

# Case Study: Optimizing Funding Costs



February 2025

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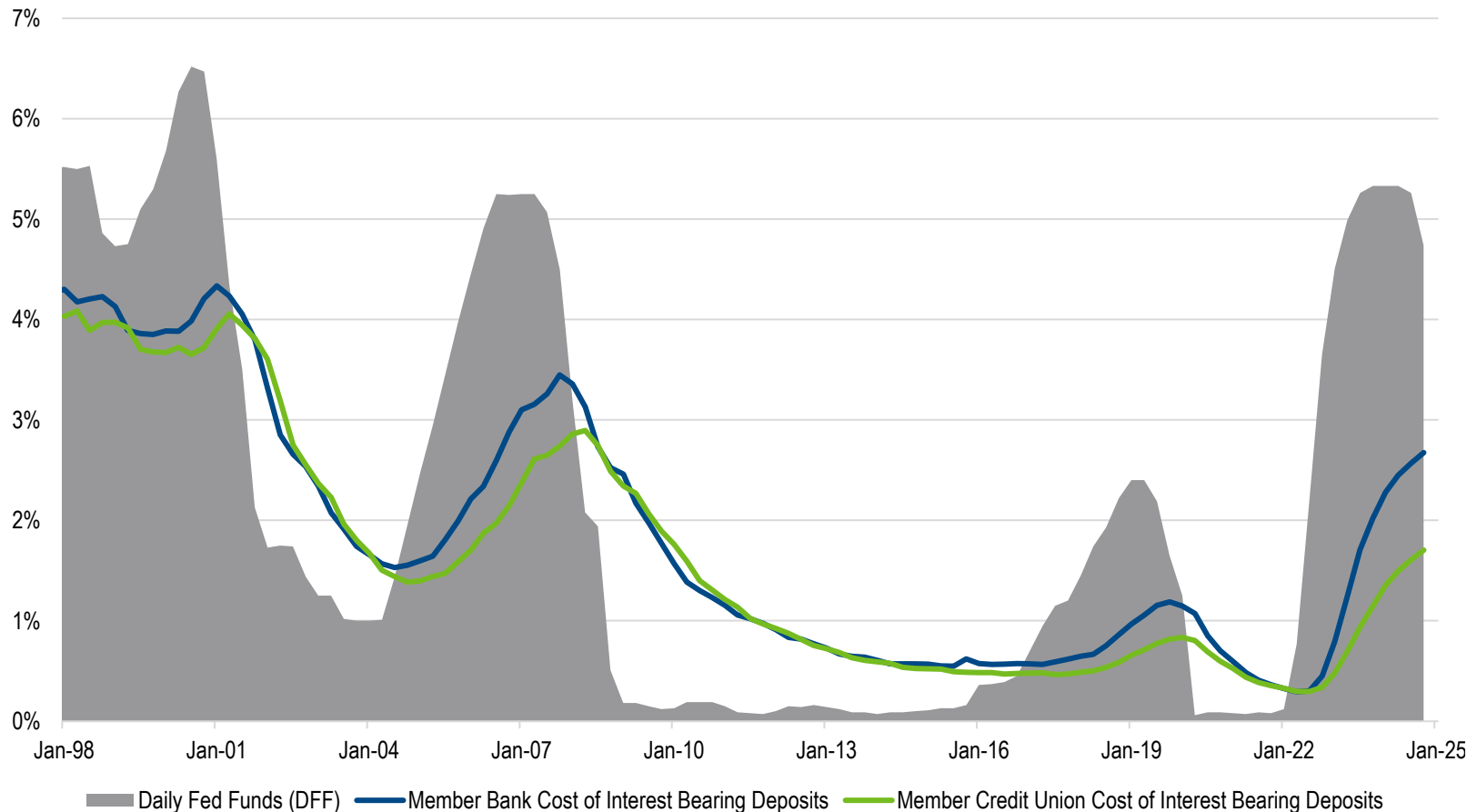
# Overview

- Deposit Dynamics Trend Analysis
- Balance Sheet Impacts
- Funding Strategies

# Deposit Cost Lag Effect

Member bank and credit union deposit costs tend to rise and fall more slowly than the Federal Funds rate.

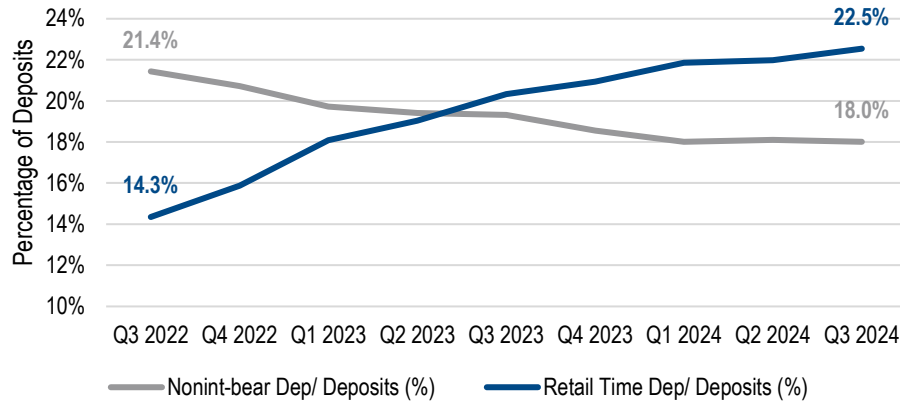
## Deposit Cost of Funds (CoF) Lag



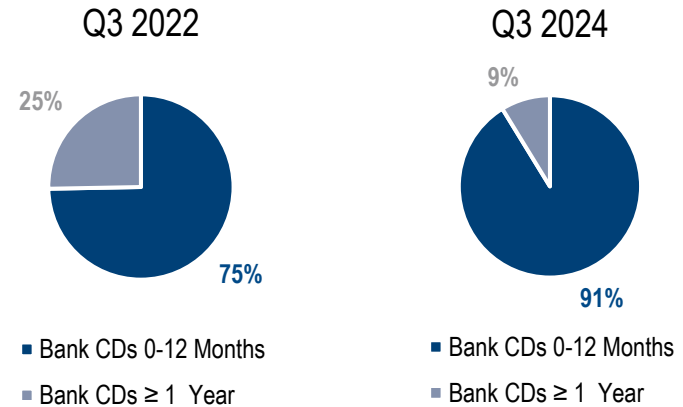
# CD Balances Are Growing and Shortening

There has been a trend of funds flowing from demand deposit accounts (DDA) to CDs while average CD tenor has also shortened.

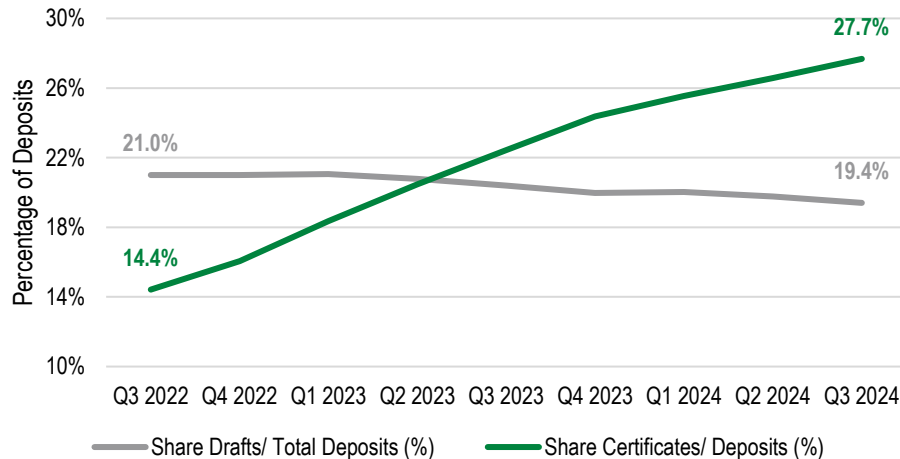
## Bank Deposit Mix



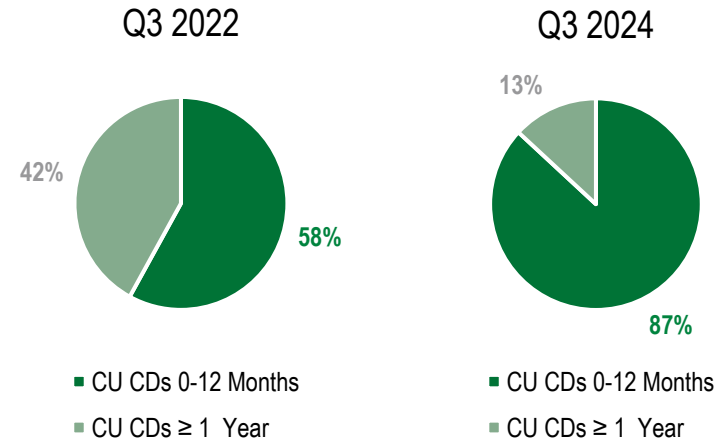
## Bank CD Term Distribution



## Credit Union Deposit Mix



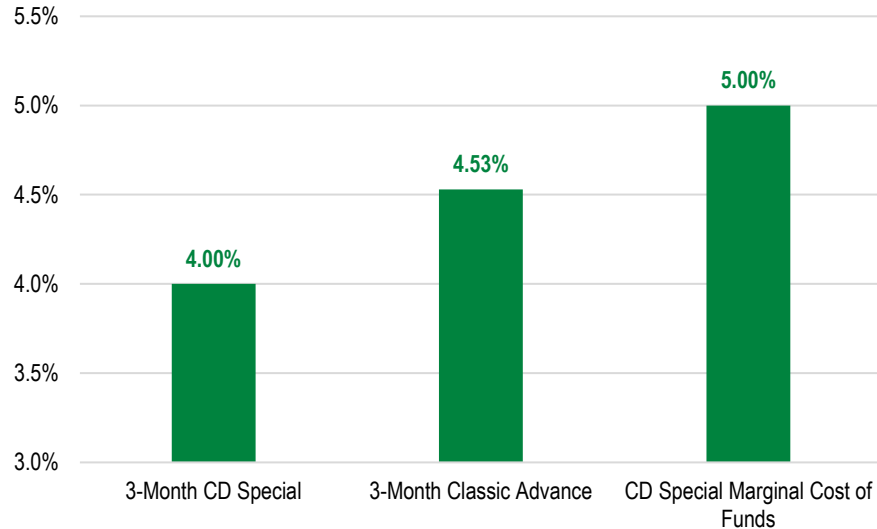
## Credit Union Term Distribution



# Deposit Cannibalization and Marginal Cost

The true cost of a CD special can often be higher than the sticker price due to deposit cannibalization.

**Marginal Cost of Funds Example**



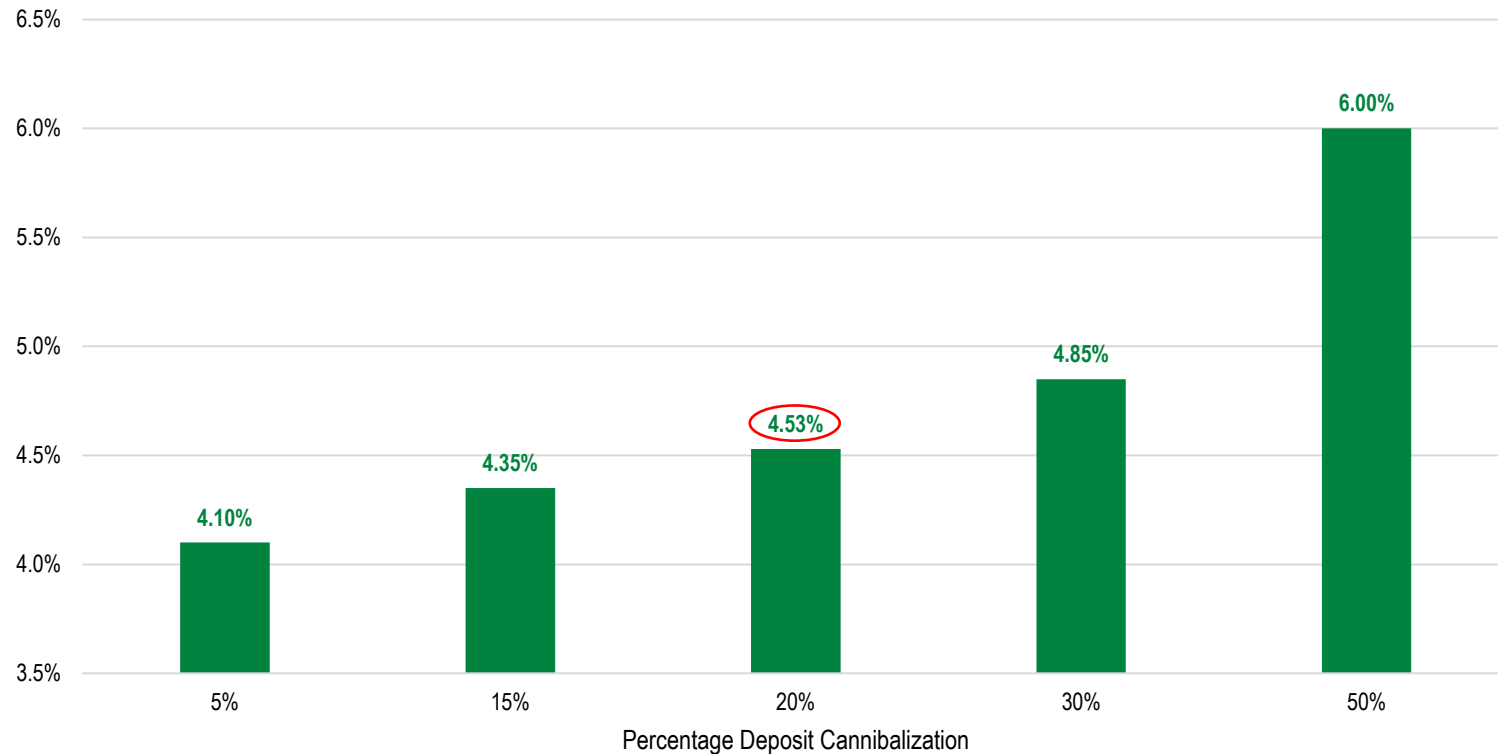
| Source of Funds       | Amount             | Current Rate | Rate Increase | Marginal Cost |
|-----------------------|--------------------|--------------|---------------|---------------|
| Cannibalized Deposits | \$2,500,000        | 2.00%        | 2.00%         | \$50,000      |
| New Deposits          | \$5,000,000        | -            | 4.00%         | \$200,000     |
| <b>Total</b>          | <b>\$7,500,000</b> |              |               | <b>5.00%</b>  |

- At a cannibalization rate of 33%, the marginal cost of adding \$5,000,000 in new deposits via a 4% three-month CD special is 5%.

# Cannibalization Rate: Breakeven Analysis

Even just small amounts of deposit cannibalization can have a much larger hidden cost.

**Cost of a 4% for 3-Month CD Special at Various Cannibalization Rates**

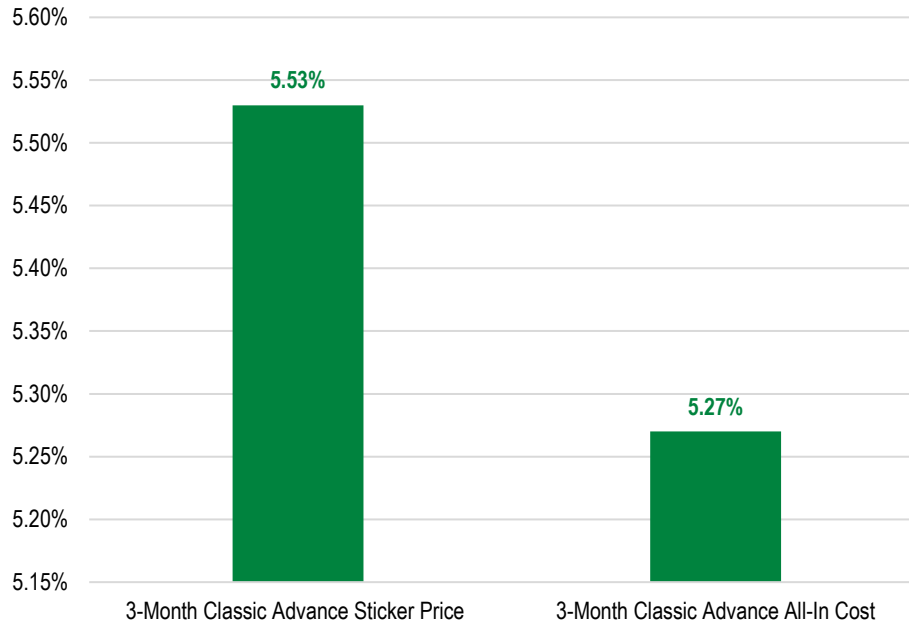


- Assuming a 2% existing deposit cost, the cost of a three-month CD special at 4% and a three-month Classic Advance at 4.53% is equal to 20% deposit cannibalization.

# FHLBank Boston Dividend and All-In Cost

The dividend paid on FHLBank Boston member stock reduces the all-in cost of advances.

**All-In Cost Comparison**



| Assumed Advance Rate    |             | 5.53% |
|-------------------------|-------------|-------|
| Advance Amount          | \$5,000,000 |       |
| Required Stock Purchase | \$200,000   |       |
| Estimated Dividend Rate | 8.41%       |       |
| Dividend Paid           | \$4,147.40  |       |
| Effective All-in Rate   | 5.27%       |       |

- **Non-overnight advances require a purchase of FHLBank Boston stock equivalent to 4% of the advance.**
- **The dividend reduces the all-in cost of a three-month Classic Advance to 5.27%, a 25.9-basis-point discount from the posted rate of 5.53%.**
- **Example uses advance rate from 7/1/2024 and the dividend rate paid of 8.41% from the third quarter of 2024 (note that the dividend rate and methodology is subject to change and is at the discretion of the Board).**



# Flexible Funding Strategies

Fill in funding gaps with flexible funding solutions, which can be tailored and turned on and off as funding needs wax and wane.

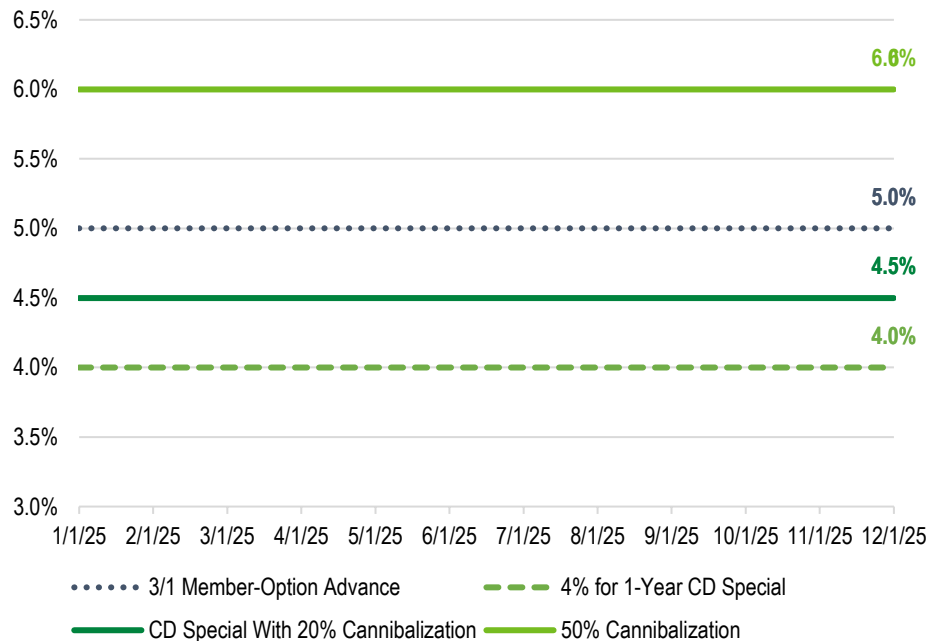
## Advance Funding Strategies

| Feature                        | Classic Advance | SOFR-Indexed Advance | Member-Option Advance | Callable SOFR-Indexed Floater Advance |
|--------------------------------|-----------------|----------------------|-----------------------|---------------------------------------|
| Term Liquidity Protection      | Yes             | Yes                  | Yes                   | Yes                                   |
| Term Rate Protection           | Yes             | No                   | Yes                   | No                                    |
| Benefit From Rate Cuts         | No              | Yes                  | No                    | Yes                                   |
| Flexibility to Prepay          | No              | No                   | Yes                   | Yes                                   |
| Causes Deposit Cannibalization | No              | No                   | No                    | No                                    |

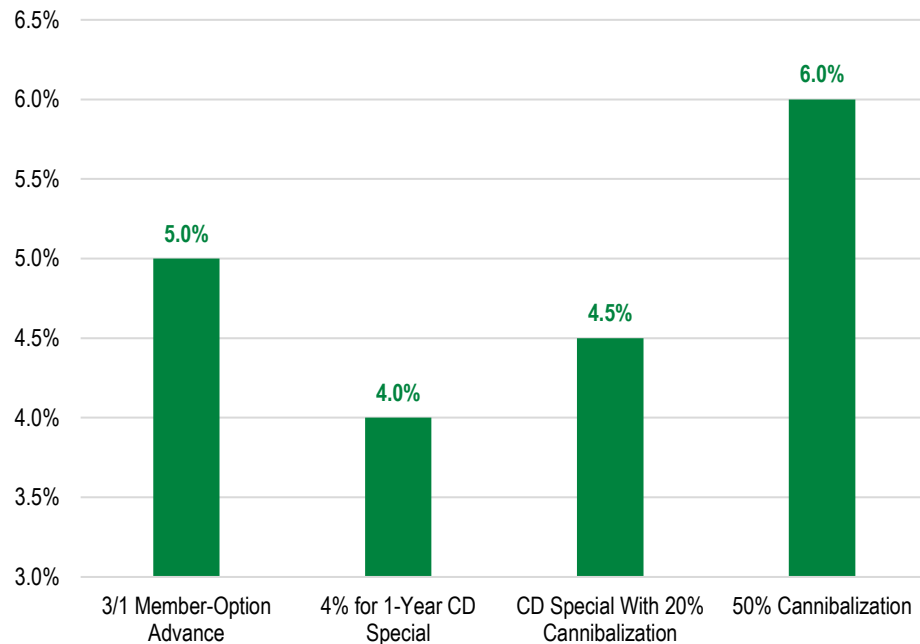
# Member-Option Advance versus CD Special

If having flexible liquidity and rate protection are a priority, consider the Member-Option Advance

**Scenario: Performance Over The Next Year**



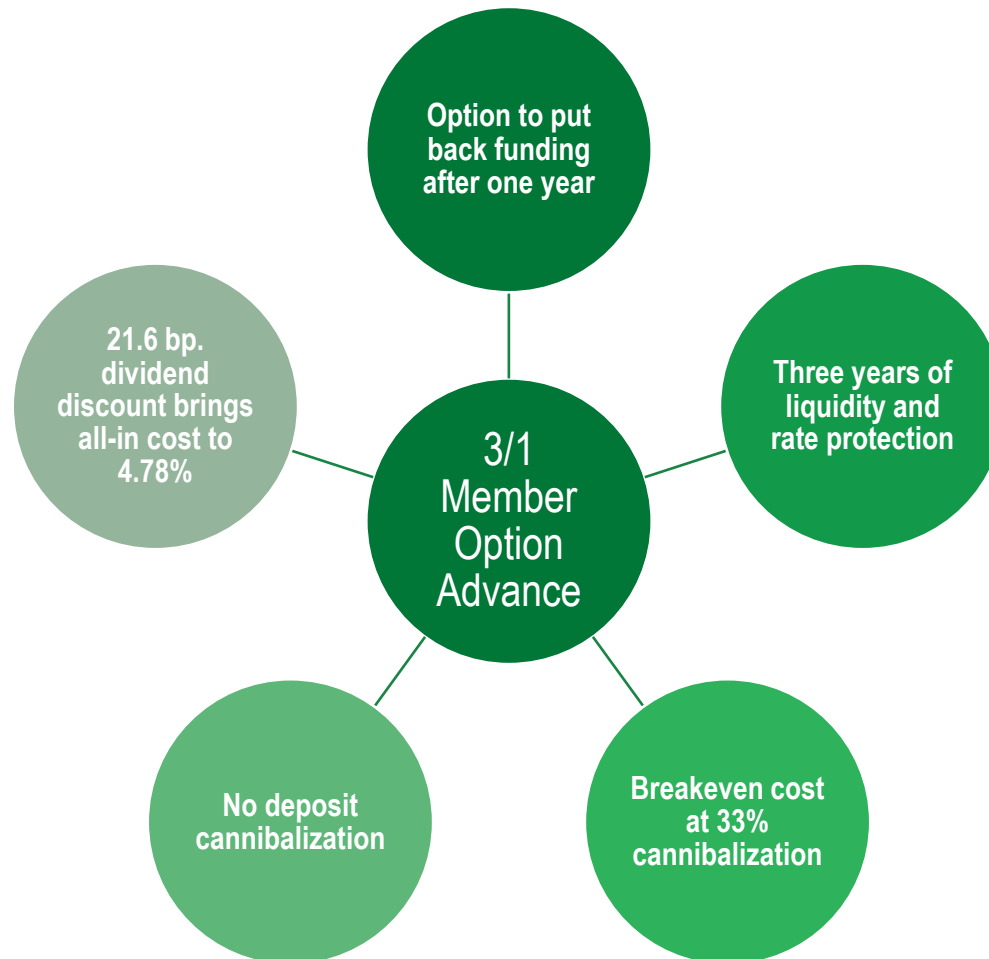
**Cost Comparison**



- Scenario: add new funding using a three-year Member-Option Advance with a one-year lockout at 5% compared to 4.5% for one-year CD special, assuming 2% existing deposit cost.

# Scenario Takeaways

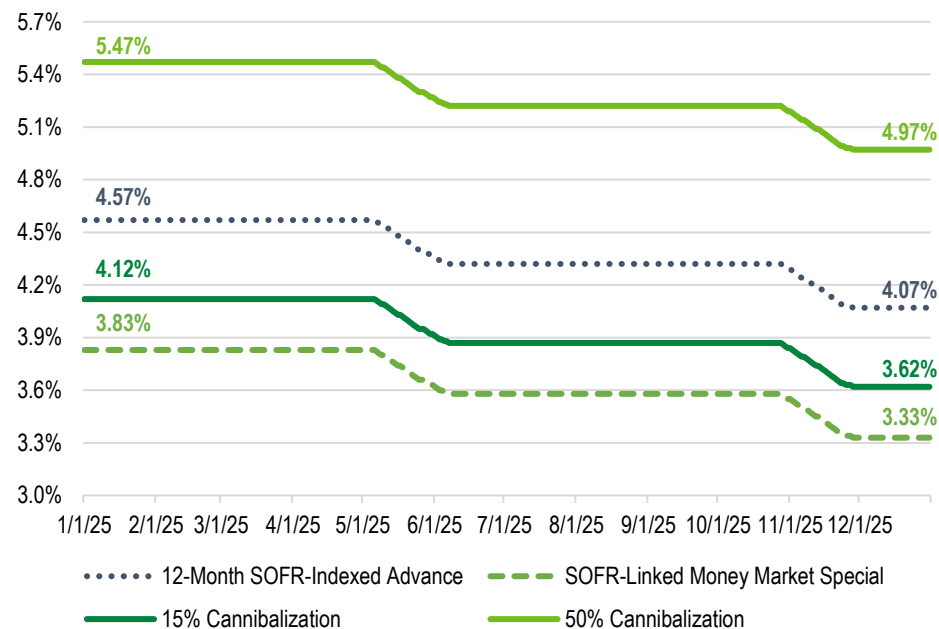
Comparing the features of the 3/1 Member Option Advance and a one-Year CD Special



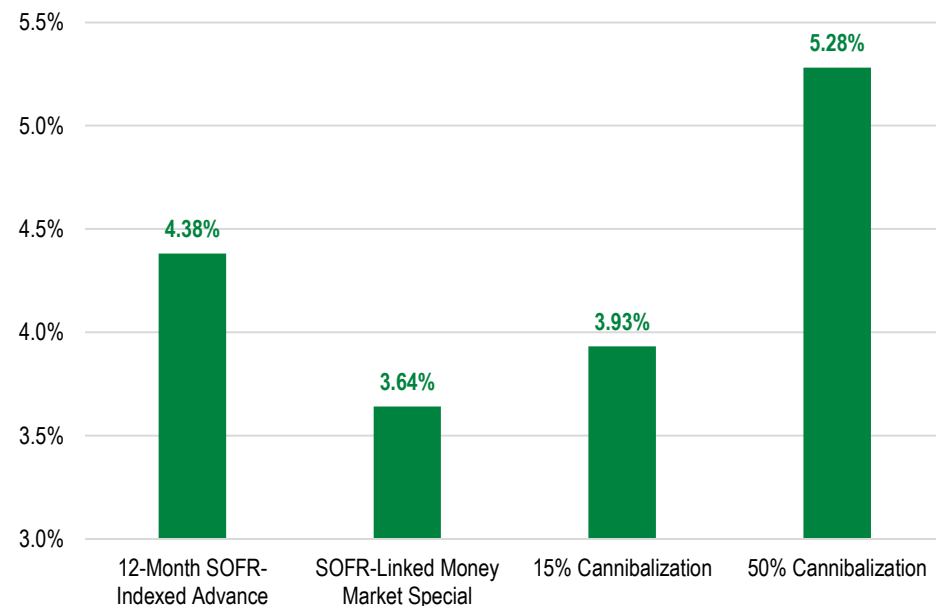
# SOFR-Indexed Advance versus Money Market Special

The SOFR-Indexed Advance offers the value of term liquidity while benefitting from rate cuts as they happen.

Scenario: Performance Over The Next Year



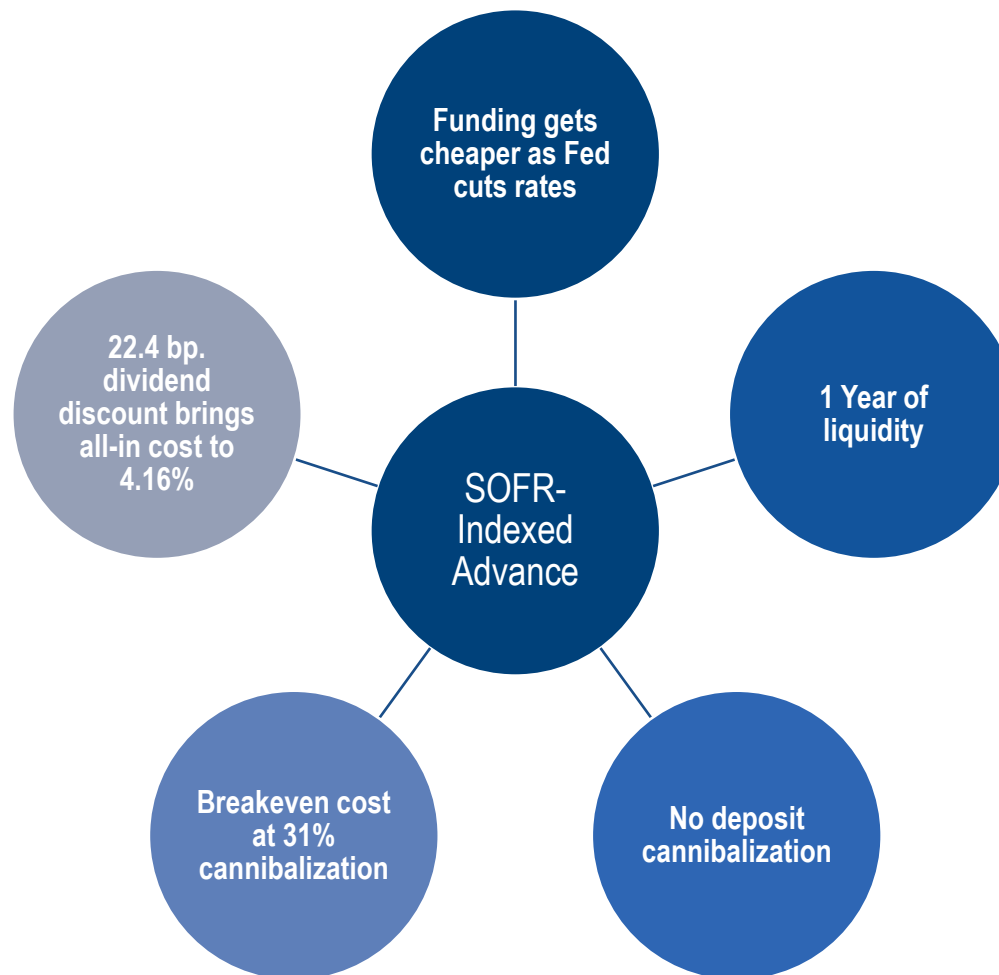
Cost Comparison



- Scenario: add new funding via 12-Month SOFR-Indexed Advance with a day one rate of 4.57% (SOFR + 24 basis points) compared to a SOFR – 50-basis-point money market special, assuming 2% existing deposit cost.

# Scenario Takeaways

Comparing the features of the SOFR-Indexed Advance compared to a Money Market Special.



# Thank You

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