



state treasurer of north carolina DALE R. FOLWELL, CPA

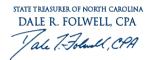
INVESTMENT MANAGEMENT DIVISION

Opportunistic Fixed Income Review

November 20, 2024

All data as of September 30, 2024 Unless Otherwise Stated





Role in the Portfolio

Attractive Absolute Returns

Long-term returns that are competitive with long-term public equities, after consideration
of lower downside risk, due to opportunistic investments, longer duration private
investments, restructurings, leverage, hedging, and trading skill

Competitive Relative Returns

• Achieve or exceed the return on the performance benchmark over a long period of time, within reasonable risk parameters

Diversification

 Enhance the diversification of the total fund relative to public equity and investment grade fixed income

Capital Preservation

 Protect capital through credit-oriented investments and trading strategies that are designed to minimize downside risk

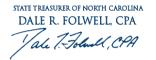
Deflation Protection

• The structure of certain fixed income assets may provide protection against the detrimental effects of deflation

Portfolio Launched June 2009

• The asset class (N.C.G.S. § 147-69.2(b)(6c)) was approved for investment by the NC General Assembly in June 2009.





Portfolio Components

<u>Components</u> <u>Strategies / Types of Investments</u>

Traditional Corporate Credit

High Yield Bonds

Bank Loans

Distressed Credit

High Yield Bonds

Post-Reorg Equity

Structured Credit

Hedged Fixed Income

Long/Short Credit

Relative Value

Convertible Arbitrage

Distressed Credit

Derivatives

Event-Driven

Special Situations

Structured Credit

Mezzanine Debt

Whole Loans

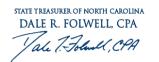
Direct Lending

Real Estate Loans

Dislocation

^{*} Portfolio Components come from the Investment Policy Statement for North Carolina Retirement Systems





Opportunistic Fixed Income

- Currently under-weight vs. target by 0.91%
- Additional capacity for approximately \$1,170MM to achieve target weight
- Current environment provides reasonable risk/reward to go beyond the target

	Market Value	% Target		Range		Relative	Relative \$
	(\$000)			Minimum	Maximum	%	(\$000)
Growth	\$68,922,566	53.60%	55.0%	33.0%	68.0%	-1.40%	(\$1,805,294)
Public Equity	52,892,479	41.13%	38.0%	33.0%	43.0%	3.13%	4,025,958
Private Equity	6,091,073	4.74%	7.0%	0.0%	8.75%	-2.26%	(2,910,655)
Non Core Real Estate	2,106,858	1.64%	3.0%	0.0%	8.0%	-1.36%	(1,751,025)
Opportunistic Fixed Income	7,832,155	6.09%	7.0%	0.0%	7.5%	-0.91%	(1,169,572)
Rates & Liquidity	44,775,034	34.82%	33.0%	23.0%	48.0%	1.82%	2,338,318
IG Fixed Income & Cash	35,406,511	27.53%	28.0%	23.0%	33.0%	-0.47%	(600,400)
Pension Cash	9,368,524	7.29%	5.0%	0.0%	15.0%	2.29%	2,938,718
Inflation Sensitive & Diversifiers	12,247,627	9.52%	11.0%	4.0%	16.0%	-1.48%	(1,897,945)
Inflation Sensitive	5,811,294	4.52%	6.0%	2.0%	7.5%	-1.48%	(1,904,473)
Core Real Estate	6,436,334	5.01%	5.0%	2.0%	10.0%	0.01%	6,528
Multi-Strategy	2,650,881	2.06%	1.0%	0.0%	4.0%	1.06%	1,364,920
Grand Total	128,596,109	100.00%					

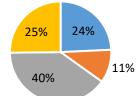
^{*} Portfolio Components, Targets, and Maximums come from the Investment Policy Statement for North Carolina Retirement Systems as of 9/30/2024

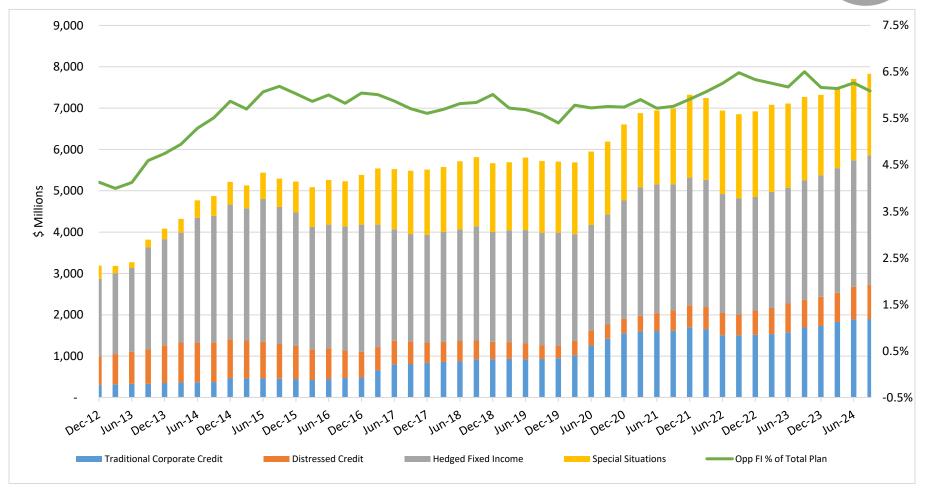




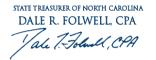
Portfolio History

Portfolio Market Value Timeline by Component



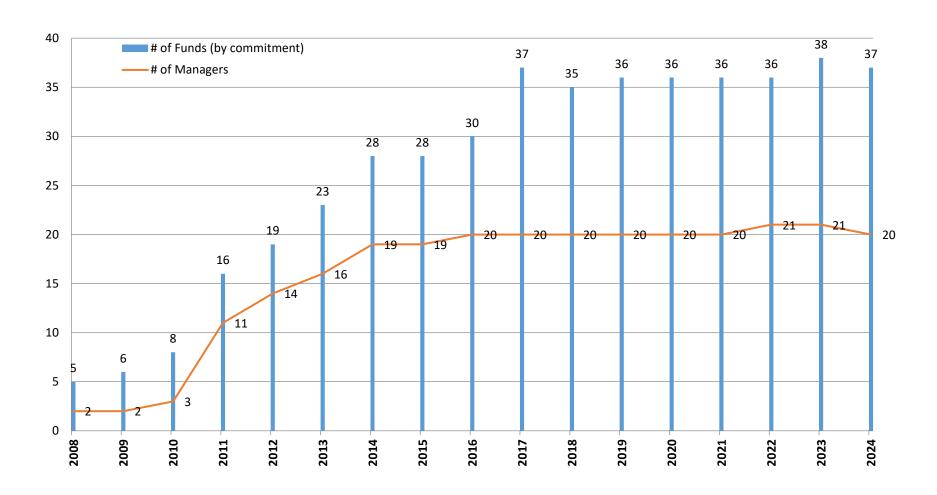


^{*} Portfolio Components come from the Investment Policy Statement for North Carolina Retirement Systems; data as of 9/30/2024

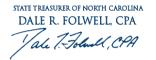


Portfolio History

Growth of Manager Relationships and Number of Funds

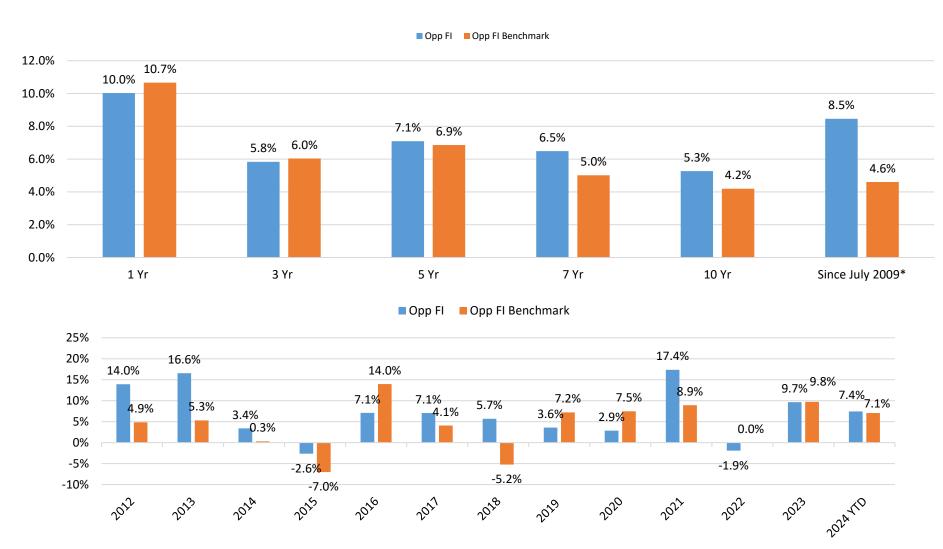




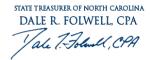


Portfolio Performance

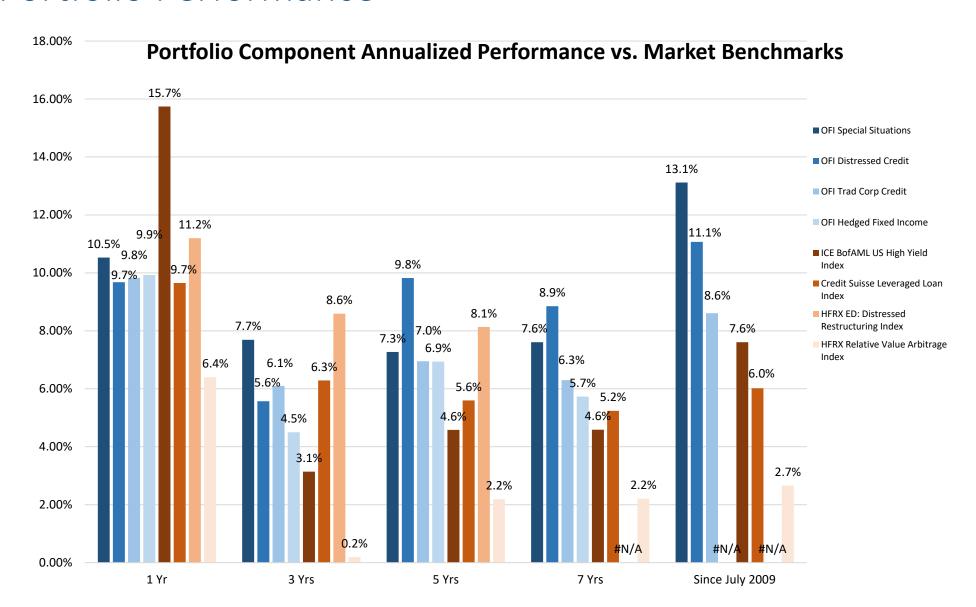
Annualized Performance



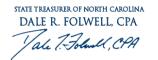
^{*} Note: Performance through September 30, 2024; See slide 38 for details on the composition of the Opportunistic Fixed Income Benchmark.



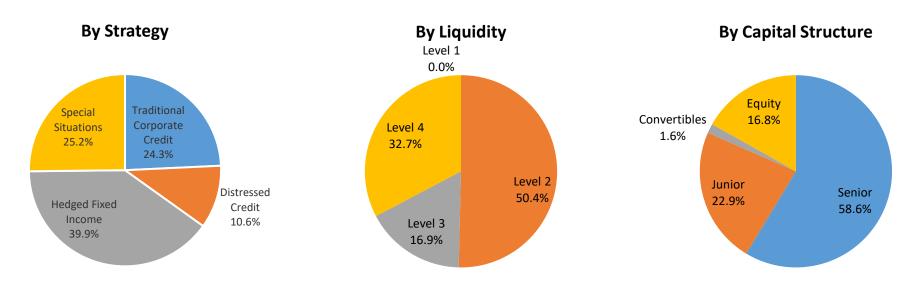
Portfolio Performance

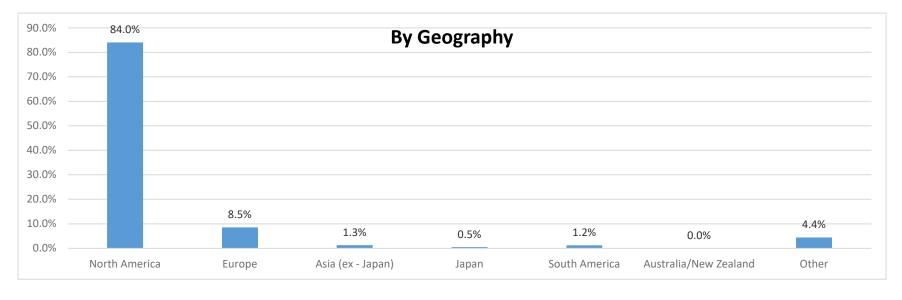


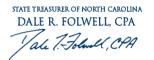




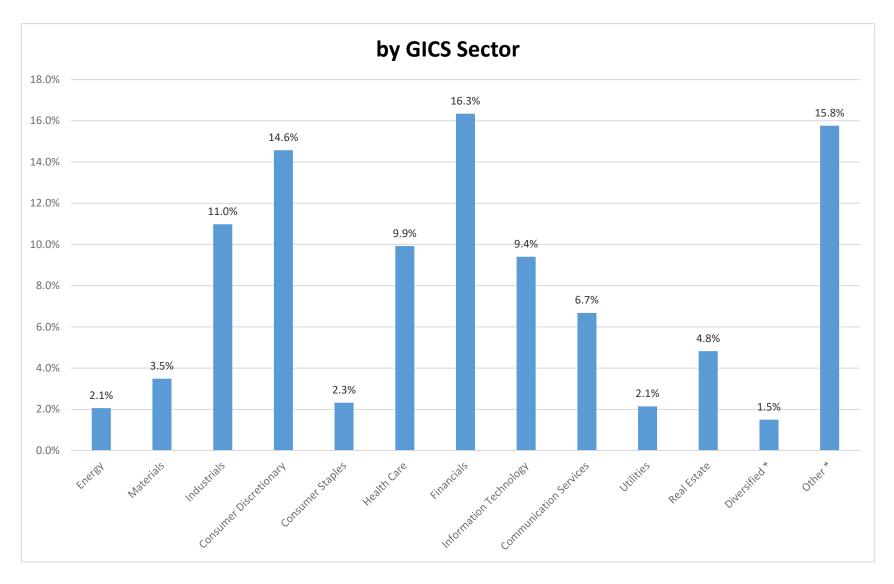
Portfolio Characteristics





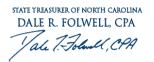


Portfolio Characteristics



^{*}Holdings that cannot be classified into any one particular sector, as self-reported by the investment manager, may include CMBS, RMBS, ABS, or CLOs

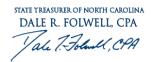




Credit Market Update (1)

- 1. Unique market environment
- 2. Credit markets are functioning reasonably well
- Although cost of debt capital increased in recent years, companies in general can service debt
- 4. Increased number of Distressed Exchanges and Liability Management Exercises, (a.k.a. "lender-on-lender violence") can cause concern for some lenders
- 5. Rate cuts





Credit Market Update (2)

Private Credit

- Both supply and demand grew at a record pace
- Offer incremental yield in exchange for liquidity, complexity, and execution speed; outperformed leveraged loans since 2007
- Lenders drive financing terms as banks retreat
- Yields remain attractive even in a lower rate environment

Structured Credit

- CLO issuance has been strong year to date, driven by strong demand of chasing yields
- Higher quality CLO tranches offer reasonable excess spread compared to similar rated high yield issuers
- CMBS, RMBS, and ABS currently provide attractive yields relative to underlying risk

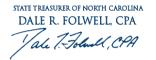
Bonds

- Spreads have compressed meaningfully
- Absolute current yields remain somewhat attractive for long-term investors
- Anticipate default rates to increase, but reasonable Debt/EV levels provide cushion vs. lofty yet decreasing valuations

Loans

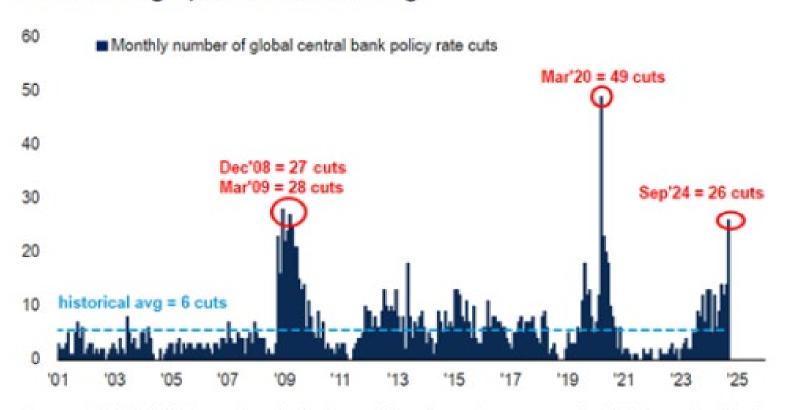
- Floating rate features provide natural hedge against higher rate environment and floors in the event rates fall materially
- Anticipate increasing default rates and lower recoveries, but opportunities remain for selective investors with reasonable return expectations





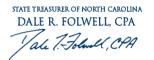
Global Easing Cycle Has Started

The cutting cycle is in full swing!



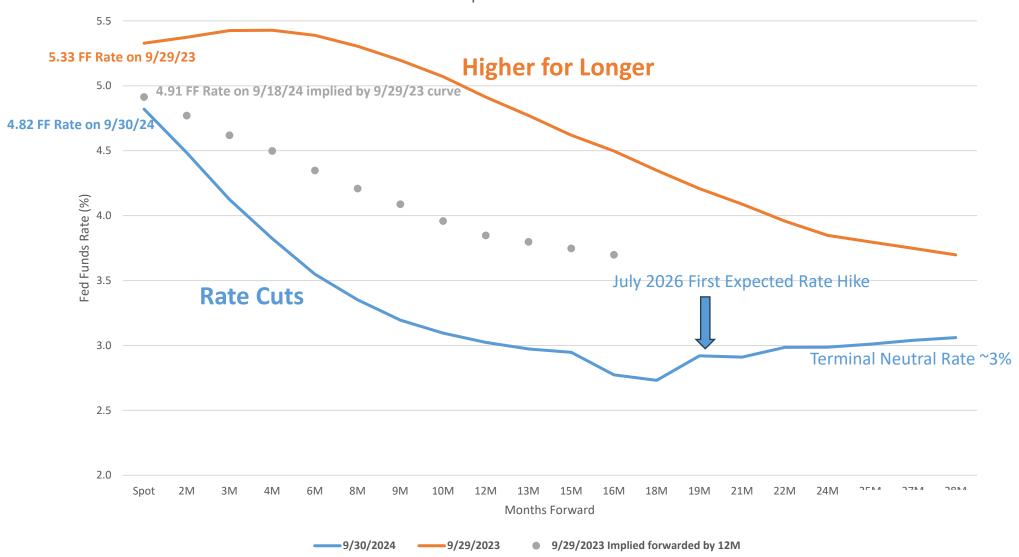
Source: BofA Global Investment Strategy, Bloomberg. Large sample of 100+ central banks.





Monetary Policy Expectations Shift





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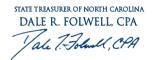




Soft Landing? Or No Landing?

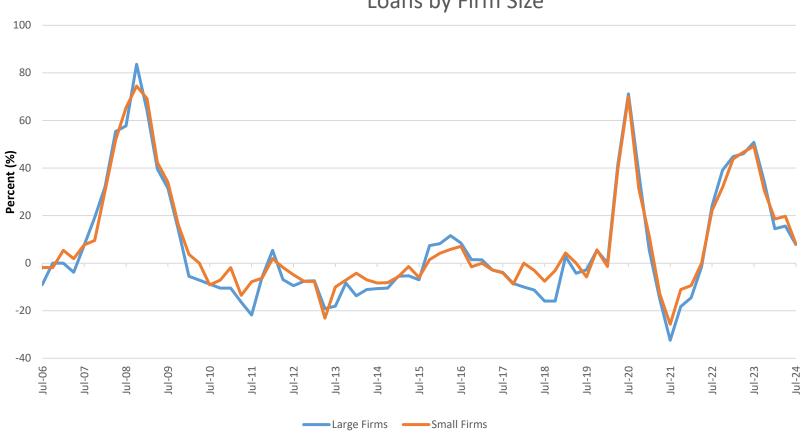
Atlanta Fed GDPNow GDP Forecast Cleveland Fed 10 Year Inflation Expectation





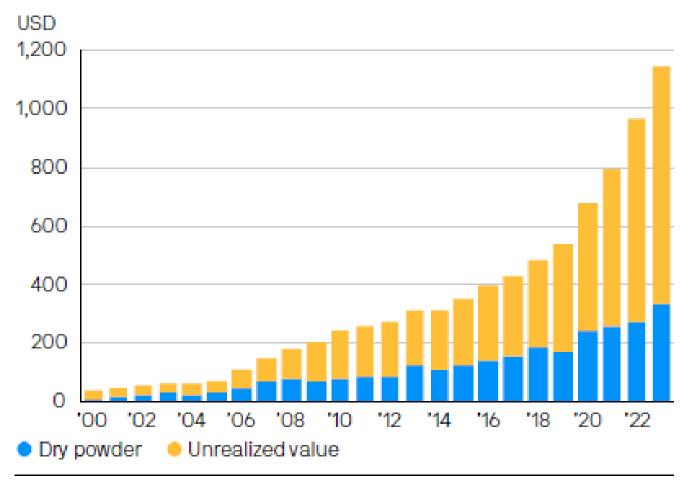
Bank Lending Has Improved Meaningfully

Net Percentage of Banks Tightening Standards for Commercial & Industrial Loans by Firm Size

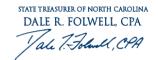




Growth of Private Credit

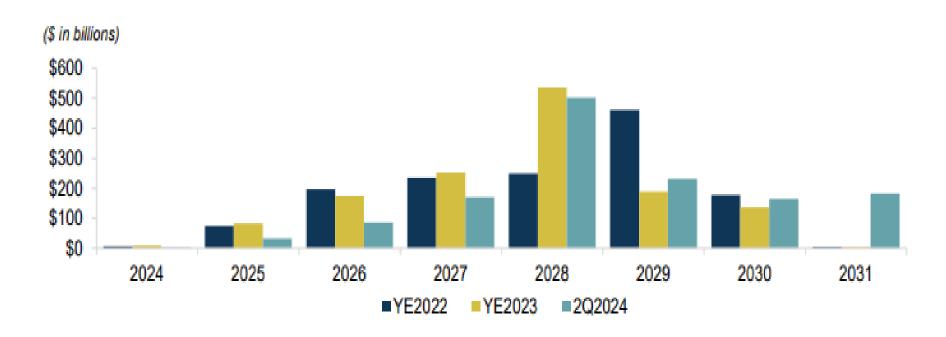


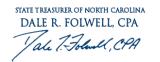
Source: Preqin, J.P. Morgan Asset Management; data as of December 31, 2023.



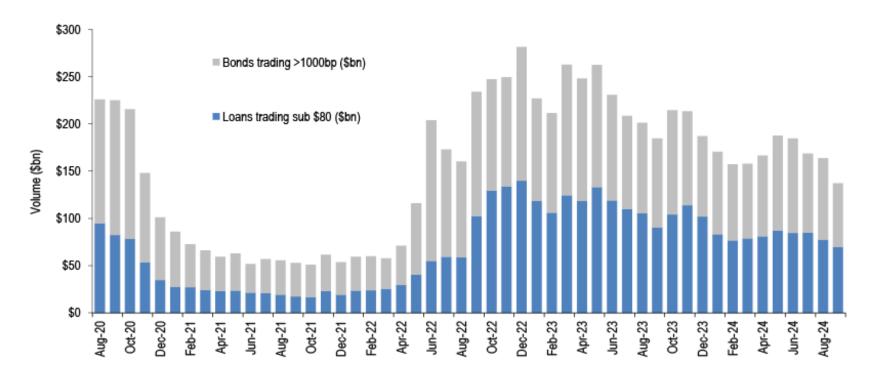
Debt Maturity Wall Not a Problem

Maturities of U.S. Senior Loans Snapshots



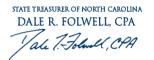


Dwindling Supply of Distressed Opportunities



Source: J.P. Morgan; S&P/IHSMarkit

Note: Data as of 9/30/2024



Leveraged Loan Issuers Welcome Rate Cuts

FIGURE 8. For leveraged loan issuers, coupon is expected to drop while interest coverage should increase...

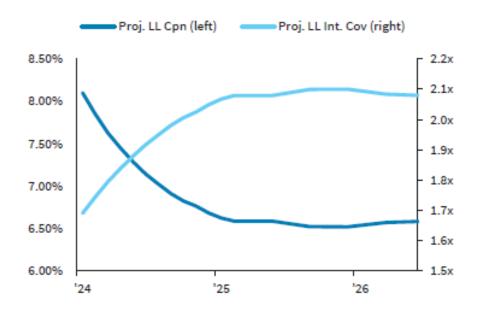
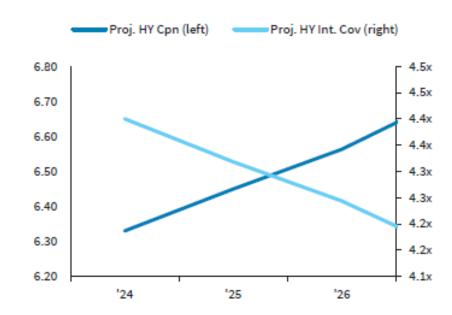


FIGURE 9. ...but for high yield issuers, coupon is expected to increase and interest coverage to continue to fall



Source: Bloomberg, Bixby Analytics, Barclays Research

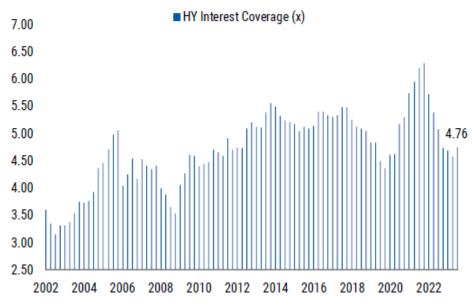
Source: Bloomberg, S&P Capital IQ, Barclays Research





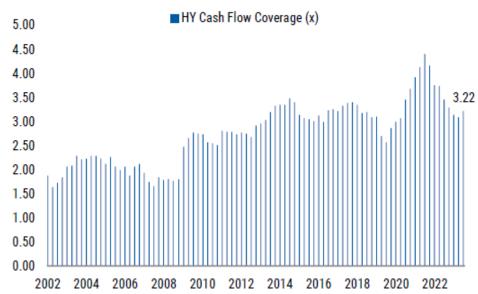
High Yield Coverage Ratios Troughed

Interest coverage inflected higher

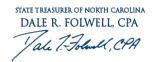


Interest Coverage Ratio (x) = EBIT / Interest Expense

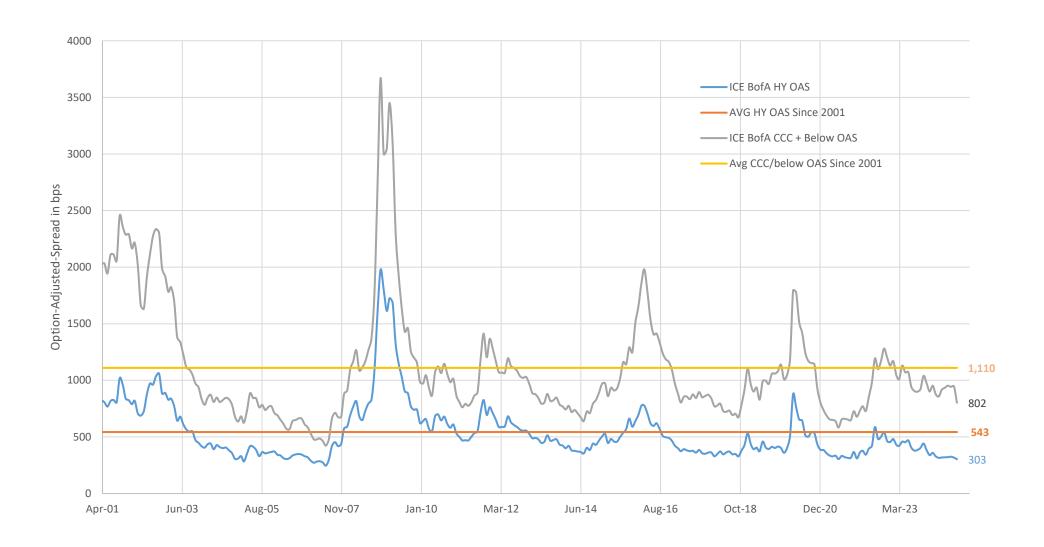
Cash flow coverage improved

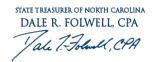


Cash Flow Coverage Ratio (x) = Operating Cash Flow / Total Debt

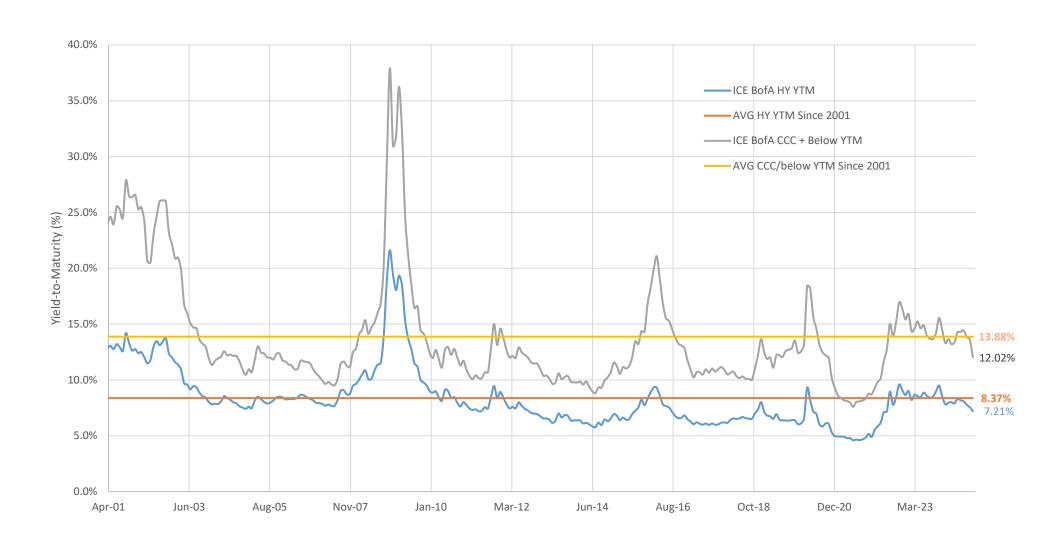


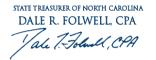
High Yield Spreads Narrowed Toward Historical Lows





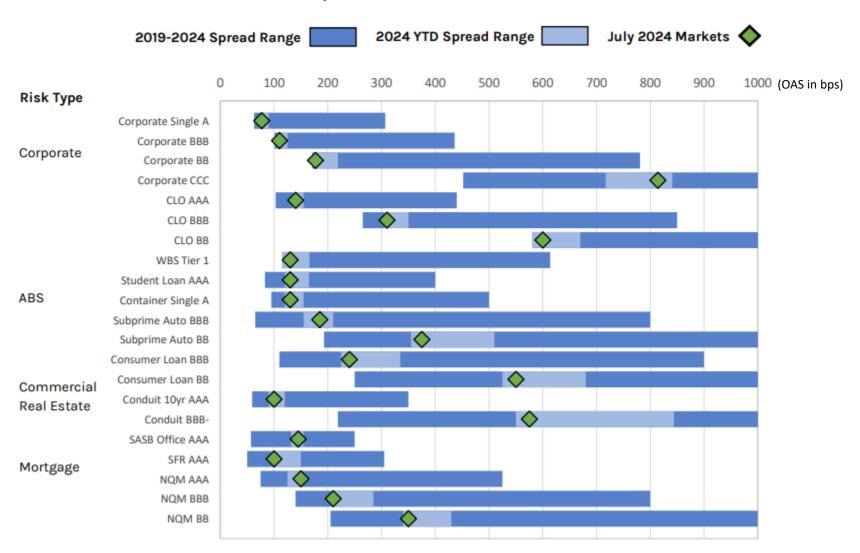
High Yield YTM Yields Fell Below Historical Average



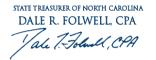


Credit Spreads Near Recent Lows

Credit Spreads Across Markets 2019 - 2024 YTD

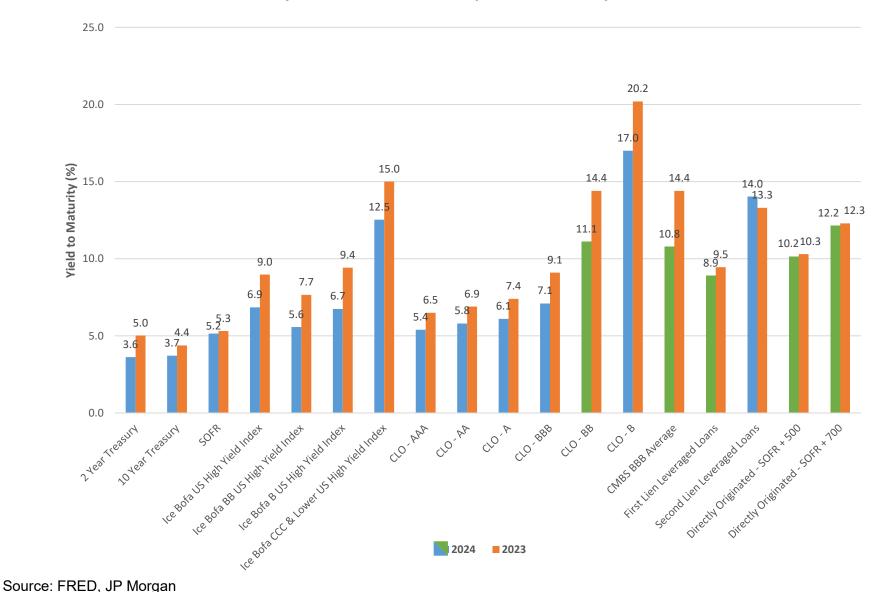




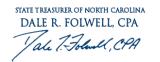


Lower Yield to Maturity Across the Credit Spectrum

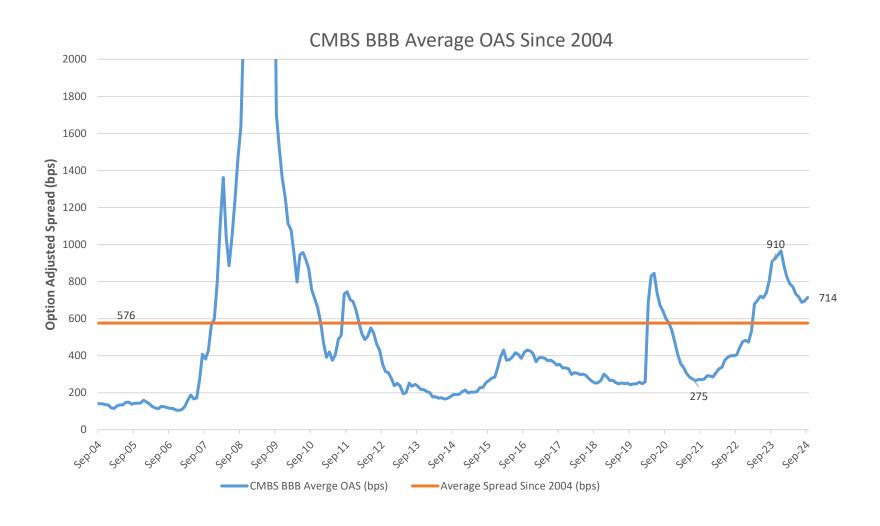
Yield to Maturity across the Credit Risk Spectrum as of September 30, 2024 vs 2023



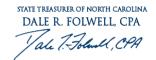




CMBS Spreads Remain Elevated

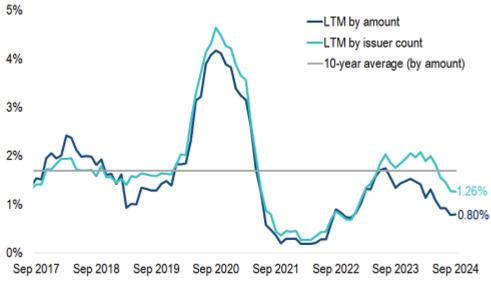






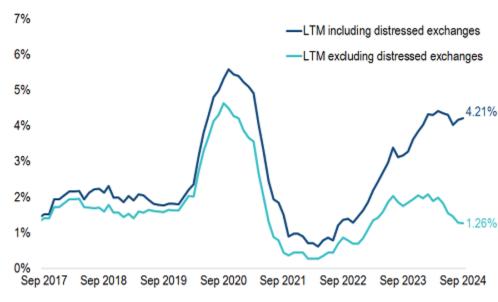
Low Loan Default Rates May Be Deceiving

US leveraged loan default rate



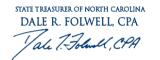
Sources: PitchBook | LCD; Morningstar LSTA US Leveraged Loan Index • Data through Sept. 30, 2024

Dual-track US loan default rate: issuer count

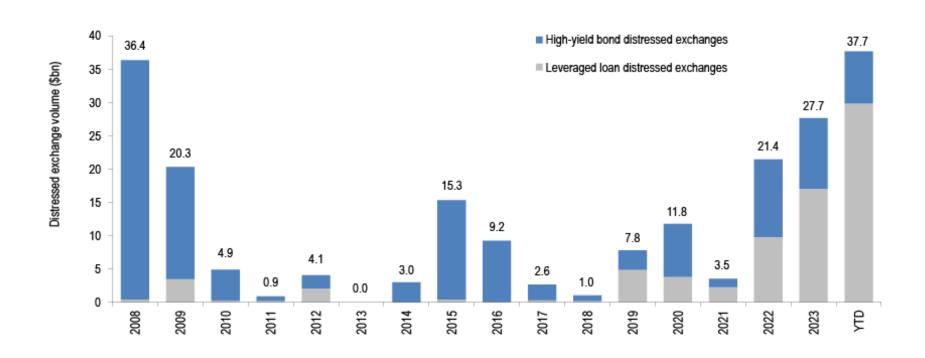


Sources: PitchBook | LCD; Morningstar LSTA US Leveraged Loan Index • Data through Sept. 30, 2024





Distressed Exchange Volume Increasing



Source: J.P. Morgan; PitchBook Data, Inc; Bloomberg Finance L.P.; S&P/IHSMarkit

Note: Data as of 9/30/2024 28

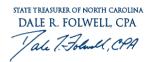




Potential Headwinds

- 1. Global conflicts
- 2. A lack of distressed opportunities with attractive spreads
- 3. Potential for increasing default rates
- 4. Potential for lower recovery rates for defaulting issuers





Potential Tailwinds

- 1. Capital constrained regional banks, traditional lenders, and LPs
- Ability to originate loans with reasonable interest and improved financial covenants
- 3. Strong manager lineup that can pivot as opportunities evolve





Portfolio Priorities

- Cautiously take advantage of elevated yield environment with best-inclass managers
- 2. Maintain meaningful exposure to senior, secured debt
- Continue to focus on SMAs and Special Situations with our coinvestment partners
- 4. Explore additional Real Estate Debt
- Re-visit dislocation mandates





Appendix



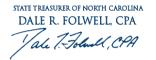


Portfolio Components

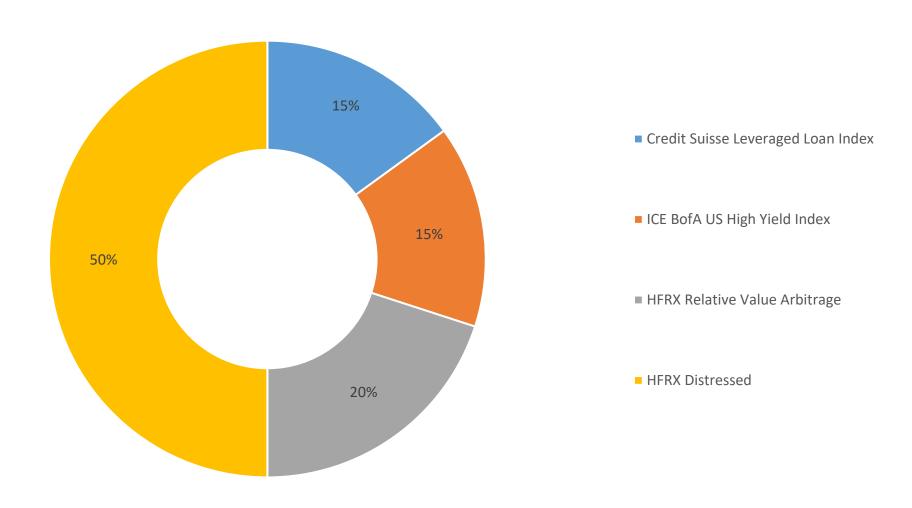
Portfolio Component*	Target*	9/30/24	+/-	Maximum*
Traditional Corporate Credit	15%	24%	+9%	50%
Distressed Credit	25%	11%	-14%	50%
Hedged Fixed Income	45%	40%	-5%	75%
Special Situations	15%	25%	+10%	75%

^{*} Portfolio Components, Targets, and Maximums come from the Investment Policy Statement for North Carolina Retirement Systems; data as of 9/30/2024





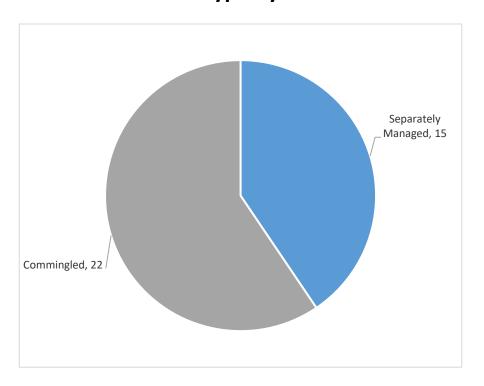
Portfolio Benchmark



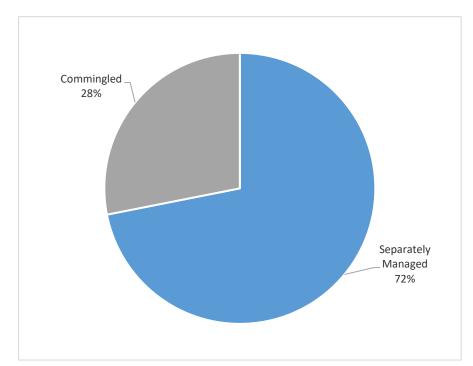


Portfolio Characteristics

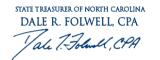
Account Type by Count



Account Type by Market Value

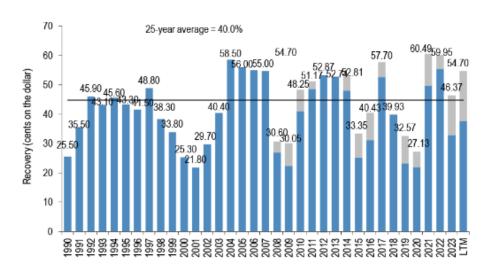






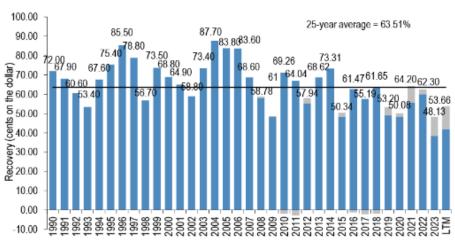
High Yield Bond and Loan Recovery Rates

Bond issuer-weighted recovery rates

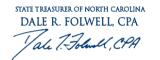


Source: J.P. Morgan; PitchBook Data, Inc.; Bloomberg Finance L.P.; Moody's Investors Service

Loan issuer-weighted recovery rates

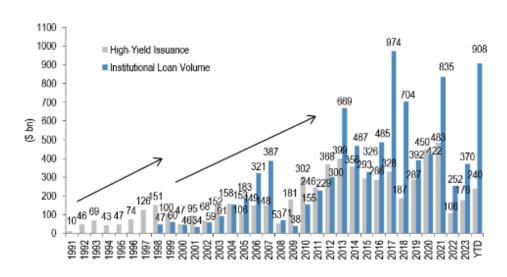


Source: J.P. Morgan; PitchBook Data, Inc.; Bloomberg Finance L.P.; Moody's Investors Service



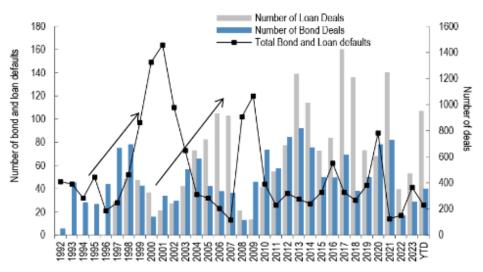
High Yield Bond and Loan Issuance

Ramp up in loan issuance reminiscent of late 90s bond market



Source: J.P. Morgan; PitchBook Data, Inc.

Easy credit availability leads to an increase in defaults



Source: J.P. Morgan; PitchBook Data, Inc.





Notes:

All data presented are based on currently available information at time of publication and may be revised subsequently.

The Opportunistic Fixed Income Benchmark is comprised of 50% HFRX Distressed Securities Index; 20% HFRX Relative Value Index; 15% Credit Suisse Leveraged Loan Index; and 15% ICE BofA US High Yield Index. The ICE BofA US High Yield Index is owned by ICE Data Indices, LLC, and is used with permission. The HFRX Distressed Securities Index and HFRX Relative Value Index are owned by Hedge Fund Research Inc. and are used with permission. The Credit Suisse Leveraged Loan Index is owned by Credit Suisse and is used with permission. See disclaimer on slide 39.

The Opportunistic Fixed Income asset class (N.C.G.S. § 147-69.2(b)(6c)) was created by the General Assembly in June 2009. It included some investments that were previously authorized under other provisions of G.S. § 147-69.2.

Abbreviations:

ABS: Asset-Backed Securities – securities backed by financial assets other than mortgages, such as credit card receivables or auto loans.

CLO: Collateralized Loan Obligation – a structured financial product that pools together loans and sells tranches to investors.

CMBS: Commercial Mortgage-Backed Securities – a type of mortgage-backed security backed by commercial mortgages.

Debt/EV: Debt-to-Enterprise Value – a ratio used in financial analysis to assess the proportion of a company's debt relative to its enterprise value.

FRED: Federal Research Economic Data as published by the Federal Reserve Bank of St. Louis.

HY: High Yield – refers to bonds that offer higher interest rates due to lower credit ratings, often labeled as "junk bonds."

LP: Limited Partner – an investor in a partnership, usually with limited liability, often found in private equity or venture capital funds.

NQM: Non-Qualified Mortgage – a type of mortgage that doesn't meet the "qualified mortgage" requirements, often made to borrowers who fall outside traditional credit standards.

OAS: Option-Adjusted Spread – the measurement of the spread of a fixed-income security rate and the risk-free rate of return, adjusted for embedded options.

RMBS: Residential Mortgage-Backed Securities – similar to CMBS but backed by residential mortgages.

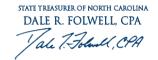
SASB: Single Asset Single Borrower – a type of CMBS that is backed by a single asset or a single borrower, often used for large commercial real estate deals.

SFR: Single-Family Rental – refers to residential properties that are rented out as single-family homes, often securitized as a type of asset-backed security.

WBS Tier 1: Wholesale Banking Services Tier 1 – refers to the highest level or category of wholesale banking services offered, often for premium clients or for institutions with substantial assets under management or transaction volume requirements.

YTM: Yield-to-Maturity – the total return anticipated on a bond if it is held until it matures, reflecting interest payments and the bond's face value.





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