



# Duration Hedging as a Shield Against Rising Interest Rates

hedging Borrower's Loan Protection lending

**Summary:** A CFI's bond portfolio can face serious risk when interest rates rise. Duration hedging can help moderate that risk, but many financial institutions don't use it. We review the most common duration hedging strategies to consider for interest rate risk mitigation.

The strategy game Risk, where players attempt to capture each other's territories until the final player occupies all 42 territories on the board, was originally invented by a French filmmaker in 1957. The French version was aptly called La Conquête du Monde, or The Conquest of the World. Parker Brothers purchased the rights to the game in 1959, and thus Risk was born.

Risk is widely considered to be the blueprint for later war-and-strategy games for multiple players and requires players to plan ahead and think strategically in order to win. Financial institutions must use similar tactics to manage their own risk, especially when it comes to interest rate risk.

To help manage it, financial institutions can employ duration hedging — typically with investments and/or other financial products that hedge against the effects of interest rate swings on longer-duration bonds. Duration hedging is common practice at big financial institutions, but its use is less frequent elsewhere, particularly among community financial institutions (CFIs).

One common barrier to hedging for CFIs managing these programs in-house is that it requires a lot of attention and staff to run such a program effectively on their own. In addition, a hedge carries its own costs and reduces the income from the underlying securities that are being hedged. For these reasons, having a correspondent bank partner the CFI can count on to help manage the logistics of a hedged loan is the most viable option for offering duration hedging.

A recent paper written by four university scholars that looked at one duration hedging method — interest rate swaps — during the run-up in interest rates in 2022 found that more than three-quarters of financial institutions never used them. Financial institutions that were most exposed to interest rate risks had used even less hedging than others.

#### **Defining Duration Hedging**

So, what is duration hedging exactly? It is a strategy to reduce interest rate risk. One of the key ways that financial institutions manage their held capital is through bond investment to earn interest. The longer the bonds, the greater the risk of loss if interest rates rise.

In the case of Silicon Valley Bank last March, that institution had a high balance of deposits that it invested in fixed-interest, longer-term bonds just as the Fed began hiking interest rates. They had planned to hold those bonds until they matured, but that proved to be a billion-dollar mistake, as interest rates rose sharply and the bank run occurred before the bonds matured.

#### **Duration Hedging Strategies**

To guard against these types of interest rate swings, there are a number of established duration hedging strategies that CFIs should consider:

- 1. **Laddering.** This is one of the most basic methods and consists of simply buying bonds with different maturities to dampen the impact of big swings on longer-term bonds.
- 2. Interest rate swaps. These investments involve derivatives under which one interest payment stream is exchanged for another for a set period of time. For example, a fixed rate of interest could be exchanged for a floating rate. These swaps are typically traded in the over-the-counter market. Although they can be complicated, fixed-for-floating interest rate swaps are just about the most basic swaps that exist and are often referred to as vanilla swaps. Timing can be important with swaps, particularly in a rapidly changing interest rate environment. PCBB's Borrower's Loan Protection® hedging solution allows your customer to pay a fixed rate, while your institution receives a floating rate for the loan's term.
- 3. **Pledging collateral.** This is not strictly a duration hedge but rather a way to establish a liquidity source in a time of exceptional need, such as an interest rate squeeze. A CFI can pledge collateral to the Fed or the Federal Home Loan Bank, thus securing a source of quick cash in the form of a loan. The pledge is actually designed to protect the government from loss on its loan to a financial institution. But by having a pledge in place, the financial institution establishes a way to quickly obtain liquidity in a crisis.

Investing in longer-term bonds is a standard way of managing cash for financial institutions, but those instruments are subject to interest rate risks that can be serious. Duration hedging can help dampen those risks and could be well worth the resources it takes to devise such a system.

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Pater Ac Of: 01/17/2024 07:25AM (CMT 0900)

### ECONOMY & RATES

Rates As Of: 01/17/2024 07:35AM (GMT-0800)			
Treasury	Yields	MTD Chg	YTD Chg
ЗМ	5.45	0.05	0.05
6M	5.18	-0.08	-0.08
1Y	4.78	0.02	0.02
2Y	4.35	0.10	0.10
5Y	4.05	0.20	0.20
10Y	4.13	0.25	0.25
30Y	4.34	0.31	0.31
FF Market	FF Disc		IORB
5.33	5.50		5.40
SOFR	Prime		OBER
5.32	8.50		5.31

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