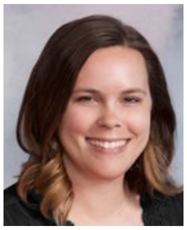
FINANCIAL INTELLIGENCE
from FHLBANK TOPEKA

COMMERCIAL

SWAPS VS. ADVANCES

What are your funding options when a rate hike is on the horizon?

your
COMMERCIAL SPECIALIST



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Bobbi has been in banking for 14 years, eight at FHLBank. She is a graduate of Washburn University and Colorado's Graduate School of Banking. Contact her today.

Find out more about Bobbi and our funding experts at **FHLBTOPEKA.COM/INTELLIGENCE.**

As a commercial lender, you understand the advantages of staying short when pricing assets, especially in today's low rate environment with a rate hike looming. Over the past several years, fixed rate pricing on commercial loans has typically been limited to 3 to 5 years in order to meet your customers' expectations of locking in low loan rates while still allowing you to partially hedge against an increase in rates.

Things are starting to change. Many of our members are seeing an increase in customer demand for long-term fixed rate loans coupled with a need to increase income. As a result, members are extending loan terms to stay competitive and keep loan demand in their markets. As you might be experiencing at your own institution, the increase in term is placing additional risk onto your balance sheet. How do you hedge the risk? It is possible to offer long-term fixed rate loans with little to no interest rate risk, but choosing the right hedging instrument becomes the challenge. When building your funding strategy, consider your institution's liquidity profile, risk tolerance and the predictability of cash flows.

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Hedging the Risk | Two Primary Options

OPTION 1: Stand-alone interest rate swap agreement

The first, and probably the most complex, is by entering into a **stand-alone interest rate swap agreement**. A swap agreement modifies the interest payments on a loan from a fixed to floating rate on your books. The fixed interest payment received on the loan is exchanged for an adjustable yield that is usually tied to LIBOR. The adjustable yield is determined by the pricing that is set by the swap counterparty and takes into account the fixed rate being paid, the term of the loan and any fees associated with the trade.

The diagram above shows the transaction flow of an interest rate swap. The example shows a financial institution entering into a fixed rate loan with a customer while simultaneously entering into an offsetting fixed rate swap. The loan customer pays a fixed rate of 3.75% for 7 years, and the bank earns LIBOR + 1.48%. The counterparty calculates the spread to LIBOR that an institution will receive based on the LIBOR/swap curve with the spread also reflecting the fees or profit the counterparty requires on the trade.

The loan is generally funded with either deposits or short-term funding that can compress the spread if the funding cost rises faster than LIBOR. Institutions entering into this transaction should analyze how their historic cost of funds has correlated to LIBOR over time. A disconnect from LIBOR could be a positive for your institution if deposit costs lag LIBOR increases; or have a negative impact if LIBOR rates fall at a faster pace than deposit costs. Looking at the correlation over a longer period of time and multiple rate environments will better illustrate your potential spread gain or compression.

If your institution chooses to enter into a swap agreement, the transaction requires the use of a swap dealer (counterparty) and often involves the use of a consultant to help with the transaction and ongoing management of the swap. Typically, depending on the counterparty, they will provide the accounting treatment and market values necessary for reporting this type of trade. Keep in mind that you must be able to fully explain the swap strategy, including related benefits and risks in different interest rate scenarios. A consultant may be able to help with policies as well as board and ALCO presentations, which may require additional fees.

Other swap considerations:

- The cost to terminate the swap if your customer prepays their loan.
- The collateral requirements that must offset mark-to-market exposure to the counterparty. You can usually expect initial margin requirements and ongoing collateralization based on the difference between the notional amount and the market value of the swap (if the market value declines).
- The potential spread compression if internal cost of funds increases significantly relative to changes in LIBOR.

While it may require some additional work, education and monitoring, interest rate swaps can provide an effective hedge against the risk of spread compression on longer-term fixed rate loans resulting from rising interest rates.

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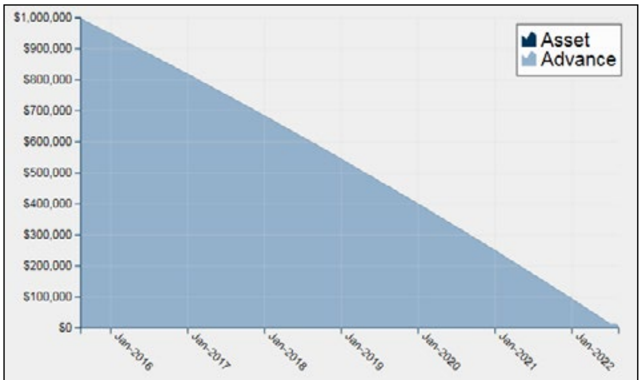
OPTION 2: Funding with FHLBank Advances

A second, and possibly simpler, approach to offering long-term fixed rate commercial loans is to fund an individual loan or pool of loans with an FHLBank advance. While various advance products are available, we typically see amortizing advances or a ladder of bullets used for hedging commercial loans.

These advances are simple in nature and are similar in structure to the loans you are making, which makes it easy to explain to your customers, regulators and board members. In comparison to interest rate swaps, advances allow you to avoid hedge accounting and any additional consulting fees associated with interest rate swaps. Similar to interest rate swaps, your customer might ask to prepay their loan early. If that happens, your institution can either re-deploy the funds to another loan or pass the prepayment fee along to the customer (if the appropriate language had been added to your loan). Let's look at three amortizing advance strategies to compare to the same transaction we used previously for an interest rate swap.

Match Funding

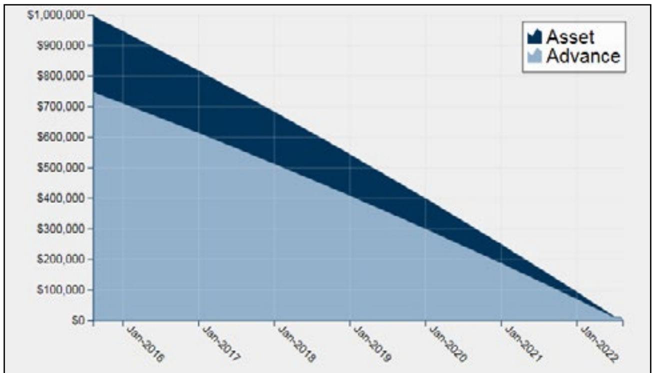


Asset	Advance	Deposit COF	Spread in bps
$1,000,000 Amort: 84 mo CPR: 0.000 % Maturity: 84 mo Yield: 3.750 % Principal: Monthly	$1,000,000 Amort: 84 mo CPR: 0.000 % Maturity: 84 mo Rate: 2.104 % Principal: Monthly	0.500 % Interest is collected on the first business day of each month.	165 initial 165 adv life 165 asset life

A **match funding strategy** uses an amortizing advance with the exact term and dollar amount of your loan.

- **When would you use the match funding strategy?** if you are tight on liquidity or when you are relatively certain your customer's loan will not prepay prior to the contractual maturity.
- **It also works well when:** You are able to incorporate a make whole prepayment fee into your loan terms.
- **Advantage**: This strategy carries zero interest rate risk since you are fully funding the loan with an advance.

Blended Funding



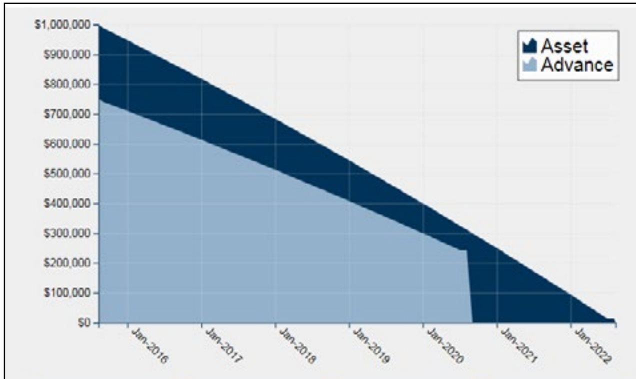
Asset	Advance	Deposit COF	Spread in bps
$1,000,000 Amort: 84 mo CPR: 0.000 % Maturity: 84 mo Yield: 3.750 % Principal: Monthly	$750,000 Amort: 84 mo CPR: 0.000 % Maturity: 84 mo Rate: 2.104 % Principal: Monthly	0.500 % Interest is collected on the first business day of each month.	205 initial 205 adv life 205 asset life

A **blended funding strategy** utilizes an amortizing advance that equals the term of your loan but funds a portion of the loan with advances and the remaining portion with deposits. The mix of funding you choose depends upon your liquidity profile, the reliability of the asset amortization and your interest rate risk tolerance.

- **When should you use more advances?** if you are tight on liquidity, risk adverse or if the asset amortization is relatively certain.
- **When should you use more deposits?** If you have excess liquidity, have a tolerance for moderate interest rate risk or if the asset may prepay more quickly than expected.
- **Advantage**: This strategy typically achieves a higher spread since deposit rates are generally lower than advance rates.
- **Keep in mind**: As deposit costs rise, spread compression could occur, depending on the percentage of deposits you use to fund the loan.

See next page for our short funding strategy.

Short Funding



Asset	Advance	Deposit COF	Spread in bps
$1,000,000 Amort: 84 mo CPR: 0.000 % Maturity: 84 mo Yield: 3.750 % Principal: Monthly	$750,000 Amort: 84 mo CPR: 0.000 % Maturity: 60 mo Rate: 1.911 % Principal: Monthly	0.500 %	219 initial 219 adv life 228 asset life
		Interest is collected on the first business day of each month.	

A **short funding strategy** employs an amortizing advance that is shorter in maturity or matches the typical duration or average life of the loan you are funding.

- **How do you determine the term?** The term should be subject to or based upon the loan officer's knowledge of your customer's typical borrowing habits, such as paying loans off early or making additional principal payments.
- **How much wholesale funding should you use?** It depends on your risk tolerance. If your customer's loan remains on the books following the advance maturity, the remaining life of the loan is funded with your deposits or shorter term advances, known as "rolling down the curve."
- **When does it work?** When you have excess liquidity to employ or you think that your customer's loan may pay off prior to contractual maturity. This strategy achieves the highest spread but also carries additional interest rate risk.

Consider your risk appetite when deciding which option is best for your institution's funding solution. Keep in mind FHLBank Topeka's above-market dividends earned on Class B stock can lower your effective advance rate by up to 27 basis points (based on 4.50% stock requirement using Class B Stock at a 6% dividend).

The table below compares the advances side by side with interest rate swaps. Numerous factors come into play when making the appropriate hedging decisions including your risk appetite, liquidity, the complexity of the trade and the overall income of the transaction.

	ADVANCES	INTEREST RATE SWAPS
Advantages	▶ Efficient long-term fixed rate funding ▶ If loan prepays early, funding can be used for another asset ▶ Simple and accessible ▶ Understood by board and management ▶ Collateralized with your blanket pledge and are based on reported collateral	▶ No additional liquidity on balance sheet ▶ Allow deposit funding to be deployed into long-term loans
Disadvantages	▶ Funding at time of execution (on balance sheet funding) ▶ Potential prepayment penalty	▶ Complexity – need to educate board and management ▶ Margin calls – need for collateralization (typically delivered cash) ▶ Cost associated with unwinding swap ▶ Transaction spread could be offset by increasing internal cost of funds
Similarities	▶ Minimal to no interest rate risk depending upon strategy ▶ Stable net interest spread on loans ▶ Both allow institution to offer long term fixed rate product ▶ Cost associated with prepayment on advance or unwind on swap	

Contact Bobbi today for solutions that work for you.

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