

Peer Analysis and Balance Sheet Strategies Update



November 14, 2024

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Presenters



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Overview

- Markets & Economy Update
- Peer Analysis & Call Report Trends
- Balance Sheet Strategies

Poll Question

Where will the Fed Funds range be at the end of December **2025**?

A: **Hard Landing**: Upper limit at 2.00% or lower

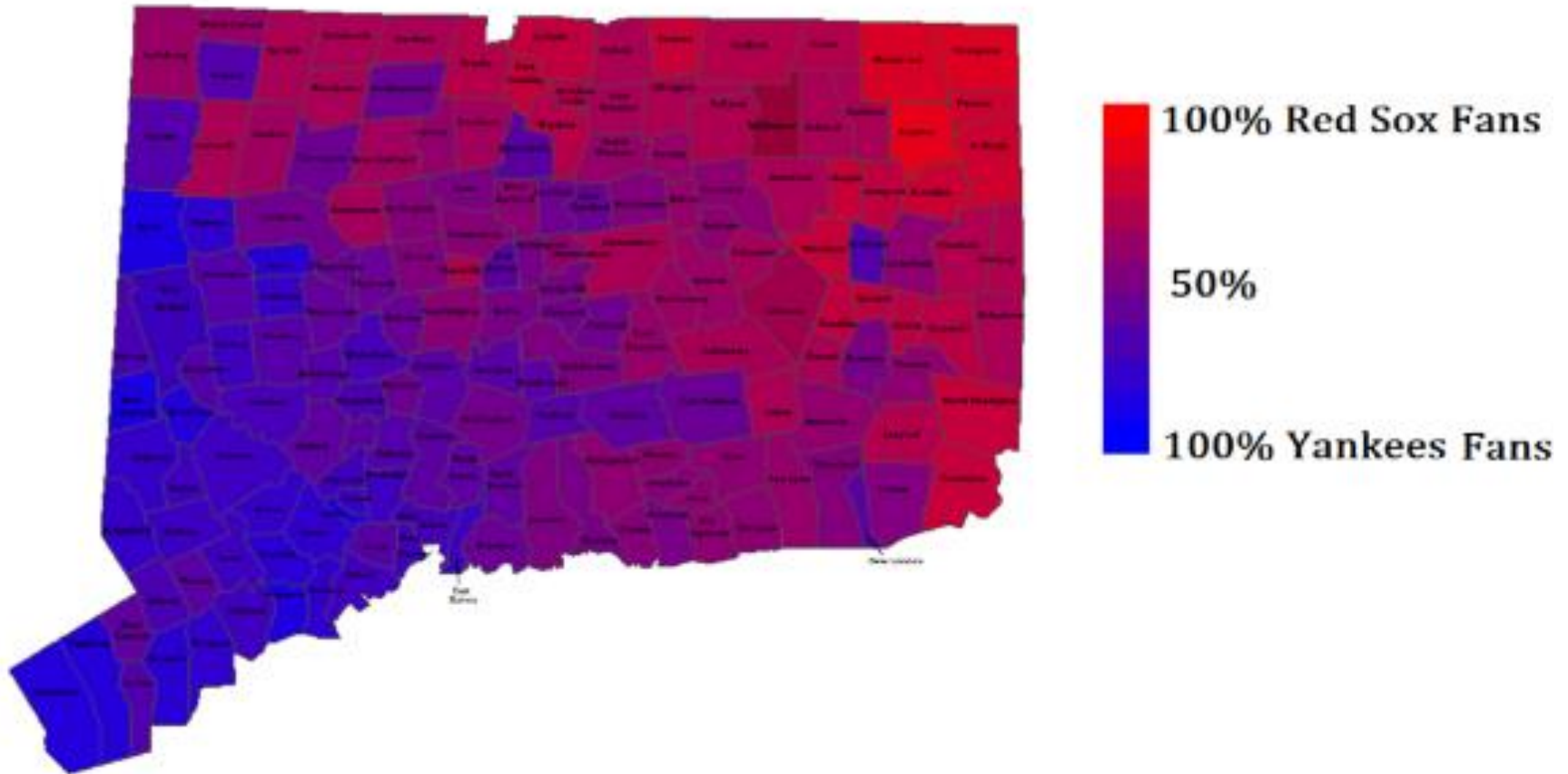
B: **Medium Landing**: Upper limit at 2.25-3.00%

C: **Soft Landing**: Upper limit at 3.25-4.00%

D: **Higher for Longer**: Upper limit at 4.25% or higher

Where is the Munson-Nixon Line?

South and west of Torrington, Hartford and Middletown, the reaction to the outcome of the World Series was different if you went north and east.



Source: Harvard Sports Analysis Collective, FHLBank Boston

Markets & Economy Update



Markets & Economy Update

- The Fed
- Labor Markets
- The Yield Curve
- Equity Markets

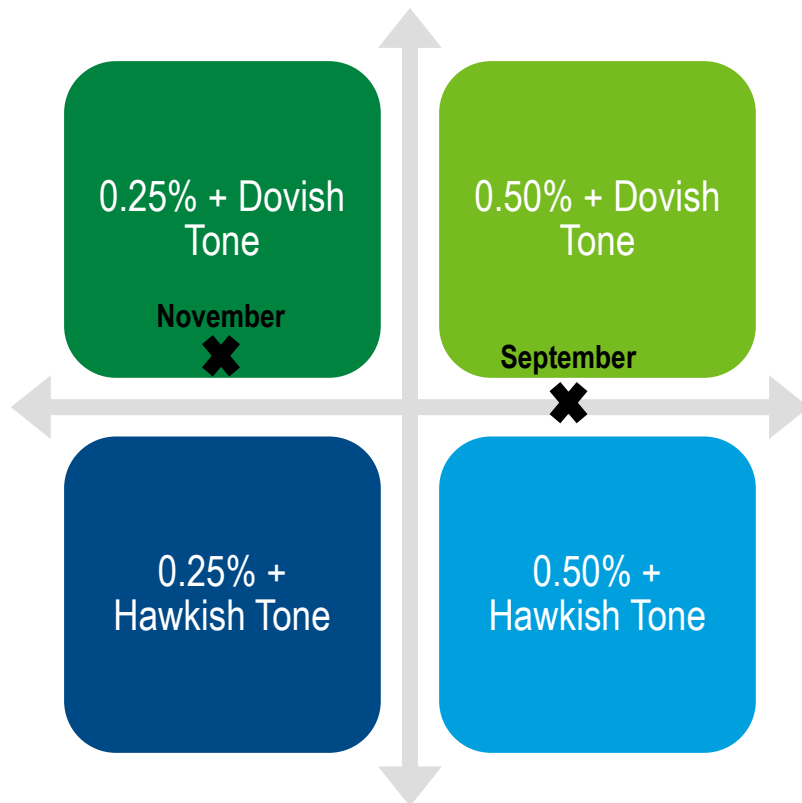
The Fed's Dual Mandate

Commentary struck a balance between noting the economy's risks and its continued strength.

Commentary from the November Fed meeting

Hawkish comments **Dovish comments**

Changes from September



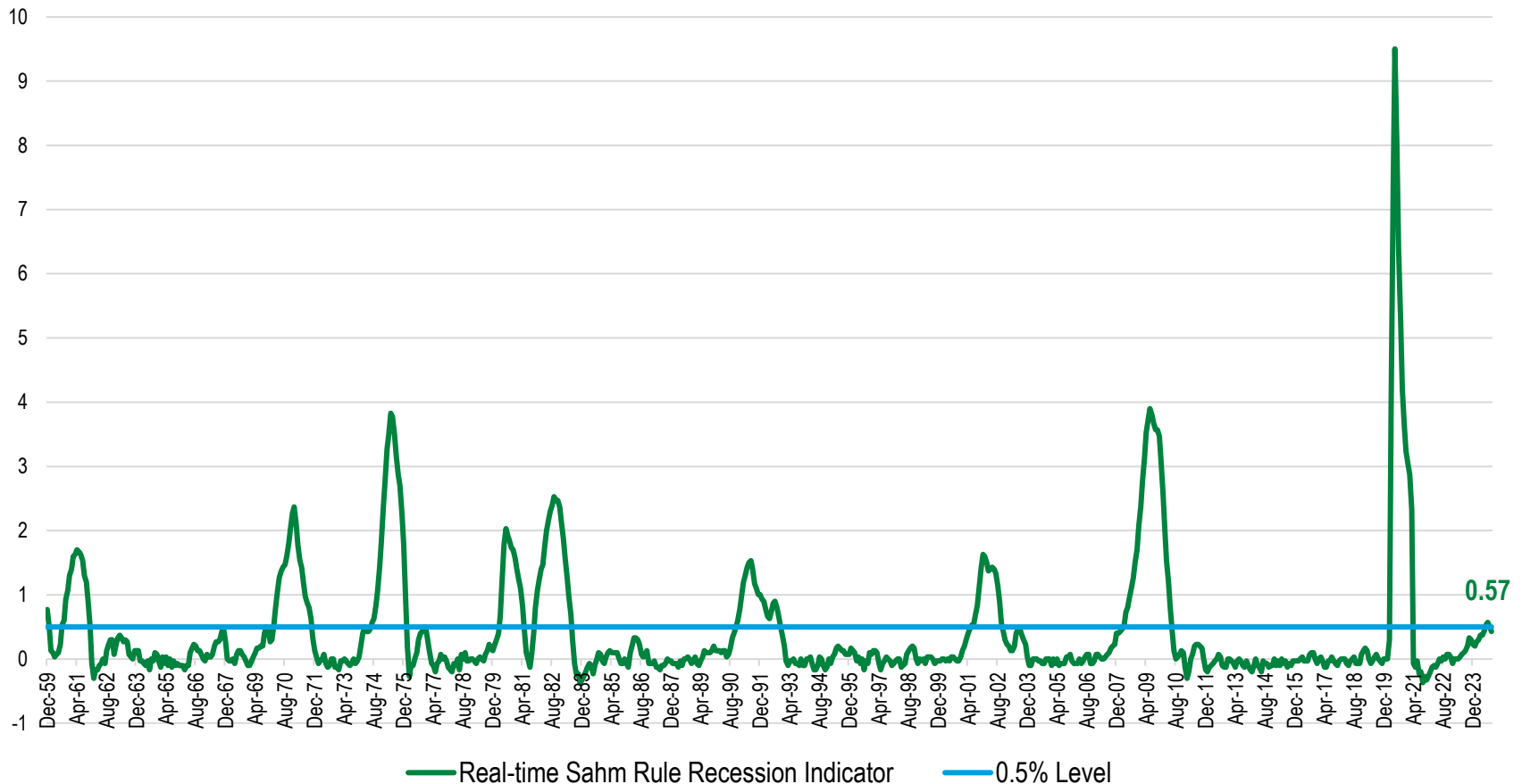
- **Economy is strong.**
- Labor market has cooled from its formerly overheated state **and remains solid.**
- The unemployment rate is notably higher than it was a year ago but **has edged down and remains low.**
- Inflation remains **somewhat** elevated
- Expecting 2% GDP growth over the next couple of years.
- Investment in equipment and intangibles **has strengthened.**
- Activity in the housing sector has been weak.
- The labor market is not a source of **significant** inflationary pressures.
- Longer-term inflation expectations appear to remain well anchored.
- **We see the risks to achieving our employment and inflation as being roughly in balance, and we are attentive to the risks to both sides of our mandate.**

Source: Federal Reserve, FHLBank Boston

Monitoring the Labor Markets

Historically, the data shows that when the three-month moving average of unemployment rises by 0.50% relative to the minimum three-month average from the previous 12 months, that is a signal that a recession has started.

Sahm Rule

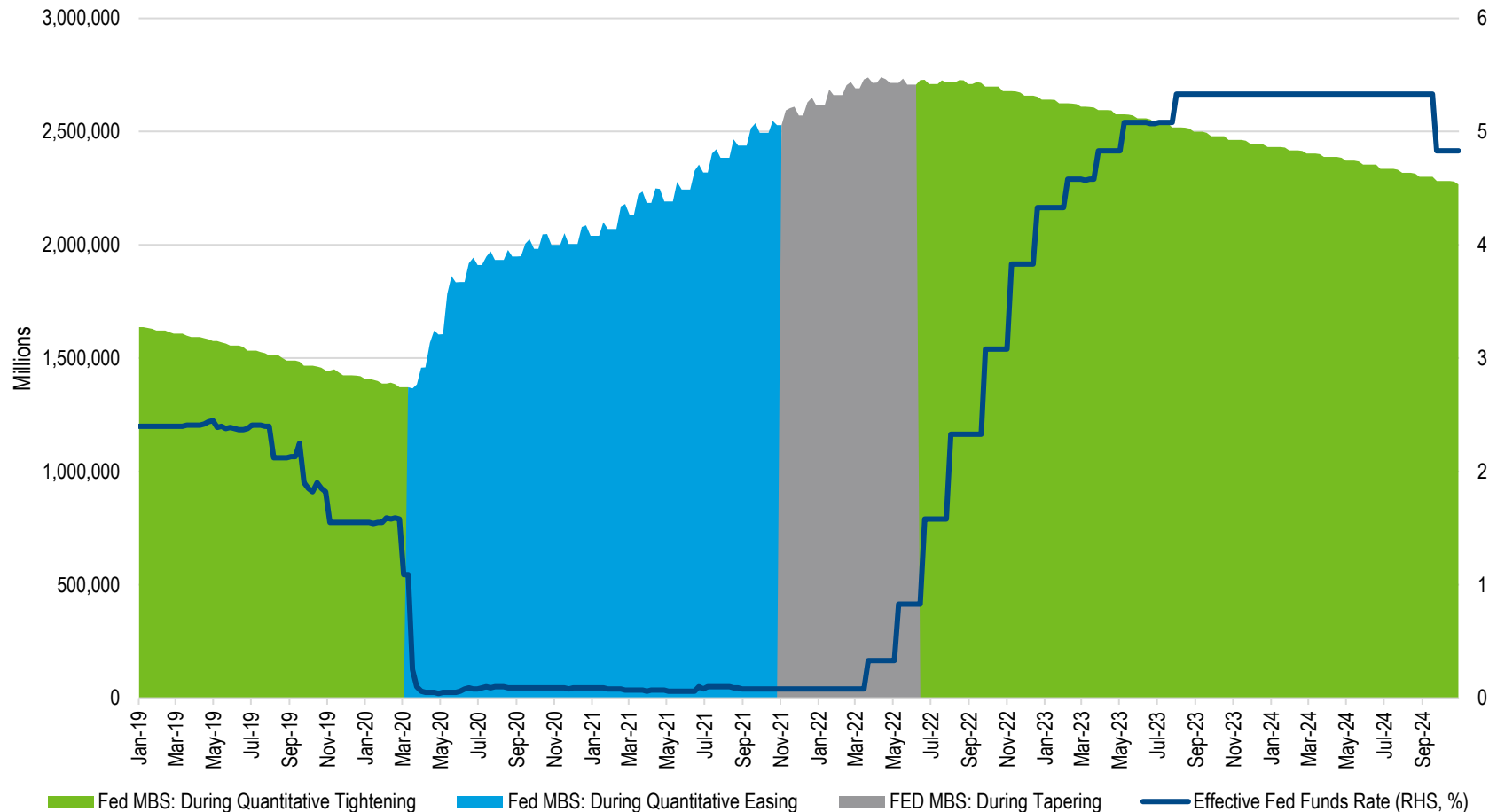


Source: Sahm, Claudia, Real-time Sahm Rule Recession Indicator [SAHMREALTIME], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/SAHMREALTIME>, November 13, 2024

Lingering Effects of Quantitative Easing

Rate cuts are a pivot to monetary easing, while the Fed's \$2 trillion retained bond portfolio slowly running off tightens conditions.

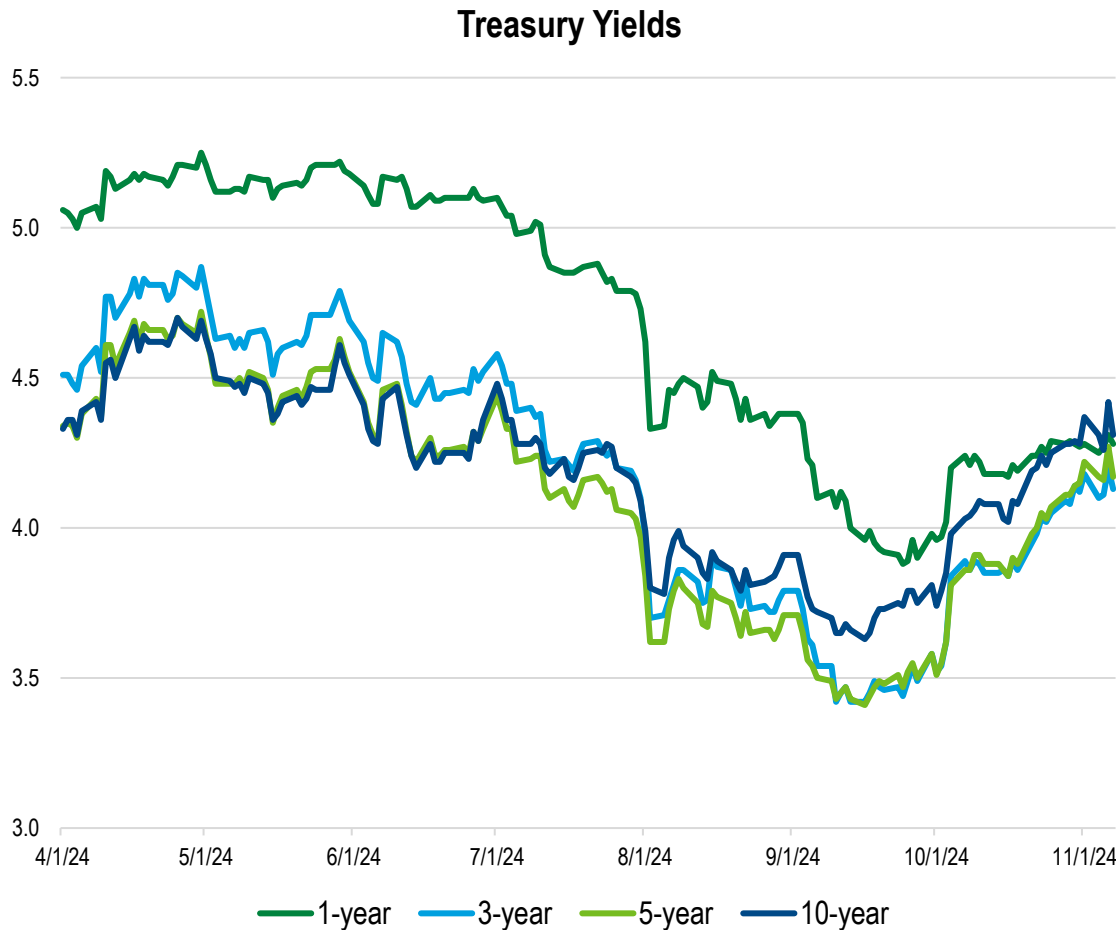
MBS Held by the Fed & the Fed Funds Rate



Source: Federal Reserve Bank of St. Louis, FHLBank Boston

Weren't Rates Supposed to be Going Lower?

From May to September, the yield curve rallied aggressively and priced in a very accommodative path for short-term rates. Now that rate cuts have started, intermediate term rates have moved sharply in the other direction.

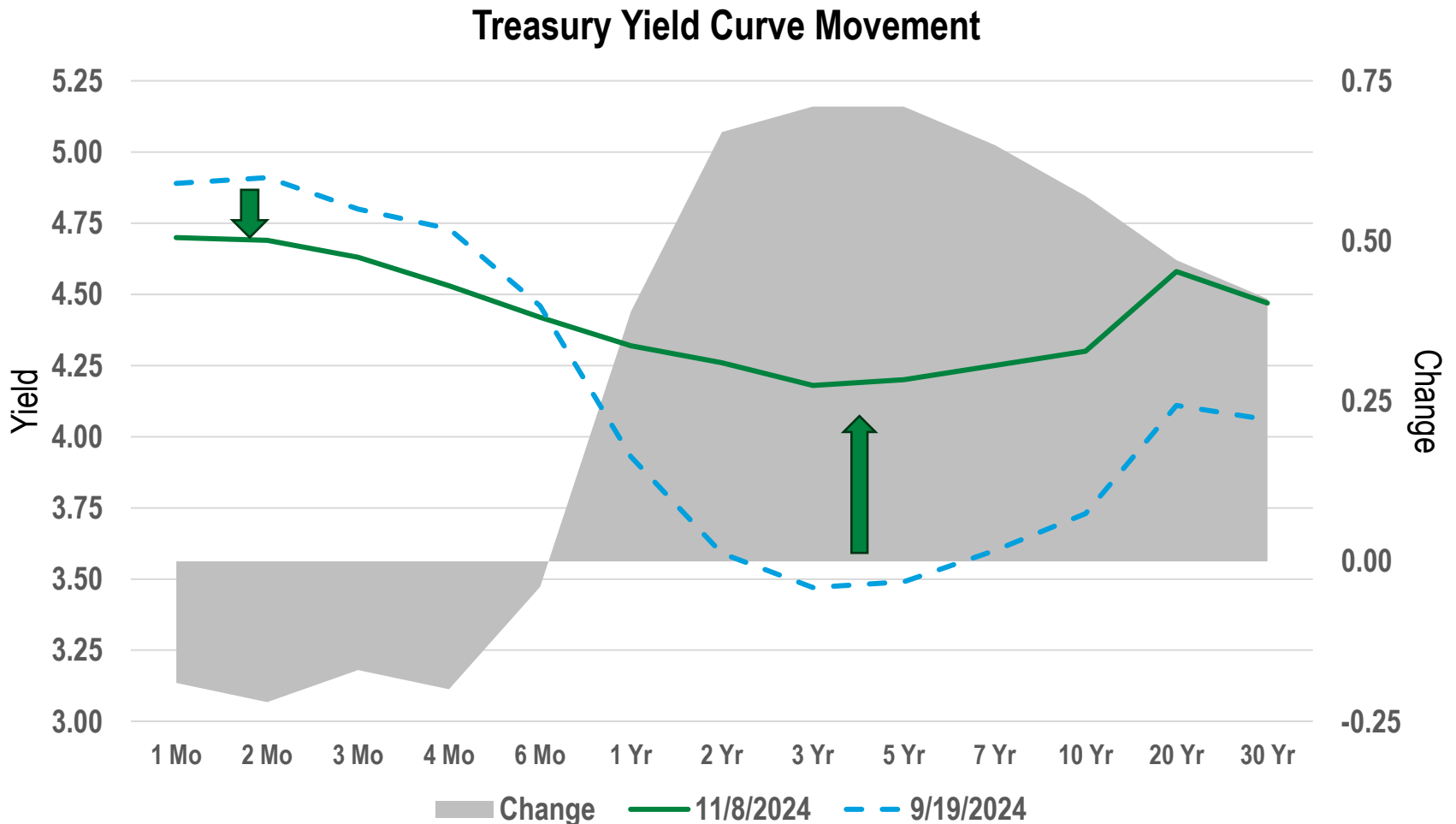


Tenor	Peak to Trough Change in Rates	Change in Rates Since the September Fed Cut
1-year	-137 bps	+33 bps
3-year	-145 bps	+64 bps
5-year	-131 bps	+70 bps
10-year	-107 bps	+61 bps

Source: Federal Reserve Bank of St. Louis, FHLBank Boston

Yield Curve Shifts

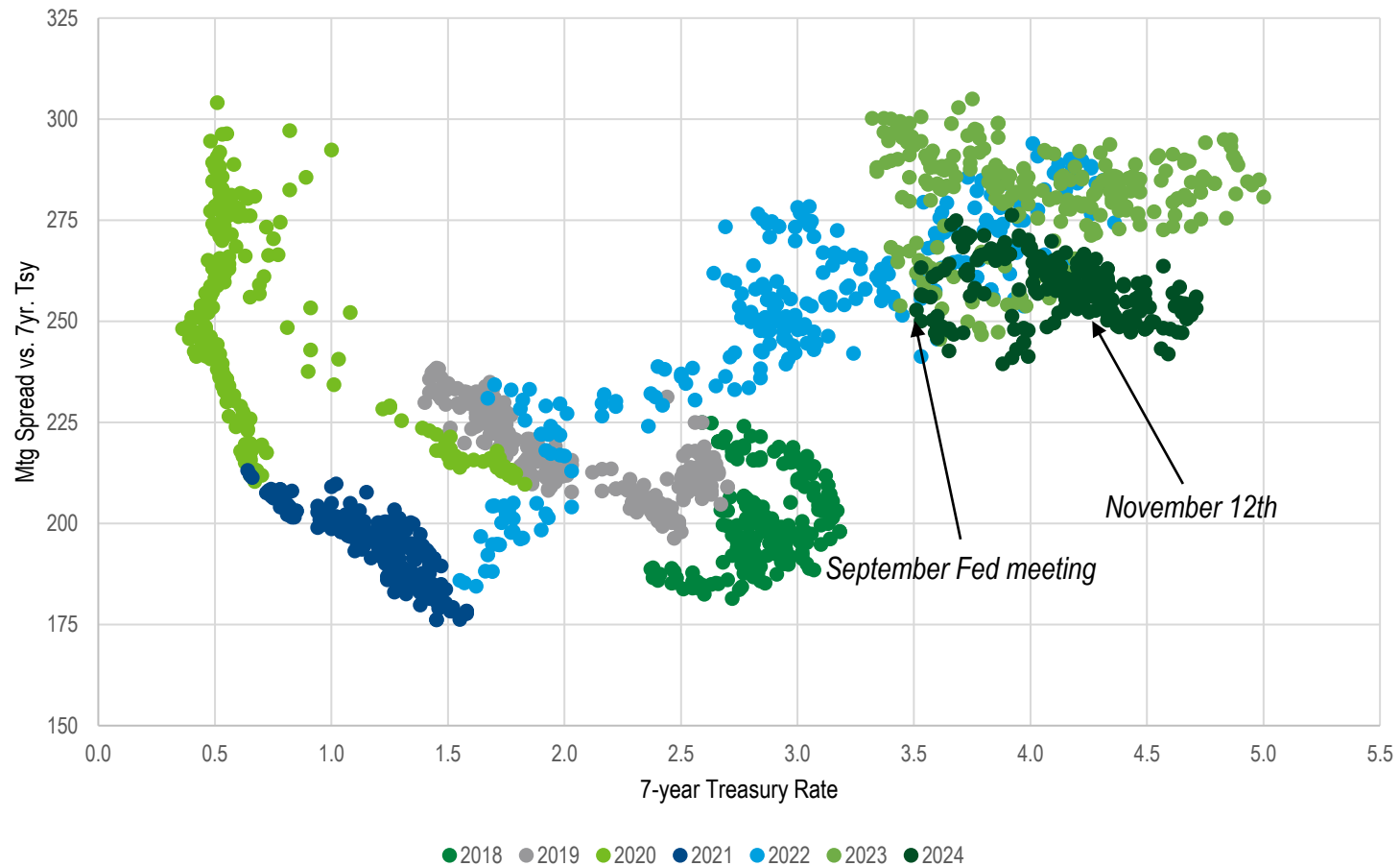
Since the Fed cut short-term rates, the yield curve has bear steepened with long rates moving higher.



Source: Federal Reserve Bank of St. Louis, FHLBank Boston

Mortgage Spreads

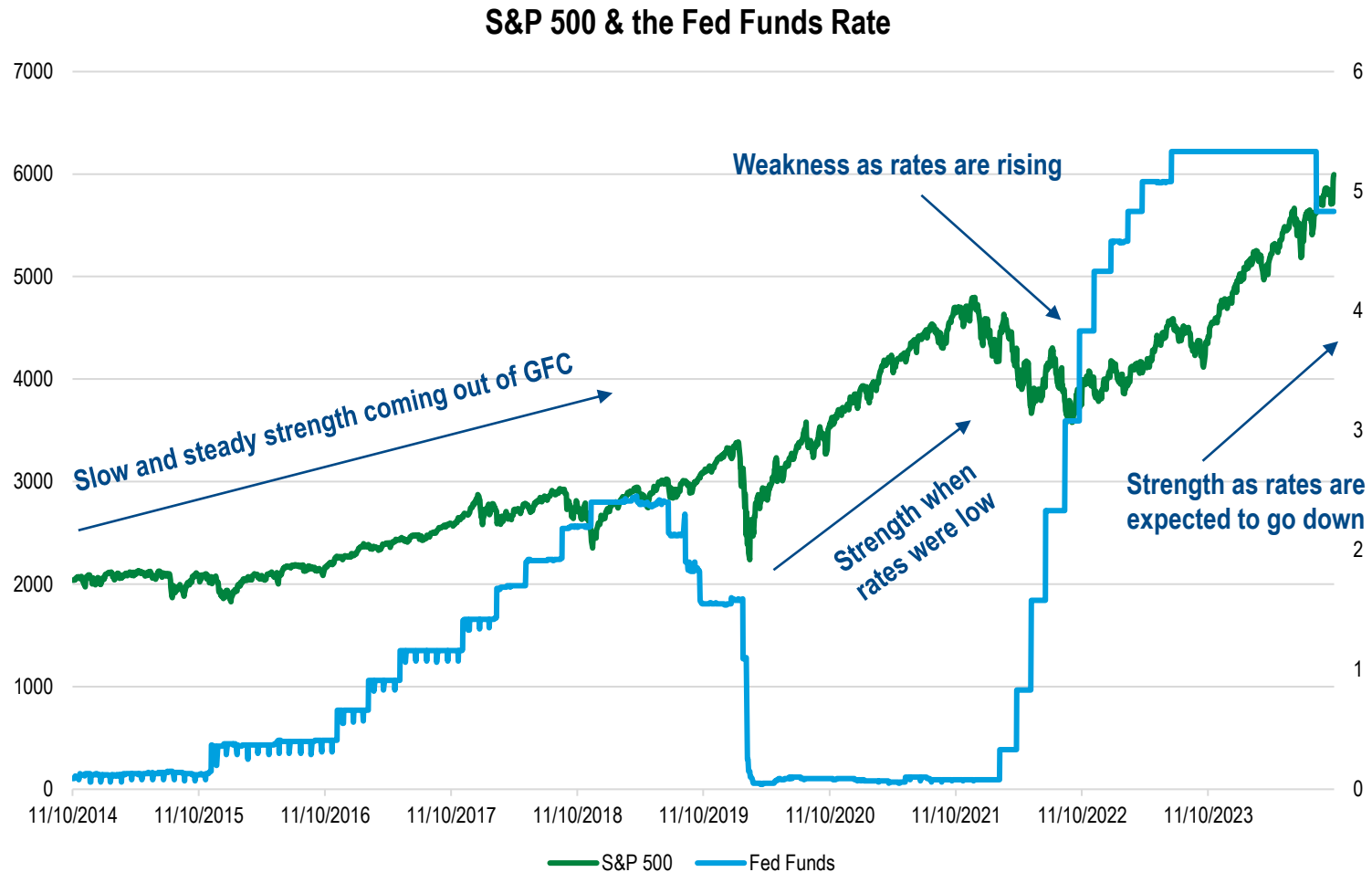
Mortgage spreads continue to tighten from the wide levels of 2023, as intermediate rates remain relatively high.



Source: Optimal Blue, Federal Reserve Bank of St. Louis, FHLBank Boston

Broader Equity Markets

What is the relationship between the level/direction/magnitude of change in interest rates, and the stock market?

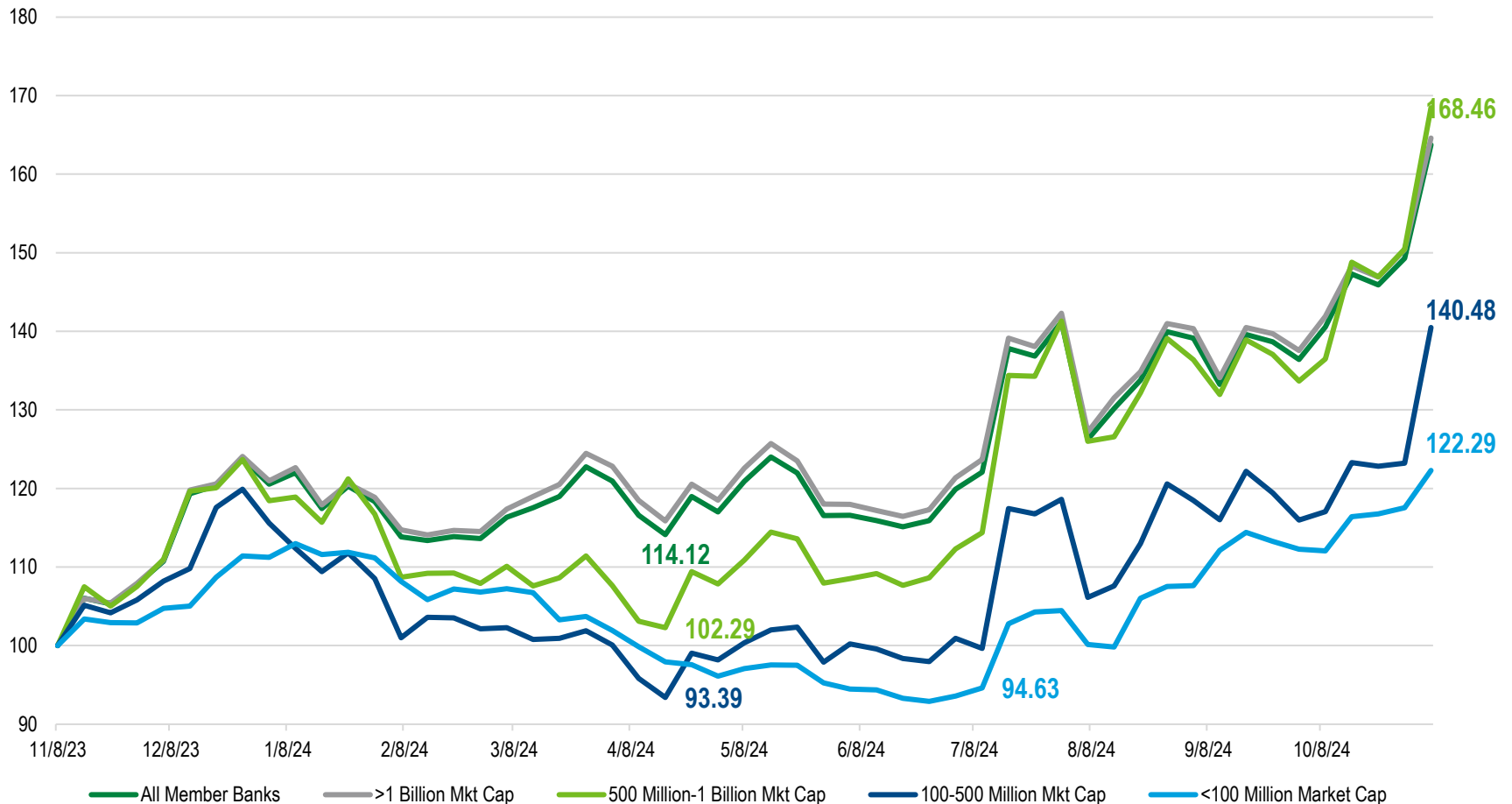


Source: Federal Reserve Bank of St. Louis, FHLBank Boston

Banking Industry Stock Performance

Bank stocks have shown considerable strength as rate cuts approached and the yield curve steepened.

Member Bank Stock Performance (Indexed to 100 at 11/8/23)



Peer Analysis & Call Report Trends

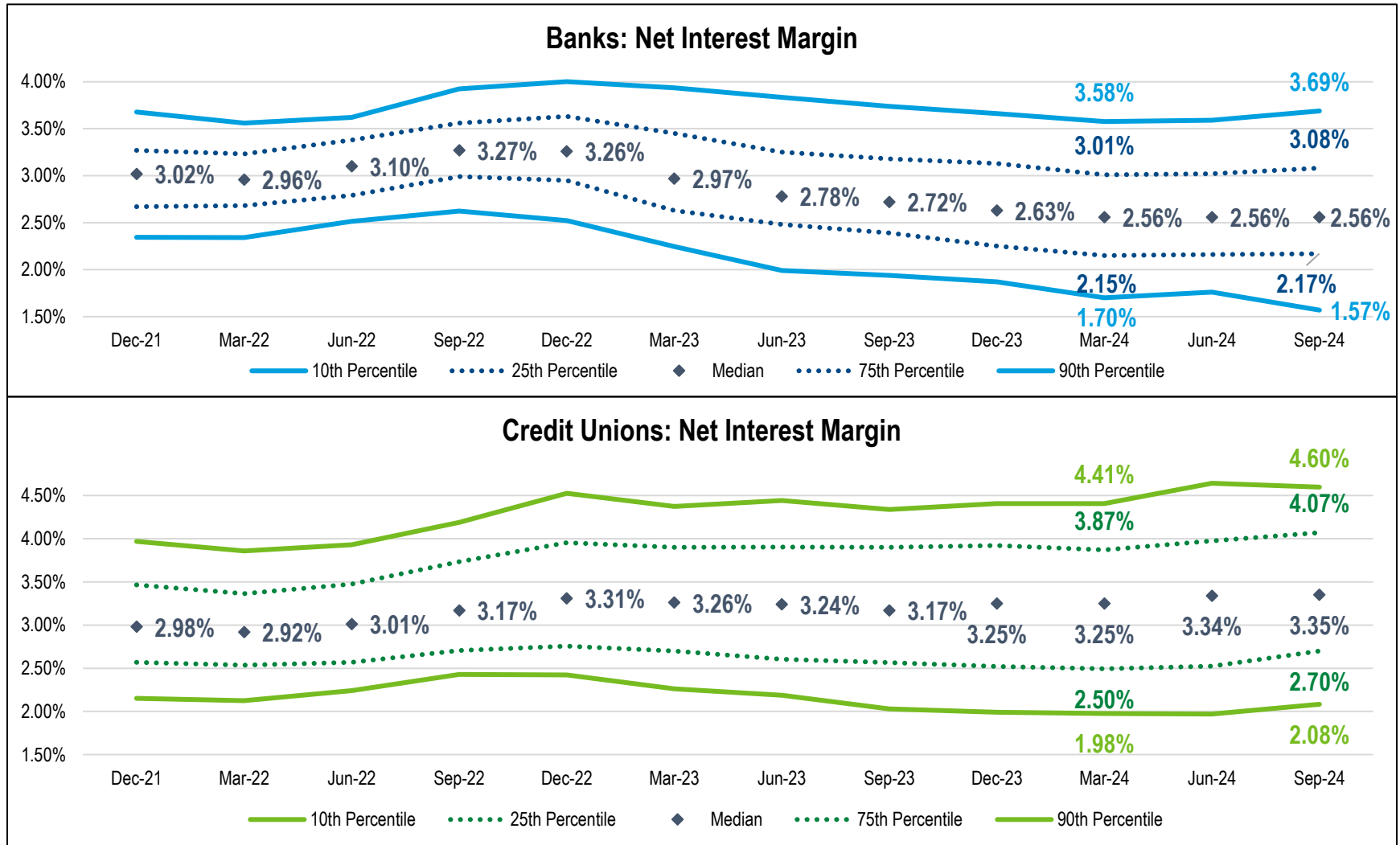


Peer Analysis & Call Report Trends

- Margin
- Deposit Composition
- Interest-Rate Risk
- Credit Trends
- Investments
- Growth, Earnings & Capital

Is Net Interest Margin Recovering?

The margin tailwinds are more prevalent for credit unions, whereas for banks it's been more narrowly focused.

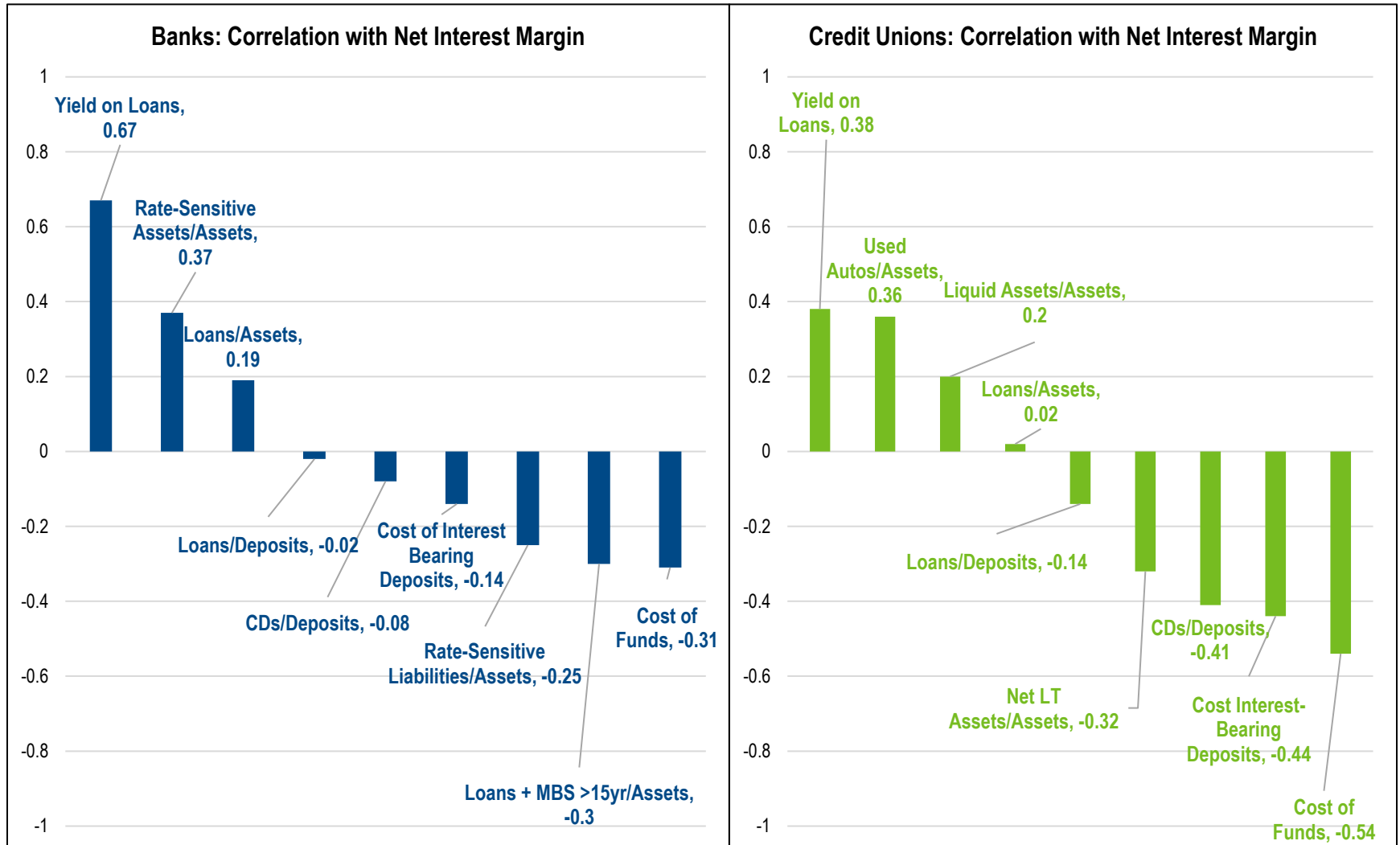


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Source: S&P Global, FHLBank Boston

What's Driving Margin?

Credit union liability composition has a stronger relationship with NIM than asset structure. For banks, it's the opposite.



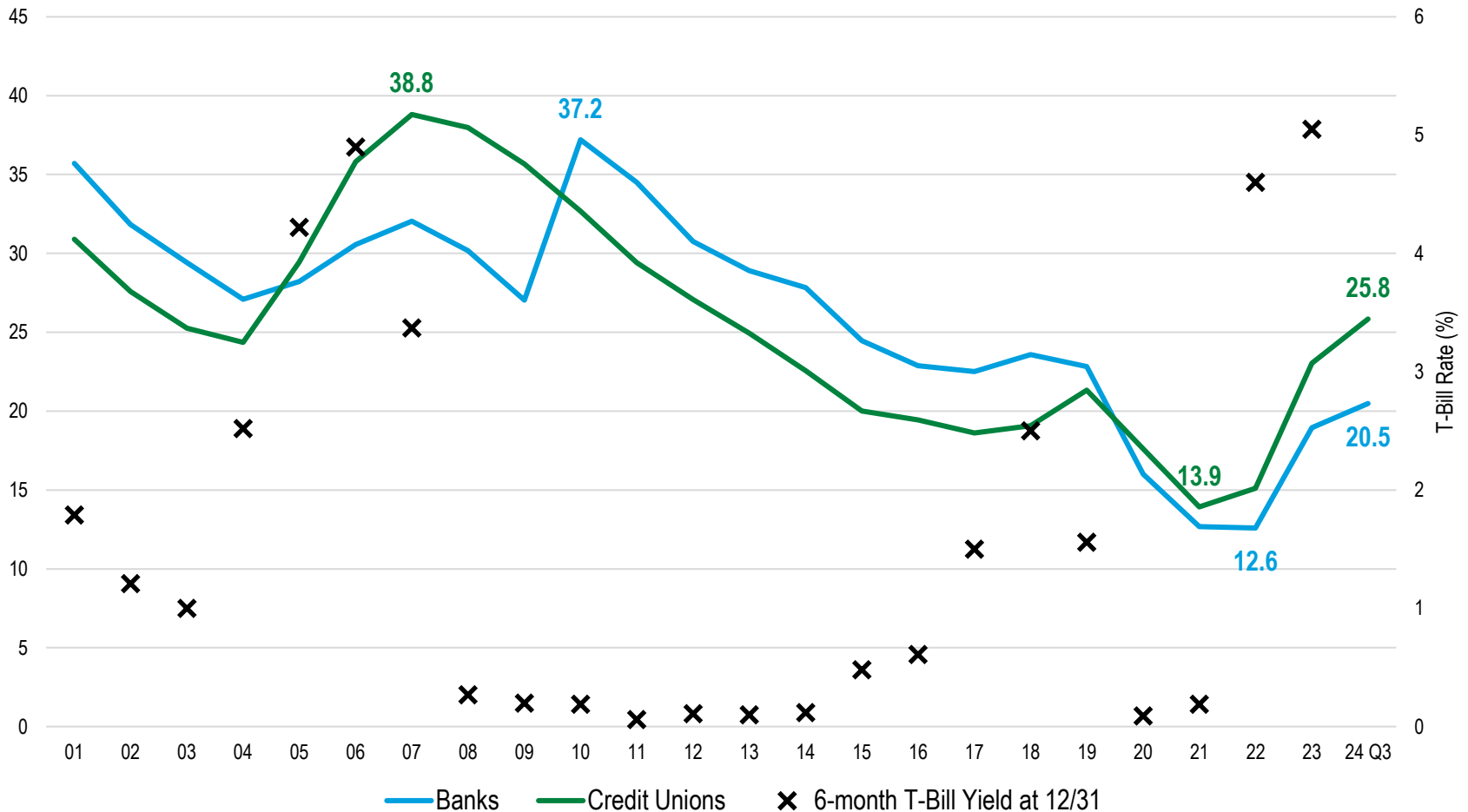
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Source: S&P Global, FHLBank Boston

Secular Shift in Deposit Composition

High rates over the last two years has stemmed some of the multi-decade drift away from term deposits.

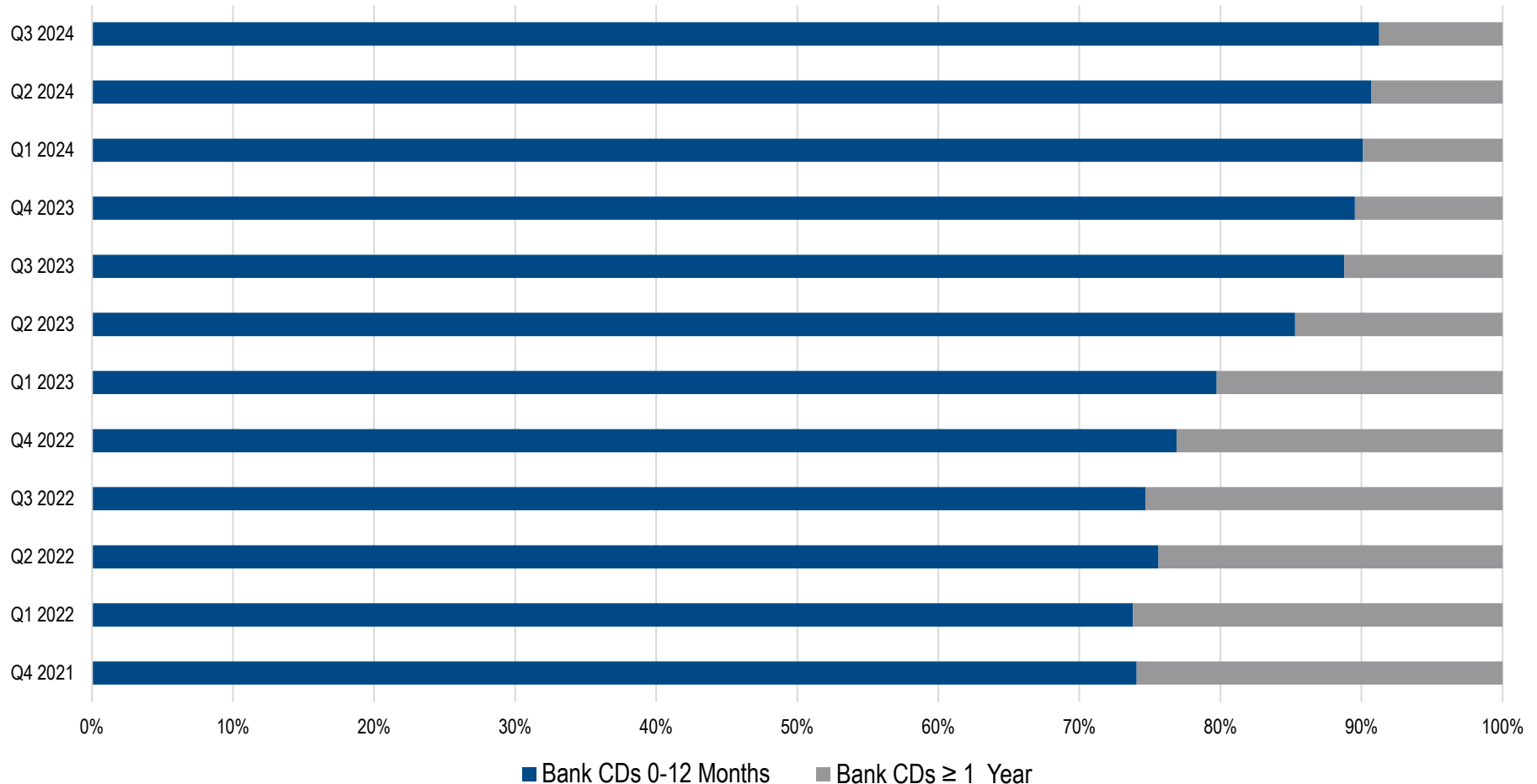
CDs to Total Deposits (%) & 6-month T-Bill Rate



Banks: Certificates of Deposit Maturity Profile

Maturities have shortened over the last two years, with the amount inside of one year going from 75% to over 90%.

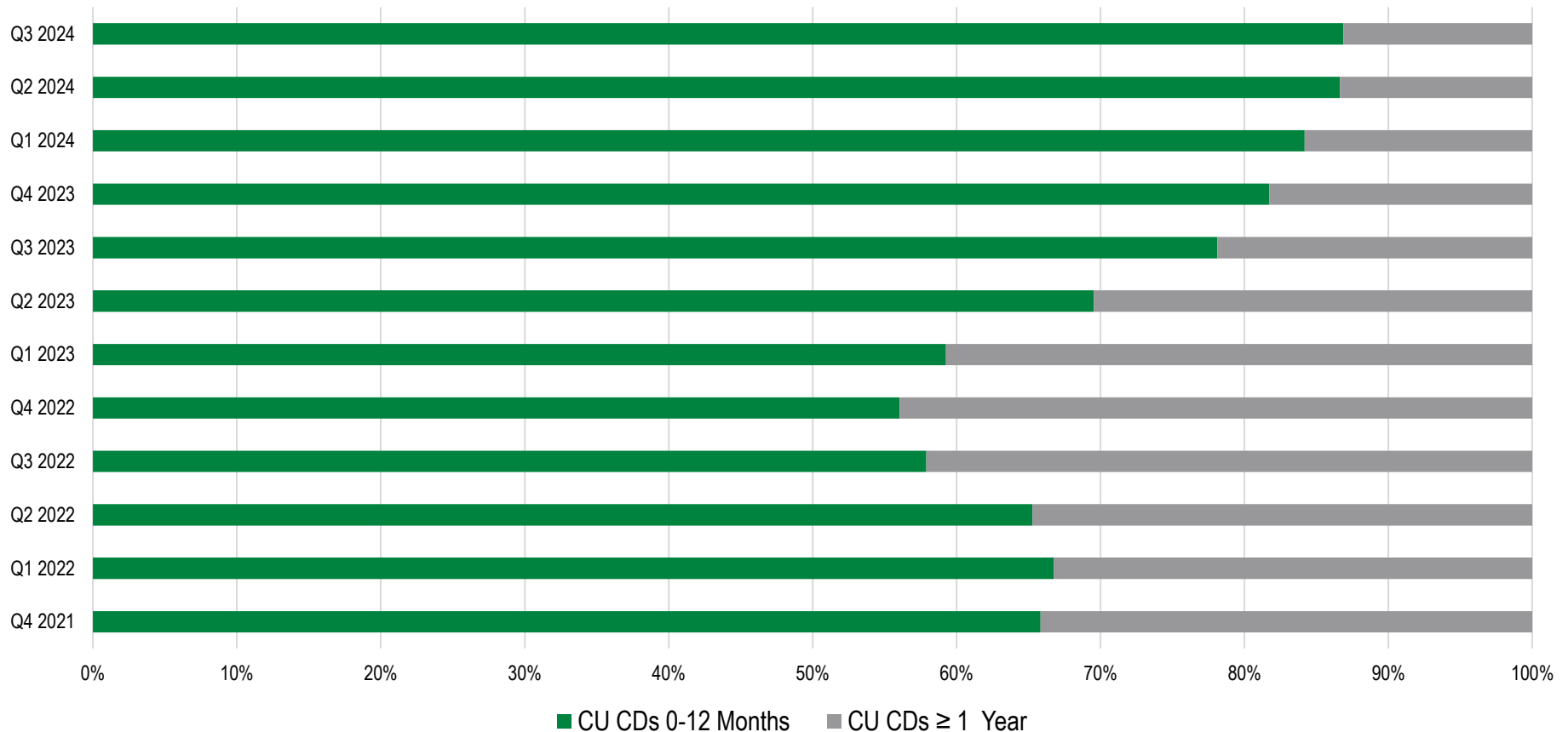
Banks: CD Maturity Distribution



Credit Unions: Certificates of Deposit Maturity Profile

The CD book briefly lengthened in 2022 as rates were rising but has pivoted to a shortening much like banks have seen.

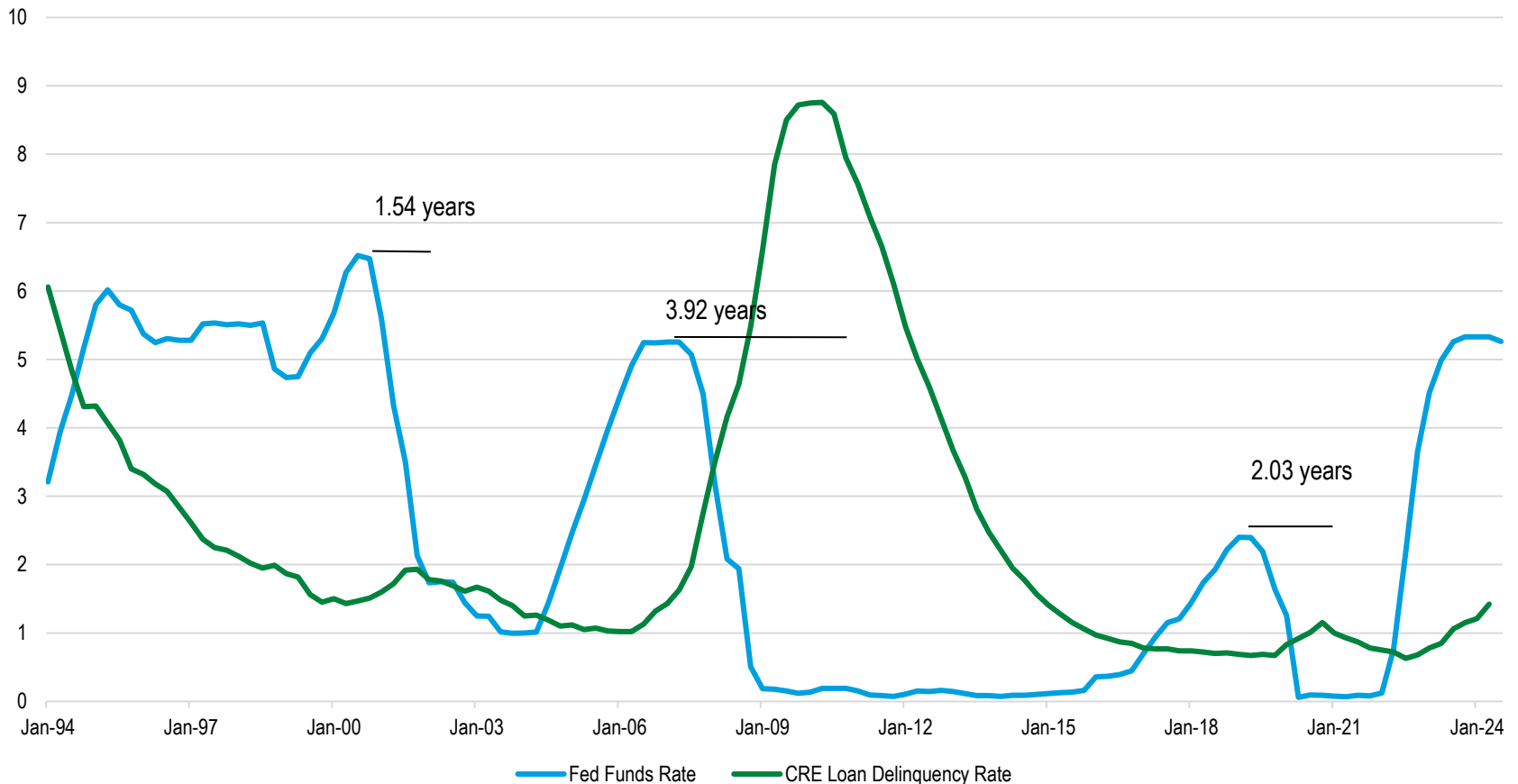
Credit Unions: CD Maturity Distribution



Peak Delinquencies and Peak Rates

The lag between peak rates and peak delinquencies over the last three cycles has ranged from one and a half to four years. If this cycle follows trend, commercial loans delinquencies could continue rising and peak in 2025 or 2026.

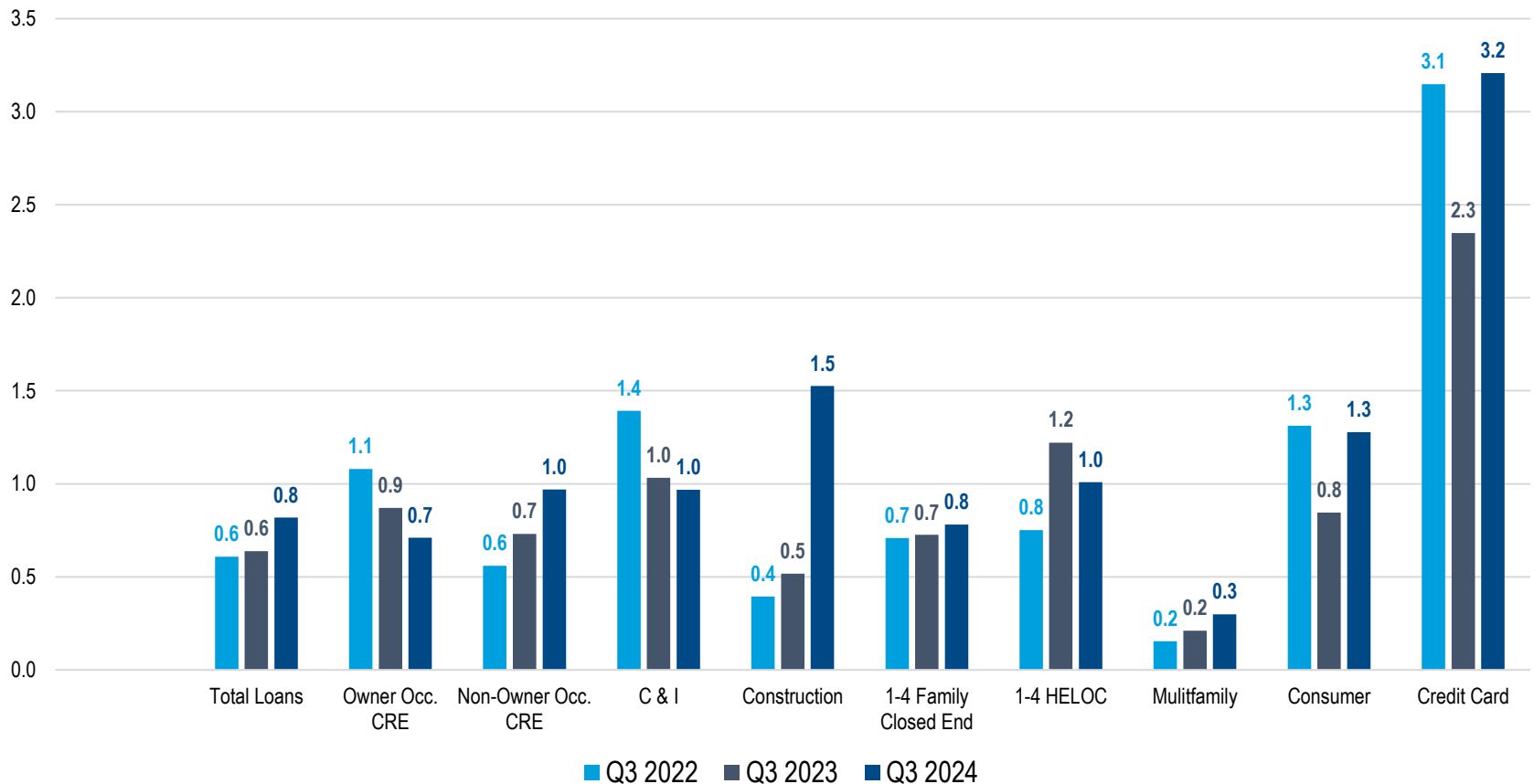
CRE Loan Delinquencies and the Fed Funds Rate



Banks: Credit Performance

Non-owner occupied commercial real estate, consumer and construction loans have seen the biggest ticks up in stress.

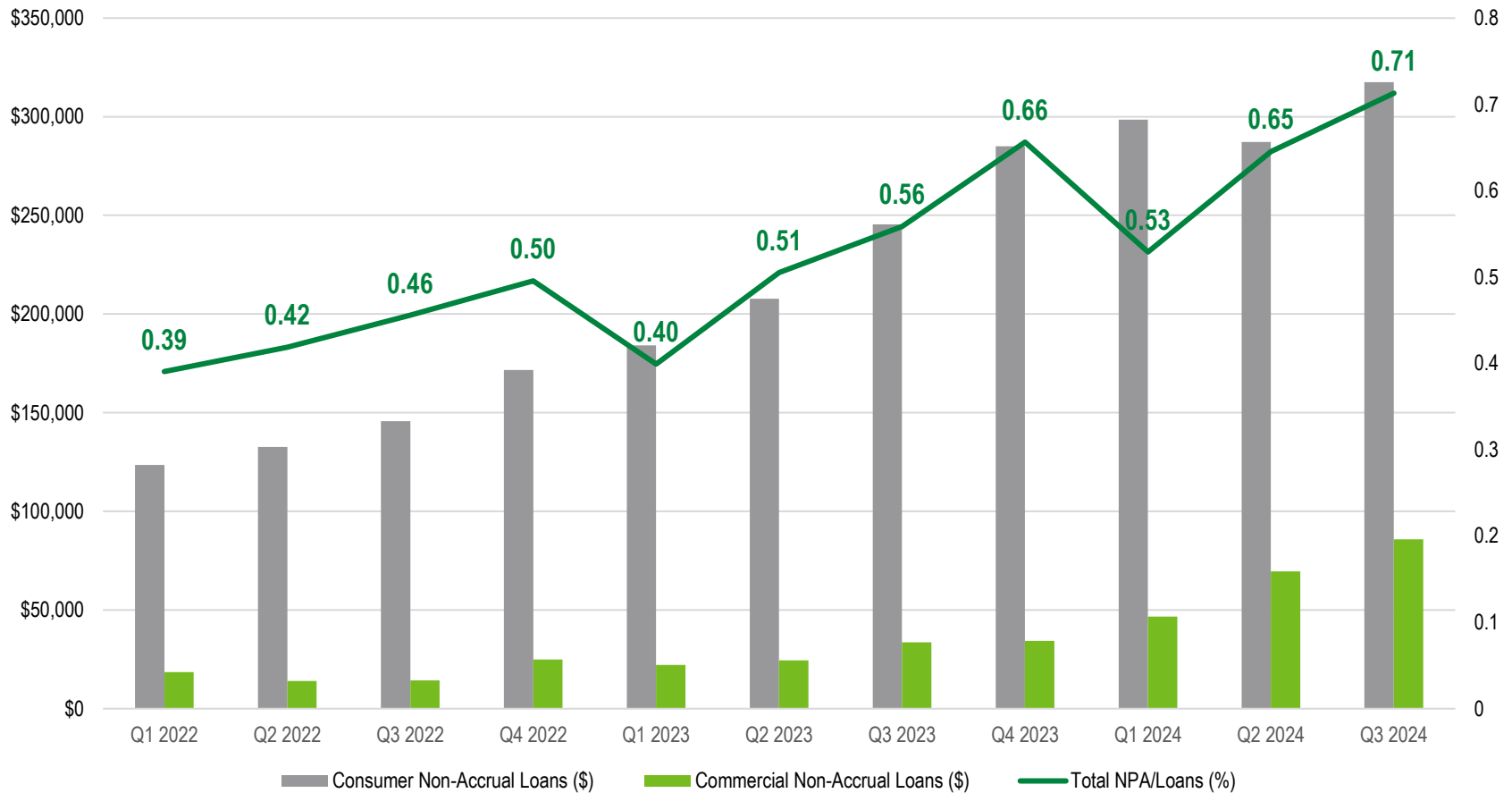
Banks: % of Loans Past Due + Non-Accrual by Loan Type



Credit Unions: Credit Performance

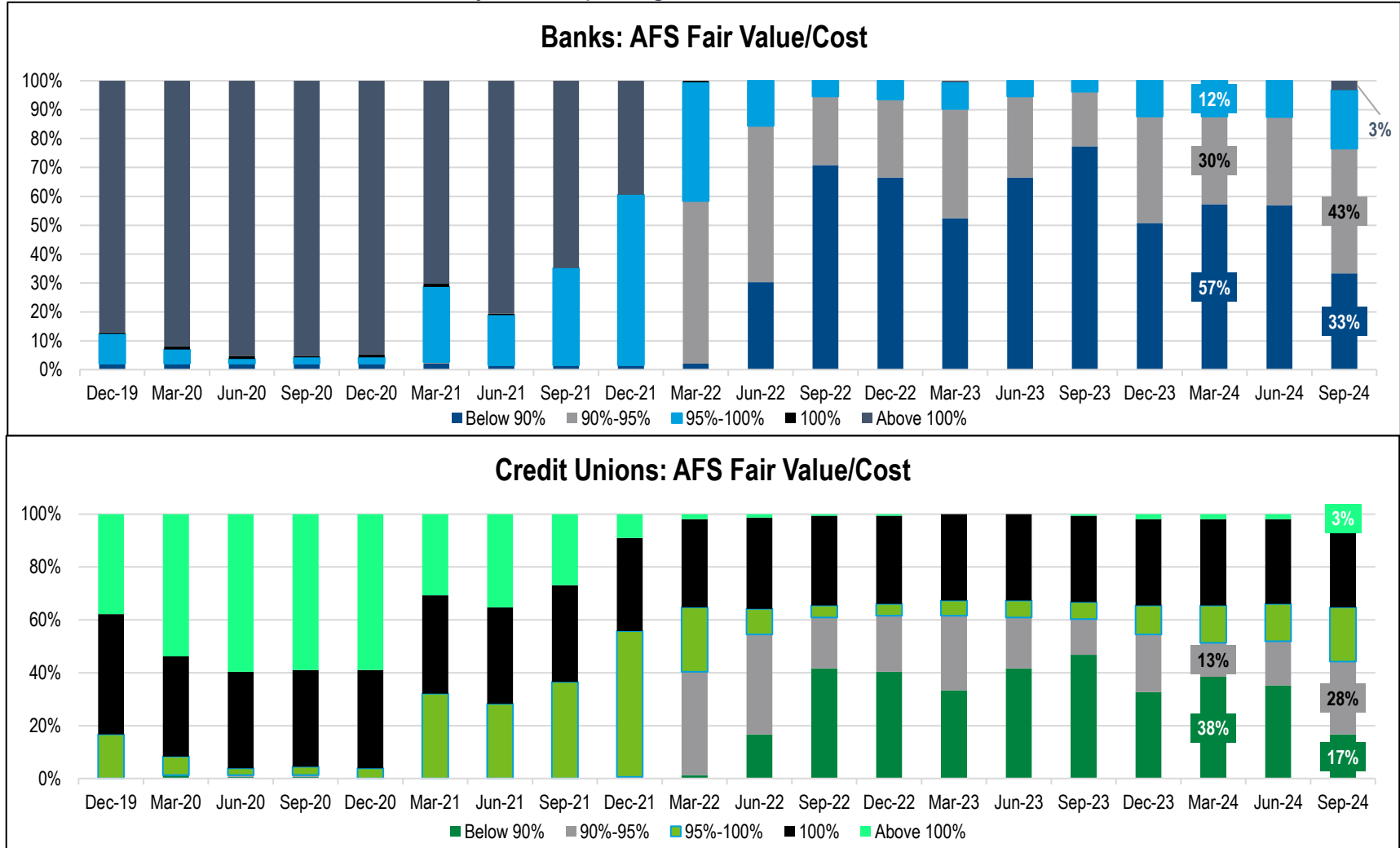
The amount of non-accrual loans is trending higher for both consumer and commercial activity, albeit from low starting points.

Credit Union Asset Quality



Investment Portfolio Marks

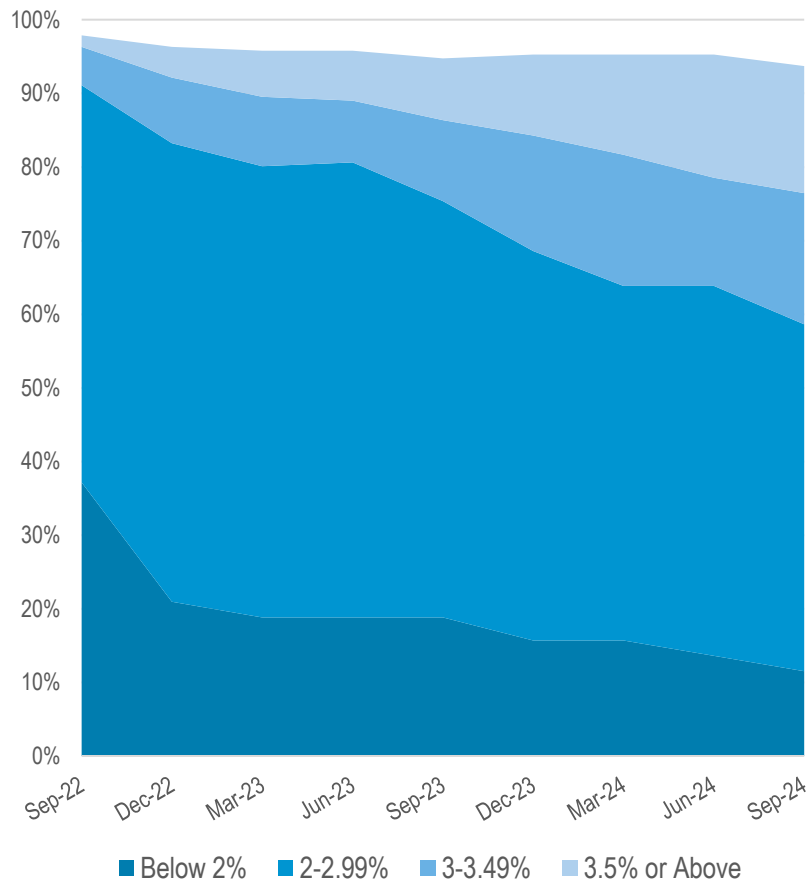
It has faded some since 9/30, but the rally and the passage of time has softened some of the unrealized losses.



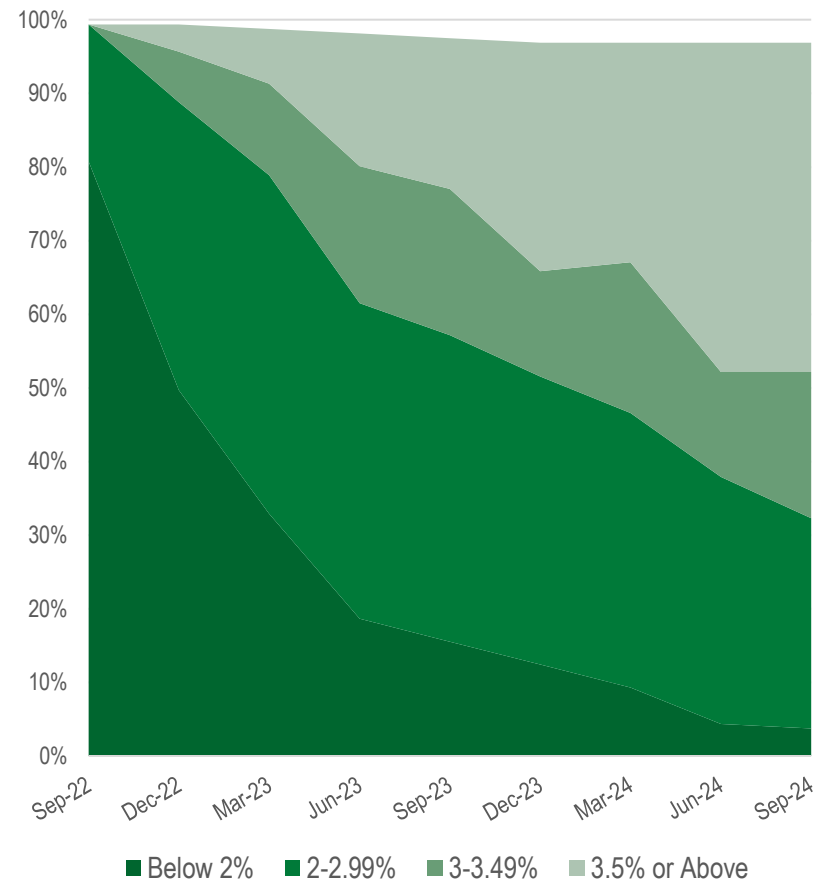
Investment Yields Continue to Rebound

For those whose liquidity and ALM profile has allowed it, the rise in medium- to long-term rates has led to an accelerated repricing of the investment portfolios that grew for many during 2020 and 2021.

% of Banks: Investment Yield Ranges



% of Credit Unions: Investment Yield Ranges



OCC Interest-Rate Risk Results

The OCC produces a semi-annual report on how interest rate shocks would impact banks. The current report reflects asset sensitivity across institutions relating to both NII and EVE results. Compared to Fall 2023 results, OCC banks look to be less reactive to both downward and upward rate shocks.

12-Month NII Parallel Shocks			
	25th Percentile	Median	75th Percentile
Down 200	-8%	-3%	1%
Down 100	-4%	-1%	1%
Up 100	-2%	1%	3%
Up 200	-4%	1%	6%
Up 300	-7%	1%	8%
Up 400	-10%	0%	10%

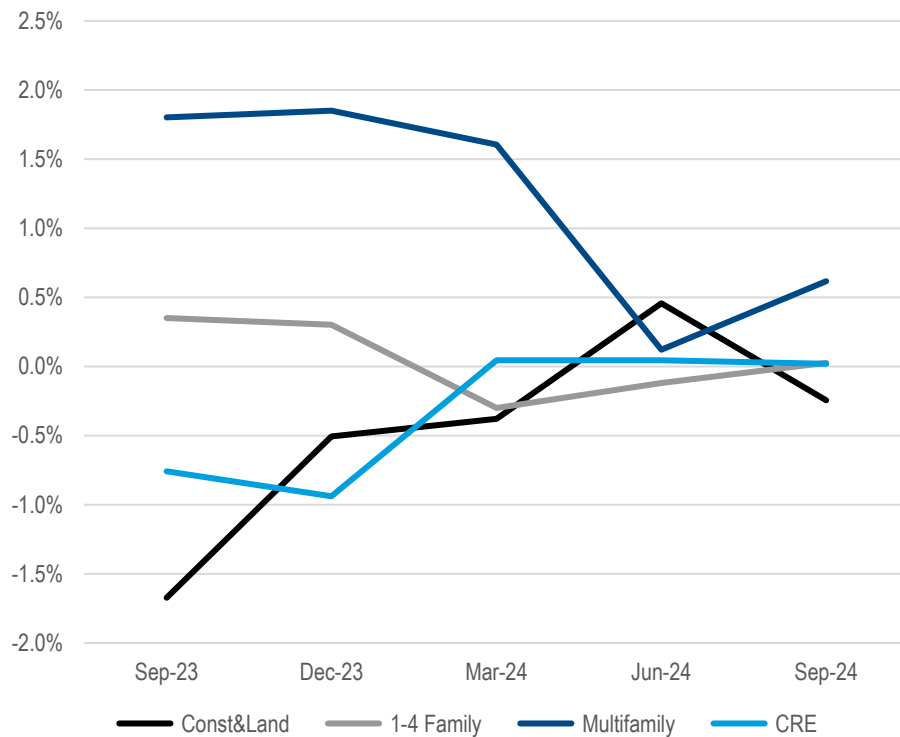
EVE Parallel Shocks		
25th Percentile	Median	75th Percentile
-7%	2%	9%
-2%	2%	6%
-7%	-3%	1%
-15%	-6%	1%
-23%	-10%	0%
-30%	-13%	0%

Source: Office of the Comptroller of the Currency, FHLBank Boston

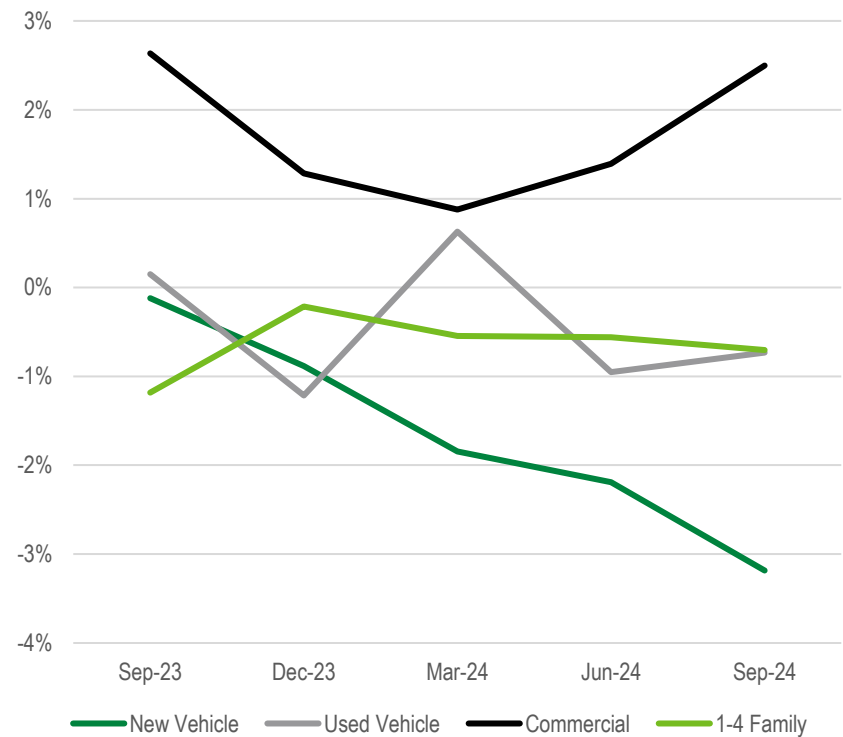
Loan Growth

While members' loan growth in aggregate is relatively flat, there is significant offsetting movements within loan types.

Banks: Loan Growth Rates



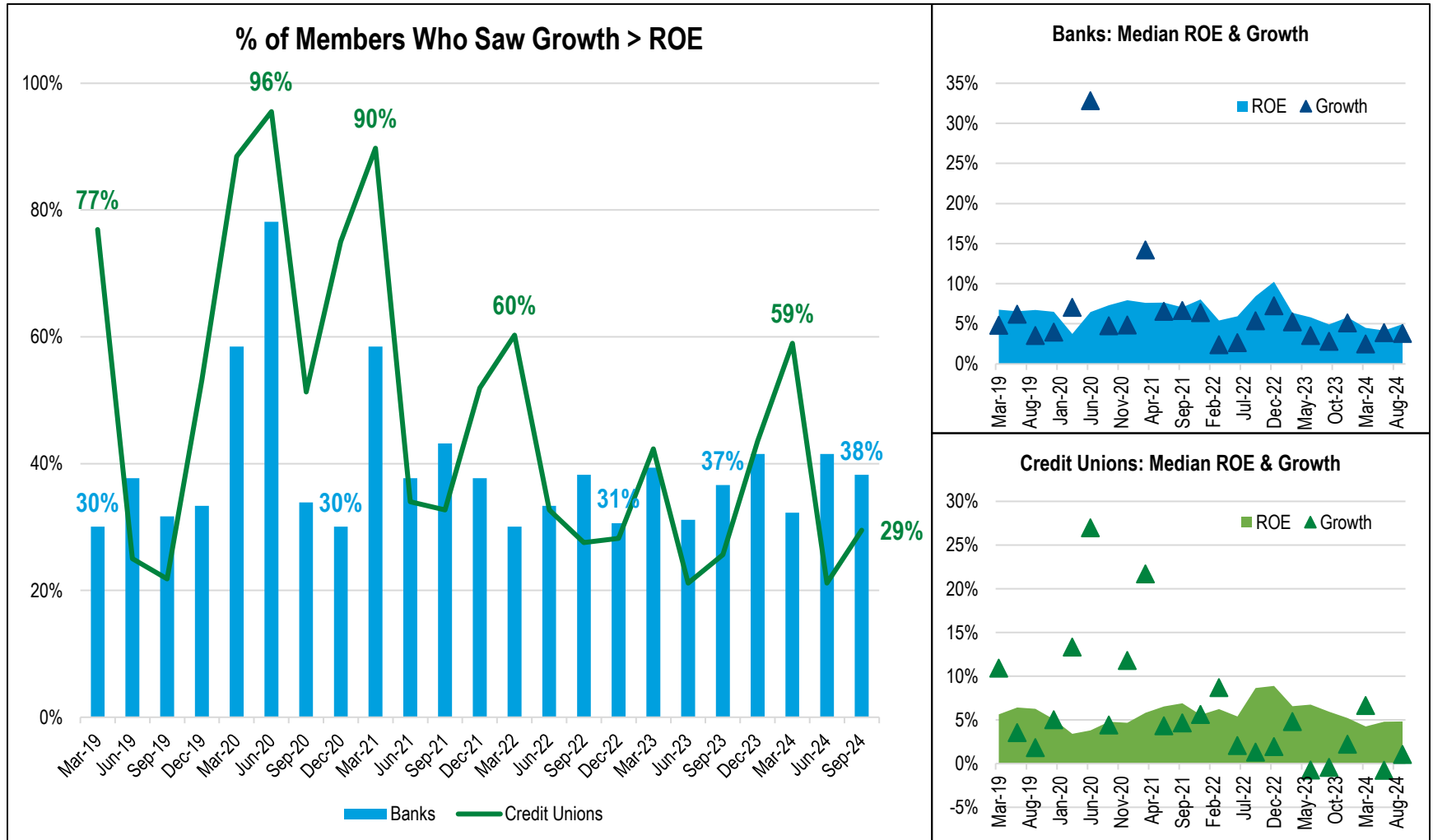
Credit Unions: Loan Growth Rates



Source: S&P Global, FHLBank Boston

Growth, Earnings & the Impact on Capital

With earnings under pressure, it doesn't take much growth to see a reduction in capital ratios.



Balance Sheet Strategies

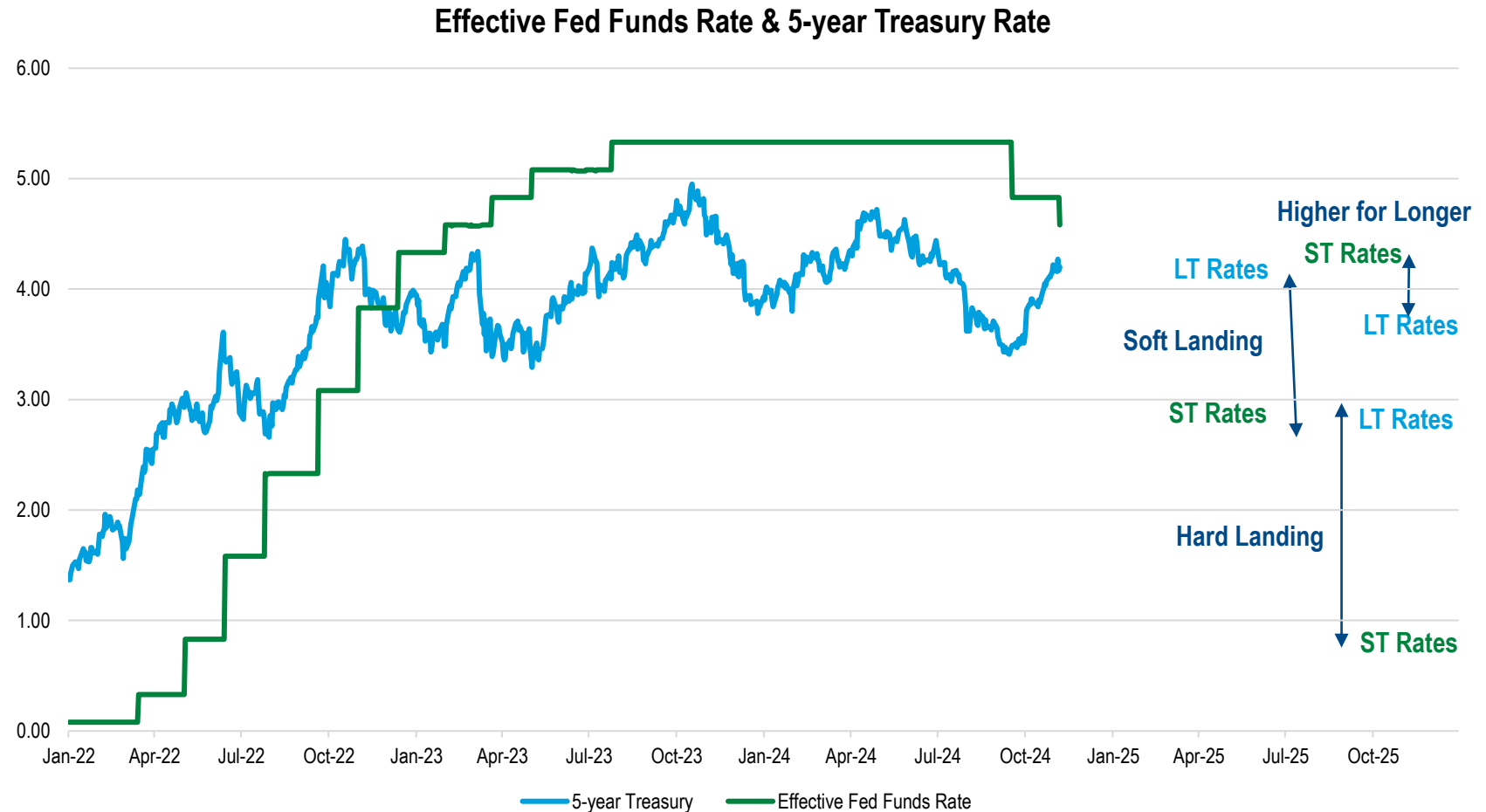


Balance Sheet Strategies

- Macro Thoughts
- Advance Solutions
- Floating-Rate Funding with Flexibility
- Investment Leverage
- Deposit Pricing & Marginal Cost of Funds

Where Do We Go From Here?

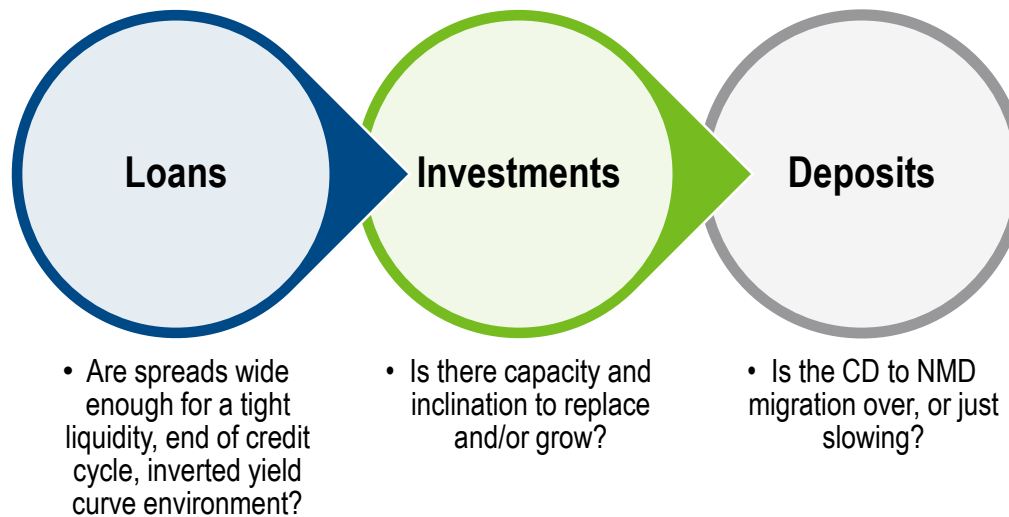
The timing, magnitude and even direction of intermediate rates may be just as or more impactful than the oft-discussed path of short-term rates.



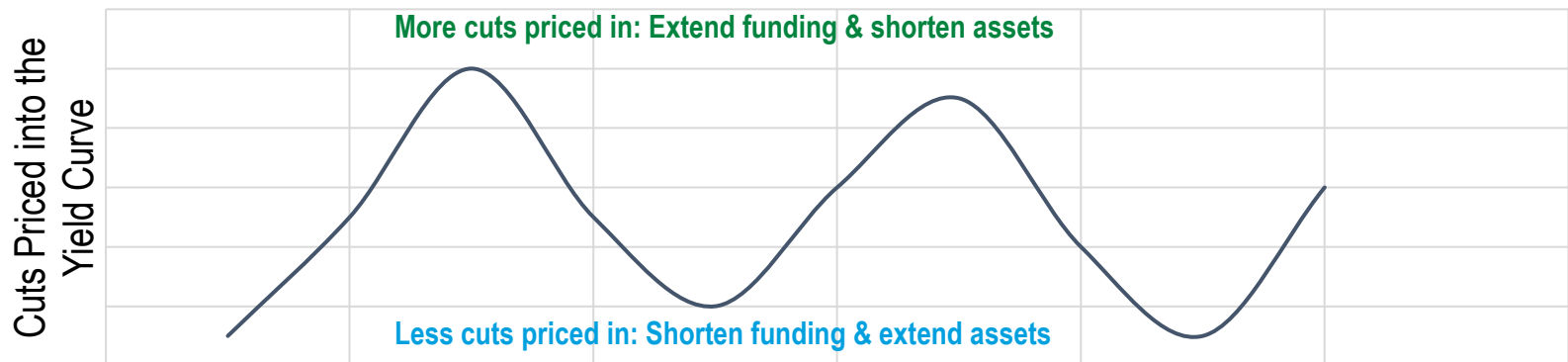
Source: Federal Reserve Bank of St. Louis, FHLBank Boston

Lending, Investment & Deposit Questions

Balancing today's interest-rate and liquidity risk profile vs. the expected future state.



Yield Curve Gyration & Incremental Tactical Adjustments



Advance Solutions

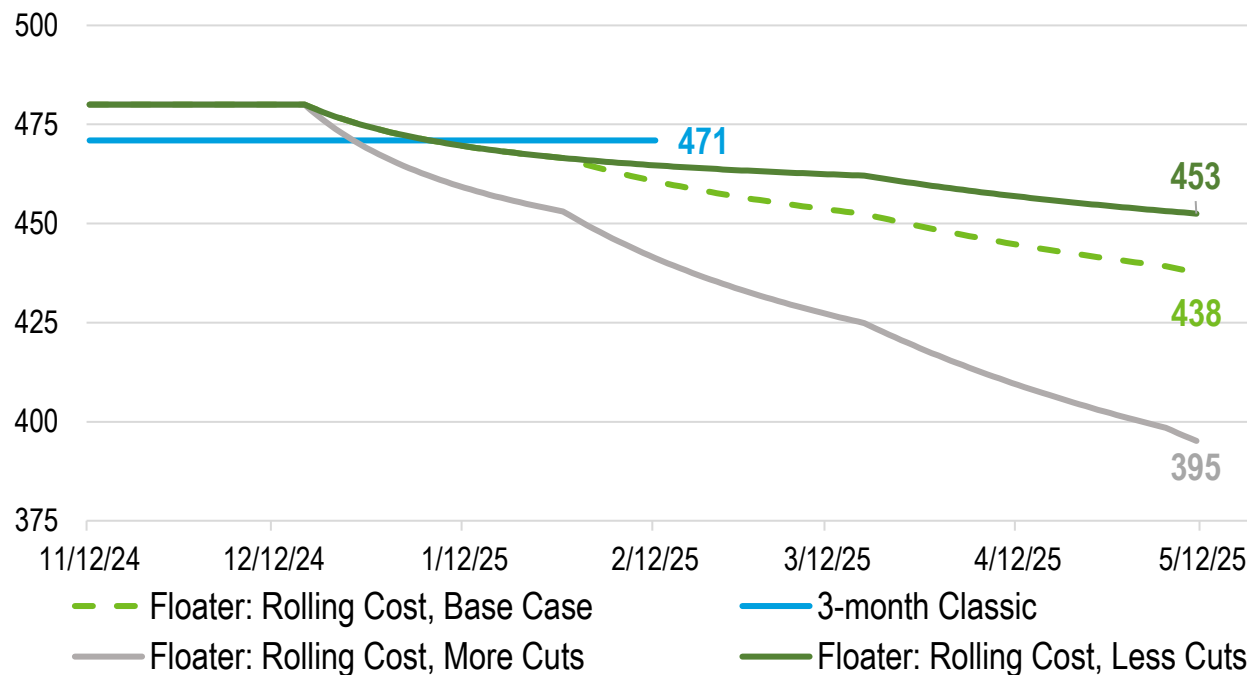
What combination of risks and return objectives are unique to your institution?

Feature	SOFR-Indexed Advance	Callable SOFR-Indexed Floater Advance	Discount Note Auction-Floater Advance	SOFR Flipper Advance	HLB-Option Advance	Member-Option Advance
Term Liquidity Protection	Yes	Yes	Yes	Yes	Yes	Yes
Term Rate Protection	No	No	No	No	Yes	Yes
Reduced Funding Costs at Initiation	N/A	N/A	N/A	Yes	Yes	No
Frequent Repricing	Yes	Yes	Yes	Yes	No	No
Coupon Type	Floating	Floating	Floating	Floating to Fixed	Fixed	Fixed
Who Owns the Option?	N/A	Member	Member	FHLBank Boston	FHLBank Boston	Member

Floating-Rate Funding with Flexibility

Term liquidity protection with a coupon that resets as short rates move- with the option to efficiently pay down the advance if wholesale funding is no longer needed.

Scenario Analysis: Callable SOFR-Indexed Floater vs. Classic Advance



Potential Drivers for Exercising the Call Feature

Outperformance on deposit growth

Underperformance on loan growth

Investment or loan sales

Acceleration in prepayment speeds

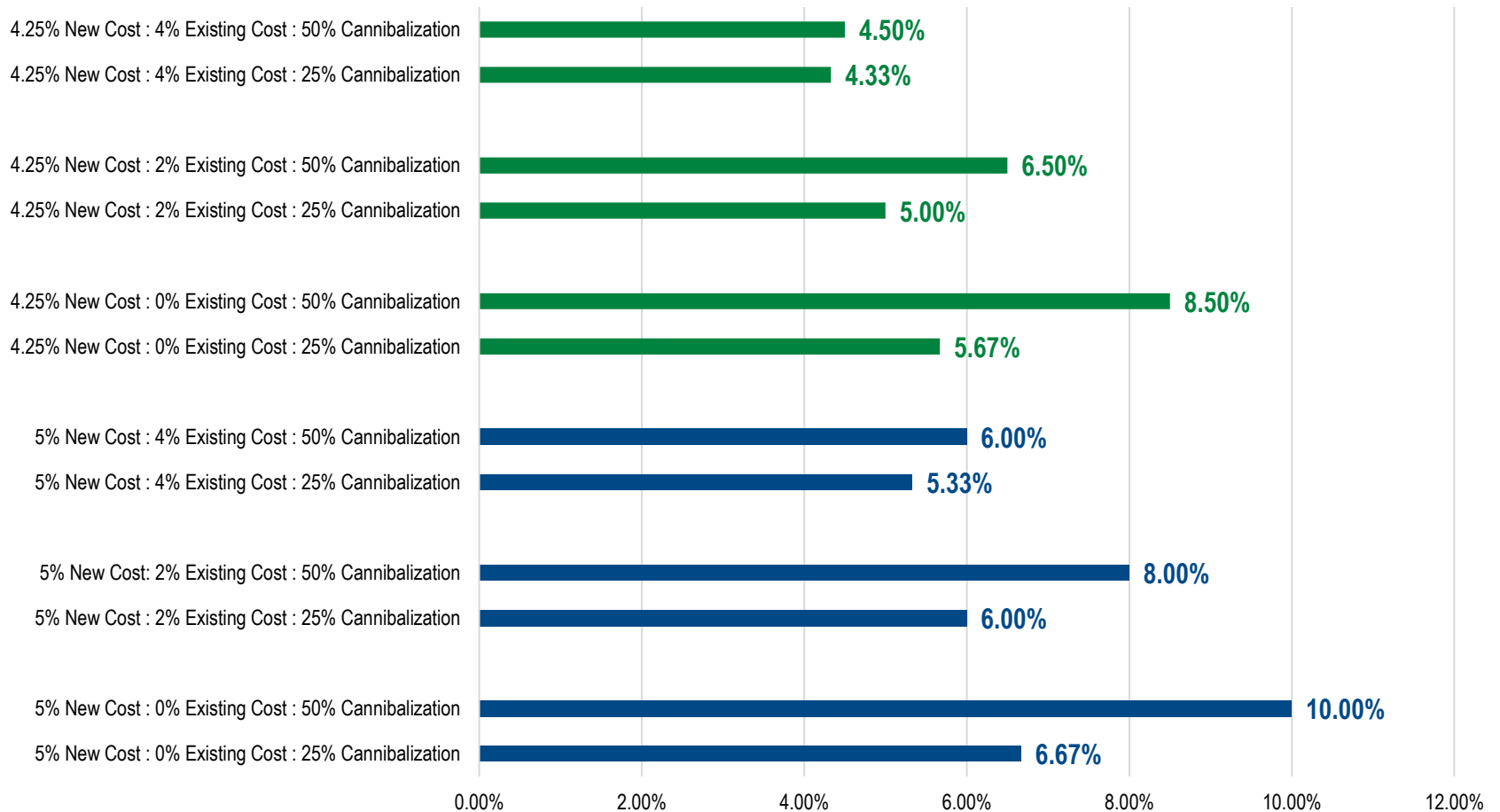
Repositioning the tenor and coupon type of wholesale funding needs

Cuts Priced in: 3 months	Cuts Priced in: 6 months	Cuts Priced in: 9 months	Cuts Priced in: 12 months
~1	~2	~2-3	~3

Marginal Cost of Funds

Lower replacement rates and higher existing yields make marginal costs less volatile- but we're still not out of the woods on deposit pricing and controlling cost of funds.

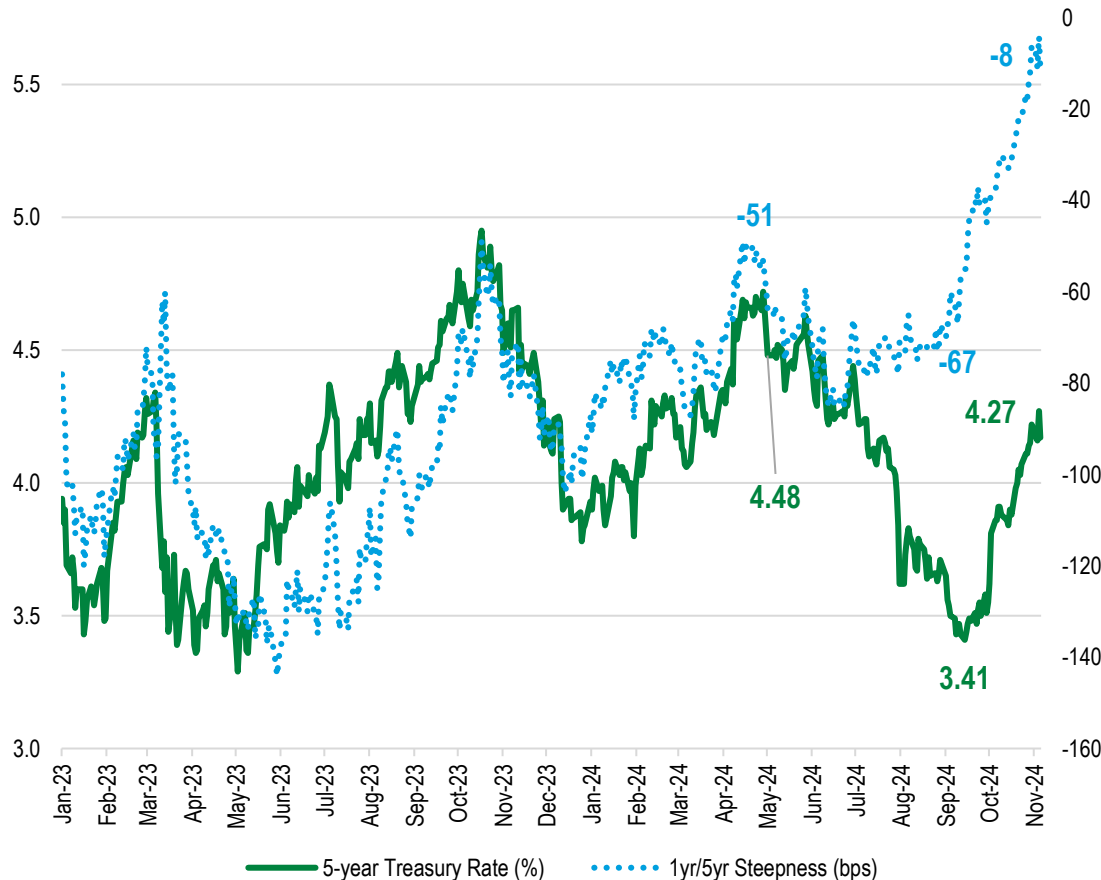
Marginal Cost of Funds Analysis



Investment Leverage Opportunities

It may seem counterintuitive given liquidity and interest-rate risk pressures, but wide spreads and asset duration can support net interest income and position the balance sheet favorably in a pivot to rate cuts.

Yield Curve Rates & Slope



Investment Funding Considerations

1-year tenor is typically the cheapest point (in terms of spread) on the advance curve

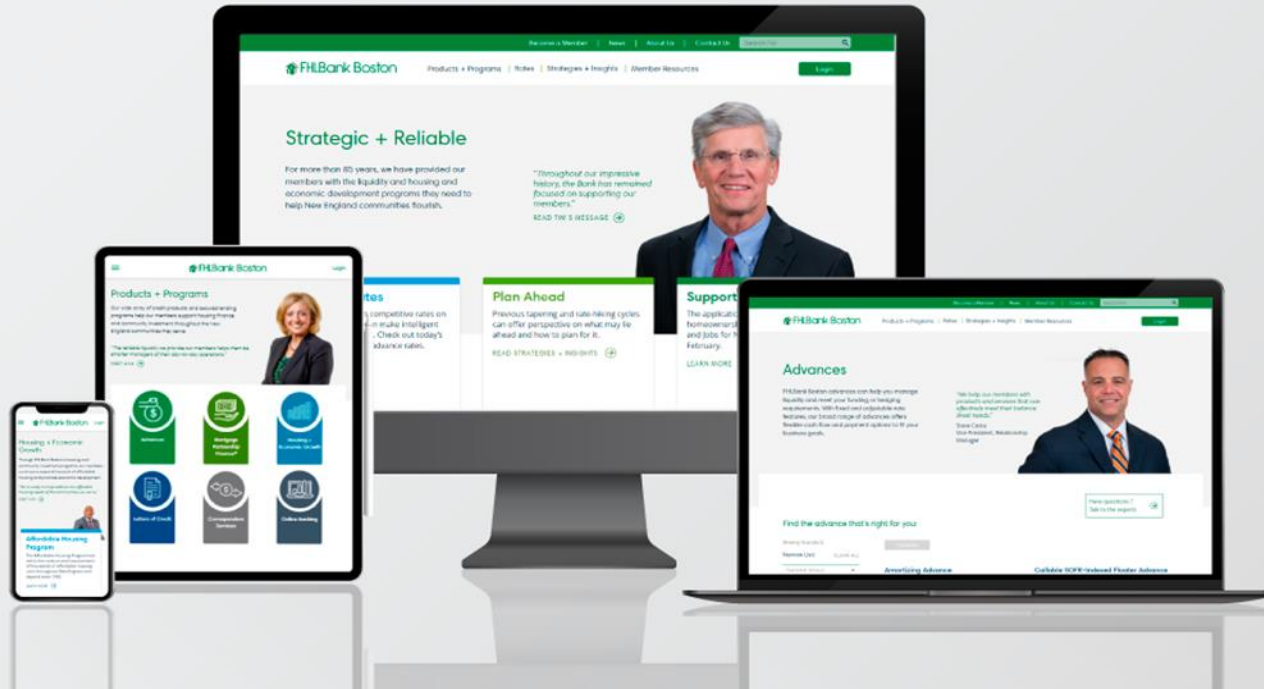
~3-5 year asset vs. ~1-2 year funding can be IRR neutral now and liability sensitive long-term- which mitigates the “swoosh” income simulation profile

With the curve less inverted and closer to flat now, clearing a return hurdle is less reliant on rate positioning and driven more by asset & liability spread

Incorporate HLB-Option Advance to enhance spread; potential extension risk may be manageable with tenor selection and recovery in fixed-rate mortgage values (EVE/NEV)

Floating rate and/or callable funding can be a useful tool to manage shifting risk profiles

Source: Federal Reserve Bank of St. Louis, FHLBank Boston



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Thank You



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