

Case Study: Forward Starting Advance

June 2021



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What are Forward Rates?

A forward rate is an interest rate for a transaction that will take place at a later date.

- Forward rates are the market's estimate of where rates are likely to be at a future point.
- Example two-year horizon investment

1

Option 1

- Invest money in 2-year Treasury.

2

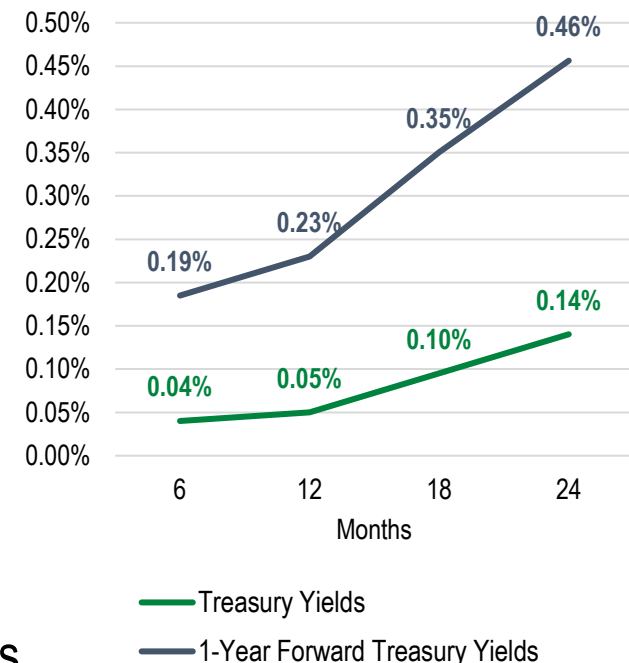
Option 2

- Invest now in 1-year Treasury.
- At the end of the first year, invest proceeds into another 1-year Treasury.

- For option 2, we don't know where rates will be in 1-year, but the market prices these rates today so that you are indifferent to either option 1 or option 2.

U.S. Treasury Yields

As of June 10, 2021



Source: U.S. Department of Treasury, FHLBank Boston

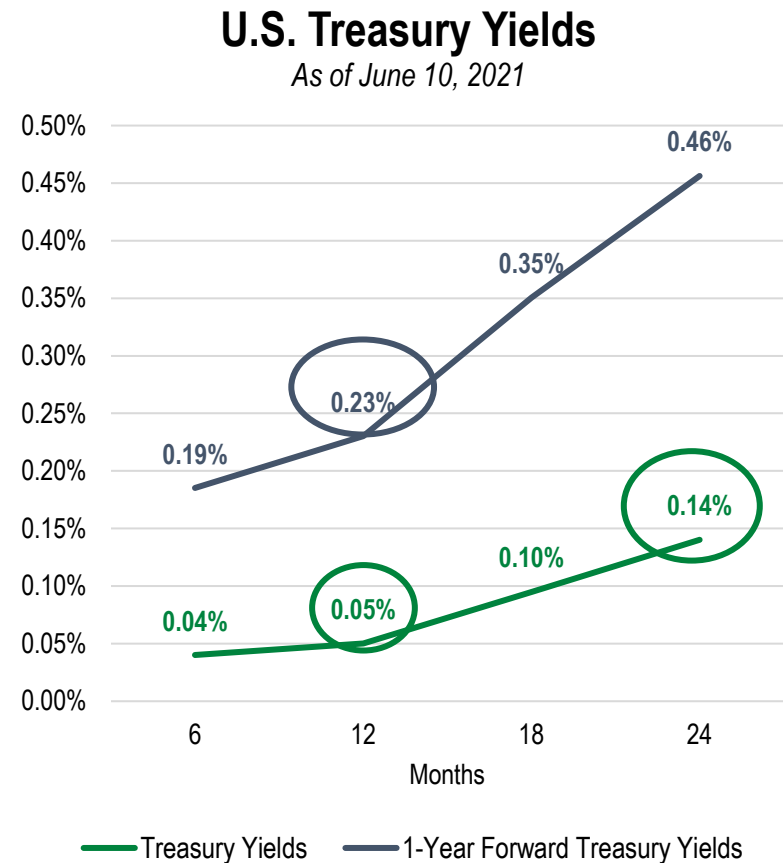
The Math Behind Forward Rates - Example

We can look at the current spot curve in order to derive forward rates.

Calculation example – Solve for the forward 1-year yield, 1-year from now

$$\text{Forward Rate} = \frac{(1+0.14\%)^2}{(1+0.05\%)^1} - 1 = \mathbf{0.23\%}$$

- In this example, 0.23% is the market expectations of a 1-year investment, 1-year from today.



Source: U.S. Department of Treasury, FHLBank Boston

Overview

The Forward Starting Advance allows members to lock in a rate today for an advance that settles at a future date. It provides the ability to delay taking down funding while hedging against rising rates, preparing for future loan growth and protecting against potential deposit runoff.

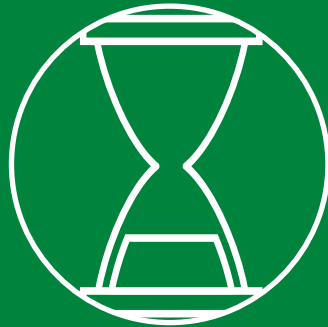
Common Uses

- Access the current rate environment without adding additional liquidity.
- Lock in rates for anticipated future funding needs.
- Allow borrowers to lock in rates on loans with future closing dates.
- Manage anticipated deposit runoff or uncertainty in the future.

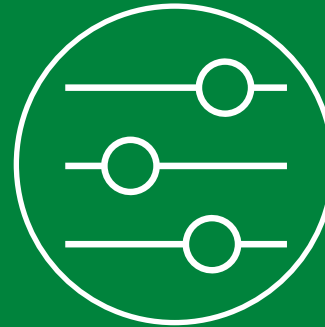
Forward Starting Advance Features



Maturities
available for
terms out to 20
years



Delay funding
up to two years



Available for
Classic,
Amortizing, and
Community
Development
Advances



Continuously
offered as well
as through
special offerings



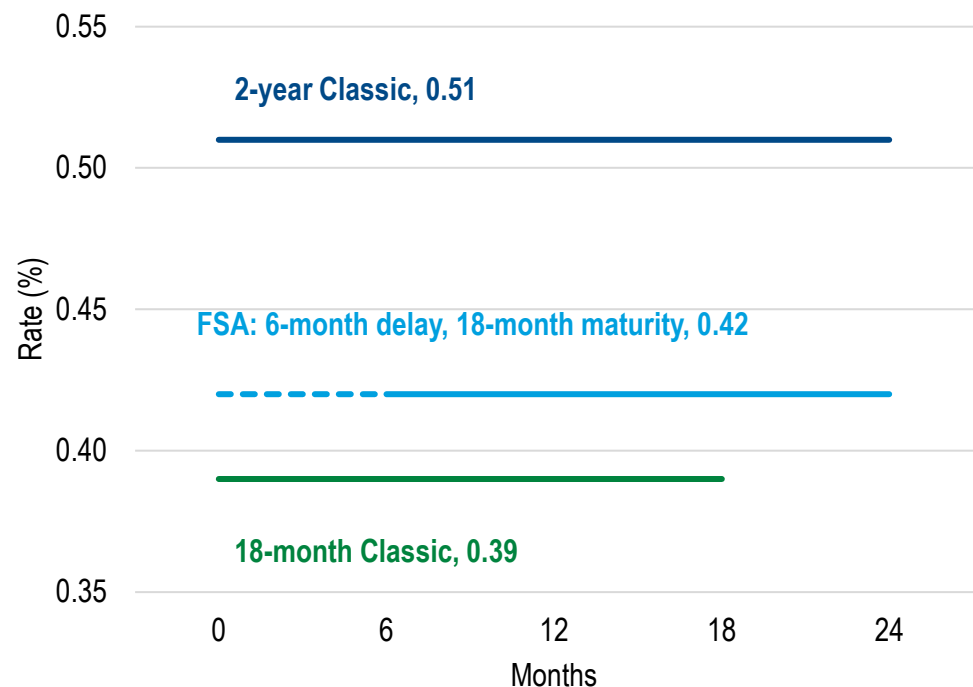
Recent Pricing Highlights

Secure today's rates for future funding.

Highlights:

- This Forward Starting Advance has a 6-month delay, and when disbursed the member will have an 18-month Classic Advance.
 - 9 basis point discount to 24-month classic and 3 basis point premium to 18-month classic.
- During the 6-month delay, members do not have to purchase activity stock, nor does the advance use up available collateral.

Classic & Forward Starting Advances

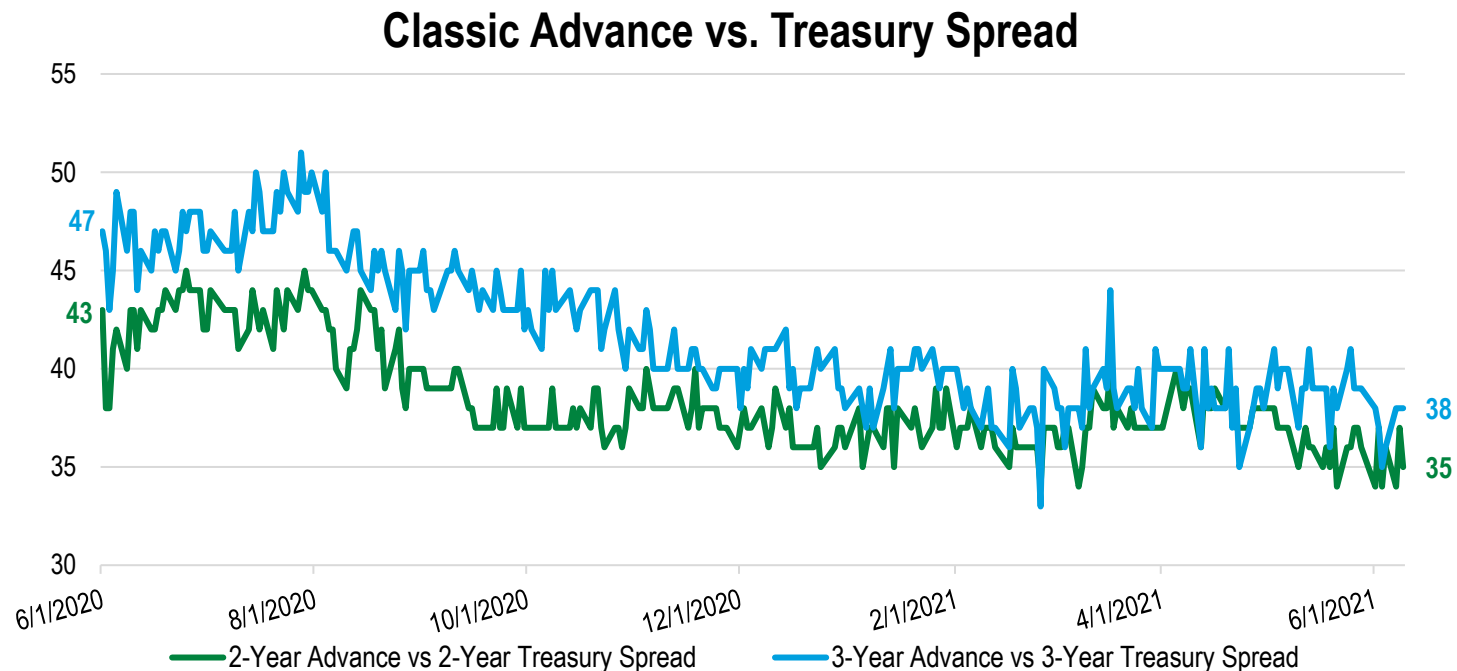


Source: FHLBank Boston

Today's Environment

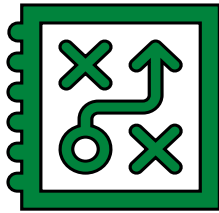
Tighter spreads help forward advance pricing.

- Continued spread tightening creates enhanced opportunity for forward pricing.
 - 2-Year Advance spread 35 basis points vs. 43 basis points last year.
 - 3-Year Advance spread 38 basis points vs. 47 basis points last year.



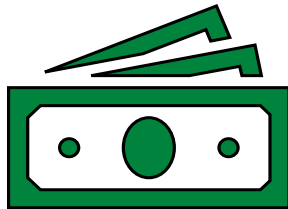
Source: U.S. Department of Treasury, FHLBank Boston

Balance Sheet Strategies



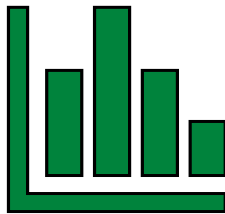
Manage Interest Rate Risk

- Liability sensitive members can protect from rising interest rates and protect net interest margins.



Manage Future Liquidity Needs

- Increased loan production expectations
- Plan for deposit runoff
- Fund future investment purchases



Replace Future CD or Advance Maturities

- When rates are expected to rise or when forward pricing is opportunistic, you can replace future runoff today.

Thank You

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