

# Investing in a Negative Interest Rate World

Central banks typically use monetary policy to manage interest rates and money supply in order to target levels of economic growth and inflation. Recently, however, the framework for monetary policy has become more complicated, with central banks in Europe and Japan imposing negative interest rates (see Figure 1).

Negative interest rates have affected bond investors around the world. Even in countries where rates remain positive, investors with broad fixed interest portfolios are not immune to the effects of negative interest rates. Central banks in nine developed countries have now set key rates below zero, and as a result, portions of the yield curves in these countries have dropped to negative levels.

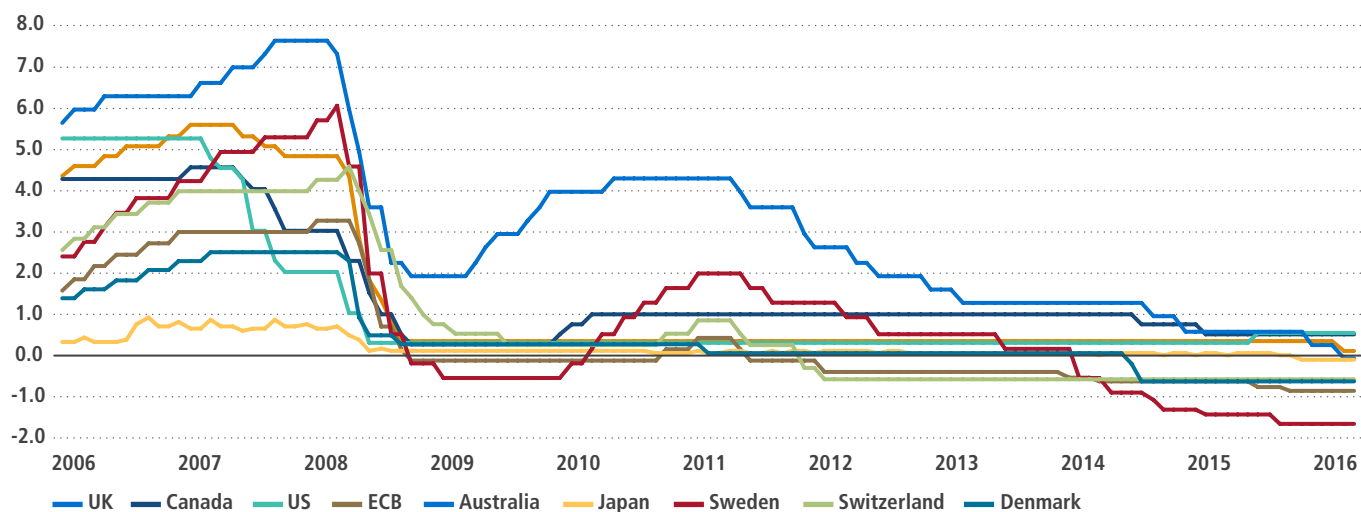
Much has been written about the effectiveness of negative interest rate policy and whether it will prove counterproductive. It is perhaps too early to tell. What has

become clear, however, is the importance of understanding the mechanics of negative interest rates and the implications for financial markets. Why are central banks imposing negative rates? How do they feed through to financial markets and the prices of assets? And what are the risks and implications for investing?

## DO NEGATIVE RATES MEAN PAYING FOR DEPOSITS?

Yes. Although individuals are not paying banks to hold their money, negative interest rates imposed by a central bank effectively mean commercial banks are required to pay for holding excess reserves with the central bank. For example, if the deposit rate were -1%, for every \$10 million held with the central bank, the commercial bank would have a balance of around \$9.9 million at the end of a year.

FIGURE 1: GLOBAL CENTRAL BANK RATES



Source: Bloomberg as of 17 October 2016

The theory is that commercial banks will be dissuaded from maintaining large balances with the central bank and will instead lend money to businesses and consumers who will, in turn, spend the money. The increase in lending and spending is likely to boost economic activity, leading to growth and inflation. In this way, negative interest rate policy is considered by many to simply be an extension of traditional monetary policy.

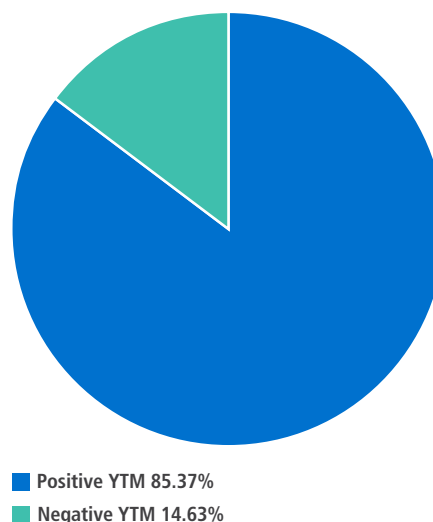
For Switzerland, Denmark and Sweden, the rationale for lowering policy rates below zero had more to do with their currencies and the associated exchange rates than credit creation. The objective was to put downward pressure on the currency in order to stimulate trade by making exports cheaper and imports more expensive.

#### HOW DO NEGATIVE INTEREST RATES FLOW THROUGH TO MARKETS?

Negative central bank rates push down short-term rates on other types of lending, which in turn influence business and consumer rates. Negative rates also spur banks and other investors seeking yield to buy short-term government debt, pushing up prices and lowering yields on these securities. And rates on corporate bonds are in turn linked to yields on government debt. Ultimately, because negative central bank rates affect bond market yields, they affect bond benchmarks.

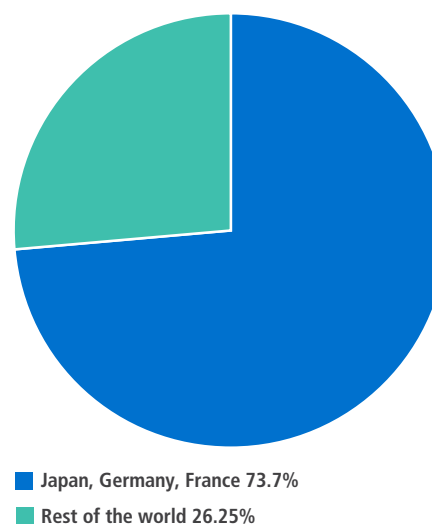
Indeed, yields-to-maturity on many bonds have now moved into negative territory: At the end of September 2016, a staggering US\$12 trillion in global investment grade bonds were trading with negative yields. At the same time, 15% of bonds within the Barclays Global Aggregate, one of the most widely used global bond benchmarks, were trading with negative yields-to-maturity. Of these, 74% were issued by Japan, Germany and France (see Figures 2 and 3).

FIGURE 2: BARCLAYS GLOBAL AGGREGATE:  
% OF TOTAL SECURITIES WITH NEGATIVE YIELDS-TO-MATURITY



Source: Barclays as of 30 September 2016

FIGURE 3: BARCLAYS GLOBAL AGGREGATE:  
NEGATIVE YIELDS-TO-MATURITY BY COUNTRY GROUPING



Source: Barclays as of 30 September 2016

However, this does not mean a positive return cannot be generated from a bond portfolio. Based on the experience in Japan over the last few decades, low and negative bond yields do not necessarily translate into negative returns in bond markets and across asset markets in general. In fact, if you invested ¥100 in the Japanese bond market in 1995 you would now have about ¥187, far outstripping the return in the equities market at only ¥105. How? Even though yields were low, the upward slope of Japan's bond yield curve – like most yield curves today – offered the opportunity for capital gains through “roll-down,” which involves buying and holding a bond for a period of time and then realizing a price/capital gain as it gets closer to maturity.

### WHAT ARE THE MECHANICS OF NEGATIVE RATES?

To understand how negative interest rates are priced into the value of securities, consider commercial paper (CP). The mechanics for CP are very simple: CP is discounted paper with no coupon. The typical term is one to three months.

Investors usually buy CP at a price below par (100) and the value of the security moves back towards par over its term. With negative interest rates, however, investors buy at a price above par, and during the term, the price falls back down to par again. In other words, the negative interest rate erodes the value of the security from above par back to par at maturity.

For example, assume a company issues €20 million in three-month CP at a rate of -0.10%.

The purchase price would be 100.025, or a total cash amount of €20,005,001. If an investor held the security for the full term, the investor would get back €20,000,000 at maturity. Hence, the investor would make a “loss” of €5,001.25. This is the negative interest.

The mechanics are similar for bonds. If a bond is sold with a negative yield, at maturity the buyer does not receive back the total amount invested. The negative interest is built into the price paid for the bond upfront, as it is basically not possible to collect negative coupons.

What happens with floating-rate bonds, which have coupons that reset periodically? As the name suggests, the rate paid on a floating-rate note (FRN) is linked to an index, such as Euribor. With three-month Euribor currently at negative -0.31%, an FRN coupon formula with a spread below 31 basis points (bps) would deliver a negative coupon.

Because negative coupon “payments” are not feasible, FRN issuers have three options. The first is to add a very large spread and hope that rates don't go down that far. This is not popular because the upfront payment would be large and FRN investors are used to buying around par. The second option is to issue “sinkable” FRNs such that negative coupons are netted with early maturity/redemption payments. Again, this is not a palatable option for most investors. The third option is to add a “floor” to the FRN, but like the first option, the FRN would get expensive as the investor would be required to pay for that protection. Not surprisingly, most governments and agencies have stopped issuing FRNs. Credit FRNs are still being issued, however, as the spreads are typically higher than those on government bonds and high enough to provide a comfortable buffer against negative rates.

### LOOKING TO THE FUTURE

Negative rates are now well entrenched in the bond markets. Global growth is widely expected to remain slow compared to the past, and most central banks will likely continue to set policy rates well below those that prevailed before the financial crisis.

While the debate continues over the effectiveness of negative interest rates, we think it is prudent for investors to understand and adapt to them.

## Navigating Negative Yields With Active Management

Earning attractive, positive returns can be challenging when yields on a significant portion of the bond market are negative. An active approach to portfolio management, in our opinion, can offer several advantages.

While passive investing typically involves constructing a portfolio to mirror a bond index, an active manager selects specific securities based on their unique characteristics and how they may perform together; in this way, an active manager can aim to minimize the impact of negative yields and outperform the broader market. Even in a world with negative yields, there continue to be many ways to seek to add value to bond portfolios through active investment strategies that take advantage of relative value, tactical opportunities and the structural features inherent in bonds.

Diversification is important in navigating the negative rate environment. Investors can boost return potential by diversifying a fixed income portfolio across segments of the bond market that offer higher yields than government bonds, including corporate bonds, mortgage-backed securities and emerging markets. Investing across the approximately \$100 trillion global bond market allows greater potential for defense, income and diversification.

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