63	755.76	-	53.36	-	-	755.76	53.36
Global Equity	141.63	755.76	-	53.36	-	-	755.76	53.36
Active Total World Ex USA:	690.54	1,694.66	-	24.54	-	-	1,694.66	24.54
World Ex-USA Large & Mid Developed Growth Active	289.13	731.29	-	25.29	-	-	731.29	25.29
World Ex-USA Large & Mid Developed Value Active	289.91	602.96	-	20.80	-	-	602.96	20.80
World Ex-USA Developed Small Cap Active	111.51	360.41	-	32.32	-	-	360.41	32.32
Total World Ex USA	-	-	-	-	-	-	-	-
NON-U.S. Activist	-	-	-	-	-	-	-	-
Active Emerging Markets	388.96	1,773.59	-	45.60	-	-	1,773.59	45.60
International Fund of Funds	92.41	287.58	-	31.12	-	-	287.58	31.12
Total Active Non US Equities	1,171.91	3,755.83	-	32.05	-	-	3,755.83	32.05
Passive Non US Equities:	1.67	0.46	-	2.73	-	-	0.46	2.73
World Ex-USA Small Cap Passive	-	-	-	-	-	-	-	-
World Ex-USA Large & Mid Cap Passive	-	-	-	-	-	-	-	-
Passive Global	1.67	0.46	-	2.73	-	-	0.46	2.73
Passive Emerging Markets	-	-	-	-	-	-	-	-
Total Passive Non US Equities	1.67	0	-	2.73	-	-	0	2.73
Real Estate Equity Securities	-	-	-	-	-	-	-	-
Total Public Equities	3,906.72	5,546	-	14.20	833	2.13	6,380	16.33

Actual Fees Incurred



Through March 31, 2025

NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM INVESTMENT MANAGEMENT FEES INCURRED FOR FISCAL YEAR ENDED JUNE 30, 2024								
	Avg. AUM FY 2024 in (\$MM)	Mgmt. Fees in (\$M)	Partnership Fees in (\$M)	Mgmt. & Part Fees in BPS	Perf / Carry Fees in (\$M)	Perf / Carry Fees in BPS	Total Invest. Fees in (\$M)	Total Invest Fees in BPS
PUBLIC FIXED INCOME								
Total Fixed Income	2,346.35	3,164.81	-	13.49	-	-	3,165	13.49
Structured Program:	1,306.85	834.86	-	6.39	-	-	834.86	6.39
Government Treas/Agency Sector	511.57	148.68	-	2.91	-	-	148.68	2.91
Long Duration Treasury	65.46	6.27	-	0.96	-	-	6.27	0.96
Mortgage Sector	358.96	224.27	-	6.25	-	-	224.27	6.25
Investment Grade Credit Sector	370.85	455.64	-	12.29	-	-	455.64	12.29
Developing Managers	164.56	303.61	-	18.45	-	-	303.61	18.45
TIPS:	130.31	7.56	-	0.58	-	-	7.56	0.58
Active TIPS Managers	-	-	-	-	-	-	-	-
Passive TIPS Managers	130.31	7.56	-	0.58	-	-	7.56	0.58
High Yield	658.67	1,948.21	-	29.58	-	-	1,948.21	29.58
Bank Loans	0.36	-	-	-	-	-	-	-
Convertible Bonds	-	-	-	-	-	-	-	-
ETI - Access - RBC	9.34	17.40	-	18.62	-	-	17.40	18.62
ETI - AFL-CIO HIT	16.20	53.17	-	32.82	-	-	53.17	32.82
Other ETI Programs (Internally Managed)	14.89	-	-	-	-	-	-	-
Short Term (Internally Managed & Other)	45.17	-	-	-	-	-	-	-
Total Public Markets	6,253.07	8,711.30	-	13.93	833.23	1.33	9,544.53	15.26
INVESTMENT STYLE (PRIVATE MARKETS)								
Hedge Funds	-	-	-	-	-	-	-	-
Private Equity	1,088.92	14,640.12	8,718.37	214.51	8,443.87	77.54	31,802.36	292.05
Private Real Estate	743.16	8,328.45	9,330.47	237.62	1,575.10	21.19	19,234.02	258.81
Infrastructure	360.22	6,342.31	2,838.73	254.87	830.58	23.06	10,011.62	277.93
Opportunistic Fixed Income	355.63	3,156.08	8,030.42	314.56	449.73	12.65	11,636.22	327.20
Total Private Markets	2,547.94	32,466.96	28,917.99	240.92	11,299.28	44.35	72,684.22	285.27
Total Overall	8,801.00	41,178.26	28,917.99	79.65	12,132.51	13.79	82,228.75	93.43

The overall carried interest and performance incentive fees paid by BERS for the Fiscal Year: 13.79 BPS



Through March 31, 2025

NYC BOARD OF EDUCATION RETIREMENT SYSTEM
SECURITIES LENDING INCOME
March 31, 2025

	U. S. FIXED INCOME	U. S. EQUITY	INTERNATIONAL EQUITY	TOTAL
1989	70,000	-	-	70,000
1990	79,000	-	-	79,000
1991	111,000	-	-	111,000
1992	122,000	11,000	-	133,000
1993	79,000	32,000	15,000	126,000
1994	93,000	77,000	20,000	190,000
1995	112,000	93,000	12,000	217,000
1996	99,000	76,000	27,000	202,000
1997	101,000	126,000	40,000	267,000
1998	111,000	170,000	60,000	341,000
1999	159,000	263,000	100,000	522,000
2000	193,000	310,000	97,000	600,000
2001	295,000	208,000	159,000	662,000
2002	209,000	143,000	152,000	504,000
2003	153,000	158,000	195,000	506,000
2004	226,000	255,000	174,000	655,000
2005	384,000	479,000	217,000	1,080,000
2006	303,000	734,000	246,000	1,283,000
2007	593,000	1,208,000	272,000	2,073,000
2008	2,514,000	2,266,000	451,000	5,231,000
2009	698,000	1,416,000	367,000	2,481,000
2010	246,000	729,000	326,000	1,301,000
2011	340,000	943,000	599,000	1,882,000
2012	516,000	1,144,000	495,000	2,155,000
2013	349,000	1,325,000	446,000	2,120,000
2014	287,000	512,000	1,387,000	2,186,000
2015	338,000	429,000	1,985,000	2,752,000
2016	418,000	1,585,000	1,685,000	3,688,000
2017	686,000	1,015,000	1,215,000	2,916,000
2018	582,738	682,039	954,109	2,218,886
2019	319,440	712,602	788,647	1,820,689
2020	360,464	392,674	356,478	1,109,617
2021	672,093	566,378	92,881	1,331,351
2022	979,471	770,306	77,445	1,827,222
2023	779,247	464,944	180,256	1,424,447
2024	1,021,835	482,955	28,690	1,533,480
2025 (3 months)	312,163	112,860	3,551	428,574
Since Inception	14,911,451	19,891,758	13,224,057	48,027,266

Information Classification: Limited Access



**New York City
Board of Education Retirement System**

Appendix A

Consolidated Performance Report

Consolidated Performance Report



Through March 31, 2025

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE 2024	CYE 2024	CYE 2023	CYE 2022	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
SYSTEM RETURN SUMMARY															
5 BERS-TOTAL PORTFOLIO - GROSS	9,619	100.00	(0.04)	4.76	(0.04)	11.34	10.68	13.97	(12.05)	6.52	5.04	10.73	8.16	8.75	07/01/1987
BERS - ESTIMATED INVESTMENT FEES			(0.17)	(0.52)	(0.17)	(0.79)	(0.71)	(0.78)	(0.53)	(0.69)	(0.68)	(0.62)	(0.43)		
EST MANAGEMENT FEES - PUBLIC MARKET (ACCRUAL)			(0.02)	(0.07)	(0.02)	(0.11)	(0.10)	(0.08)	(0.12)	(0.10)	(0.11)	(0.12)			
EST MANAGEMENT FEES - ALTERNATIVE MARKETS (CASH)			(0.15)	(0.45)	(0.15)	(0.68)	(0.61)	(0.70)	(0.41)	(0.59)	(0.57)	(0.50)			
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
BERS-TOTAL PORTFOLIO - NET MGR			(0.21)	4.24	(0.21)	10.55	9.97	13.20	(12.57)	5.83	4.35	10.11	7.73		
BOARD OF EDUCATION POLICY BENCHMARK			0.56	6.01	0.56	13.70	13.55	14.90	(13.31)	8.76	5.44	10.88	7.77		
EXCESS RETURN			(0.77)	(1.76)	(0.77)	(3.15)	(3.58)	(1.71)	0.74	(2.93)	(1.08)	(0.77)	(0.04)		
EQUITY RETURN DETAIL															
18 BERS-TOTAL EQUITY (INCLUDES ALTERNATIVES) - GROSS	6,464	67.20	(1.20)	4.21	(1.20)	13.64	13.41	16.42	(12.90)	6.40	5.87	14.72	10.36	9.59	08/01/1993
ESTIMATED INVESTMENT FEES			(0.20)	(0.67)	(0.20)	(1.02)	(0.99)	(1.00)	(0.70)	(0.91)	(0.89)	(0.85)	(0.56)		
EST MANAGEMENT FEES			(0.20)	(0.67)	(0.20)	(1.02)	(0.99)	(1.00)	(0.70)	(0.91)	(0.89)	(0.85)	(0.56)		
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
BERS-TOTAL EQUITY (INCLUDES ALTERNATIVES) - NET MGR			(1.40)	3.54	(1.40)	12.62	12.41	15.43	(13.60)	5.49	4.97	13.87	9.80		
26 BERS-TOTAL EQUITY - GROSS	3,947	41.03	(2.84)	3.36	(2.84)	19.37	17.86	23.86	(21.59)	5.76	6.48	15.35	9.68	8.91	04/01/2004
ESTIMATED INVESTMENT FEES			(0.03)	(0.11)	(0.03)	(0.19)	(0.18)	(0.20)	(0.14)	(0.16)	(0.17)	(0.19)	(0.17)		
EST MANAGEMENT FEES			(0.03)	(0.11)	(0.03)	(0.19)	(0.18)	(0.20)	(0.14)	(0.16)	(0.17)	(0.19)	(0.17)		
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
BERS-TOTAL EQUITY - NET MGR			(2.88)	3.25	(2.88)	19.17	17.68	23.67	(21.72)	5.60	6.31	15.16	9.51		
34 BERS-TOTAL DOMESTIC EQUITY - GROSS	2,660	27.66	(4.67)	3.45	(4.67)	23.42	22.98	26.30	(20.37)	6.55	7.99	17.76	11.71	10.41	09/01/1991
ESTIMATED INVESTMENT FEES			(0.01)	(0.04)	(0.01)	(0.09)	(0.09)	(0.05)	(0.07)	(0.08)	(0.07)	(0.09)	(0.09)		
BERS-TOTAL DOMESTIC EQUITY - NET MGR			(4.68)	3.41	(4.68)	23.33	22.89	26.25	(20.44)	6.47	7.91	17.66	11.63		
RUSSELL 3000 (DAILY)			(4.72)	3.88	(4.72)	23.13	23.81	25.96	(19.21)	7.22	8.22	18.18	11.80	10.33	
EXCESS RETURN			0.04	(0.47)	0.04	0.20	(0.92)	0.29	(1.23)	(0.75)	(0.30)	(0.52)	(0.18)	0.08	
44 BERS-TOTAL SMALL CAP - GROSS	97	1.01	(8.70)	1.12	(8.70)	14.84	11.73	24.84	(22.70)	(2.21)	2.81	16.06	7.78	7.38	04/01/2004
ESTIMATED INVESTMENT FEES			(0.03)	(0.10)	(0.03)	(0.85)	(0.83)	(0.17)	(0.71)	(0.72)	(0.62)	(0.58)	(0.28)		
BERS-TOTAL SMALL CAP - NET MGR			(8.73)	1.02	(8.73)	13.98	10.90	24.67	(23.41)	(2.93)	2.19	15.48	7.50		
RUSSELL 2000 (DAILY)			(9.48)	(0.75)	(9.48)	10.06	11.54	16.93	(20.44)	(4.01)	0.52	13.27	6.30	7.45	
EXCESS RETURN			0.75	1.78	0.75	3.93	(0.63)	7.75	(2.98)	1.07	1.67	2.21	1.21	(0.07)	
54 BERS-TOTAL MID CAP - GROSS	207	2.15	(3.53)	(2.05)	(3.53)	8.76	4.29	12.83	(22.30)	(7.63)	(0.61)	10.20	7.76	10.64	10/01/2010
ESTIMATED INVESTMENT FEES			(0.11)	(0.32)	(0.11)	(0.33)	(0.38)	(0.34)	(0.23)	(0.37)	(0.33)	(0.57)	(0.58)		
BERS-TOTAL MID CAP - NET MGR			(3.64)	(2.37)	(3.64)	8.44	3.91	12.49	(22.53)	(8.00)	(0.94)	9.64	7.18		
RUSSELL MIDCAP (DAILY)			(3.40)	6.15	(3.40)	12.88	15.34	17.23	(17.32)	2.59	4.62	16.28	8.82	11.46	
EXCESS RETURN			(0.24)	(8.52)	(0.24)	(4.44)	(11.44)	(4.74)	(5.22)	(10.59)	(5.56)	(6.64)	(1.65)	(0.83)	
64 BERS-TOTAL RUSSELL 1000 - GROSS	1,608	16.71	(4.50)	4.22	(4.50)	24.62	24.98	26.89	(19.95)	8.06	8.80	18.40		12.97	04/01/2018
ESTIMATED INVESTMENT FEES			(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)		(0.00)	
BERS-TOTAL RUSSELL 1000 - NET MGR			(4.50)	4.21	(4.50)	24.61	24.98	26.89	(19.95)	8.06	8.80	18.40		12.97	
RUSSELL 1000 (DAILY)			(4.49)	4.10	(4.49)	23.88	24.51	26.53	(19.13)	7.82	8.65	18.47		12.95	
EXCESS RETURN			(0.01)	0.11	(0.01)	0.74	0.47	0.36	(0.82)	0.23	0.14	(0.07)		0.02	
74 BERS-TOTAL RUSSELL TOP 200 PASSIVE - GROSS	730	7.59	(4.65)	3.64	(4.65)	27.86	27.27	30.62	(20.15)	9.43	10.15	19.12		14.35	05/01/2018
ESTIMATED INVESTMENT FEES			(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)		(0.01)	
BERS-TOTAL RUSSELL TOP 200 PASSIVE - NET MGR			(4.65)	3.64	(4.65)	27.86	27.26	30.61	(20.15)	9.43	10.15	19.11		14.34	
RUSSELL TOP 200 INDEX (DAILY)			(4.79)	3.54	(4.79)	27.42	27.44	29.85	(19.77)	9.47	9.97	19.18		14.38	
EXCESS RETURN			0.14	0.10	0.14	0.44	(0.18)	0.76	(0.39)	(0.04)	0.18	(0.06)		(0.04)	

Information Classification: Confidential

Consolidated Performance Report



Through March 31, 2025

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE 2024	CYE 2024	CYE 2023	CYE 2022	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
EQUITY RETURN DETAIL															
86 BERS-TOTAL EMERGING MANAGER - GROSS ESTIMATED INVESTMENT FEES	18	0.19	(10.77)	(0.07)	(10.77)	9.13	16.05	14.34	(15.72)	(1.79)	3.05	16.71		8.13	05/01/2017
			(0.11)	(0.37)	(0.11)	(0.54)	(0.57)	(0.64)	(0.48)	(0.48)	(0.56)	(0.63)		(0.54)	
BERS-TOTAL EMERGING MANAGER - NET MGR			(10.88)	(0.44)	(10.88)	8.60	15.48	13.70	(16.20)	(2.27)	2.50	16.09		7.59	
RUSSELL 2000 (DAILY)			(9.48)	(0.75)	(9.48)	10.06	11.54	16.93	(20.44)	(4.01)	0.52	13.27		6.11	
EXCESS RETURN			(1.40)	0.31	(1.40)	(1.46)	3.94	(3.23)	4.23	1.74	1.97	3.44		1.48	
96 BERS-TOTAL WORLD ex-USA EQUITY - GROSS ESTIMATED INVESTMENT FEES	699	7.26	0.98	2.20	0.98	6.57	4.40	18.53	(24.63)	1.32	2.54	10.77	6.40	7.45	11/01/1992
			(0.06)	(0.19)	(0.06)	(0.26)	(0.25)	(0.29)	(0.18)	(0.25)	(0.25)	(0.27)	(0.26)		
BERS-TOTAL WORLD ex-USA EQUITY - NET MGR			0.91	2.01	0.91	6.31	4.14	18.24	(24.81)	1.07	2.29	10.50	6.14		
NYC DEVELOPED EQUITY BENCHMARK			5.82	5.85	5.82	10.76	4.44	17.18	(15.26)	5.08	4.99	11.95	5.33	6.10	
EXCESS RETURN			(4.91)	(3.84)	(4.91)	(4.45)	(0.30)	1.05	(9.55)	(4.00)	(2.70)	(1.45)	0.81	1.35	
106 BERS-TOTAL WORLD ex-USA LARGE & MID ACTIVE - GROSS ESTIMATED INVESTMENT FEES	594	6.17	0.37	1.50	0.37	5.15	3.79	18.72	(25.88)	0.45	2.13	9.80	6.03	5.44	11/01/2013
			(0.06)	(0.17)	(0.06)	(0.24)	(0.24)	(0.27)	(0.17)	(0.23)	(0.23)	(0.25)	(0.24)	(0.24)	
BERS-TOTAL WORLD ex-USA LARGE & MID ACTIVE - NET MGR			0.31	1.33	0.31	4.91	3.55	18.45	(26.05)	0.22	1.90	9.55	5.78	5.20	
NYC CUSTOM WORLD EX-USA LG & MID ACT INDEX			6.20	5.94	6.20	11.22	4.70	17.94	(14.29)	5.30	5.70	12.16	5.53	5.02	
EXCESS RETURN			(5.89)	(4.62)	(5.89)	(6.32)	(1.15)	0.51	(11.76)	(5.08)	(3.80)	(2.61)	0.25	0.19	
126 BERS-TOTAL WORLD ex-USA SMALL CAP ACTIVE - GROSS ESTIMATED INVESTMENT FEES	105	1.09	4.56	6.37	4.56	14.32	7.63	17.40	(18.57)	6.35	4.85	15.39	8.71	8.63	05/01/2013
			(0.09)	(0.26)	(0.09)	(0.37)	(0.34)	(0.38)	(0.27)	(0.35)	(0.34)	(0.38)	(0.36)		
BERS-TOTAL WORLD ex-USA SMALL CAP ACTIVE - NET MGR			4.47	6.11	4.47	13.95	7.29	17.02	(18.83)	6.00	4.51	15.01	8.36		
S&P EPAC SMALL CAP USD NET			3.78	1.98	3.78	7.49	(1.27)	14.16	(22.69)	0.61	0.02	9.00	4.54	5.17	
EXCESS RETURN			0.69	4.13	0.69	6.47	8.56	2.86	3.86	5.39	4.49	6.01	3.82	3.46	
136 BERS-TOTAL EMERGING MARKETS - GROSS ESTIMATED INVESTMENT FEES	354	3.68	0.91	2.16	0.91	18.37	10.78	16.42	(22.41)	7.73	2.46	8.86	4.12	6.80	11/01/1997
			(0.11)	(0.35)	(0.11)	(0.51)	(0.42)	(0.58)	(0.34)	(0.41)	(0.45)	(0.44)	(0.36)		
BERS-TOTAL EMERGING MARKETS - NET MGR			0.80	1.81	0.80	17.86	10.36	15.83	(22.75)	7.32	2.01	8.43	3.76		
MSCI EMERGING MARKETS			2.93	2.95	2.93	12.55	7.50	9.83	(20.09)	8.09	1.44	7.94	3.71		
EXCESS RETURN			(2.13)	(1.13)	(2.13)	5.31	2.85	6.00	(2.66)	(0.77)	0.57	0.48	0.06		
146 BERS-TOTAL ACTIVE EMERGING MARKETS - GROSS ESTIMATED INVESTMENT FEES	353	3.67	0.90	2.15	0.90	18.39	10.80	16.44	(22.42)	7.73	2.46	8.59	3.87	6.86	04/01/2004
			(0.11)	(0.35)	(0.11)	(0.51)	(0.42)	(0.59)	(0.34)	(0.41)	(0.45)	(0.46)	(0.40)		
BERS-TOTAL ACTIVE EMERGING MARKETS - NET MGR			0.79	1.81	0.79	17.88	10.37	15.85	(22.76)	7.32	2.01	8.13	3.47		
MSCI EMERGING MARKETS			2.93	2.95	2.93	12.55	7.50	9.83	(20.09)	8.09	1.44	7.94	3.71	6.54	
EXCESS RETURN			(2.14)	(1.14)	(2.14)	5.33	2.87	6.02	(2.67)	(0.77)	0.57	0.18	(0.23)	0.31	
156 BERS-TOTAL PASSIVE EMERGING MARKETS - GROSS ESTIMATED INVESTMENT FEES	2	0.02	2.94	3.31	2.94	11.97	7.24	10.14	(19.57)	7.89	1.57	8.02		5.55	12/01/2016
			(0.00)	(0.00)	(0.00)	0.55	0.52	(0.02)	(0.01)	0.53	0.15	0.09		0.04	
BERS-TOTAL PASSIVE EMERGING MARKETS - NET MGR			2.94	3.31	2.94	12.51	7.76	10.13	(19.57)	8.42	1.72	8.11		5.59	
MSCI EMERGING MARKETS			2.93	2.95	2.93	12.55	7.50	9.83	(20.09)	8.09	1.44	7.94		5.47	
EXCESS RETURN			0.01	0.36	0.01	(0.03)	0.26	0.30	0.52	0.33	0.28	0.17		0.12	
166 BERS-TOTAL INTERNATIONAL FUND OF FUNDS - GROSS ESTIMATED INVESTMENT FEES	122	1.27	5.19	6.45	5.19	10.99	5.83	18.13	(17.16)	6.38	5.58	12.48		6.86	05/01/2017
			(0.08)	(0.25)	(0.08)	(0.36)	(0.33)	(0.60)	(0.27)	(0.34)	(0.40)	(0.44)		(0.40)	
BERS-TOTAL INTERNATIONAL FUND OF FUNDS - NET MGR			5.10	6.20	5.10	10.64	5.49	17.53	(17.43)	6.04	5.18	12.03		6.46	
MSCI ACWI EX USA IMI NET			4.59	4.54	4.59	11.57	5.23	15.62	(16.58)	5.50	3.99	11.02		5.57	
EXCESS RETURN			0.51	1.66	0.51	(0.94)	0.26	1.91	(0.85)	0.54	1.19	1.45		0.89	
176 BERS-TOTAL GLOBAL EQUITY - GROSS ESTIMATED INVESTMENT FEES	111	1.15	(1.79)	6.59	(1.79)	20.09	20.47	33.10	(28.80)	7.28	9.52	15.58		11.45	06/01/2018
			(0.13)	(0.42)	(0.13)	(0.63)	(0.63)	(0.70)	(0.37)	(0.56)	(0.58)	(0.61)		(0.60)	
BERS-TOTAL GLOBAL EQUITY - NET MGR			(1.92)	6.17	(1.92)	19.46	19.84	32.40	(29.17)	6.72	8.95	14.96		10.85	
MSCI AC WORLD (DAILY CONST)			(1.32)	4.16	(1.32)	19.38	17.49	22.20	(18.36)	7.15	6.91	15.18		9.21	
EXCESS RETURN			(0.59)	2.01	(0.59)	0.08	2.35	10.20	(10.81)	(0.43)	2.03	(0.21)		1.64	

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Consolidated Performance Report



Through March 31, 2025

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE 2024	CYE 2024	CYE 2023	CYE 2022	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
ALTERNATIVE EQUITY RETURN DETAIL															
188 BERS-TOTAL PRIVATE EQUITY (TIME WEIGHTED) - GROSS	1,237	12.86	1.40	6.21	1.40	8.27	8.88	8.87	5.77	9.07	6.36	17.21	16.76	10.60	07/01/2006
ESTIMATED INVESTMENT FEES			(0.61)	(2.08)	(0.61)	(2.87)	(2.79)	(2.72)	(2.25)	(2.69)	(2.62)	(2.66)	(1.96)		
BERS-TOTAL PRIVATE EQUITY (TIME WEIGHTED) - NET MGR			0.79	4.13	0.79	5.40	6.09	6.15	3.52	6.38	3.73	14.55	14.80		
NYC R3000 +3% LAGGED			3.39	15.02	3.39	33.09	39.15	24.02	(15.11)	27.46	11.23	17.25	15.89	14.24	
EXCESS RETURN			(2.60)	(10.89)	(2.60)	(27.69)	(33.06)	(17.87)	18.63	(21.08)	(7.50)	(2.70)	(1.09)	(3.64)	
198 BERS-TOTAL PRIVATE REAL ESTATE (TIME WEIGHTED) - GROSS	814	8.46	0.97	2.20	0.97	(5.50)	(2.20)	(5.90)	19.46	1.67	1.00	6.30	8.86	9.72	12/01/2010
ESTIMATED INVESTMENT FEES			(0.29)	(0.94)	(0.29)	(1.21)	(1.10)	(1.25)	(2.06)	(1.15)	(1.37)	(1.38)	(1.06)		
BERS-TOTAL PRIVATE REAL ESTATE (TIME WEIGHTED) - NET MGR			0.68	1.27	0.68	(6.72)	(3.30)	(7.15)	17.40	0.52	(0.37)	4.92	7.80		
NCREIF NFI-ODCE NET + 100 BP			1.10	2.61	1.10	(9.09)	(1.29)	(11.85)	7.61	2.18	(4.12)	3.03	5.75	8.29	
EXCESS RETURN			(0.42)	(1.34)	(0.42)	2.37	(2.01)	4.69	9.79	(1.66)	3.75	1.89	2.05	1.43	
208 BERS-TOTAL INFRASTRUCTURE (TIME WEIGHTED) - GROSS	467	4.85	2.32	8.93	2.32	12.66	13.39	12.96	13.73	12.76	12.96	13.92	13.77	14.39	12/01/2013
ESTIMATED INVESTMENT FEES			(0.39)	(1.74)	(0.39)	(3.15)	(3.14)	(3.18)	(3.44)	(2.82)	(2.57)	(2.91)	(2.27)	(2.93)	
BERS-TOTAL INFRASTRUCTURE (TIME WEIGHTED) - NET MGR			1.92	7.19	1.92	9.51	10.25	9.78	10.30	9.94	10.39	11.02	11.51	11.47	
CPI + 4%			1.63	5.12	1.63	7.09	6.99	7.46	10.67	6.50	7.74	8.54	7.20	6.90	
EXCESS RETURN			0.30	2.07	0.30	2.42	3.26	2.33	(0.37)	3.43	2.65	2.47	4.30	4.57	

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		Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE 2024	CYE 2024	CYE 2023	CYE 2022	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
FIXED INCOME RETURN DETAIL																
220	BERS-TOTAL FIXED INCOME - GROSS	3,153	32.78	2.34	5.80	2.34	6.19	4.87	8.40	(10.53)	6.64	2.89	2.63	3.18	7.10	02/01/1980
	ESTIMATED INVESTMENT FEES			(0.11)	(0.19)	(0.11)	(0.28)	(0.15)	(0.30)	(0.15)	(0.23)	(0.23)	(0.18)	(0.15)		
	EST MANAGEMENT FEES			(0.11)	(0.19)	(0.11)	(0.28)	(0.15)	(0.30)	(0.15)	(0.23)	(0.23)	(0.18)	(0.15)		
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	BERS-TOTAL FIXED INCOME - NET MGR			2.24	5.61	2.24	5.91	4.72	8.10	(10.67)	6.41	2.66	2.44	3.03		
228	BERS-FIXED INCOME (ex OFI & CASH) - GROSS	2,535	26.35	2.35	5.26	2.35	5.29	3.47	8.35	(11.64)	5.80	2.16	2.07	2.94	3.21	11/01/2013
	ESTIMATED INVESTMENT FEES			(0.03)	(0.10)	(0.03)	(0.15)	(0.13)	(0.16)	(0.12)	(0.13)	(0.14)	(0.13)	(0.12)	(0.13)	
	EST MANAGEMENT FEES			(0.03)	(0.10)	(0.03)	(0.15)	(0.13)	(0.16)	(0.12)	(0.13)	(0.14)	(0.13)	(0.12)	(0.13)	
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	BERS-FIXED INCOME (ex OFI & CASH) - NET MGR			2.31	5.16	2.31	5.15	3.34	8.20	(11.75)	5.67	2.03	1.94	2.82	3.09	
236	BERS-TOTAL STRUCTURED FIXED INCOME - GROSS	1,705	17.73	2.71	4.97	2.71	3.28	1.93	6.03	(12.97)	5.25	0.85	(0.36)	1.96	6.56	01/01/1985
	ESTIMATED INVESTMENT FEES			(0.01)	(0.04)	(0.01)	(0.07)	(0.06)	(0.07)	(0.05)	(0.06)	(0.06)	(0.05)	(0.05)		
	BERS-TOTAL STRUCTURED FIXED INCOME - NET MGR			2.69	4.93	2.69	3.21	1.87	5.96	(13.01)	5.19	0.79	(0.41)	1.91		
	NYC CUSTOM STRUCTURED INDEX-BERS			2.75	4.84	2.75	2.67	1.29	5.80	(13.15)	4.92	0.53	(0.50)	2.07		
	EXCESS RETURN			(0.05)	0.08	(0.05)	0.54	0.58	0.16	0.14	0.27	0.26	0.09	(0.16)		
246	BERS-TOTAL GOVERNMENT - GROSS	821	8.53	2.70	4.40	2.70	1.94	1.31	4.15	(11.57)	4.70	0.29	(1.32)	1.37	6.15	05/01/1987
	ESTIMATED INVESTMENT FEES			(0.01)	(0.02)	(0.01)	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)	(0.03)	(0.02)	(0.03)		
	BERS-TOTAL GOVERNMENT - NET MGR			2.69	4.38	2.69	1.91	1.28	4.12	(11.59)	4.67	0.26	(1.34)	1.34		
	CUSTOM GOVERNMENT BENCHMARK - BOE			2.84	4.39	2.84	1.67	0.75	4.41	(12.29)	4.59	0.03	(1.43)	1.94		
	EXCESS RETURN			(0.15)	(0.00)	(0.15)	0.24	0.53	(0.29)	0.70	0.08	0.23	0.09	(0.60)		
256	BERS-TOTAL MORTGAGE - GROSS	424	4.40	2.95	5.42	2.95	2.66	1.80	5.38	(11.77)	5.70	0.82	(0.22)	1.48	4.70	08/01/1993
	ESTIMATED INVESTMENT FEES			(0.02)	(0.05)	(0.02)	(0.07)	(0.06)	(0.07)	(0.05)	(0.06)	(0.06)	(0.05)	(0.05)		
	BERS-TOTAL MORTGAGE - NET MGR			2.93	5.37	2.93	2.59	1.74	5.31	(11.82)	5.63	0.76	(0.27)	1.43		
	NYC CUSTOM MORTGAGE BENCHMARK			3.06	5.32	3.06	2.12	1.20	5.05	(11.81)	5.39	0.55	(0.77)	1.13	4.26	
	EXCESS RETURN			(0.12)	0.05	(0.12)	0.48	0.54	0.26	(0.01)	0.24	0.20	0.50	0.30	0.45	
266	BERS-TOTAL INVESTMENT GRADE CORPORATE - GROSS	461	4.79	2.49	5.43	2.49	5.45	3.06	9.11	(16.67)	5.69	1.39	1.75	2.58	6.35	04/01/1987
	ESTIMATED INVESTMENT FEES			(0.03)	(0.08)	(0.03)	(0.13)	(0.11)	(0.12)	(0.08)	(0.11)	(0.11)	(0.10)	(0.09)		
	BERS-TOTAL INVESTMENT GRADE CORPORATE - NET MGR			2.46	5.36	2.46	5.32	2.95	8.99	(16.75)	5.58	1.28	1.65	2.49		
	NYC CUSTOM IGC BENCHMARK			2.31	4.99	2.31	4.63	2.13	8.52	(15.76)	4.90	1.14	1.38	2.33		
	EXCESS RETURN			0.15	0.37	0.15	0.68	0.82	0.47	(0.99)	0.68	0.14	0.26	0.16		

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Through March 31, 2025

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE 2024	CYE 2024	CYE 2023	CYE 2022	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
FIXED INCOME RETURN DETAIL															
278 BERS-TOTAL CORE FI- DEVELOPING MGRS - GROSS	228	2.37	2.64	5.06	2.64	3.19	1.93	6.52	(13.13)	5.40	0.96			(0.70)	09/01/2020
ESTIMATED INVESTMENT FEES			(0.05)	(0.14)	(0.05)	(0.20)	(0.19)	(0.22)	(0.18)	(0.19)	(0.20)			(0.20)	
BERS-TOTAL CORE FI- DEVELOPING MGRS - NET MGR			2.59	4.92	2.59	2.99	1.74	6.30	(13.31)	5.21	0.76			(0.90)	
BLOOMBERG U.S. AGGREGATE			2.78	4.81	2.78	2.63	1.25	5.53	(13.01)	4.88	0.52			(1.20)	
EXCESS RETURN			(0.19)	0.10	(0.19)	0.35	0.49	0.77	(0.30)	0.33	0.24			0.30	
288 BERS-TOTAL TIPS - GROSS	-	-				2.73		3.92	(11.91)						06/01/2005
ESTIMATED INVESTMENT FEES						(0.01)									
BERS-TOTAL TIPS - NET MGR						2.72									
BLOOMBERG GLOBAL INFL-LINKED: U.S. TIPS						2.71	1.84	3.90	(11.85)						
EXCESS RETURN						0.02									
298 BERS-TOTAL TARGETED INVESTMENTS (NO CASH) - GROSS	40	0.41	3.09	5.20	3.09	4.09	2.65	5.78	(10.99)	5.71	1.72	0.33	2.44	6.00	12/01/1984
ESTIMATED INVESTMENT FEES			(0.04)	(0.14)	(0.04)	(0.18)	(0.18)	(0.19)	(0.16)	(0.18)	(0.18)	(0.18)	(0.21)	(0.13)	
BERS-TOTAL TARGETED INVESTMENTS (NO CASH) - NET MGR			3.05	5.06	3.05	3.91	2.47	5.59	(11.15)	5.53	1.54	0.16	2.23	5.87	
BERS CUSTOM BENCHMARK (NO CASH)			2.85	5.16	2.85	3.07	2.03	5.43	(10.76)	5.53	1.27	0.05	1.71		
EXCESS RETURN			0.20	(0.09)	0.20	0.84	0.44	0.16	(0.39)	(0.01)	0.27	0.11	0.51		
308 BERS-TOTAL HIGH YIELD - GROSS	561	5.83	1.15	6.17	1.15	10.53	8.06	13.71	(9.33)	7.56	5.45	8.12	5.32	5.89	08/01/1997
ESTIMATED INVESTMENT FEES			(0.07)	(0.23)	(0.07)	(0.32)	(0.31)	(0.33)	(0.26)	(0.31)	(0.30)	(0.32)	(0.32)		
BERS-TOTAL HIGH YIELD - NET MGR			1.08	5.94	1.08	10.21	7.75	13.38	(9.59)	7.25	5.14	7.80	5.00		
HIGH YIELD CUSTOM BENCHMARK			1.00	6.53	1.00	10.43	8.19	13.44	(11.18)	7.69	4.98	7.28	4.81	5.71	
EXCESS RETURN			0.08	(0.58)	0.08	(0.22)	(0.44)	(0.06)	1.59	(0.44)	0.17	0.52	0.18	0.18	
318 BERS- TOTAL BANK LOANS - GROSS	-	-													12/01/2012
ESTIMATED INVESTMENT FEES															
BERS-TOTAL BANK LOANS - NET MGR															
S&P UBS LEVERAGED LOAN INDEX						11.04	9.05	13.04	(1.06)						
EXCESS RETURN															
328 BERS-TOTAL OPPORTUNISTIC FIXED INCOME - GROSS	537	5.58	2.43	9.03	2.43	12.88	12.99	10.67	2.58	11.95	9.19			11.41	08/01/2020
ESTIMATED INVESTMENT FEES			(0.49)	(0.74)	(0.49)	(1.24)	(0.32)	(1.31)	(0.60)	(0.82)	(0.90)			(0.70)	
BERS-TOTAL OPPORTUNISTIC FIXED INCOME - NET MGR			1.94	8.29	1.94	11.63	12.68	9.36	1.98	11.12	8.28			10.71	
OPPORTUNISTIC FIXED INCOME JPMGHY / CSFB 50/50 BLEND PLUS 200			1.27	7.20	1.27	14.27	11.48	16.55	(2.79)	9.46	9.13			9.01	
EXCESS RETURN			0.67	1.09	0.67	(2.64)	1.19	(7.19)	4.77	1.66	(0.85)			1.71	
CASH SUMMARY															
340 Short Term BERS - GROSS	82	0.85	1.08	3.66	1.08	5.50	5.32	5.17	1.41	5.10	4.36	2.61	1.91	2.12	10/01/2000
ESTIMATED INVESTMENT FEES			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Short Term BERS - NET MGR			1.08	3.66	1.08	5.50	5.32	5.17	1.41	5.10	4.36	2.61	1.91		
344 Cash Account	2	0.02													
346 Securities Lending	0	0.00													

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**New York City
Board of Education Retirement System**

Appendix B

Public Markets Manager Performance Detail

Public Markets Manager Performance Detail



Net Returns Through March 31, 2025

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2024	2023	2022	2021	2020
EQUITY SUMMARY										
US EQUITY										
Wasatch-US SCG	\$49	0.51	(9.65)	1.64	(9.65)	13.09	34.29	(31.14)	19.39	38.80
RUSSELL 2000 GROWTH DAILY			(11.12)	(2.00)	(11.12)	15.15	18.66	(26.36)	2.83	34.63
Excess			1.46	3.64	1.46	(2.06)	15.63	(4.78)	16.56	4.17
BlackRock US SCG R2000	\$0	0.00	(11.07)	(1.81)	(11.07)	15.32	18.43	(26.38)	3.35	34.42
RUSSELL 2000 GROWTH DAILY			(11.12)	(2.00)	(11.12)	15.15	18.66	(26.36)	2.83	34.63
Excess			0.05	0.19	0.05	0.17	(0.23)	(0.02)	0.51	(0.21)
BlackRock US SCV R2000	\$48	0.50	(7.77)	0.31	(7.77)	7.78	14.51	(14.51)	28.48	4.87
RUSSELL 2000 VALUE DAILY			(7.74)	0.54	(7.74)	8.05	14.65	(14.48)	28.27	4.63
Excess			(0.02)	(0.23)	(0.02)	(0.28)	(0.14)	(0.03)	0.21	0.24
Earnest-US MCC	\$207	2.15	(3.64)		(3.64)					
RUSSELL MIDCAP (DAILY)			(3.40)		(3.40)					
Excess			(0.24)		(0.24)					
Wellington US MCC	\$0	0.00					12.49	(22.53)	10.07	25.12
S&P 400 MIDCAP INDEX (DAILY)							16.44	(13.06)	24.76	13.66
Excess							(3.95)	(9.47)	(14.69)	11.46
BlackRock US LMC R1000 Core	\$1,608	16.71	(4.50)	4.21	(4.50)	24.98	26.89	(19.95)	26.64	20.97
RUSSELL 1000 (DAILY)			(4.49)	4.10	(4.49)	24.51	26.53	(19.13)	26.45	20.96
Excess			(0.01)	0.11	(0.01)	0.47	0.36	(0.82)	0.18	0.00
SSGA-US LC Russell TOP 200 Core	\$730	7.59	(4.65)	3.64	(4.65)	27.26	30.61	(20.15)	27.50	22.40
RUSSELL TOP 200 INDEX (DAILY)			(4.79)	3.54	(4.79)	27.44	29.85	(19.77)	27.90	22.37
Excess			0.14	0.10	0.14	(0.18)	0.76	(0.39)	(0.40)	0.03

Public Markets Manager Performance Detail



Net Returns Through March 31, 2025

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2024	2023	2022	2021	2020
FUND OF FUNDS										
BERS-TOTAL FUNDS OF FUNDS	\$18	0.19	(10.88)	(0.44)	(10.88)	15.48	13.70	(16.20)	25.02	19.38
RUSSELL 2000 (DAILY)			(9.48)	(0.75)	(9.48)	11.54	16.93	(20.44)	14.82	19.96
Excess			(1.40)	0.31	(1.40)	3.94	(3.23)	4.23	10.20	(0.58)
BERS-TOTAL LEGATO										
BERS-TOTAL LEGATO	\$18	0.19	(10.88)	(0.44)	(10.88)	15.48	13.70	(16.20)	25.02	19.38
RUSSELL 2000 (DAILY)			(9.48)	(0.75)	(9.48)	11.54	16.93	(20.44)	14.82	19.96
Excess			(1.40)	0.31	(1.40)	3.94	(3.23)	4.23	10.20	(0.58)
NON - US EQUITY										
Sprucegrove WorldxUS LMCC	\$309	3.21	3.38	2.50	3.38	0.29	19.94	(14.43)	8.01	5.35
NYC Developed Value Benchmark ^[1]			6.20	5.94	6.20	4.70	17.94	(14.29)	12.62	7.59
Excess			(2.82)	(3.44)	(2.82)	(4.41)	2.00	(0.14)	(4.61)	(2.24)
Baillie Gifford WorldxUS LMCC	\$285	2.96	(2.83)	0.12	(2.83)	7.06	16.96	(38.20)	(7.53)	66.99
NYC Developed Growth Benchmark ^[2]			6.20	5.94	6.20	4.70	17.94	(14.29)	12.62	7.59
Excess			(9.03)	(5.82)	(9.03)	2.36	(0.98)	(23.91)	(20.15)	59.40
Acadian WorldxUS SCC	\$104	1.09	4.49	6.09	4.49	7.57	18.47	(17.95)	21.67	15.96
S&P EPAC Small Cap USD NET			3.78	1.98	3.78	(1.27)	14.16	(22.69)	8.06	13.78
Excess			0.70	4.11	0.70	8.84	4.31	4.74	13.61	2.18
Algert EAFE SCC	\$0	0.00					11.64	(21.66)	11.94	9.76
MSCI EAFE SMALL CAP NET (DAILY)							13.16	(21.39)	10.10	12.34
Excess							(1.52)	(0.27)	1.84	(2.59)
EMERGING MARKETS										
Acadian EM	\$244	2.54	0.04	2.23	0.04	15.19	19.77	(20.75)	4.96	10.72
MSCI EMERGING MARKETS			2.93	2.95	2.93	7.50	9.83	(20.09)	(2.54)	18.31
Excess			(2.89)	(0.72)	(2.89)	7.68	9.94	(0.66)	7.50	(7.59)

Public Markets Manager Performance Detail



Net Returns Through March 31, 2025

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2024	2023	2022	2021	2020
JP Morgan AM-EM ACG	\$108	1.13	2.52	0.87	2.52	0.42	7.43	(27.80)		
MSCI EMERGING MARKETS			2.93	2.95	2.93	7.50	9.83	(20.09)		
Excess			(0.41)	(2.07)	(0.41)	(7.08)	(2.40)	(7.71)		
BlackRock MSCI EM Core	\$2	0.02	2.94	3.31	2.94	7.76	10.13	(19.57)	(2.10)	17.27
MSCI EMERGING MARKETS			2.93	2.95	2.93	7.50	9.83	(20.09)	(2.54)	18.31
Excess			0.01	0.36	0.01	0.26	0.30	0.52	0.44	(1.04)
INTERNATIONAL FOF										
BERS-TOTAL INTERNATIONAL FOF	\$122	1.27	5.10	6.20	5.10	5.49	17.53	(17.43)	8.90	16.60
MSCI ACWI ex USA IMI Net			4.59	4.54	4.59	5.23	15.62	(16.58)	8.53	11.12
Excess			0.51	1.66	0.51	0.26	1.91	(0.85)	0.37	5.48
BERS-TOTAL INTERNATIONAL XPONANCE	\$122	1.27	5.10	6.20	5.10	5.49	17.53	(17.43)	8.90	16.60
MSCI ACWI ex USA IMI Net			4.59	4.54	4.59	5.23	15.62	(16.58)	8.53	11.12
Excess			0.51	1.66	0.51	0.26	1.91	(0.85)	0.37	5.48
GLOBAL EQUITY										
Morgan Stanley-Global	\$58	0.60	(1.41)	12.98	(1.41)	28.28	50.25	(40.28)	0.63	58.66
MSCI AC WORLD (Daily Const)			(1.32)	4.16	(1.32)	17.49	22.20	(18.36)	18.54	16.25
Excess			(0.08)	8.81	(0.08)	10.79	28.05	(21.92)	(17.91)	42.41
Fiera-Global	\$53	0.55	(2.47)	(0.41)	(2.47)	11.99	19.60	(18.27)	26.21	20.57
MSCI World Index			(1.79)	4.29	(1.79)	18.67	23.79	(18.14)	21.82	15.90
Excess			(0.68)	(4.70)	(0.68)	(6.69)	(4.18)	(0.13)	4.39	4.66
FIXED INCOME SUMMARY										
STRUCTRED FIXED INCOME										
BlackRock Mortgages	\$387	4.02	2.94	5.40	2.94	1.74	5.33	(11.81)	(0.79)	4.42
NYC Custom Mortgage Benchmark ⁽³⁾			3.06	5.32	3.06	1.20	5.05	(11.81)	(1.04)	3.91
Excess			(0.11)	0.08	(0.11)	0.54	0.29	0.01	0.26	0.52

Public Markets Manager Performance Detail



Net Returns Through March 31, 2025

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2024	2023	2022	2021	2020
Medalist-Mortgages - Bivium	\$37	0.38	2.83	5.04	2.83	1.63	4.98			
Bloomberg US Mortgage Backed Securities			3.06	5.32	3.06	1.20	5.05			
Excess			(0.23)	(0.28)	(0.23)	0.43	(0.06)			
T Rowe Price-Corporate	\$422	4.39	2.44	5.38	2.44	2.99	9.16	(16.68)		
Bloomberg U.S. Corporate Inv Grade			2.31	4.99	2.31	2.13	8.52	(15.76)		
Excess			0.14	0.39	0.14	0.86	0.64	(0.92)		
SSGA LI Treasury	\$101	1.05	4.13	4.03	4.13	(2.50)	4.22	(21.24)	(3.60)	12.59
NYC - Treasury Agency Plus Five			4.11	4.07	4.11	(2.87)	4.09	(20.58)	(3.78)	12.85
Excess			0.01	(0.04)	0.01	0.38	0.12	(0.66)	0.17	(0.26)
New Century-LI Treasury - Bivium	\$35	0.36	4.14	4.10	4.14	(2.62)	3.33			
NYC - Treasury Agency Plus Five			4.11	4.07	4.11	(2.87)	4.09			
Excess			0.03	0.02	0.03	0.25	(0.77)			
SSGA IT Treasury 1-10Y	\$319	3.32	2.48	4.77	2.48	2.60	4.38	(7.75)	(1.73)	5.73
USBIG TSY AGN 1-10			2.44	4.75	2.44	2.52	4.42	(7.79)	(1.66)	5.72
Excess			0.04	0.02	0.04	0.08	(0.04)	0.03	(0.07)	0.02
SSGA ST Treasury 1-3Y	\$275	2.86	1.61	4.54	1.61	4.16	4.37	(3.66)	(0.60)	3.05
FTSE US Government Bond 1-3 Years Index			1.58	4.46	1.58	4.09	4.35	(3.74)	(0.58)	3.09
Excess			0.03	0.08	0.03	0.07	0.02	0.08	(0.02)	(0.04)
SSGA LT Treasury 10Y Plus	\$91	0.94	4.83	3.13	4.83	(6.04)	3.48	(29.51)		
FTSE US Government Bond 10+ Years Index			4.76	3.14	4.76	(6.47)	3.70	(29.75)		
Excess			0.08	(0.01)	0.08	0.43	(0.22)	0.24		
Integrity-Credit - Bivium	\$39	0.40	2.67	5.12	2.67	2.40	7.58			
Bloomberg U.S. Corporate Inv Grade			2.31	4.99	2.31	2.13	8.52			
Excess			0.36	0.12	0.36	0.28	(0.94)			

Public Markets Manager Performance Detail



Net Returns Through March 31, 2025

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2024	2023	2022	2021	2020
HIGH YIELD										
Mackay Shields High Yield	\$305	3.17	1.09	5.38	1.09	7.49	12.32	(8.60)	5.42	8.00
Bloomberg U.S. HY - 2% Issuer Cap			1.00	6.53	1.00	8.19	13.44	(11.18)	5.26	7.05
Excess			0.08	(1.14)	0.08	(0.71)	(1.12)	2.58	0.16	0.95
Nomura High Yield	\$256	2.66	1.03	6.46	1.03	8.01	14.46	(10.57)	6.49	8.22
Bloomberg U.S. HY - 2% Issuer Cap			1.00	6.53	1.00	8.19	13.44	(11.18)	5.26	7.05
Excess			0.03	(0.06)	0.03	(0.18)	1.01	0.61	1.23	1.17
BANK LOANS										
Barings Bank Loans	\$0	0.00								1.12
S&P UBS Leveraged Loan Index										2.78
Excess										(1.66)
CORE FI-DEVELOPING MANAGERS										
Pugh-CorePlus	\$228	2.37	2.59	4.92	2.59	1.74	6.30	(13.31)	(1.32)	
Bloomberg U.S. Aggregate			2.78	4.81	2.78	1.25	5.53	(13.01)	(1.54)	
Excess			(0.19)	0.10	(0.19)	0.49	0.77	(0.30)	0.23	
ECONOMICALLY TARGETED INVESTMENTS										
RBC Access MBS	\$10	0.10	2.95	5.17	2.95	1.60	4.58	(12.00)	(1.03)	6.14
Access RBC Benchmark			2.77	5.04	2.77	1.75	4.71	(10.38)	(1.46)	4.69
Excess			0.18	0.13	0.18	(0.15)	(0.13)	(1.61)	0.43	1.45
AFL-CIO Housing Investment Trust	\$17	0.18	2.67	4.77	2.67	2.36	5.17	(13.55)	(1.04)	6.20
Bloomberg U.S. Aggregate			2.78	4.81	2.78	1.25	5.53	(13.01)	(1.54)	7.51
Excess			(0.11)	(0.04)	(0.11)	1.11	(0.36)	(0.54)	0.50	(1.31)
CPC Construction Facility	\$2	0.02	2.98	5.54	2.98	7.63	8.19	3.80	3.89	0.67
CPC CONST BENCHMARK			1.63	4.99	1.63	6.55	6.16	3.75	2.42	2.73
Excess			1.34	0.55	1.34	1.07	2.03	0.04	1.47	(2.06)

Public Markets Manager Performance Detail



Net Returns Through March 31, 2025

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2024	2023	2022	2021	2020
BOA PPAR FNMA	\$1	0.01	3.64	5.34	3.64	1.40	5.65	(8.50)	(1.89)	6.12
FNMA Plus 85bps			3.27	6.05	3.27	2.10	5.69	(11.28)	(0.37)	5.14
Excess			0.37	(0.70)	0.37	(0.70)	(0.04)	2.78	(1.52)	0.98
Citibank PPAR FNMA	\$2	0.02	4.05	5.89	4.05	1.63	6.61	(11.34)	(1.56)	7.06
FNMA Plus 85bps			3.27	6.05	3.27	2.10	5.69	(11.28)	(0.37)	5.14
Excess			0.78	(0.16)	0.78	(0.47)	0.92	(0.06)	(1.19)	1.92
Citibank PPAR GNMA	\$0	0.00	2.96	5.82	2.96	3.79	6.40	(5.04)	(1.10)	8.31
GNMA Plus 65bps			3.15	5.54	3.15	1.56	6.09	(10.14)	(0.82)	4.31
Excess			(0.18)	0.28	(0.18)	2.23	0.31	5.10	(0.29)	4.00
CFSB PPAR FNMA	\$0	0.00	4.09	5.62	4.09	1.07	5.76	(12.29)	(2.05)	
FNMA Plus 85bps			3.27	6.05	3.27	2.10	5.69	(11.28)	(0.37)	
Excess			0.82	(0.43)	0.82	(1.04)	0.07	(1.01)	(1.67)	
CFSB PPAR GNMA	\$0	0.00	2.79	5.60	2.79	3.71	6.13	(5.29)	0.03	8.01
GNMA Plus 65bps			3.15	5.54	3.15	1.56	6.09	(10.14)	(0.82)	4.31
Excess			(0.36)	0.05	(0.36)	2.14	0.04	4.85	0.84	3.69
CPC PPAR FNMA	\$1	0.01	3.60	5.54	3.60	1.94	6.34	(10.21)	1.14	7.00
FNMA Plus 85bps			3.27	6.05	3.27	2.10	5.69	(11.28)	(0.37)	5.14
Excess			0.33	(0.51)	0.33	(0.17)	0.64	1.07	1.51	1.87
ECLF PPAR FNMA	\$0	0.00	4.20	5.97	4.20	1.55	5.58	(11.97)	(1.65)	
FNMA Plus 85bps			3.27	6.05	3.27	2.10	5.69	(11.28)	(0.37)	
Excess			0.93	(0.07)	0.93	(0.56)	(0.12)	(0.69)	(1.28)	
JPMC PPAR FNMA	\$4	0.04	3.61	5.41	3.61	1.57	6.23	(11.48)	(1.84)	8.33
FNMA Plus 85bps			3.27	6.05	3.27	2.10	5.69	(11.28)	(0.37)	5.14
Excess			0.34	(0.64)	0.34	(0.53)	0.54	(0.21)	(1.47)	3.19

Public Markets Manager Performance Detail



Net Returns Through March 31, 2025

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2024	2023	2022	2021	2020
LIIF PPAR FNMA	\$2	0.02	3.94	5.83	3.94	1.73	6.23	(9.29)	(1.75)	6.44
FNMA Plus 85bps			3.27	6.05	3.27	2.10	5.69	(11.28)	(0.37)	5.14
Excess			0.67	(0.22)	0.67	(0.37)	0.54	1.99	(1.37)	1.30
LIIF PPAR GNMA	\$0	0.00	1.54	4.26	1.54	4.46	7.72	(2.79)	0.84	6.19
GNMA Plus 65bps			3.15	5.54	3.15	1.56	6.09	(10.14)	(0.82)	4.31
Excess			(1.61)	(1.29)	(1.61)	2.90	1.62	7.35	1.65	1.87
LISC PPAR FNMA	\$0	0.00	4.17	5.88	4.17	2.21	6.52	(16.45)	(1.69)	31.93
FNMA Plus 85bps			3.27	6.05	3.27	2.10	5.69	(11.28)	(0.37)	5.14
Excess			0.91	(0.16)	0.91	0.11	0.83	(5.17)	(1.32)	26.80
NCBCI PPAR FNMA	\$0	0.00	2.75	5.98	2.75	4.46	6.63	(4.39)	0.66	8.49
FNMA Plus 85bps			3.27	6.05	3.27	2.10	5.69	(11.28)	(0.37)	5.14
Excess			(0.52)	(0.06)	(0.52)	2.36	0.93	6.89	1.03	3.36
NCBCI PPAR GNMA	\$0	0.00	2.63	5.81	2.63	4.43	6.38	(4.17)	0.95	8.16
GNMA Plus 65bps			3.15	5.54	3.15	1.56	6.09	(10.14)	(0.82)	4.31
Excess			(0.52)	0.26	(0.52)	2.86	0.29	5.97	1.77	3.85
Wells Fargo PPAR FNMA	\$1	0.01	4.13	5.80	4.13	1.29	6.38	(11.70)	(1.86)	28.61
FNMA Plus 85bps			3.27	6.05	3.27	2.10	5.69	(11.28)	(0.37)	5.14
Excess			0.86	(0.24)	0.86	(0.82)	0.69	(0.42)	(1.48)	23.48
CASH										
Short Term BERS	\$82	0.85	1.08	3.66	1.08	5.32	5.17	1.41	0.07	0.44
ICE BofA US 3-Month Treasury Bill			1.02	3.60	1.02	5.25	5.01	1.46	0.05	0.67
Excess			0.06	0.05	0.06	0.06	0.15	(0.05)	0.02	(0.23)
Cash Account	\$2	0.02								
Securities Lending	\$0	0.00								



**New York City
Board of Education Retirement System**

Appendix C

Alternative Assets Manager Performance Detail

Through December 31, 2024



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TBD

Alternative Assets Manager Performance Detail



Through March 31, 2025

	Vintage Year	Commitment - Closing (Base)	Contributions Cumulative (Local)	Distributions Cumulative	Final Market Value	3 Month Base%	Inception IRR%
TOTAL OPPORTUNISTIC FIXED INCOME		835,000,000.00	566,316,660.56	145,505,272.03	534,638,827.26	0.56%	10.91%
Apollo Centre Street Partnership, L.P.	2020	30,000,000	28,615,775	16,724,739	19,161,656	0.75%	9.74%
KKR-NYC Credit C L.P.	2020	30,000,000	25,898,411	3,867,652	27,145,433	0.00%	6.68%
Marathon Centre Street Partnership, L.P. - Asset Class	2020	20,000,000	26,620,000	10,420,000	25,526,394	1.27%	10.32%
Marathon Centre Street Partnership, L.P. - Asset Class - Subsequent Commitment	2020	10,000,000	9,150,000	7,600,000	2,887,490	0.71%	4.63%
OHA Centre Street Partnership, L.P.	2020	30,000,000	31,509,434	20,869,452	44,445,466	1.24%	18.60%
400 Capital Centre Street LP	2021	40,000,000	40,435,994	-	50,741,601	0.00%	8.37%
Torchlight Debt Fund VII, LP	2021	30,000,000	31,608,768	3,275,504	30,986,961	1.04%	4.30%
Brightwood Capital Fund V, LP	2022	40,000,000	32,073,336	5,511,924	33,885,823	0.00%	12.41%
Centre Street CarVal Partnership LP	2022	40,000,000	26,000,000	-	30,412,420	1.70%	10.54%
ICG Centre Street Partnership, L.P.	2022	26,600,000	44,681,416	50,087,128	-	-	8.82%
KLCP Domestic Fund III LP	2022	40,000,000	28,973,189	605,550	35,606,340	0.00%	12.35%
Ares Centre Street Partnership, L.P.	2023	30,000,000	30,000,000	-	33,758,271	0.71%	8.21%
Blackstone Green Private Credit Fund III LP	2023	32,000,000	8,029,594	2,213,565	6,358,529	0.00%	10.86%
Crestline Opportunity Fund V Onshore T/STE, L.P.	2023	40,000,000	20,187,618	1,794,752	22,188,207	0.00%	13.60%
Maranon Centre-B Street Partnership, L.P.	2023	50,000,000	40,000,000	-	43,351,279	1.59%	7.96%
Torchlight Debt Fund VIII, LP	2023	40,000,000	16,000,000	5,093,878	11,539,301	0.17%	3.63%
Carlyle Credit Opportunities Fund III, L.P.	2024	46,000,000	13,895,705	482,534	13,413,171	0.00%	0.00%
Charlesbank Credit Opp III Co-Investment	2024	11,800,000	71,189	139,951	(53,763)	0.00%	-56.38%
Charlesbank Credit Opportunities Fund III, Limited Partnership	2024	28,200,000	21,137,250	7,906,111	15,622,613	0.00%	32.21%
GoldenTree Distressed Fund IV	2024	40,000,000	13,000,000	2,300,000	14,279,631	0.00%	25.23%
HPS Specialty Loan Fund VI-L, SCSp	2024	40,000,000	9,000,000	-	9,852,875	2.18%	22.71%
ICG Centre Street Partnership, L.P. - Series M	2024	9,617,486	1,474,143	-	1,474,143	0.00%	0.00%
ICG Centre Street Partnership, L.P. - Series N	2024	19,234,973	3,173,686	-	3,196,289	0.00%	1.39%
ICG Centre Street Partnership, L.P. - Series S	2024	32,547,541	28,938,663	5,392,000	24,236,739	0.00%	3.94%
400 Capital Asset Based Onshore Term Fund IV LP	2025	29,000,000	8,101,626	1,220,531	6,881,095	0.00%	0.00%
Hayfin Centre Street LP	2025	50,000,000	27,740,864	-	27,740,864	0.00%	0.00%

Information provided by Alpha Frontier
Above data is not final and subject to change
Information Classification: Confidential



**New York City
Board of Education Retirement System**

Appendix D

Footnotes



Through March 31, 2025

General Notes

- Estimated management fees for public market investments are calculated on an accrual basis without adjustment for management fee caps. Alternative investment (Private Market) fees are recorded on a cash basis and are not inclusive of carried interest paid. Since not all alternative managers currently provide detailed fee disclosure, the alternative investment fees noted here are not comprehensive.
- Returns greater than 1 year are annualized.
- Public Market returns are Net of Manager Fees for periods after January 2014 and Gross of investment advisory fees for other periods unless otherwise indicated.
- Public market excess returns for periods prior to 2014 are based on Gross performance.

Page Specific

Page 12 - 17 - Portfolio Asset Allocation

- Rebalancing Ranges: the minimum and maximum weights that actual Asset Allocation may reach before rebalancing between Asset Classes is necessary.

Pages 18 - 20 - Performance Attribution: Total Plan

- Plan Return at Policy Weights: the return of the Total Plan assuming actual Asset Class results were maintained at target (Adjusted Policy) weights. *Figure = (Return of Asset Class 1 * Target Weight) plus (Return Of Asset Class 2 * Target Weight) plus (.....)*
- **Allocation Effect** = Total Plan Return minus Plan Return At Adjusted Policy Weights. Allocation is the Contribution to Performance resulting from an overweight or underweight to an asset class. E.g. an underweight to an Asset Class that under-performs results in a positive Allocation Effect and vice versa.
- **Selection Effect** = Equal to the Custom Benchmark (Adjusted Policy Index) Return minus Plan Return at Adjusted Policy Weights. This illustrates how the Managers have added or removed value based on their Security Selection decisions, e.g., *If the manager's Actual Returns are higher than the Implied Return there will be a positive Selection Effect.*
- **Policy Index = Custom Benchmark**
The "policy index" is a custom benchmark representing the weighted average return of the weighted benchmark indexes for each major investment program. Weights may reflect an adjustment of actual policy for outstanding commitments for new or revised programs, such as for private market programs, which are invested gradually, or for any new or updated program requiring the completion of RFPs and contracts. The policy index/custom benchmark is calculated monthly based on adjusted policy weights at the beginning of each month.

Information Classification: Confidential



Through March 31, 2025

The indexes and most recent policy weights are as follows:

*U.S. Equity: Russell 3000 * 29.06%*

*International Developed (EAFE) Markets: MSCI World ex USA IMI Net * 8.88%*

*International Active – Global Equity: MSCI ACWI * 0.00%*

*Emerging Markets: MSCI Emerging Markets *3.97%*

*International Emerging Managers FOF: MSCI ACWI Ex US IMI Net * 0.00%*

*Private Equity: Russell 3000 + 300 b.p. per annum * 12.70%*

*Private Real Estate: NCREIF NFI-ODCE NET + 100 BP * 8.14%*

*Infrastructure: CPI + 4% * 4.65%*

US Treasury Short Term: FTSE US Government Bond 1-3 Years Index 2.93%*

US Treasury Intermediate: USBIG TSY AGN 1-10 3.42%*

*Active Government: NYC Treasury Agency + 5 * 2.45%*

*US Treasury Long Duration: FTSE US Government Bond 10+ Years Index * 0.98%*

*Core FI-Developing Managers : Bloomberg U.S. Aggregate * 0.00%*

*Mortgage: Bloomberg US Mortgage Backed Securities * 5.63%*

*ETI: ETI Custom Benchmark * 0.00%*

*Investment Grade Corporate: NYC Custom IGC Benchmark * 5.53%*

*High Yield: Bloomberg U.S. HY - 2% Issuer Cap * 5.84%*

*Bank Loans: Credit Suisse Leveraged Loan * 0.00%*

Information Classification: Confidential



Through March 31, 2025

*TIPS: Bloomberg Global Infl-Linked: U.S. TIPS * 0.00%*

*Opportunistic Fixed: OFI - JPMGHY / CSFB 50/50 Blend Plus 300 b.p. per annum * 5.32%*

*Cash: ICE BofA US 3-Month Treasury Bill * 0.50%*

Page 21 – Allocation and Selection Effects - Asset Class Breakdown

- This chart aims to break down the Allocation and Selection Effects shown on the Performance Attribution pages. The aim of the Page is to show the asset classes where Managers are either out performing or underperforming their benchmark and to show the basis point effect that this is having on Plan performance.

Information Classification: Confidential



Through March 31, 2025

[1] NYC Developed Value Benchmark: Beginning 8.2017 benchmark changed from MSCI EAFE Value Net to MSCI World ex USA Net Index.

[2] NYC Developed Growth Benchmark: Beginning 8.2017 benchmark changed from MSCI EAFE Growth to MSCI World ex USA Net Index.

[3] NYC Custom Mortgage Benchmark: Beginning 9.2020 benchmark changed from FTSE Mortgage Index to Bloomberg US Mortgage Backed Securities.

ETI Quarterly Report (Public):

BERS - Economically Targeted Investments Quarterly Report

Public/Private Apartment Rehabilitation Program (PPAR)

Lenders	Bank of America		Citi Community Development		Carver Federal Savings Bank		The Community Preservation Corp		JP Morgan Chase		Low Income Investment Fund		NCB Capital Impact		Neighborhood Housing Service		Wells Fargo		Local Initiatives Support Corp		Enterprise Cmty Loan Fund		NYC HDC	
Contractual Commitment	\$4.00		\$4.00		\$1.00		\$4.00		\$5.00		\$4.00		\$0.00		\$1.00		\$2.00		\$1.00		\$1.00		\$2.00	
Current Market Value	\$0.56		\$2.09		\$0.14		\$1.39		\$3.52		\$1.66		\$0.08		\$0.00		\$0.75		\$0.43		\$0.18		\$0.00	
	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units
Commitments Q1 (included in total)																								
Bronx	\$0.00	0	\$0.00	0	\$0.00	0	\$0.01	36	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0
Brooklyn	0.00	0	0.00	0	0.00	0	0.01	44	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Manhattan	0.00	0	0.00	0	0.00	0	0.01	16	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Queens	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Staten Island	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Outside of NYC	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Total	\$0.00	0	\$0.00	0	\$0.00	0	\$0.04	96	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0
Delivered Q1 (included in total)																								
Bronx	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0
Brooklyn	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Manhattan	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Queens	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Staten Island	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Outside of NYC	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Total	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0
Total Commitments																								
Bronx	\$0.00	0	\$0.20	61	\$0.00	0	\$0.14	579	\$0.00	0	\$0.24	75	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.22	130	\$0.00	0
Brooklyn	0.00	0	0.00	0	0.00	0	0.08	255	0.00	0	0.18	95	0.00	0	0.00	0	0.00	0	0.09	74	0.00	0	0.00	0
Manhattan	0.00	0	0.22	48	0.00	0	0.04	210	0.12	69	0.95	289	0.00	0	0.00	0	0.00	0	0.31	183	0.21	163	0.00	0
Queens	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Staten Island	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Outside of NYC	0.00	0	0.00	0	0.00	0	0.09	95	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Total	\$0.00	0	\$0.42	109	\$0.00	0	\$0.36	1,139	\$0.12	69	\$1.38	459	\$0.00	0	\$0.00	0	\$0.00	0	\$0.40	257	\$0.43	293	\$0.00	0
Historical Investments																								
Bronx	\$0.26	60	\$1.37	802	\$0.00	0	\$0.60	2,114	\$3.14	1,786	\$0.51	178	\$0.00	0	\$0.00	0	\$0.11	90	\$0.11	48	\$0.00	0	\$0.00	0
Brooklyn	0.28	54	0.97	481	0.00	0	0.58	1,873	0.33	226	0.71	401	0.00	0	0.00	0	0.25	130	0.16	82	0.22	360	0.00	0
Manhattan	0.34	100	0.24	283	0.21	236	0.36	1,688	0.35	361	1.28	498	0.10	123	0.00	0	0.48	203	0.22	65	0.00	0	0.00	0
Queens	0.84	293	0.04	54	0.00	0	0.09	220	0.27	164	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Staten Island	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.04	67	0.00	0	0.00	0	0.00	0
Outside of NYC	0.09	39	0.21	41	0.00	0	0.35	924	0.38	197	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Total	\$1.81	546	\$2.83	1,661	\$0.21	236	\$1.97	6,819	\$4.48	2,734	\$2.50	1,077	\$0.10	123	\$0.00	0	\$0.88	490	\$0.49	195	\$0.22	360	\$0.00	0

¹ Dollar amount listed in millions² NCB Capital Impact's Buy-Sell Agreement terminated effective 7/29/2014.

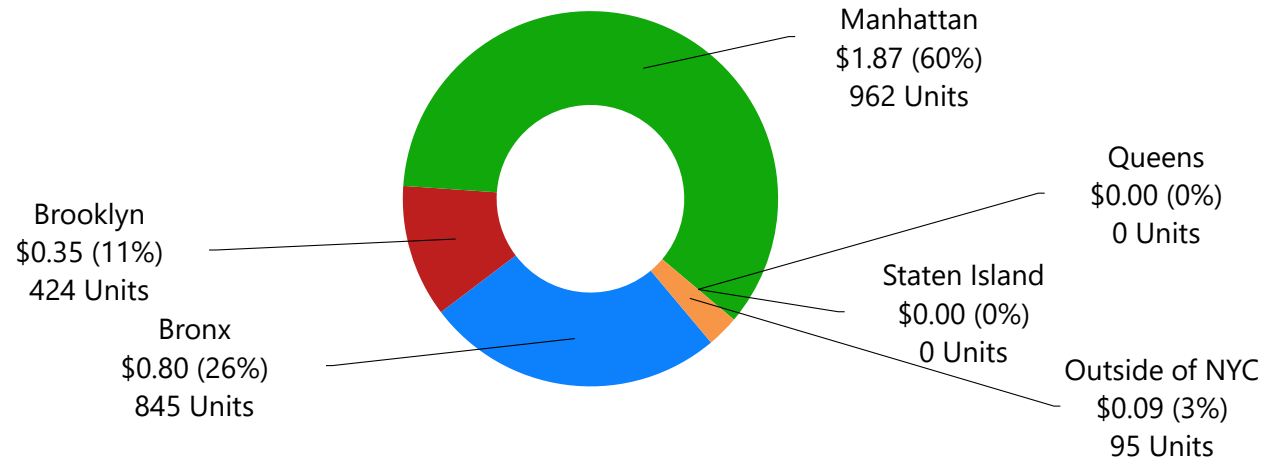
BERS - Economically Targeted Investments Quarterly Report

Public/Private Apartment Rehabilitation Program (PPAR)

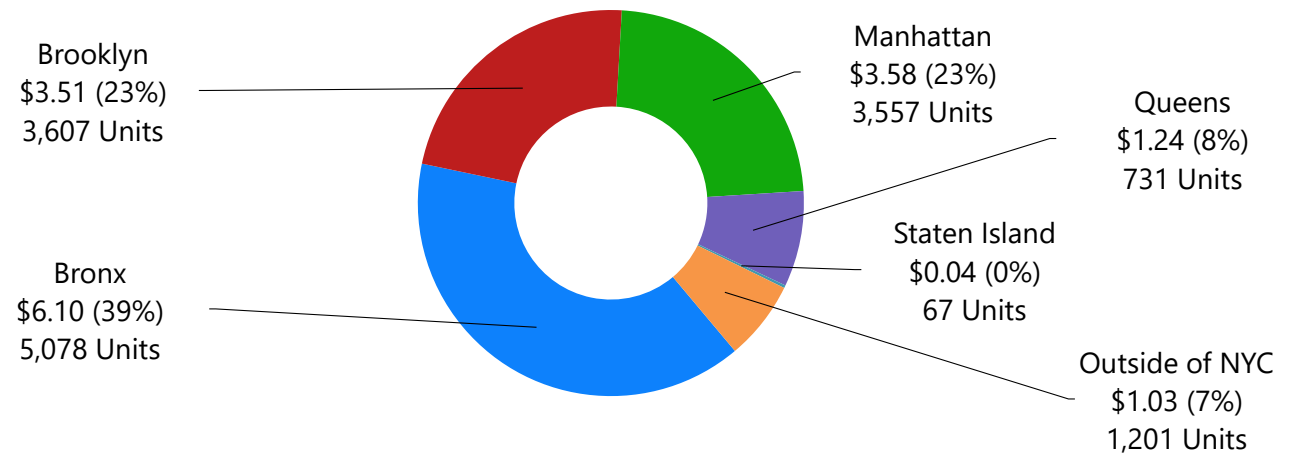
Lenders	All Lender Totals	
Contractual Commitment	\$29.00	
Current Market Value	\$10.79	
	Dollars	Units
Commitments Q1 (included in total)		
Bronx	\$0.01	36
Brooklyn	0.01	44
Manhattan	0.01	16
Queens	0.00	0
Staten Island	0.00	0
Outside of NYC	0.00	0
Total	\$0.04	96
Delivered Q1 (included in total)		
Bronx	\$0.00	0
Brooklyn	0.00	0
Manhattan	0.00	0
Queens	0.00	0
Staten Island	0.00	0
Outside of NYC	0.00	0
Total	\$0.00	0
Total Commitments		
Bronx	\$0.80	845
Brooklyn	0.35	424
Manhattan	1.87	962
Queens	0.00	0
Staten Island	0.00	0
Outside of NYC	0.09	95
Total	\$3.11	2,326
Historical Investments		
Bronx	\$6.10	5,078
Brooklyn	3.51	3,607
Manhattan	3.58	3,557
Queens	1.24	731
Staten Island	0.04	67
Outside of NYC	1.03	1,201
Total	\$15.50	14,241

¹ Dollar amount listed in millions

Current Commitments All PPAR Lenders



Historical Investments Since Inception All PPAR Lenders



BERS - Economically Targeted Investments Quarterly Report

AFL-CIO Housing Investment Trust (HIT)
Market Value \$17.47 million¹

NYC Community Investment Initiative (NYCCII)

Borough	NYCCII Phase I: 2002 - 2005		NYCCII Phase II: 2006 - 2013		Grand Total	
	Investments	Units ²	Investments	Units ²	Investments	Units ²
Bronx	\$27,600,000	2,010	\$52,827,900	761	\$80,427,900	2,771
Brooklyn	49,501,800	3,230	103,890,446	5,616	153,392,246	8,846
Manhattan	172,021,700	6,908	174,075,200	813	346,096,900	7,721
Queens	0	0	17,760,000	1,149	17,760,000	1,149
Staten Island	0	0	6,414,554	693	6,414,554	693
Outside NYC	0	0	100,000,000	137	100,000,000	137
Total	\$249,123,500	12,148	\$454,968,100	9,169	\$704,091,600	21,317

HIT Home Mortgage Program

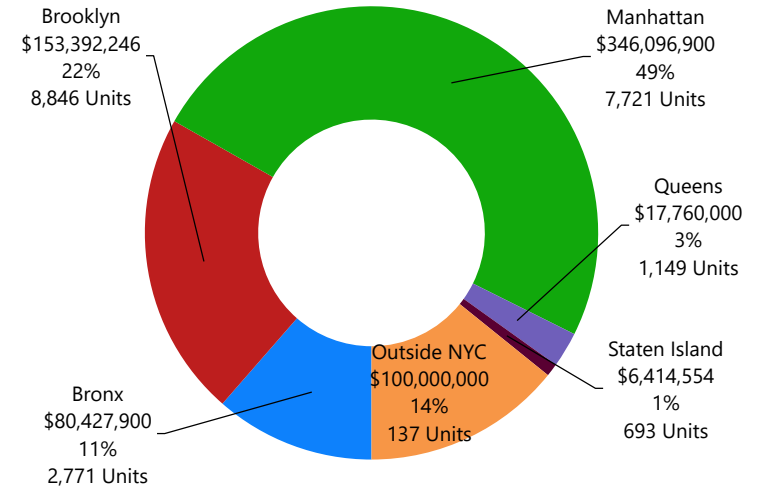
Borough	NYCCII Phase I: 2002 - 2005		NYCCII Phase II: 2006 - 2013		Grand Total	
	\$ Amount	Loans	\$ Amount	Loans	\$ Amount	Loans
Bronx	\$32,544,168	41	\$218,082,108	296	\$250,626,276	337
Brooklyn	116,575,736	138	864,892,271	1,115	981,468,007	1,253
Manhattan	10,742,253	12	214,244,680	265	224,986,933	277
Queens	82,399,317	64	894,399,418	973	976,798,735	1,037
Staten Island	106,039,089	191	359,980,460	439	466,019,549	630
Total	\$348,300,563	446	\$2,551,598,937	3,088	\$2,899,899,500	3,534

BERS Loans	Phase I:	0	Phase II:	13	Total:	13
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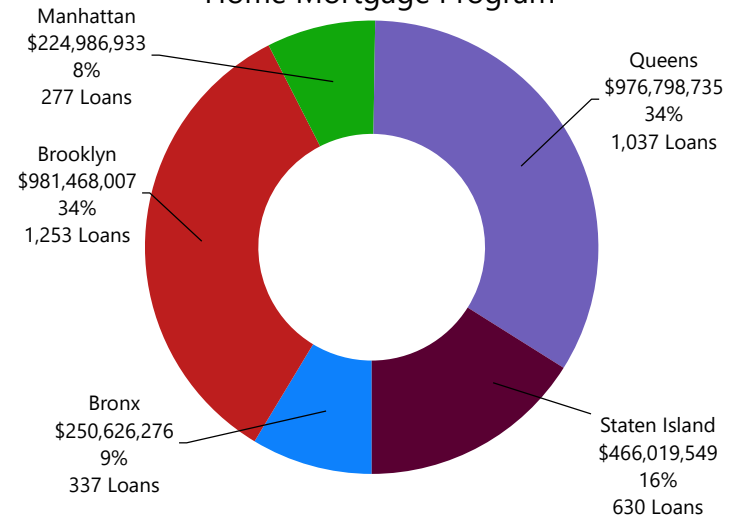
¹Interest is reinvested

²Low/Moderate Income Units

NYCCII Multifamily Program



Home Mortgage Program



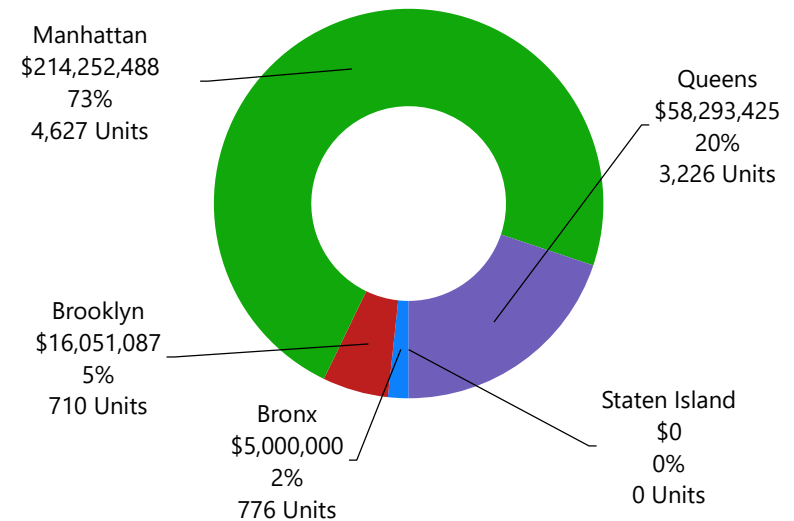
BERS - Economically Targeted Investments Quarterly Report

AFL-CIO Housing Investment Trust (HIT)

NYC Workforce Housing Investments: 2009 - 2015

Borough	Investments Since Inception	LMI Units Since Inception
Bronx	\$5,000,000	776
Brooklyn	16,051,087	710
Manhattan	214,252,488	4,627
Queens	58,293,425	3,226
Staten Island	0	0
Total	\$293,597,000	9,339

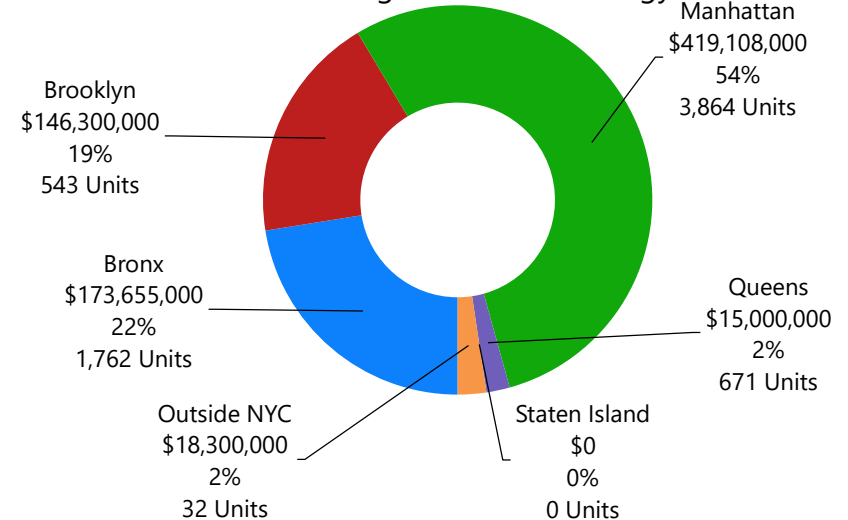
NYC Workforce Housing Investments



HIT Housing Investment Strategy: 2015 - Q1 2025

Borough	Q1 Investments	Investments Since Inception	Q1 Units	LMI Units Since Inception
Bronx	\$0	\$173,655,000	0	1,762
Brooklyn	0	146,300,000	0	543
Manhattan	0	419,108,000	0	3,864
Queens	0	15,000,000	0	671
Staten Island	0	0	0	0
Outside NYC	0	18,300,000	0	32
Total	\$0	\$772,363,000	0	6,872

HIT Housing Investment Strategy



BERS - Economically Targeted Investments Quarterly Report

RBC ACCESS CAPITAL STRATEGIES (Since Inception 2/1/07)

\$10.5 million Allocated (2.34% of total account)

Market Value \$9.65 million

Multifamily Investments Detail	\$ Invested ¹		Units ²	
	Q1	Total	Q1	Total
Bronx	\$0	\$3,523,546	0	20,186
Brooklyn	147,537	2,033,500	72	15,445
Manhattan	374,400	3,423,289	1,365	8,657
Queens	0	504,630	0	920
Staten Island	0	130,389	0	75
Total BERS Multifamily Investments	\$521,937	\$9,615,354	1,437	45,283
Multifamily Total All Systems	\$22,305,000	\$410,912,572	1,437	45,283

Single Family Investments Detail	\$ Invested		Units	
	Q1	Total	Q1	Total
Bronx	\$0	\$1,811,454	0	327
Brooklyn	0	4,512,315	0	745
Manhattan	0	408,039	0	67
Queens	0	7,029,597	0	1,078
Staten Island	0	4,708,726	0	728
Total BERS Single Family Investments	\$0	\$18,470,130	0	2,945
Single Family Total All Systems	\$0	\$789,321,813	0	2,945

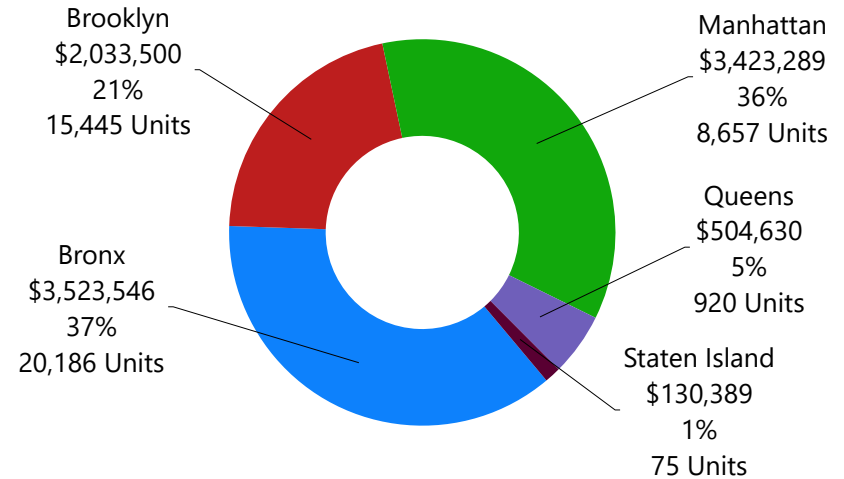
Other Investments Detail	\$ Invested		Loans	
	Q1	Total	Q1	Total
Bronx	\$0	\$15,795	0	1
Brooklyn	0	126,135	0	8
Manhattan	0	56,930	0	5
Queens	0	12,716	0	3
Staten Island	0	0	0	0
Total BERS Other Investments	\$0	\$211,577	0	17
Other Investments Total All Systems	\$0	\$9,041,740	0	17

Grand Total BERS	\$521,937	\$28,297,061
Grand Total All Systems	\$22,305,000	\$1,209,276,125

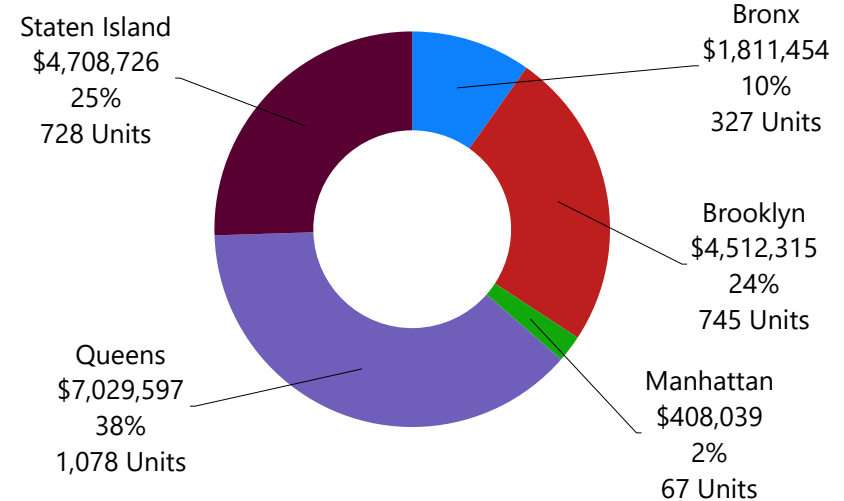
¹ Certain bond investment amounts are allocated pro rata across boroughs based upon unit count.

² If not indicated otherwise, superintendent units are allocated based on building size.

RBC Access Multifamily Investments Since Inception



RBC Access Single Family Investments Since Inception



BERS - Economically Targeted Investments Quarterly Report

ETI Real Estate Equity Investments

Total Market Value \$10.65 million

Hudson Market Value \$5.07 million

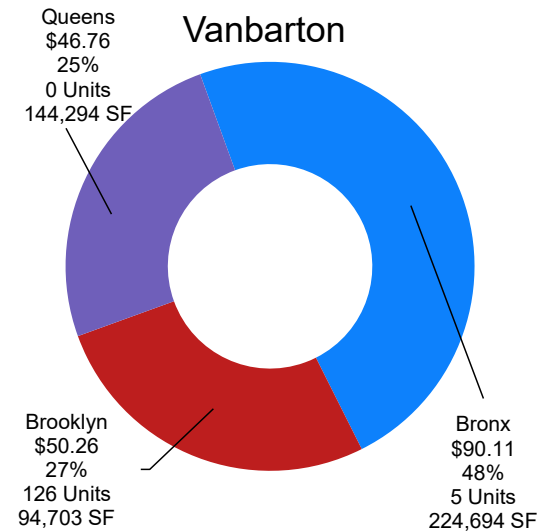
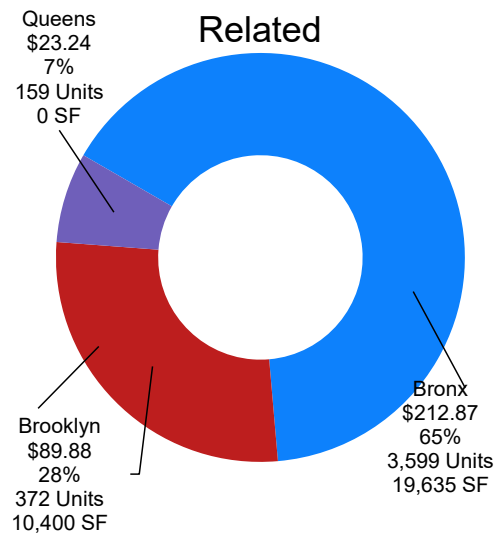
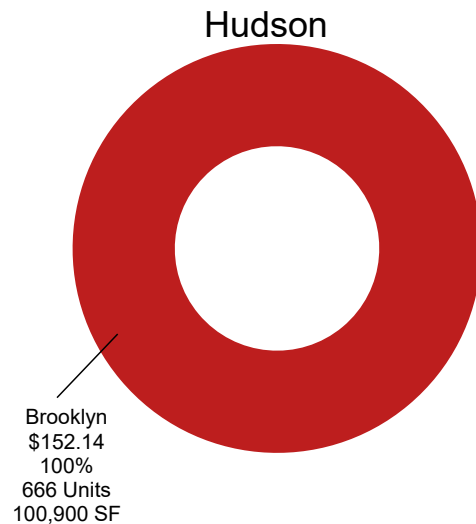
Borough	Gross Capital Invested	Total Units	Workforce Units	Comm. SF
Bronx	\$0.00	0	0	0
Brooklyn	152.14	666	666	100,900
Manhattan	0.00	0	0	0
Queens	0.00	0	0	0
Staten Island	0.00	0	0	0
Outside NYC	0.00	0	0	0
Totals	\$152.14	666	666	100,900

Related Market Value \$1.36 million

Borough	Gross Capital Invested	Total Units	Workforce Units	Comm. SF
Bronx	\$212.87	3,599	3,356	19,635
Brooklyn	89.88	372	248	10,400
Manhattan	0.00	0	0	0
Queens	23.24	159	151	0
Staten Island	0.00	0	0	0
Outside NYC	0.00	0	0	0
Totals	\$325.99	4,130	3,755	30,035

Vanbarton (Emmes) Market Value \$4.23 million

Borough	Gross Capital Invested	Total Units	Workforce Units	Comm. SF
Bronx	\$90.11	5	2	224,694
Brooklyn	50.26	126	61	94,703
Manhattan	0.00	0	0	0
Queens	46.76	0	0	144,294
Staten Island	0.00	0	0	0
Outside NYC	0.00	0	0	0
Totals	\$187.13	131	63	463,691



¹ All information is derived from reports submitted by individual managers and State Street Bank, and is reported on a quarter lag. Performance has not been reviewed by consultants or custodial bank.

² Dollar amounts listed in millions.

Private Equity Quarterly Report (Public):
N/A

Real Estate Quarterly Report (Public): N/A

Infrastructure Quarterly Report (Public):
N/A

Risk Quarterly Report (Public):

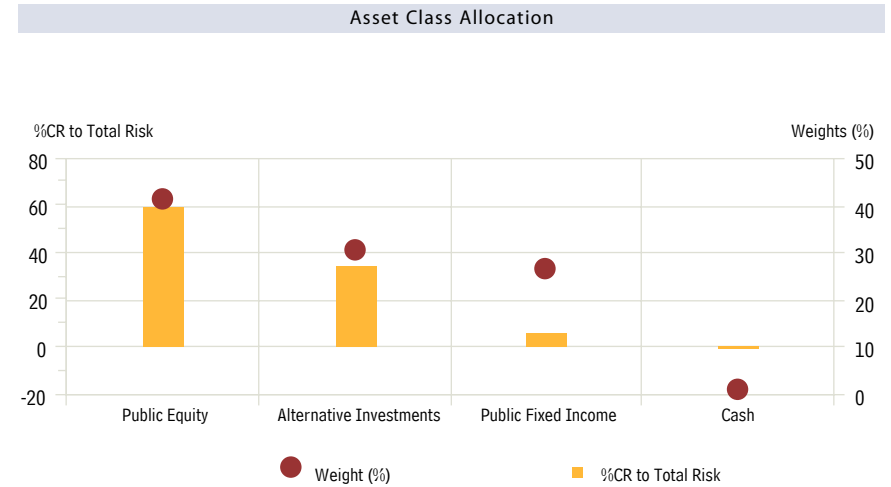
BarraOne Total Plan Summary

COMPANY: NYCRS - BERS
PORTFOLIO: BERS_Plan3
BENCHMARK: BERS_Policy3
POSITIONS: 9,319

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 9,502,660,353
ACCEPTED: 9,281

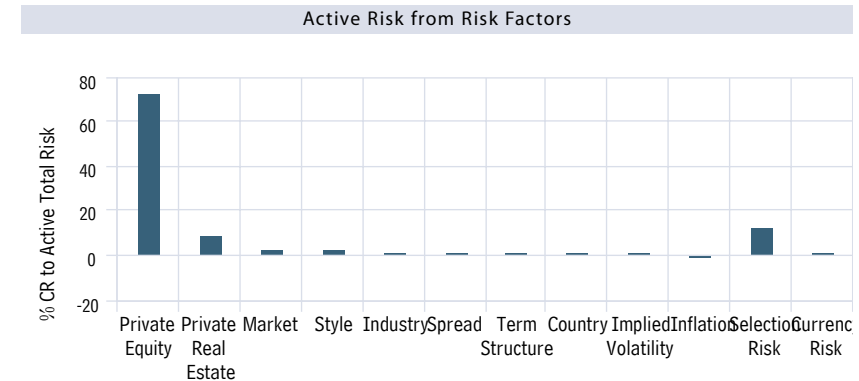
Total Plan Summary

Risk Summary		Asset Class Contribution to Risk					
Statistic	Value	Asset Class	Mkt Value	Weight (%)	Total Risk	Risk Contribution	%CR to TR
Total Risk	9.77	Total	9,502,660,353	100.00	9.77	9.77	100.00
Benchmark Risk	9.49	Public Equity	3,941,953,768	41.48	14.60	5.82	59.54
Active Risk	2.17	Alternative Investments	2,919,701,298	30.73	11.94	3.35	34.28
Portfolio Beta	1.00	Public Fixed Income	2,557,456,140	26.91	5.03	0.60	6.18
Effective Duration	1.59	Cash	83,549,147	0.88	0.00	-0.00	-0.00



Risk Factor Breakdown

Risk Decomposition						
Risk Source	Portfolio			Active		
	Risk Contribution	% Risk	Correlation	Risk Contribution	% Risk	Correlation
Total Risk	9.77	100.00	1.00	2.17	100.00	1.00
Local Market Risk	9.48	97.08	1.00	2.17	99.99	1.00
Common Factor Risk	9.39	96.10	0.99	1.90	87.82	0.94
Private Real Estate	0.56	5.77	0.61	0.20	9.03	0.28
Implied Volatility	0.02	0.21	0.48	0.00	0.01	0.07
Industry	0.09	0.95	0.19	0.03	1.15	0.10
Market	7.49	76.69	0.95	0.05	2.25	0.15
Private Equity	0.35	3.57	0.19	1.57	72.51	0.85
Spread	0.48	4.96	0.70	0.02	0.78	0.11
Style	0.03	0.33	0.12	0.04	1.93	0.16
Term Structure	0.35	3.60	0.22	0.00	0.15	0.03
Selection Risk	0.10	0.97	0.10	0.26	12.17	0.35
Currency Risk	0.29	2.92	0.48	0.00	0.01	0.00



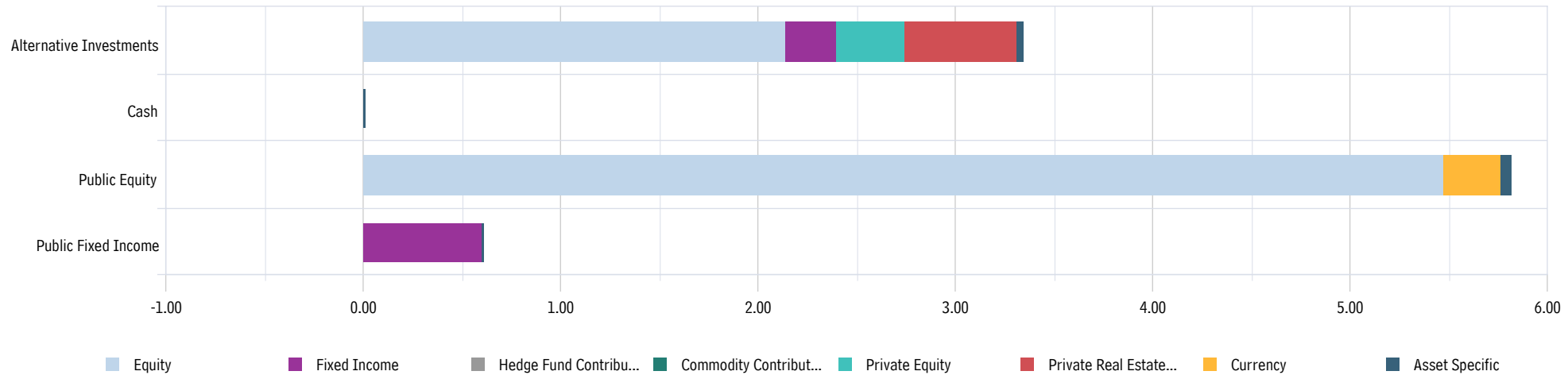
BarraOne Total Plan Summary

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BENCHMARK: BERS_Policy3
POSITIONS: 9,319

CURRENCY: USD
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Risk Contribution Breakdown by Risk Type

Asset Name	Mkt Value	Weight (%)	Eff Weight (%)	Total Risk	%CR to Total Risk	Port Risk Contribution	Risk Contribution							
							Equity	Fixed Income	Hedge Fund	Commodity	Private Real Estate	Private Equity	Currency	Asset Specific
Total	9,502,660,353	100.00	-	9.77	100.00	9.77	7.62	0.86	0.00	0.00	0.56	0.35	0.29	0.10
Alternative Investments	2,919,701,298	30.73	-	11.94	34.28	3.35	2.14	0.25	0.00	0.00	0.56	0.35	0.00	0.04
Cash	83,549,147	0.88	-	0.00	-0.00	-0.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Equity	3,941,953,768	41.48	-	14.60	59.54	5.82	5.48	-0.00	0.00	0.00	0.00	0.00	0.28	0.06
Public Fixed Income	2,557,456,140	26.91	-	5.03	6.18	0.60	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00



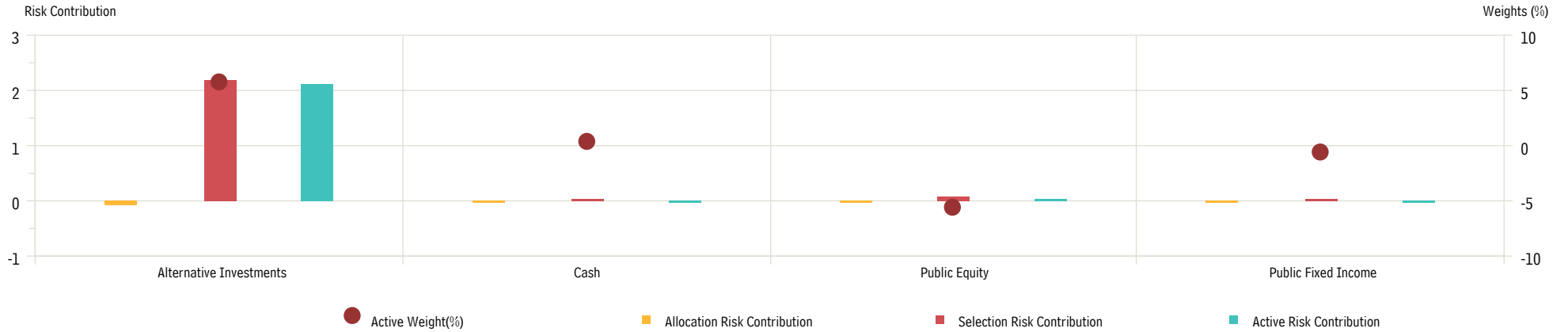
BarraOne Total Plan Summary

COMPANY: NYCERS - BERS
PORTFOLIO: BERS_Plan3
BENCHMARK: BERS_Policy3
POSITIONS: 9,319

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
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Allocation Selection

Asset Class	Active Weight(%)	Allocation			Selection			Active	
		Volatility	Correlation	Risk Contribution	Volatility	Correlation	Risk Contribution	Risk Contribution	
Active Total Risk				-0.12			2.29	2.17	
Alternative Investments	5.73	4.53	-0.32	-0.08	7.43	0.97	2.21	2.13	
Cash	0.38	9.49	-0.02	-0.00	0.17	0.02	0.00	-0.00	
Public Equity	-5.52	5.65	0.13	-0.04	0.98	0.20	0.08	0.04	
Public Fixed Income	-0.59	8.57	0.01	-0.00	0.18	0.00	0.00	-0.00	



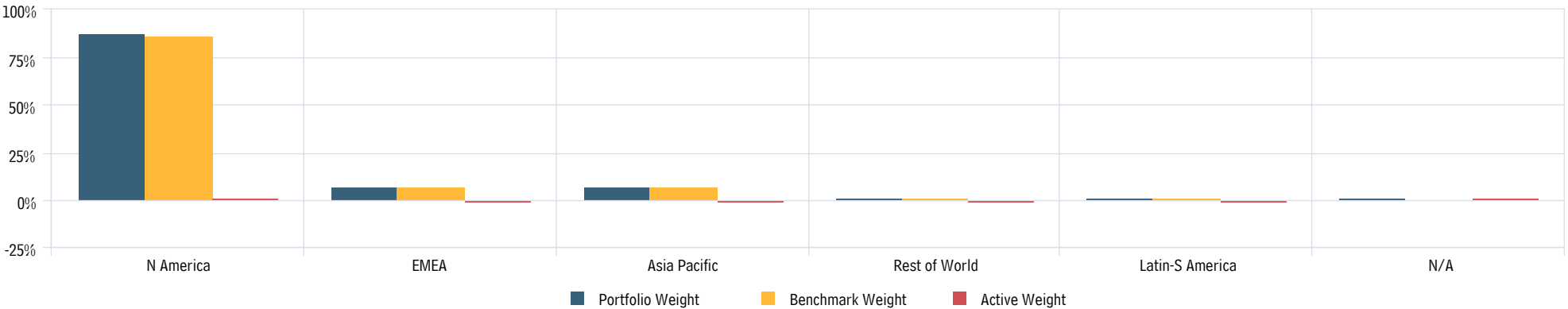
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CURRENCY: USD
ANALYSIS DATE: March 31, 2025
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Portfolio Allocation by Region

Region	Weight (%)			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
Total	100.00	100.00	0.00	9.77	2.17	100.00	0.02
N America	86.73	85.68	1.05	9.22	2.03	93.45	0.01
EMEA	6.40	7.00	-0.60	19.23	0.12	5.49	0.01
Asia Pacific	6.19	6.34	-0.15	15.69	0.02	1.00	0.01
Rest of World	0.32	0.58	-0.26	9.59	0.00	0.05	0.00
Latin-S America	0.29	0.39	-0.11	20.73	-0.00	-0.02	0.01
N/A	0.07	0.00	0.07	13.54	0.00	0.03	0.02



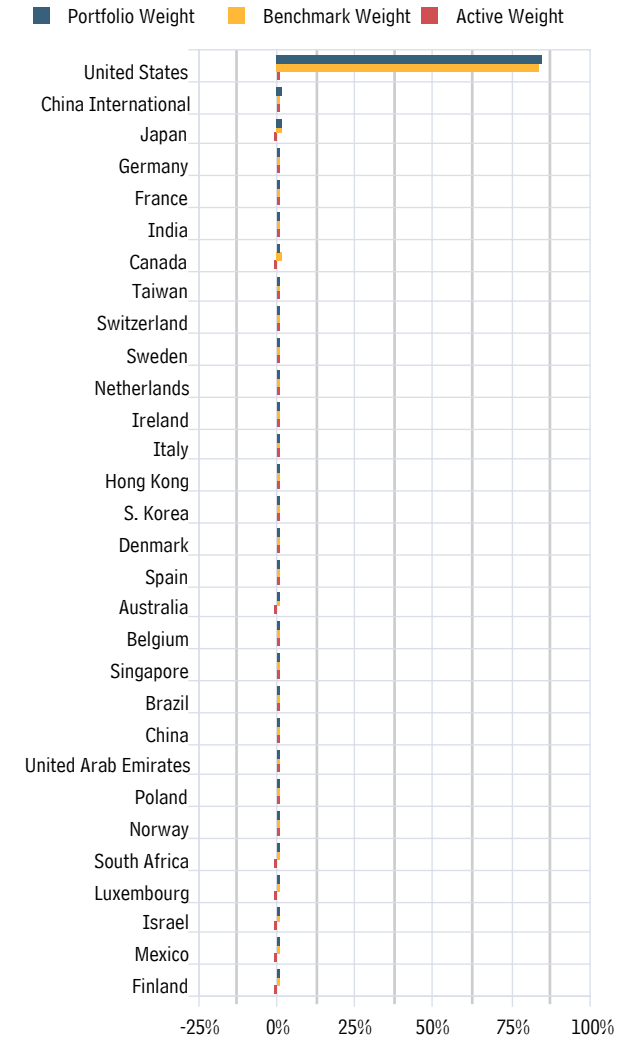
BarraOne Total Plan Summary

COMPANY: NYCRC - BERS
PORTFOLIO: BERS_Plan3
BENCHMARK: BERS_Policy3
POSITIONS: 9,319

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 9,502,660,353
ACCEPTED: 9,281

Top 30 Countries by Weight%

Country of Exposure	Weight (%)			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
Total	100.00	100.00	0.00	9.77	2.17	100.00	0.02
United States	84.78	83.85	0.93	9.17	1.99	91.59	0.01
China International	1.59	1.09	0.50	27.48	0.01	0.56	0.03
Japan	1.33	2.11	-0.78	18.59	-0.00	-0.03	0.01
Germany	1.09	0.86	0.23	14.89	0.00	0.22	0.01
France	1.08	0.90	0.19	17.33	0.01	0.47	0.02
India	1.05	0.76	0.29	17.71	0.00	0.22	0.01
Canada	1.02	1.69	-0.66	12.68	0.02	0.96	0.02
Taiwan	0.95	0.68	0.27	25.97	0.01	0.32	0.02
Switzerland	0.80	0.80	0.00	13.55	0.00	0.09	0.01
Sweden	0.75	0.34	0.41	25.78	0.02	0.98	0.03
Netherlands	0.74	0.43	0.32	21.62	0.01	0.60	0.02
Ireland	0.69	0.20	0.49	4.80	0.00	0.06	0.00
Italy	0.60	0.35	0.25	18.14	0.01	0.40	0.02
Hong Kong	0.46	0.18	0.28	24.96	0.01	0.35	0.02
S. Korea	0.43	0.39	0.04	24.62	0.00	0.06	0.02
Denmark	0.41	0.19	0.23	20.27	0.01	0.34	0.03
Spain	0.36	0.27	0.08	12.65	0.00	0.12	0.01
Australia	0.30	0.66	-0.36	21.46	-0.00	-0.16	0.01
Belgium	0.25	0.12	0.13	17.87	0.00	0.14	0.02
Singapore	0.24	0.13	0.11	14.89	0.00	0.07	0.01
Brazil	0.21	0.18	0.03	25.54	0.00	0.04	0.01
China	0.18	0.17	0.01	39.48	0.00	0.16	0.01
United Arab Emirates	0.16	0.06	0.10	14.68	0.00	0.02	0.00
Poland	0.14	0.06	0.08	24.91	0.00	0.16	0.03
Norway	0.12	0.08	0.04	15.78	0.00	0.07	0.02
South Africa	0.09	0.13	-0.04	21.90	-0.00	-0.02	0.01
Luxembourg	0.09	0.19	-0.10	6.02	-0.00	-0.01	0.00
Israel	0.09	0.09	-0.00	20.56	0.00	0.04	0.02
Mexico	0.08	0.14	-0.05	17.67	-0.00	-0.02	0.01
Finland	0.08	0.09	-0.01	19.00	0.00	0.03	0.02

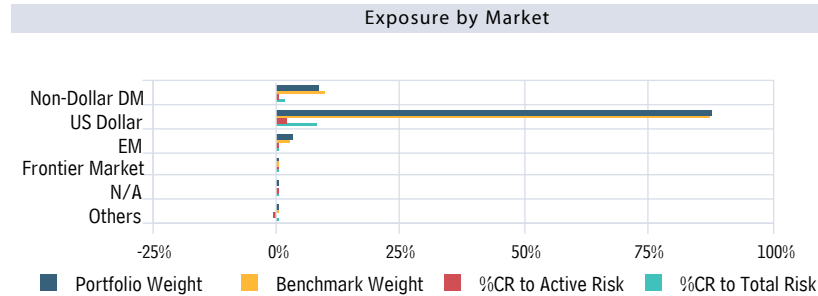


BarraOne Total Plan Summary

COMPANY: NYCRS - BERS
PORTFOLIO: BERS_Plan3
BENCHMARK: BERS_Policy3
POSITIONS: 9,319

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 9,502,660,353
ACCEPTED: 9,281

Portfolio Allocation by Currency



Developed Market Currency				Emerging Market Currency			
Top Five	Exposure \$	CR to AR (%)	CR to TR (%)	Top Five	Exposure \$	CR to AR (%)	CR to TR (%)
US Dollar	8,329,242,368.43	92.06	80.06	Indian Rupee	99,038,954.77	0.22	0.88
Euro	304,301,914.88	2.61	5.94	New Taiwan Dollar	89,964,065.49	0.32	1.52
Hong Kong Dollar	157,618,218.84	0.70	1.82	Korean Won	37,085,470.14	0.02	0.67
Japanese Yen	122,328,847.61	-0.05	1.65	Brazilian Real	19,322,649.87	0.04	0.27
Swiss Franc	70,766,153.37	0.07	0.77	CNH	17,338,286.18	0.01	0.03

Top 15 Currencies by Weight%

Currency of Exposure	Weight (%)			Total Risk	CR to TR	CR to TR (%)	CR to AR	CR to AR (%)
	Portfolio	Benchmark	Active					
Total	100.00	100.00	0.00	9.77	9.77	100.00	2.17	100.00
US Dollar	87.65	87.20	0.45	9.01	7.82	80.06	2.00	92.06
Euro	3.20	2.62	0.58	21.82	0.58	5.94	0.06	2.61
Hong Kong Dollar	1.66	1.18	0.48	28.57	0.18	1.82	0.02	0.70
Japanese Yen	1.29	1.91	-0.62	19.08	0.16	1.65	-0.00	-0.05
Indian Rupee	1.04	0.74	0.30	17.78	0.09	0.88	0.00	0.22
New Taiwan Dollar	0.95	0.67	0.27	25.97	0.15	1.52	0.01	0.32
Swiss Franc	0.74	0.74	0.00	14.10	0.08	0.77	0.00	0.07
Canadian Dollar	0.53	0.98	-0.45	22.97	0.10	1.04	0.02	0.94
Swedish Krona	0.45	0.28	0.16	27.12	0.10	0.98	0.01	0.67
Danish Krone	0.41	0.19	0.23	20.27	0.06	0.58	0.01	0.34
Korean Won	0.39	0.36	0.03	24.07	0.07	0.67	0.00	0.02
Singapore Dollar	0.24	0.12	0.12	15.36	0.02	0.24	0.00	0.07
Brazilian Real	0.20	0.16	0.05	26.15	0.03	0.27	0.00	0.04
CNH	0.18	0.00	0.18	4.61	0.00	0.03	0.00	0.01
Chinese Yuan	0.18	0.16	0.02	40.34	0.02	0.24	0.00	0.16

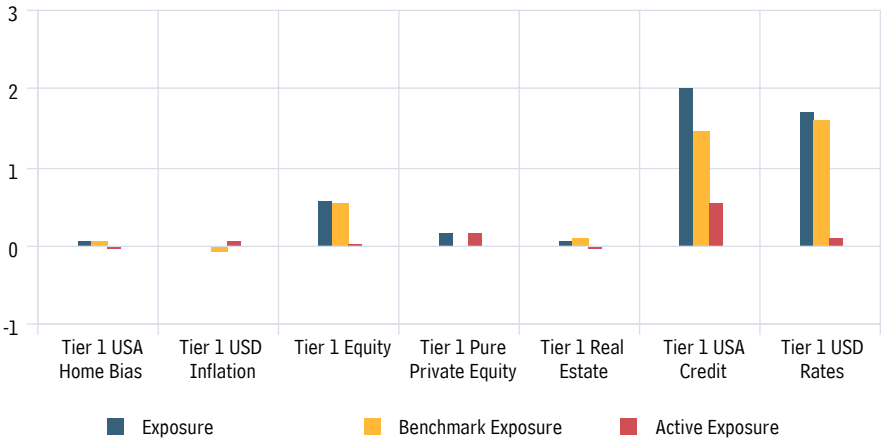
BarraOne Tier 1 USA Factor Summary

Tier 1 factors describe the most important drivers of the markets and provide a platform for the factor-based asset-allocation framework. They provide a lens for strategic asset allocation and are designed for board level reporting.

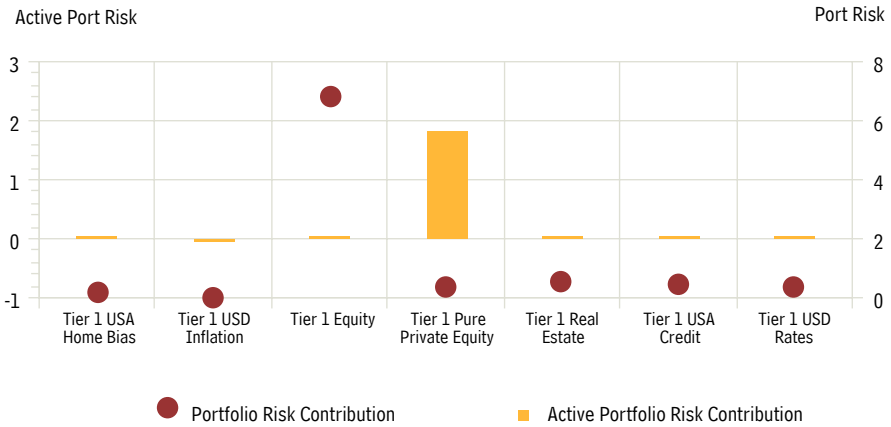
COMPANY: NYCRS - BERS
PORTFOLIO: BERS_Plan3
BENCHMARK: BERS_Policy3
POSITIONS: 9,319
MODEL: MAC.L Tier 1 USA

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 9,502,660,353
ACCEPTED: 9,281

Macro Factor Exposures



Macro Factor Risk Contribution



BarraOne Tier 1 USA Factor Summary

Tier 1 factors describe the most important drivers of the markets and provide a platform for the factor-based asset-allocation framework. They provide a lens for strategic asset allocation and are designed for board level reporting.

COMPANY: NYCRS - BERS
PORTFOLIO: BERS_Plan3
BENCHMARK: BERS_Policy3
POSITIONS: 9,319
MODEL: MAC.L Tier 1 USA

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 9,502,660,353
ACCEPTED: 9,281

Risk Decomposition							
Risk Source	Exposure			Contribution			
	Exposure	Benchmark Exposure	Active Exposure	Portfolio Risk Contribution	% Portfolio Risk	Active Portfolio Risk Contribution	% Active Risk
Total Risk	-	-	-	9.77	100.00	2.17	100.00
Local Market Risk	-	-	-	9.48	97.08	2.17	99.99
Common Factor Risk	-	-	-	9.39	96.10	1.90	87.82
Country	-	-	-	0.18	1.81	0.00	0.11
Tier 1 USA Home Bias	0.06	0.07	-0.01	0.18	1.81	0.00	0.11
Factor Residual Risk	-	-	-	0.65	6.68	0.02	1.13
Inflation	-	-	-	0.00	0.00	-0.00	-0.01
Tier 1 USD Inflation	0.00	-0.08	0.08	0.00	0.00	-0.00	-0.01
Interaction within Common Factor	-	-	-	N/A	-	N/A	-
Market	-	-	-	6.80	69.59	0.03	1.49
Tier 1 Equity	0.57	0.55	0.02	6.80	69.59	0.03	1.49
Private Equity	-	-	-	0.40	4.12	1.81	83.66
Tier 1 Pure Private Equity	0.18	0.00	0.18	0.40	4.12	1.81	83.66
Private Real Estate	-	-	-	0.55	5.64	0.01	0.46
Tier 1 Real Estate	0.08	0.10	-0.02	0.55	5.64	0.01	0.46
Spread	-	-	-	0.41	4.24	0.02	0.91
Tier 1 USA Credit	2.03	1.48	0.55	0.41	4.24	0.02	0.91
Term Structure	-	-	-	0.39	4.00	0.00	0.08
Tier 1 USD Rates	1.71	1.61	0.09	0.39	4.00	0.00	0.08
Specific Risk	-	-	-	0.10	0.97	0.26	12.17
Currency Risk	-	-	-	0.29	2.92	0.00	0.01
Currency/Market Interaction	-	-	-	N/A	-	N/A	-

Tier 1 Macro Factor Scheme has six factors		
Tier 1 Factor	Exposure Type	Description
Equity	Membership (weights)	USA Equity
Pure Private Equity	Membership (weights)	USA Private Equity
Real Estate	Membership (weights)	USA Real Estate
USA Credit	Sensitivities (durations)	Sensitive to USA credit spreads
USD Inflation	Sensitivities (durations)	Sensitive to USD inflation protected assets
USD Rates	Sensitivities (durations)	Sensitive to Govt rate exposure
Commodities	Membership (weights)	Sensitive to Commodities
USA Home Bias		USA Home Bias factor returns is very similar to that of a portfolio long the MSCI USA IMI index and short the currency-hedged MSCI ACWI ex-US IMI index.

Factor Residual Risk				
Risk Source	Portfolio Risk Contribution	% Portfolio Risk	Active Portfolio Risk Contribution	% Active Risk
Basis	-0.00	-0.00	0.00	0.00
Country	0.00	0.02	0.00	0.04
Implied Volatility	0.02	0.21	0.00	0.01
Industry	0.09	0.95	0.03	1.15
Inflation	0.00	0.00	-0.00	-0.01
Interaction within Factor Residual Risk	N/A	-	N/A	-
Market	0.52	5.29	0.01	0.65
Private Equity	-0.05	-0.55	-0.24	-11.15
Private Real Estate	0.01	0.13	0.19	8.57
Spread	0.07	0.71	-0.00	-0.13
Style	0.03	0.33	0.04	1.93
Term Structure	-0.04	-0.41	0.00	0.07

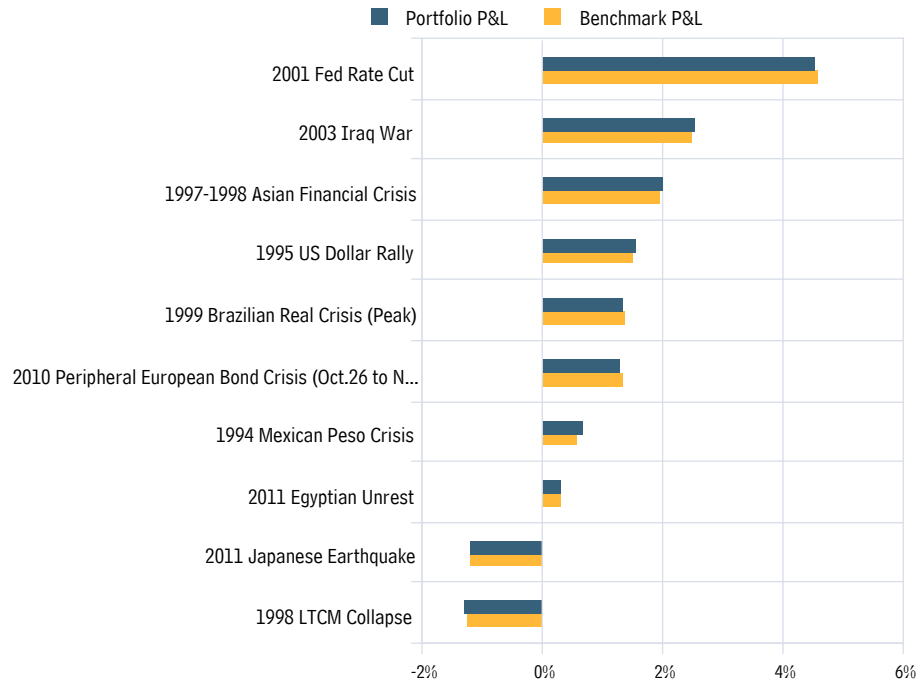
BarraOne Total Plan Summary

COMPANY: NYCRRS - BERS
PORTFOLIO: BERS_Plan3
BENCHMARK: BERS_Policy3
POSITIONS: 9,319
MODEL: MAC.L

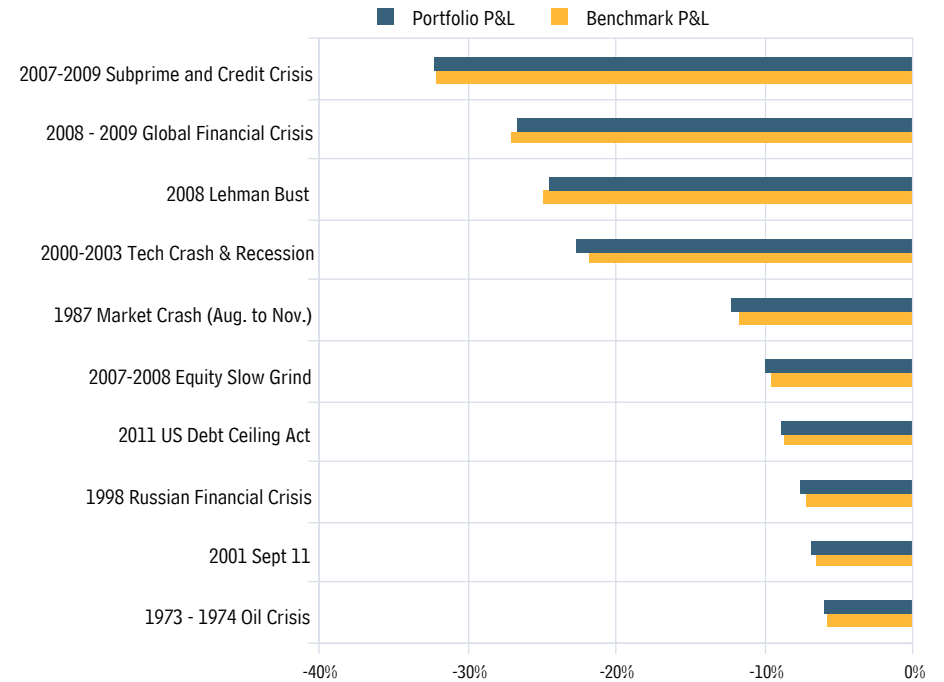
CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 9,502,660,353
ACCEPTED: 9,281

Stress Scenarios

Top 10 Best Scenarios			
Scenario	Portfolio P&L	Benchmark P&L	Market Change (\$)
2001 Fed Rate Cut	4.54	4.58	431,480,398
2003 Iraq War	2.55	2.49	241,941,425
1997-1998 Asian Financial Crisis	2.02	1.94	191,854,036
1995 US Dollar Rally	1.56	1.53	147,913,765
1999 Brazilian Real Crisis (Peak)	1.33	1.37	126,394,751
2010 Peripheral European Bond Crisis (Oc	1.29	1.32	123,014,361
1994 Mexican Peso Crisis	0.66	0.59	62,355,940
2011 Egyptian Unrest	0.32	0.33	30,158,760
2011 Japanese Earthquake	-1.19	-1.22	-112,647,817
1998 LTCM Collapse	-1.29	-1.26	-122,546,316



Top 10 Worst Scenarios			
Scenario	Portfolio P&L	Benchmark P&L	Market Change (\$)
2007-2009 Subprime and Credit Crisis	-32.17	-32.09	-3,057,206,896
2008 - 2009 Global Financial Crisis	-26.62	-26.95	-2,529,203,776
2008 Lehman Bust	-24.54	-24.93	-2,332,056,184
2000-2003 Tech Crash & Recession	-22.63	-21.76	-2,150,868,625
1987 Market Crash (Aug. to Nov.)	-12.29	-11.72	-1,168,225,915
2007-2008 Equity Slow Grind	-9.99	-9.48	-949,584,747
2011 US Debt Ceiling Act	-8.77	-8.71	-833,264,553
1998 Russian Financial Crisis	-7.63	-7.17	-725,378,636
2001 Sept 11	-6.84	-6.50	-649,719,955
1973 - 1974 Oil Crisis	-5.96	-5.71	-566,677,115



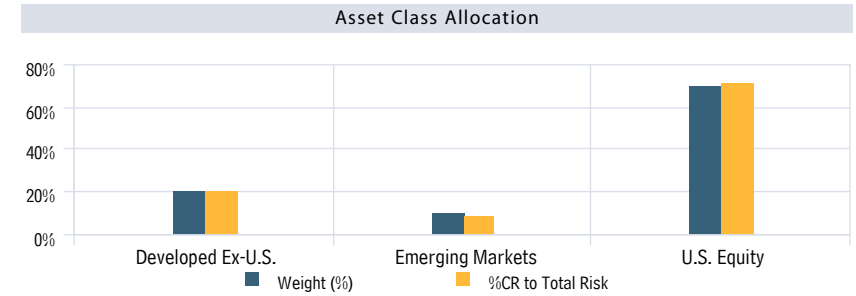
BarraOne Equity Summary

COMPANY: NYCRC - BERS
PORTFOLIO: Public Equity
BENCHMARK: Public Equity
POSITIONS: 4,848
MODEL: MAC.I

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 3,941,953,768
ACCEPTED: 4,839

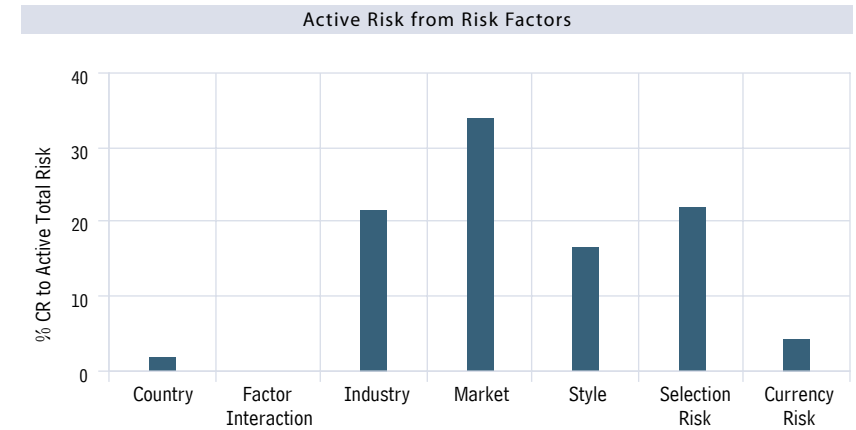
Total Plan Summary

Risk Summary		Asset Class Contribution to Risk					
Statistic	Value	Asset Class	Mkt Value	Weight (%)	Total Risk	Risk Contribution	%CR to TR
Total Risk	14.60	Total	3,941,953,768	100.00	14.60	14.60	100.00
Benchmark Risk	14.48	Developed Ex-U.S.	784,098,206	19.89	16.26	2.93	20.08
Active Risk	0.98	Emerging Markets	388,086,131	9.85	16.04	1.23	8.41
Portfolio Beta	1.01	U.S. Equity	2,769,769,432	70.26	15.15	10.44	71.51



Risk Factor Breakdown

Risk Decomposition						
Risk Source	Portfolio			Active		
	Risk Contribution	% Risk	Correlation	Risk Contribution	% Risk	Correlation
Total Risk	14.60	100.00	1.00	0.98	100.00	1.00
Local Market Risk	13.96	95.58	1.00	0.94	95.66	0.99
Common Factor Risk	13.74	94.11	0.99	0.73	73.72	0.87
Country	0.00	0.02	0.01	0.02	1.64	0.18
Industry	0.22	1.52	0.22	0.21	21.60	0.51
Market	13.34	91.35	0.99	0.33	34.01	0.57
Style	0.18	1.22	0.47	0.16	16.48	0.44
Selection Risk	0.21	1.47	0.12	0.22	21.93	0.47
Currency Risk	0.65	4.42	0.47	0.04	4.34	0.29



BarraOne Equity Summary

COMPANY: NYCRS - BERS
PORTFOLIO: Public Equity
BENCHMARK: Public Equity
POSITIONS: 4,848
MODEL: MAC.I

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 3,941,953,768
ACCEPTED: 4,839

Portfolio Allocation by Region

Region	Weight (%)			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
Total	100.00	100.00	-0.00	14.60	0.98	100.00	0.01
Asia Pacific	13.42	12.52	0.90	16.54	0.34	34.52	0.04
EMEA	11.87	11.78	0.08	17.49	0.27	27.03	0.02
Latin-S America	0.49	0.54	-0.06	23.33	-0.00	-0.12	-0.01
N America	73.78	74.90	-1.11	15.14	0.38	38.67	-0.01
Rest of World	0.45	0.26	0.19	14.21	-0.00	-0.10	-0.01



BarraOne Equity Summary

COMPANY: NYCERS - BERS
PORTFOLIO: Public Equity
BENCHMARK: Public Equity
POSITIONS: 4,848
MODEL: MAC.I

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 3,941,953,768
ACCEPTED: 4,839

Top 30 Countries by Weight%

Country of Exposure	Weight (%)			Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active				
Total	100.00	100.00	-0.00	14.60	0.98	100.00	0.01
United States	70.78	72.47	-1.69	15.18	0.15	15.66	-0.00
China International	3.80	2.32	1.48	27.45	0.19	18.82	0.14
Japan	2.89	4.07	-1.17	19.66	0.05	5.16	0.01
Taiwan	2.28	1.43	0.85	25.97	0.08	7.63	0.08
India	2.01	1.58	0.44	18.14	0.01	0.90	0.02
United Kingdom	1.87	2.55	-0.68	18.59	0.04	4.19	0.02
France	1.67	1.78	-0.11	20.83	0.04	4.48	0.04
Germany	1.48	1.58	-0.10	20.09	0.02	2.25	0.04
Switzerland	1.37	1.57	-0.21	15.27	0.00	0.37	0.03
Sweden	1.35	0.68	0.67	26.35	0.06	6.15	0.07
Netherlands	1.32	0.68	0.64	26.41	0.06	6.07	0.08
Hong Kong	1.05	0.33	0.73	25.78	0.09	8.96	0.12
S. Korea	1.00	0.77	0.24	24.76	0.01	0.87	0.05
Italy	0.98	0.53	0.45	21.59	0.04	4.19	0.05
Canada	0.76	2.11	-1.35	27.15	0.05	5.54	0.00
Denmark	0.72	0.39	0.33	21.93	0.01	1.24	0.04
Singapore	0.54	0.26	0.28	15.65	0.01	0.68	0.03
Australia	0.50	1.21	-0.71	27.08	0.01	0.93	0.02
Brazil	0.40	0.33	0.07	26.03	-0.00	-0.00	-0.00
Belgium	0.38	0.18	0.20	23.30	0.01	0.79	0.03
United Arab Emirates	0.31	0.12	0.19	17.39	-0.00	-0.08	0.01
South Africa	0.22	0.27	-0.05	21.94	0.00	0.03	0.02
Ireland	0.20	0.05	0.15	29.52	0.01	0.73	0.05
Thailand	0.20	0.10	0.10	20.62	0.00	0.07	0.02
Spain	0.20	0.50	-0.31	19.85	0.00	0.11	0.01
China	0.19	0.34	-0.15	68.83	0.02	2.42	0.05
Poland	0.17	0.09	0.08	27.09	0.00	0.07	0.03
Hungary	0.15	0.02	0.13	31.45	0.01	0.65	0.06
Indonesia	0.15	0.11	0.04	22.55	-0.00	-0.07	0.01
Finland	0.15	0.18	-0.04	19.76	-0.00	-0.25	0.03

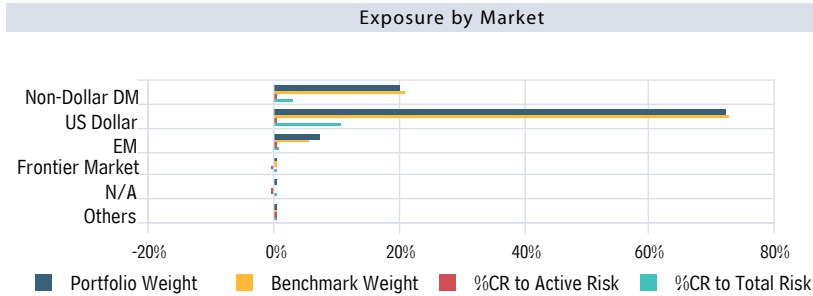


BarraOne Equity Summary

COMPANY: NYCRS - BERS
PORTFOLIO: Public Equity
BENCHMARK: Public Equity
POSITIONS: 4,848
MODEL: MAC.I

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 3,941,953,768
ACCEPTED: 4,839

Portfolio Allocation by Currency



Developed Market Currency				Emerging Market Currency			
Top Five	Exposure \$	CR to AR (%)	CR to TR (%)	Top Five	Exposure \$	CR to AR (%)	CR to TR (%)
US Dollar	2,841,614,888.18	26.66	73.37	New Taiwan Dollar	89,964,065.49	7.63	2.55
Euro	254,664,079.43	18.45	7.09	Indian Rupee	79,330,608.11	0.90	1.19
Hong Kong Dollar	155,429,288.63	22.79	3.27	Korean Won	35,120,047.80	0.39	1.07
Japanese Yen	113,996,360.45	5.16	2.61	CNH	17,338,286.18	-0.09	0.05
British Pound Sterling	75,806,487.49	4.67	1.97	Brazilian Real	15,915,680.18	-0.00	0.37

Top 15 Currencies by Weight%

Currency of Exposure	Weight (%)			Total Risk	CR to TR	CR to TR (%)	CR to AR	CR to AR (%)
	Portfolio	Benchmark	Active					
Total	100.00	100.00	0.00	14.60	14.60	100.00	0.98	100.00
US Dollar	72.09	72.77	-0.68	15.14	10.71	73.37	0.26	26.66
Euro	6.46	5.58	0.88	19.08	1.04	7.09	0.18	18.45
Hong Kong Dollar	3.94	2.50	1.44	28.74	0.48	3.27	0.22	22.79
Japanese Yen	2.89	4.07	-1.17	19.66	0.38	2.61	0.05	5.16
New Taiwan Dollar	2.28	1.43	0.85	25.97	0.37	2.55	0.08	7.63
Indian Rupee	2.01	1.58	0.44	18.14	0.17	1.19	0.01	0.90
British Pound Sterling	1.92	2.55	-0.63	18.84	0.29	1.97	0.05	4.67
Swiss Franc	1.33	1.57	-0.25	15.25	0.14	0.99	0.00	0.18
Korean Won	0.89	0.77	0.13	24.40	0.16	1.07	0.00	0.39
Canadian Dollar	0.76	2.08	-1.32	27.18	0.16	1.11	0.05	5.49
Danish Krone	0.72	0.39	0.33	21.93	0.10	0.69	0.01	1.24
Swedish Krona	0.67	0.60	0.07	24.54	0.13	0.88	0.01	0.89
Singapore Dollar	0.53	0.25	0.28	15.66	0.05	0.38	0.01	0.68
Australian Dollar	0.50	1.21	-0.71	27.11	0.10	0.70	0.01	0.93
CNH	0.44	0.00	0.44	4.61	0.01	0.05	-0.00	-0.09

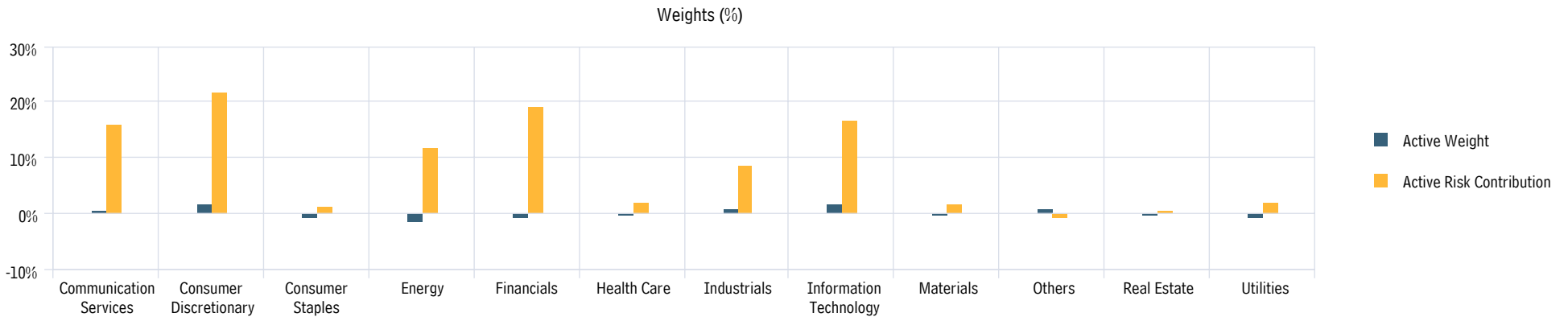
BarraOne Equity Summary

COMPANY: NYCRS - BERS
PORTFOLIO: Public Equity
BENCHMARK: Public Equity
POSITIONS: 4,848
MODEL: MAC.I

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 3,941,953,768
ACCEPTED: 4,839

Portfolio Allocation by GICS Sector

GICS Sector	Weight (%)			Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active				
Total	100.00	100.00	-0.00	14.60	0.98	100.00	0.01
Communication Services	8.45	8.07	0.38	17.92	0.16	16.03	0.06
Consumer Discretionary	12.36	10.62	1.74	18.85	0.22	21.86	0.06
Consumer Staples	5.10	6.00	-0.90	10.77	0.01	1.26	0.02
Energy	2.57	4.08	-1.51	22.24	0.11	11.66	-0.05
Financials	16.82	17.60	-0.78	14.83	0.19	18.86	0.03
Health Care	10.14	10.41	-0.27	12.65	0.02	1.95	0.02
Industrials	11.85	10.90	0.95	16.04	0.08	8.46	0.03
Information Technology	24.88	23.34	1.54	21.60	0.16	16.68	0.05
Materials	3.12	3.63	-0.52	16.81	0.02	1.70	0.02
Others	0.64	0.00	0.64	1.21	-0.01	-0.81	0.01
Real Estate	2.16	2.70	-0.54	16.12	0.00	0.26	0.01
Utilities	1.92	2.65	-0.73	15.23	0.02	2.09	-0.01



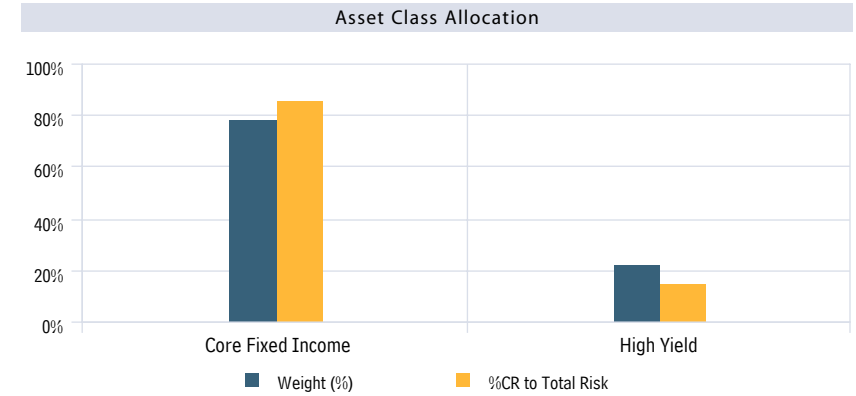
BarraOne Fixed Income Summary

Total Plan Summary

Risk Summary		Asset Class Contribution to Risk					
Statistic	Value	Asset Class	Mkt Value	Weight (%)	Total Risk	Risk Contribution	%CR to TR
Total Risk	5.03	Total	2,557,456,140	100.00	5.03	5.03	100.00
Benchmark Risk	5.18	Core Fixed Income	1,994,213,561	77.98	5.60	4.31	85.72
Active Risk	0.18	High Yield	563,242,579	22.02	4.52	0.72	14.28
Portfolio Beta	0.97						
Cont. to Eff. Duration	5.16						
Convexity	0.41						
Yield to Worst (%)	5.23						
OAS to Swap (bp)	111.63						

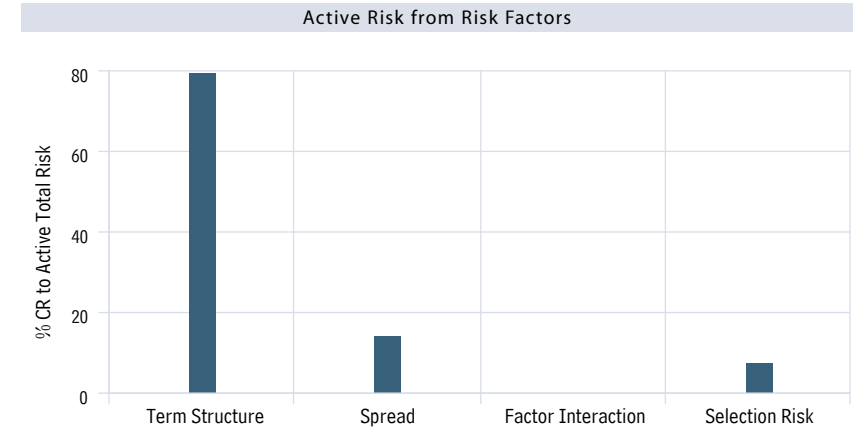
COMPANY: NYCRS - BERS
PORTFOLIO: Public Fixed Income
BENCHMARK: Public Fixed Income
POSITIONS: 4,143
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 2,557,456,140
ACCEPTED: 4,116



Risk Factor Breakdown

Risk Decomposition						
Risk Source	Portfolio			Active		
	Risk Contribution	% Risk	Correlation	Risk Contribution	% Risk	Correlation
Total Risk	5.03	100.00	1.00	0.18	100.00	1.00
Local Market Risk	5.03	100.00	1.00	0.18	100.00	1.00
Common Factor Risk	5.03	99.99	1.00	0.17	92.38	0.96
Implied Volatility	0.08	1.55	0.57	-0.00	-0.52	-0.27
Spread	0.43	8.65	0.28	0.03	13.83	0.41
Term Structure	4.52	89.79	0.95	0.14	79.12	0.90
Selection Risk	0.00	0.01	0.01	0.01	7.62	0.28



BarraOne Fixed Income Summary

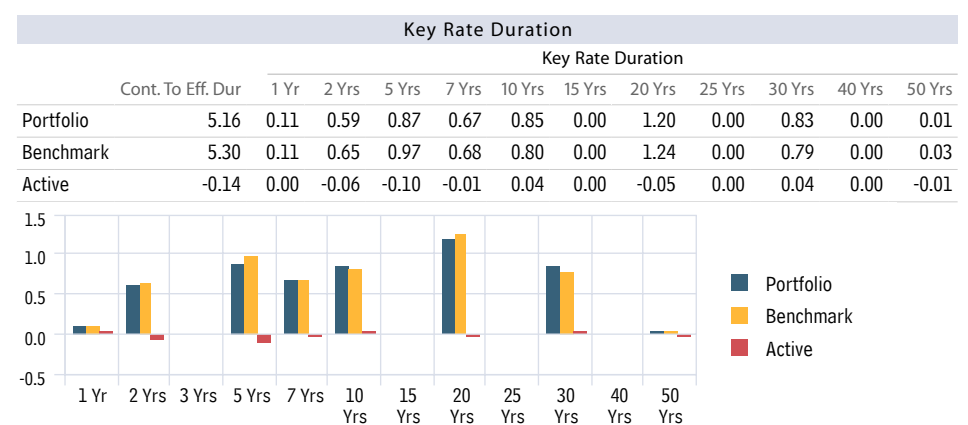
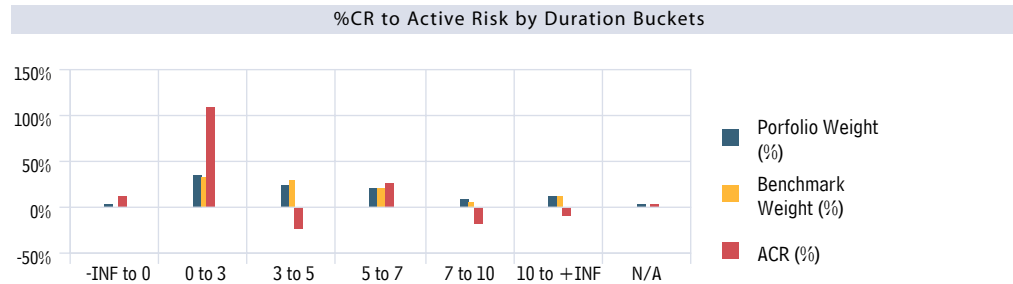
COMPANY: NYCRS - BERS
PORTFOLIO: Public Fixed Income
BENCHMARK: Public Fixed Income
POSITIONS: 4,143
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 2,557,456,140
ACCEPTED: 4,116

Portfolio by Factor Breakdowns

Top 10 Spread Factor									
Spread Factor	Volatility	Exposure (Residual)				Correlation	Contribution (Residual)		
		Portfolio	Benchmark	Active	MCAR		to TR	to AR	to AR%
US Agency MBS Spread OAS 30Y	0.38	0.71	0.80	-0.08	-0.00	-0.26	0.12	0.01	4.45
US Agency MBS Spread Turnover	0.10	-1.23	-1.31	0.08	0.00	0.51	0.06	0.00	2.28
US ABS Other Bonds Spread	18.67	0.05	0.00	0.04	0.08	0.43	-0.00	0.00	1.98
US Utilities HY Spread	39.22	0.09	0.06	0.03	0.10	0.27	0.00	0.00	1.90
US Agency MBS Spread OAS 15Y	0.48	0.03	0.05	-0.02	-0.00	-0.34	0.01	0.00	1.77
US Bank Loan Consumer Discreti	16.01	0.06	0.00	0.06	0.04	0.25	0.00	0.00	1.40
US Real Estate IG Spread	29.44	0.09	0.05	0.04	0.06	0.20	0.01	0.00	1.35
US Industrials - Capital Goods	31.82	0.11	0.06	0.04	0.06	0.18	0.01	0.00	1.34
US PL CMBS Single Asset Single	19.65	0.05	0.00	0.05	0.05	0.23	0.00	0.00	1.33
US Energy - Oil & Gas IG Sprea	31.29	0.13	0.10	0.03	0.06	0.20	0.01	0.00	1.12

Top 10 Term Structure									
Term Structure	Volatility	Exposure (Residual)				Correlation	Contribution (Residual)		
		Portfolio	Benchmark	Active	MCAR		to TR	to AR	to AR%
USD Rate 5Y	1.07	1.27	1.38	-0.11	-0.01	-0.90	1.24	0.11	58.99
USD Rate 2Y	1.09	0.59	0.65	-0.06	-0.01	-0.85	0.50	0.05	28.63
USD Rate 20Y	0.90	1.19	1.24	-0.05	-0.01	-0.77	1.00	0.03	18.28
USD Rate 50Y	0.86	0.01	0.03	-0.01	-0.01	-0.73	0.01	0.01	4.99
USD Muni Rates 1Y	0.85	0.00	0.00	0.00	-0.00	-0.49	0.00	-0.00	-0.00
USD Muni Rates 2Y	0.91	0.00	0.00	0.00	-0.01	-0.56	0.00	-0.00	-0.01
USD Muni Rates 5Y	0.90	0.00	0.00	0.00	-0.01	-0.56	0.00	-0.00	-0.07
USD Rate 1M	0.82	0.01	0.00	0.00	-0.00	-0.13	0.00	-0.00	-0.19
USD Muni Rates 10Y	0.92	0.00	0.00	0.00	-0.01	-0.57	0.00	-0.00	-0.23
USD Muni Rates 20Y	0.93	0.00	0.00	0.00	-0.00	-0.49	0.00	-0.00	-0.33



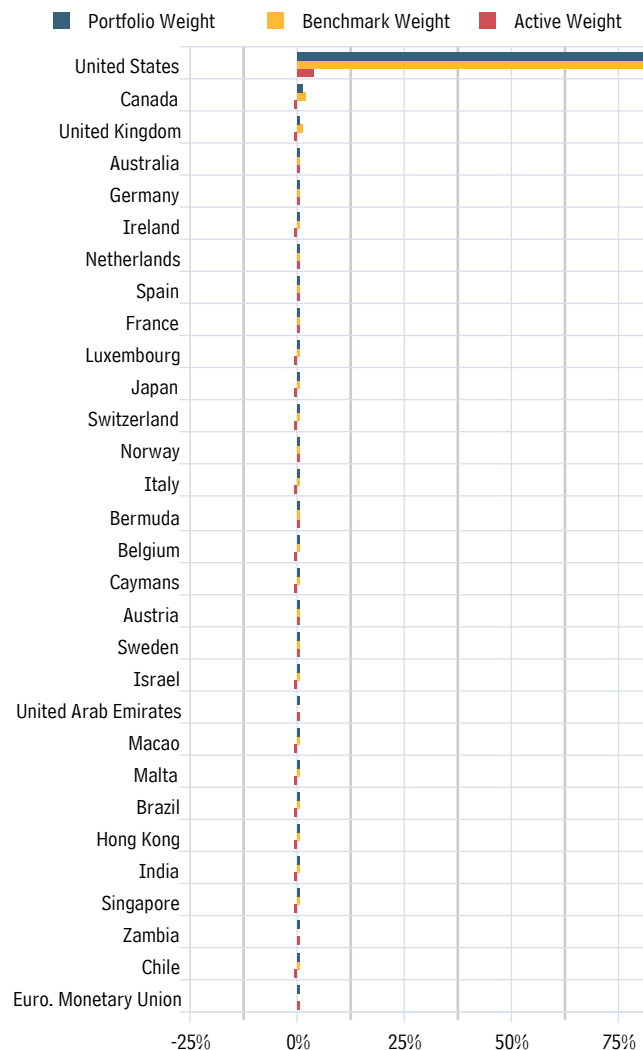
BarraOne Fixed Income Summary

COMPANY: NYCRS - BERS
PORTFOLIO: Public Fixed Income
BENCHMARK: Public Fixed Income
POSITIONS: 4,143
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 2,557,456,140
ACCEPTED: 4,116

Top 30 Countries by Weight%

Country of Exposure	Weight (%)			Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active				
Total	100.00	100.00	0.00	5.03	0.18	100.00	0.00
United States	94.22	90.74	3.48	5.07	0.20	111.04	-0.04
Canada	1.44	1.87	-0.43	4.15	-0.00	-1.83	-0.03
United Kingdom	0.88	1.52	-0.64	5.67	-0.00	-1.78	-0.04
Australia	0.49	0.27	0.23	5.45	-0.00	-0.67	-0.04
Germany	0.46	0.30	0.16	4.83	0.00	2.33	-0.03
Ireland	0.40	0.47	-0.07	5.74	0.00	1.56	-0.03
Netherlands	0.28	0.23	0.05	7.61	-0.00	-2.31	-0.04
Spain	0.24	0.13	0.11	6.65	-0.00	-0.82	-0.04
France	0.19	0.16	0.03	5.81	0.00	0.47	-0.04
Luxembourg	0.15	0.26	-0.11	6.46	-0.00	-1.04	-0.02
Japan	0.14	0.71	-0.57	9.46	-0.01	-6.39	-0.04
Switzerland	0.14	0.17	-0.04	7.99	0.00	1.03	-0.04
Norway	0.13	0.03	0.10	6.75	-0.00	-0.31	-0.05
Italy	0.11	0.22	-0.11	5.68	0.00	0.15	-0.03
Bermuda	0.10	0.09	0.01	5.55	-0.00	-0.25	-0.03
Belgium	0.10	0.11	-0.02	12.75	-0.00	-0.61	-0.07
Caymans	0.08	0.08	-0.01	3.19	-0.00	-0.00	-0.01
Austria	0.07	0.04	0.03	3.77	0.00	0.89	-0.01
Sweden	0.07	0.07	0.00	7.10	-0.00	-0.03	-0.03
Israel	0.07	0.08	-0.01	2.98	0.00	1.29	-0.04
United Arab Emirates	0.05	0.00	0.05	3.52	0.00	0.92	-0.01
Macao	0.04	0.15	-0.11	7.26	-0.00	-1.82	-0.01
Malta	0.03	0.03	-0.00	10.32	-0.00	-0.08	-0.00
Brazil	0.02	0.08	-0.06	13.98	-0.00	-0.03	-0.05
Hong Kong	0.02	0.07	-0.06	7.59	0.00	0.24	-0.05
India	0.02	0.06	-0.04	8.93	-0.00	-0.62	-0.02
Singapore	0.01	0.04	-0.03	12.87	-0.00	-0.48	-0.01
Zambia	0.01	0.00	0.01	1.98	0.00	0.22	-0.01
Chile	0.01	0.07	-0.06	6.16	0.00	0.82	-0.05
Euro. Monetary Union	0.00	0.00	0.00	7.25	0.00	0.00	-0.02

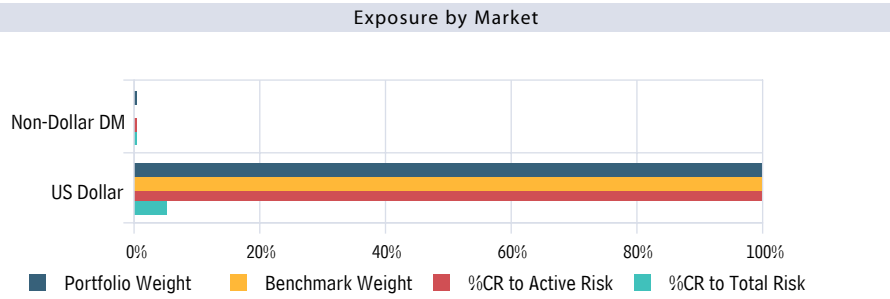


BarraOne Fixed Income Summary

COMPANY: NYCRS - BERS
 PORTFOLIO: Public Fixed Income
 BENCHMARK: Public Fixed Income
 POSITIONS: 4,143
 MODEL: MAC.L

CURRENCY: USD
 ANALYSIS DATE: March 31, 2025
 MARKET VALUE: 2,557,456,140
 ACCEPTED: 4,116

Portfolio Allocation by Currency



Developed Market Currency			
Top Five	Exposure \$	CR to AR (%)	CR to TR (%)
US Dollar	2,557,449,406.57	100.00	100.00
Euro	6,733.05	0.00	0.00

Emerging Market Currency			
Top Five	Exposure \$	CR to AR (%)	CR to TR (%)

Top 15 Currencies by Weight%								
Currency of Exposure	Weight (%)			Total Risk	CR to TR	CR to TR (%)	CR to AR	CR to AR (%)
	Portfolio	Benchmark	Active					
Total	100.00	100.00	0.00	5.03	5.03	100.00	0.18	100.00
US Dollar	100.00	100.00	-0.00	5.03	5.03	100.00	0.18	100.00
Euro	0.00	0.00	0.00	7.25	0.00	0.00	0.00	0.00

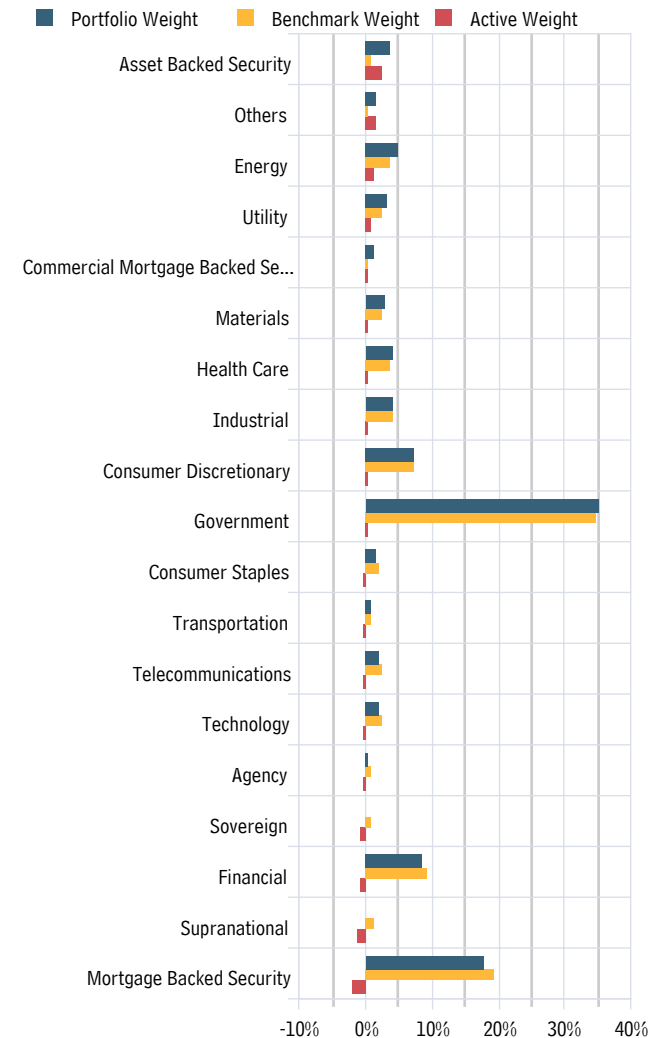
BarraOne Fixed Income Summary

COMPANY: NYCRS - BERS
PORTFOLIO: Public Fixed Income
BENCHMARK: Public Fixed Income
POSITIONS: 4,143
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 2,557,456,140
ACCEPTED: 4,116

Portfolio Allocation by Bond Sector

Sector	Weight (%)			Cont. To Eff. Dur	Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active					
Total	100.00	100.00	0.00	5.16	5.03	0.18	100.00	0.00
Government	34.90	34.86	0.04	1.99	5.14	0.07	41.24	-0.05
Mortgage Backed Security	17.58	19.52	-1.95	0.97	6.63	0.01	4.90	-0.05
Financial	8.60	9.46	-0.86	0.44	5.43	-0.05	-28.40	-0.04
Consumer Discretionary	7.28	7.20	0.08	0.28	5.06	0.02	8.36	-0.03
Energy	4.85	3.79	1.06	0.21	4.66	0.02	12.67	-0.03
Industrial	4.08	4.00	0.08	0.17	4.95	0.00	1.06	-0.03
Health Care	4.00	3.70	0.29	0.24	6.34	0.00	0.59	-0.05
Asset Backed Security	3.46	0.96	2.51	0.15	4.18	0.02	8.63	-0.03
Utility	3.03	2.40	0.62	0.17	5.70	0.02	11.50	-0.05
Materials	2.79	2.45	0.34	0.09	4.31	0.02	10.60	-0.02
Technology	1.95	2.50	-0.55	0.12	6.19	-0.01	-4.72	-0.05
Telecommunications	1.86	2.25	-0.39	0.10	7.01	-0.00	-1.61	-0.04
Consumer Staples	1.77	2.00	-0.23	0.11	6.63	-0.00	-2.75	-0.05
Others	1.58	0.00	1.58	0.02	1.12	0.05	29.86	-0.01
Commercial Mortgage Backed	1.06	0.58	0.48	0.02	2.23	0.03	13.92	-0.02
Transportation	0.68	0.93	-0.25	0.03	4.69	0.00	1.22	-0.03
Agency	0.36	0.97	-0.60	0.03	6.66	-0.02	-10.21	-0.03
Local/Provincial	0.18	0.61	-0.43	0.01	7.32	0.00	2.52	-0.06
Sovereign	0.00	0.80	-0.80	0.00	0.00	0.01	6.20	-0.06
Supranational	0.00	1.02	-1.02	0.00	0.00	-0.01	-5.58	-0.03



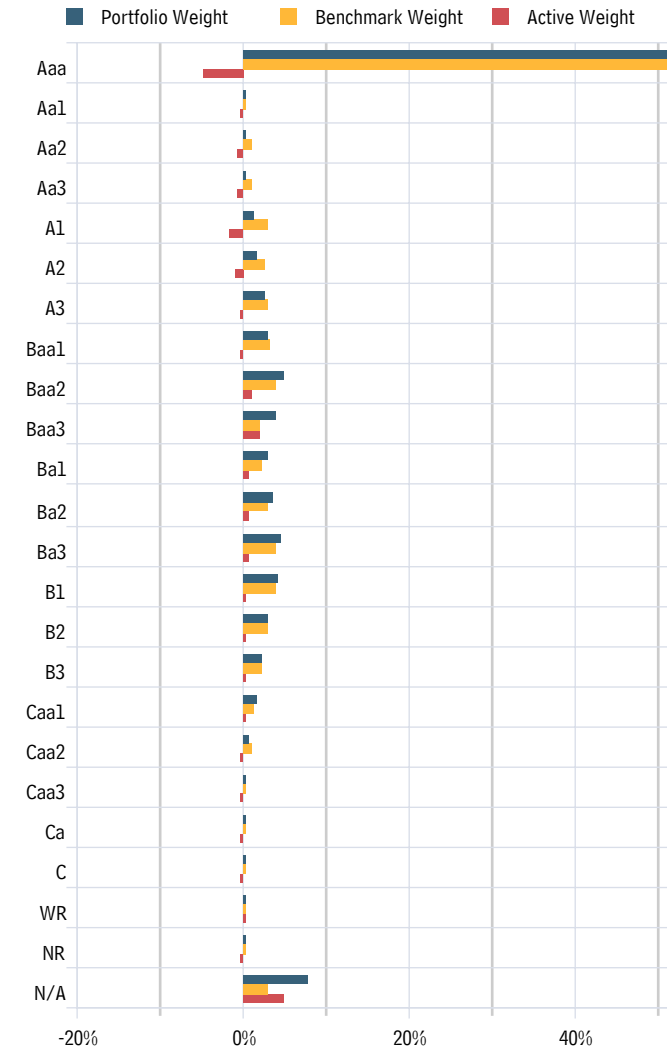
BarraOne Fixed Income Summary

COMPANY: NYCRS - BERS
PORTFOLIO: Public Fixed Income
BENCHMARK: Public Fixed Income
POSITIONS: 4,143
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 2,557,456,140
ACCEPTED: 4,116

Portfolio Allocation by Moody's Rating

Rating	Weight (%)			Cont. To Eff. Dur	Spread Duration	Total Risk	Active Risk CR	%CR to Active TR
	Portfolio	Benchmark	Active					
Total	100.00	100.00	0.00	5.16	5.30	5.03	0.18	100.00
Aaa	51.60	56.35	-4.75	2.90	5.74	5.54	0.09	50.73
Aa1	0.09	0.12	-0.04	0.00	3.18	2.88	0.00	1.29
Aa2	0.35	0.92	-0.57	0.02	6.02	4.94	0.01	4.92
Aa3	0.48	1.07	-0.59	0.04	8.14	7.62	0.01	3.40
A1	1.28	2.98	-1.71	0.10	7.75	7.45	-0.01	-6.03
A2	1.51	2.62	-1.11	0.12	8.26	7.92	0.00	2.10
A3	2.61	2.88	-0.27	0.23	8.81	8.49	-0.02	-13.76
Baa1	2.76	3.23	-0.47	0.20	7.36	7.13	0.00	0.15
Baa2	4.69	3.86	0.83	0.31	6.58	6.54	0.00	0.92
Baa3	3.79	1.98	1.81	0.25	6.52	6.49	-0.02	-9.17
Ba1	2.76	2.26	0.50	0.11	3.89	4.38	0.01	4.23
Ba2	3.62	2.99	0.64	0.11	3.07	3.87	0.02	12.26
Ba3	4.45	3.95	0.50	0.13	3.16	3.97	0.01	7.57
B1	4.22	4.01	0.21	0.12	3.07	4.41	0.01	5.69
B2	3.01	2.86	0.15	0.08	3.08	4.78	0.01	4.33
B3	2.32	2.27	0.05	0.06	2.90	6.07	0.00	2.56
Caa1	1.51	1.34	0.17	0.04	2.69	5.39	0.01	3.96
Caa2	0.77	0.89	-0.12	0.02	3.03	5.87	-0.00	-1.63
Caa3	0.21	0.31	-0.09	0.01	2.59	12.22	-0.00	-1.57
Ca	0.11	0.17	-0.06	0.00	2.95	13.35	-0.00	-1.96
C	0.01	0.01	-0.00	0.00	1.91	11.91	-0.00	-0.00
WR	0.13	0.09	0.04	0.00	3.32	3.53	0.00	0.92
NR	0.01	0.07	-0.06	0.00	2.52	5.33	-0.00	-0.29
Not Rated	7.71	2.77	4.94	0.30	4.37	3.75	0.05	29.38



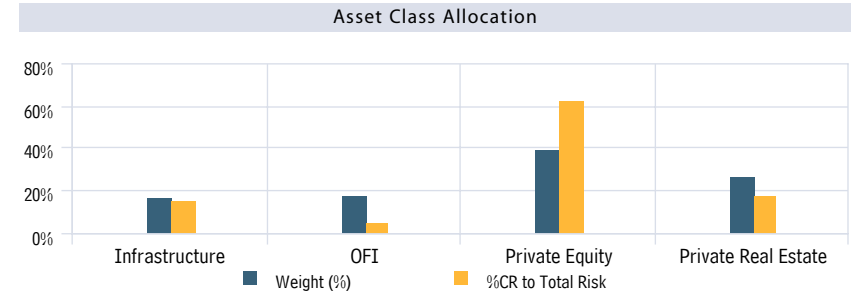
BarraOne Equity Summary

COMPANY: NYCRS - BERS
PORTFOLIO: Alternative Investments
BENCHMARK: Alternative Investments
POSITIONS: 320
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 2,919,701,298
ACCEPTED: 320

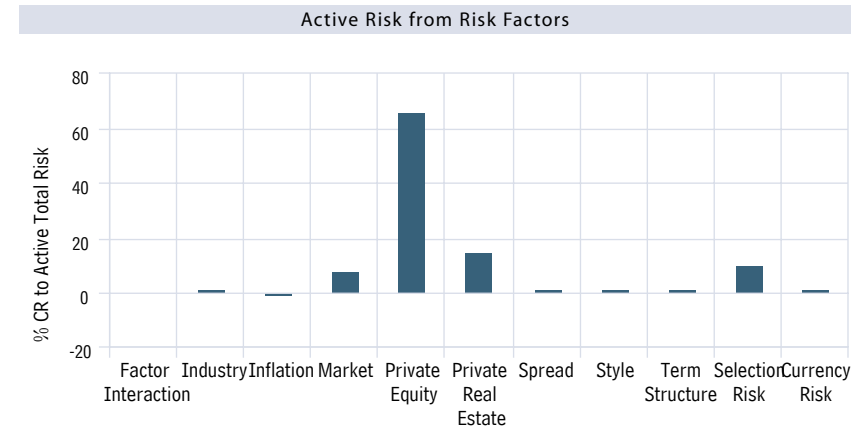
Total Plan Summary

Risk Summary		Asset Class Contribution to Risk					
Statistic	Value	Asset Class	Mkt Value	Weight (%)	Total Risk	Risk Contribution	%CR to TR
Total Risk	11.94	Total	2,919,701,298	100.00	11.94	11.94	100.00
Benchmark Risk	9.97	Infrastructure	466,906,358	15.99	12.23	1.77	14.79
Active Risk	7.43	OFI	536,827,074	18.39	6.89	0.56	4.72
Portfolio Beta	0.94	Private Equity	1,132,218,086	38.78	20.08	7.49	62.76
		Private Real Estate	783,749,780	26.84	11.79	2.12	17.73



Risk Factor Breakdown

Risk Decomposition						
Risk Source	Portfolio			Active		
	Risk Contribution	% Risk	Correlation	Risk Contribution	% Risk	Correlation
Total Risk	11.94	100.00	1.00	7.43	100.00	1.00
Local Market Risk	11.94	99.98	1.00	7.43	99.92	1.00
Common Factor Risk	11.60	97.09	0.99	6.72	90.32	0.95
Private Real Estate	1.91	16.00	0.63	1.11	14.95	0.32
Implied Volatility	0.01	0.06	0.38	0.00	0.02	0.12
Industry	0.08	0.63	0.11	0.05	0.70	0.07
Inflation	0.00	0.00	0.08	-0.02	-0.21	-0.05
Market	6.00	50.26	0.81	0.56	7.56	0.22
Private Equity	3.03	25.33	0.50	4.86	65.37	0.81
Spread	0.53	4.40	0.58	0.08	1.04	0.18
Style	-0.07	-0.61	-0.11	0.05	0.64	0.07
Term Structure	0.12	0.98	0.12	0.02	0.27	0.05
Selection Risk	0.35	2.89	0.17	0.71	9.59	0.31
Currency Risk	0.00	0.02	0.01	0.01	0.08	0.03



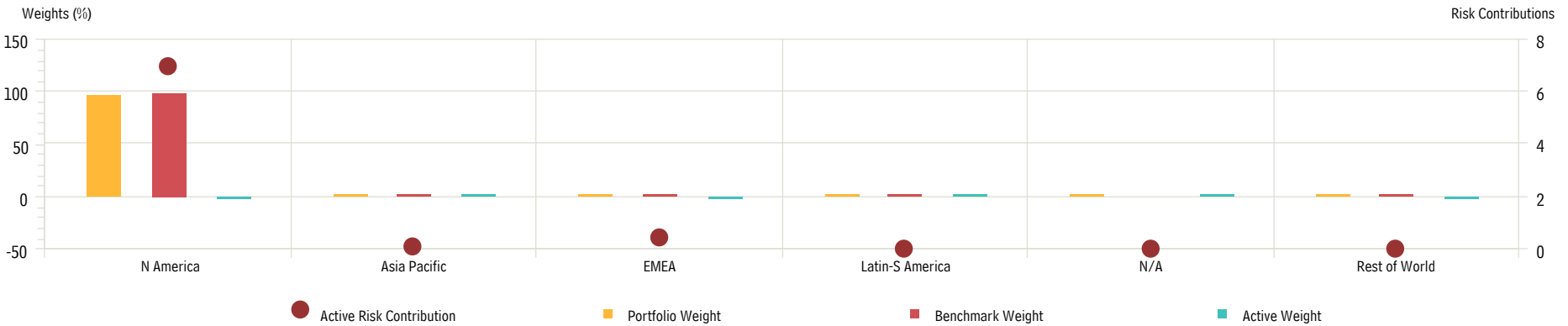
BarraOne Equity Summary

COMPANY: NYCRS - BERS
PORTFOLIO: Alternative Investments
BENCHMARK: Alternative Investments
POSITIONS: 320
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 2,919,701,298
ACCEPTED: 320

Portfolio Allocation by Region

Region	Weight (%)			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
Total	100.00	100.00	-0.00	11.94	7.43	100.00	0.07
Asia Pacific	1.44	0.13	1.31	16.34	0.05	0.61	0.03
EMEA	0.71	1.57	-0.85	186.57	0.41	5.47	0.03
Latin-S America	0.25	0.01	0.24	17.42	0.01	0.11	0.03
N America	97.19	98.05	-0.85	11.19	6.96	93.67	0.03
N/A	0.24	0.00	0.24	13.54	0.01	0.10	0.05
Rest of World	0.17	0.24	-0.07	12.14	0.00	0.03	0.02



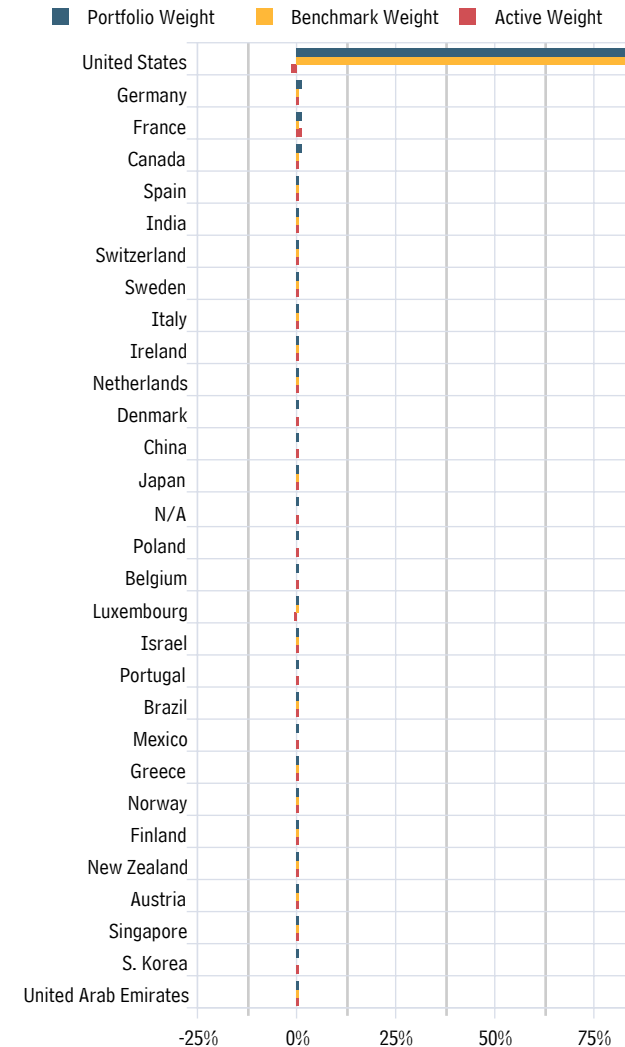
BarraOne Equity Summary

COMPANY: NYCRS - BERS
PORTFOLIO: Alternative Investments
BENCHMARK: Alternative Investments
POSITIONS: 320
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 2,919,701,298
ACCEPTED: 320

Top 30 Countries by Weight%

Country of Exposure	Weight (%)			Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active				
Total	100.00	100.00	-0.00	11.94	7.43	100.00	0.07
United States	96.17	97.33	-1.17	11.17	6.88	92.49	0.02
Germany	1.14	0.13	1.01	12.25	0.03	0.39	0.02
France	1.11	0.07	1.04	14.45	0.05	0.62	0.03
Canada	1.03	0.71	0.32	15.00	0.09	1.19	0.05
Spain	0.70	0.01	0.68	14.23	0.03	0.37	0.03
India	0.69	0.02	0.67	19.51	0.02	0.28	0.02
Switzerland	0.64	0.04	0.60	13.08	0.02	0.28	0.02
Sweden	0.56	0.01	0.55	36.53	0.06	0.87	0.06
Italy	0.52	0.14	0.38	15.62	0.02	0.28	0.03
Ireland	0.42	0.19	0.23	7.26	0.01	0.08	0.01
Netherlands	0.39	0.18	0.21	15.78	0.02	0.29	0.04
Denmark	0.37	0.00	0.37	20.98	0.02	0.31	0.05
China	0.34	0.00	0.34	21.38	0.01	0.12	0.02
Japan	0.29	0.02	0.27	16.07	0.01	0.11	0.02
N/A	0.24	0.00	0.24	13.54	0.01	0.10	0.04
Poland	0.23	0.00	0.23	25.95	0.02	0.21	0.06
Belgium	0.21	0.00	0.21	19.68	0.01	0.15	0.05
Luxembourg	0.17	0.48	-0.31	6.42	-0.00	-0.05	0.01
Israel	0.14	0.01	0.13	28.09	0.01	0.12	0.06
Portugal	0.13	0.00	0.13	12.36	0.00	0.04	0.01
Brazil	0.12	0.01	0.11	30.43	0.00	0.07	0.03
Mexico	0.11	0.00	0.11	11.63	0.00	0.04	0.02
Greece	0.10	0.00	0.10	28.64	0.01	0.10	0.07
Norway	0.09	0.01	0.09	20.04	0.01	0.08	0.05
Finland	0.07	0.02	0.05	27.38	0.01	0.07	0.05
New Zealand	0.06	0.02	0.05	21.28	0.00	0.03	0.02
Austria	0.06	0.00	0.06	12.88	0.00	0.02	0.02
Singapore	0.06	0.01	0.05	13.57	0.00	0.02	0.02
S. Korea	0.05	0.00	0.05	51.33	0.00	0.03	0.04
United Arab Emirates	0.05	0.01	0.04	17.03	0.00	0.01	0.01

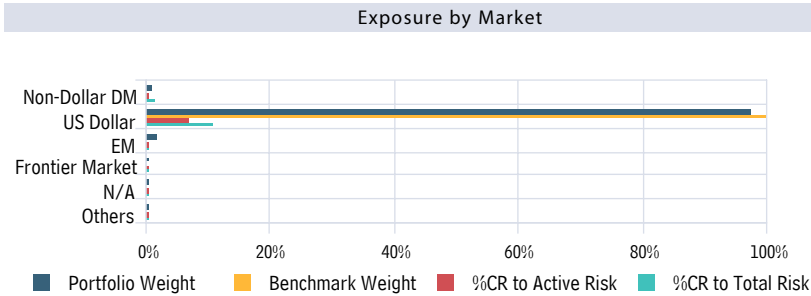


BarraOne Equity Summary

COMPANY: NYCRS - BERS
PORTFOLIO: Alternative Investments
BENCHMARK: Alternative Investments
POSITIONS: 320
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 2,919,701,298
ACCEPTED: 320

Portfolio Allocation by Currency



Developed Market Currency				Emerging Market Currency			
Top Five	Exposure \$	CR to AR (%)	CR to TR (%)	Top Five	Exposure \$	CR to AR (%)	CR to TR (%)
US Dollar	2,846,628,926.73	92.27	89.75	Indian Rupee	19,708,346.66	0.28	0.36
Euro	49,631,102.40	2.69	4.12	Chinese Yuan	9,536,437.56	0.12	0.13
Canadian Dollar	20,201,951.89	1.23	1.07	Polish Zloty	6,785,947.17	0.21	0.24
Swiss Franc	18,419,087.41	0.29	0.37	Brazilian Real	3,406,969.69	0.07	0.11
Swedish Krona	16,246,131.03	0.87	1.08	Korean Won	1,965,422.34	0.04	0.06

Top 15 Currencies by Weight%

Currency of Exposure	Weight (%)				Total Risk	CR to TR	CR to TR (%)	CR to AR	CR to AR (%)
	Portfolio	Benchmark	Active						
Total	100.00	100.00	0.00		11.94	11.94	100.00	7.43	100.00
US Dollar	97.50	100.00	-2.50		11.04	10.72	89.75	6.86	92.27
Euro	1.70	0.00	1.70		40.54	0.49	4.12	0.20	2.69
Canadian Dollar	0.69	0.00	0.69		21.35	0.13	1.07	0.09	1.23
Indian Rupee	0.68	0.00	0.68		19.59	0.04	0.36	0.02	0.28
Swiss Franc	0.63	0.00	0.63		13.20	0.04	0.37	0.02	0.29
Swedish Krona	0.56	0.00	0.56		36.74	0.13	1.08	0.06	0.87
Danish Krone	0.37	0.00	0.37		20.98	0.04	0.36	0.02	0.31
Chinese Yuan	0.33	0.00	0.33		22.19	0.02	0.13	0.01	0.12
Japanese Yen	0.29	0.00	0.29		16.07	0.02	0.14	0.01	0.11
Polish Zloty	0.23	0.00	0.23		25.95	0.03	0.24	0.02	0.21
New Israeli Sheqel	0.14	0.00	0.14		28.09	0.02	0.19	0.01	0.12
Brazilian Real	0.12	0.00	0.12		30.60	0.01	0.11	0.01	0.07
Hong Kong Dollar	0.07	0.00	0.07		23.90	0.00	0.03	0.00	0.03
Norwegian Krone	0.07	0.00	0.07		25.58	0.01	0.10	0.01	0.08
Korean Won	0.07	0.00	0.07		40.42	0.01	0.06	0.00	0.04

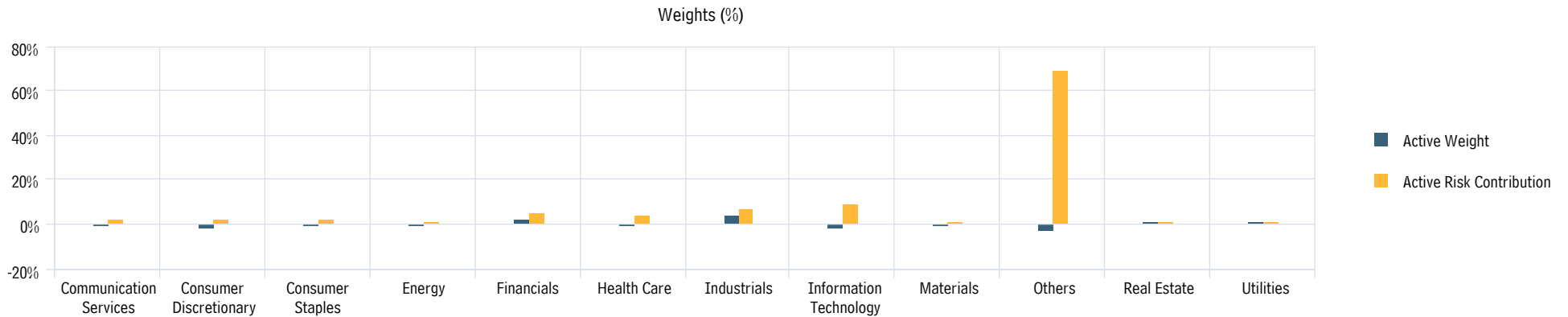
BarraOne Equity Summary

COMPANY: NYCRS - BERS
PORTFOLIO: Alternative Investments
BENCHMARK: Alternative Investments
POSITIONS: 320
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: March 31, 2025
MARKET VALUE: 2,919,701,298
ACCEPTED: 320

Portfolio Allocation by GICS Sector

GICS Sector	Weight (%)			Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active				
Total	100.00	100.00	-0.00	11.94	7.43	100.00	0.07
Communication Services	3.57	4.17	-0.60	12.10	0.11	1.47	0.04
Consumer Discretionary	2.92	4.55	-1.63	18.49	0.16	2.14	0.06
Consumer Staples	2.01	2.29	-0.28	15.55	0.15	2.03	0.05
Energy	1.56	2.25	-0.69	14.74	0.01	0.11	0.03
Financials	7.43	5.32	2.12	10.27	0.33	4.47	0.05
Health Care	4.12	4.30	-0.18	15.05	0.28	3.71	0.05
Industrials	8.01	3.81	4.19	11.78	0.48	6.47	0.06
Information Technology	7.13	9.20	-2.07	22.35	0.63	8.43	0.07
Materials	1.03	1.22	-0.19	17.02	0.07	0.92	0.06
Others	57.79	60.76	-2.97	12.44	5.16	69.35	0.01
Real Estate	2.05	1.13	0.92	7.38	0.06	0.75	0.03
Utilities	2.38	1.01	1.37	7.79	0.01	0.15	0.01



APPENDICES:

- Basket Clause
- Liquidity Analysis

Basket Limit	35.00%
Basket Consumed	25.13%
Remaining Capacity	9.87%

	Basket-Eligible Assets*				
	Non-Basket Assets	Non-Contributing	Contributing	Basket Assets	Total
FIXED INCOME	24.89%	4.36%	0.01%	7.41%	36.67%
U.S. Fixed	9.28%	4.09%	0.01%	6.55%	19.93%
Cash/Equivalent	6.63%	---	---	----	6.63%
TIPS	---	---	---	----	----
OFI	0.02%	0.03%	0.01%	5.16%	5.22%
High Yield	0.27%	3.91%	0.00%	1.29%	5.47%
Bank Loans	0.00%	---	---	0.00%	0.00%
ETI Investments	0.38%	---	---	0.00%	0.38%
Core/Core Plus	1.98%	0.14%	---	0.10%	2.22%
U.S. Structured	15.61%	0.27%	---	0.86%	16.75%
Credit	3.85%	0.27%	---	0.41%	4.53%
Mortgages	3.76%	---	---	0.45%	4.21%
ST Treasury	2.70%	---	---	----	2.70%
Treasury/Agency	1.32%	---	---	----	1.32%
MT Treasury	3.11%	---	---	----	3.11%
LT Treasury	0.88%	---	---	----	0.88%
EQUITY	25.65%	19.98%	5.54%	12.17%	63.33%
Public Equity	25.14%	9.98%	3.12%	0.02%	38.26%
U.S. Equity	24.20%	1.24%	0.39%	0.00%	25.83%
EAFE	0.22%	5.63%	1.76%	0.02%	7.62%
Emerging Markets	0.07%	2.78%	0.87%	0.01%	3.73%
Global	0.65%	0.33%	0.10%	0.00%	1.08%
Alternative Investments	0.51%	10.00%	2.42%	12.14%	25.07%
Infrastructure	---	3.64%	0.88%	0.00%	4.52%
Private RE/Core	---	3.54%	0.85%	----	4.39%
Private RE/Non-Core	---	2.83%	0.68%	0.00%	3.51%
Private Equity	0.51%	---	---	12.14%	12.65%
TOTAL ASSETS	50.53%	24.34%	5.54%	19.58%	100.00%
	Non-Basket:	74.87%	Basket:	25.13%	

This analysis shows basket consumption by investment mandate on a security look-through basis.

* Basket Eligible Assets are subject to the following thresholds - above which investment consumes basket capacity: 10% aggregate portfolio weight for investments in non-U.S. listed equities; 10% aggregate portfolio weight for real assets; and 10% aggregate portfolio weight for investments in high yield bonds and foreign debt issues that are registered with the SEC. To the extent that the value of investments in a particular category exceeds a threshold, the excess consumes basket capacity.

In the above table, the investment of cash held as collateral under the system's securities lending program, is included as a Non-Basket Asset in the Cash/Equivalent line.



AUM as of March 31, 2025

	Current MV	Liquid Assets		
		Today	1 Year	2 Years
PUBLIC EQUITY	\$3,947	\$3,947	\$3,947	\$3,947
U.S.	2,660	2,660	2,660	2,660
EAFE Equity	699	699	699	699
Emerging Markets	477	477	477	477
Global Equity	111	111	111	111
PUBLIC FIXED INCOME	\$2,618	\$2,596	\$2,605	\$2,605
Short Term Securities	84	84	84	84
U.S. Government	821	821	821	821
Mortgages				
Core Mortgages	424	424	424	424
ETI	40	17	27	27
Credit - Investment Grade	689	689	689	689
Corporate - High Yield	561	561	561	561
Corporate - Bank Loans	0	0	0	0
UST - Inflation Protected	0	0	0	0
ALTERNATIVE ASSETS	\$3,054	\$403	\$537	\$537
Private Equity	1,237	0	0	0
Private Real Estate	814	0	0	0
Infrastructure	467	0	0	0
Opportunistic Fixed Income	537	403	537	537
Total Assets	\$9,619	\$6,945	\$7,089	\$7,089
Total Illiquid \$		\$2,675	\$2,531	\$2,531
Total Illiquid %		27.8%	26.3%	26.3%
Unfunded OFI Commitments	\$433			
Unfunded INF Commitments	\$422			
Unfunded PE Commitments	\$613			
Unfunded RE Commitments	\$294			
Total commitments \$	\$1,761			
Total commitments %	18.3%			



BERS Liquidity Profile - Static Analysis

AUM as of March 31, 2025

Denominator Effect - Decrease AUM by One-Third

Total Illiquid \$	\$2,675	\$2,531	\$2,531
Total Illiquid %	41.7%	39.5%	39.5%

Note: Assumes zero realizations, no new commitments and a five-year investment period; funded out of liquids



	Current MV	Liquid Assets		
		Today	1 Year	2 Years
Total Assets	\$9,619	\$6,945	\$7,089	\$7,089

Private Equity, Real Estate and Infrastructure Fixed Income Stress Case

Unfunded OFI Commitments	\$87	\$173
Unfunded INF Commitments	\$84	\$169
Unfunded PE Commitments Drawn	\$123	\$245
Unfunded RE Commitments Drawn	\$59	\$118
Total commitments \$	\$352	\$705
Total commitments %	3.7%	7.3%

Total Illiquid \$	\$2,883	\$3,235
Total Illiquid %	30.0%	33.6%

Note: Assumes zero realizations, no new commitments and a five-year investment period; funded out of liquids

See Assumptions Page for Full Details



Denominator Effect - Decrease AUM by One-Third

Total Illiquid \$	\$2,675	\$2,883	\$3,235
Total Illiquid %	41.7%	45.0%	50.4%

Note: Assumes zero realizations, no new commitments and a five-year investment period; funded out of liquids



Additional Assumptions

Alternative Assets Liquidation Estimates: Private Equity, Private Real Estate, and Infrastructure: assumes no liquidations in 2-year horizon; Opportunistic Fixed Income: assumes 75% immediate availability and 100% availability within one year.

Illiquid Ratio: Illiquid investment value for each of the three time horizons as a percentage of current AUM. The ratio is calculated under three scenarios: 1) Unadjusted estimated illiquid value to current total assets. 2) Unadjusted estimated illiquid values to current total assets after a 33% decline. 3) Estimated illiquid value after Fixed Income Stress Case to current total assets after a 33% decline.

Unfunded Commitments: Uses custodian value at month end.

Denominator Effect: Measures Illiquid Ratio for each time horizon after an assumed 33% decline in portfolio value.

Fixed Income Stress Case: Measures impact of new commitments to illiquid asset classes assuming no capital calls and a level 5-year pacing schedule.

