
Finding Positive Expected Returns in a Negative Rate Environment

August 2019

Governments, banks, and companies around the world have different reasons to issue and invest in bonds. Individual investors may also hold bonds, either directly or through vehicles like mutual funds and ETFs. The collective supply and demand of all market participants sets the yields on bonds, which have been pushed into negative territory in various currencies.

At first glance, investors may want to avoid bonds with negative yields. However, these bonds may provide positive expected returns if they are hedged to a currency with a positive short-term interest rate. Although typically viewed as a tool for dampening volatility, currency hedging may also transform a negative yield into a positive yield for some bonds, thereby enhancing expected returns. The hypothetical example in **Exhibit 1** shows how a foreign yield curve's short-term interest rate shifts to the local yield curve's short-term interest rate by hedging the foreign yield curve to the local yield curve's currency.

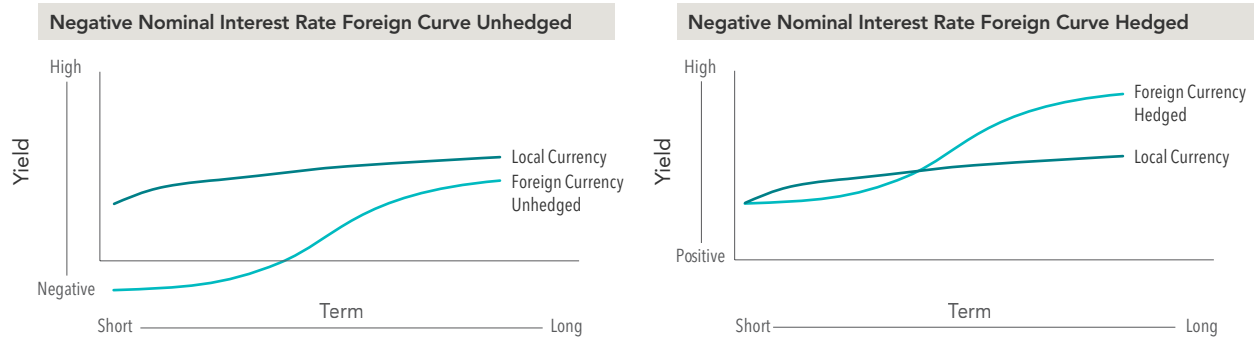
If the foreign yield curve's short-term interest rate is -0.25% and the local yield curve's short-term interest rate is 0.25% , for instance, the hedged foreign yield curve's short-term interest rate would become approximately 0.25% . As a result, the entire foreign yield curve experiences a positive shift while maintaining its original shape.

The shape of a yield curve is also important to consider. The expected return of a bond equals (1) its yield, or income, plus (2) any expected capital gain (loss) over its

Strategies with the flexibility to consider the effects of currency hedging and the shapes of yield curves may have the opportunity to generate positive expected returns in a negative interest rate environment and higher expected returns than a domestic-only strategy.

holding period based on the current shape of the yield curve. In an upwardly sloped yield curve environment, the expected capital gain of a bond is generally higher at steeper segments of the yield curve. The foreign yield curve in Exhibit 1 is relatively steep, thereby offering higher expected return opportunities on a currency hedged basis than the local yield curve. Thus, it is worth considering foreign bonds with negative yields, since they may provide positive and higher expected returns due to the impact of currency hedging and expected capital gains.

Exhibit 1: Currency Hedging Broadens the Investment Opportunity Set



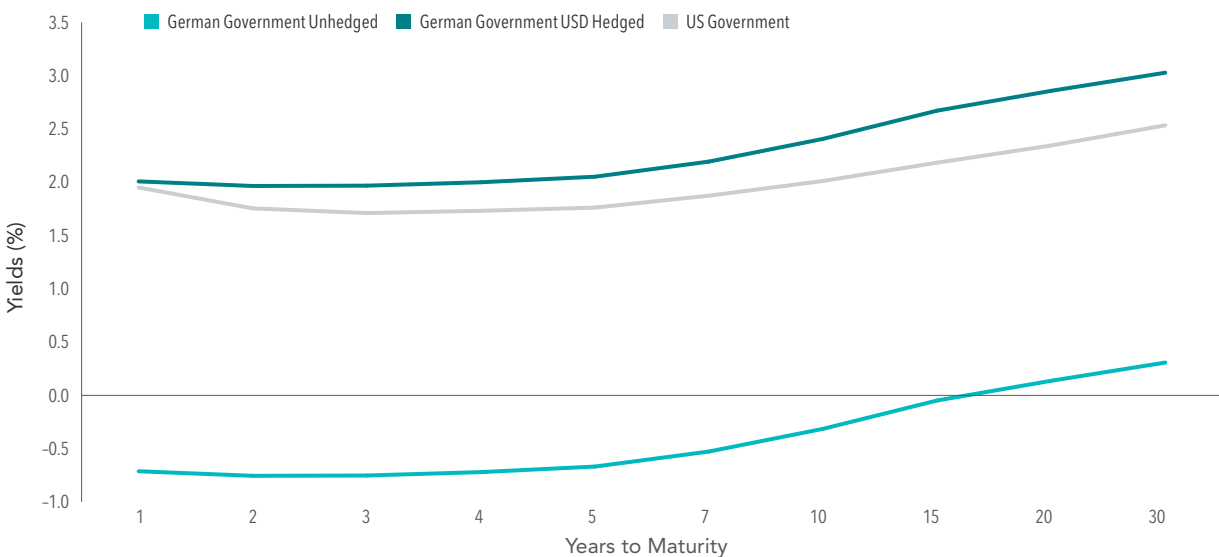
Hypothetical example for illustrative purposes only.

Consider the yields on German and US government bonds as of June 30, 2019, shown in **Exhibit 2**. German investors experience negative yields in their local currency. However, US investors would experience positive yields once the German bonds are hedged to the US dollar. Furthermore, because the German yield curve is steeper than the US yield curve, the German yield curve provides a higher expected return than the US yield curve due to the second component of expected return.

SUMMARY

In recent years, market forces have pushed interest rates below zero on bonds in various currencies. This development is not a reason for investors to abandon a globally diversified bond portfolio. Yield curves around the world have different shapes and different levels of interest rates. Fixed income strategies that have the flexibility to consider the effects of currency hedging and the shapes of yield curves may have the opportunity to generate positive expected returns in a negative interest rate environment and higher expected returns than a domestic-only strategy.

Exhibit 2: Yields on Government Bonds in Local Currency and Hedged to USD as of June 30, 2019



Source: Bloomberg Barclays.

Past performance is no guarantee of future results.

This information is provided for registered investment advisors and institutional investors and is not intended for public use.

All expressions of opinion are subject to change. This information is intended for educational purposes, and it is not to be construed as an offer, solicitation, recommendation, or endorsement of any particular security, products, or services.

Past performance is not a guarantee of future results. There is no guarantee investing strategies will be successful. Investing risks include loss of principal and fluctuating value. Fixed income securities are subject to increased loss of principal during periods of rising interest rates, and they are subject to various other risks, including changes in credit quality, liquidity, prepayments, and other factors. International investing involves special risks, such as currency fluctuation and political instability.

Dimensional Fund Advisors LP is an investment advisor registered with the Securities and Exchange Commission.

dimensional.com

