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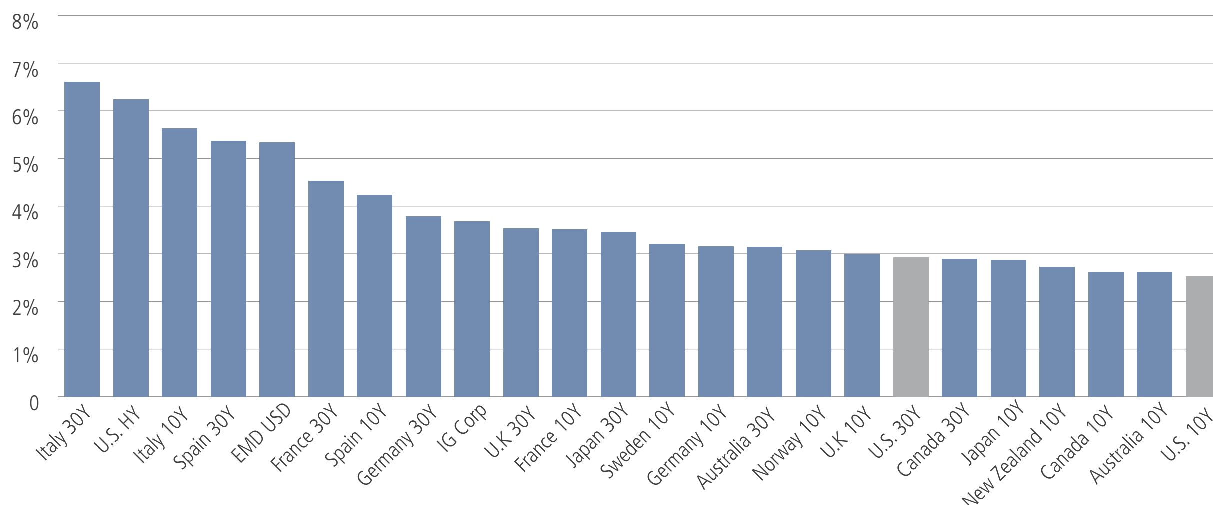
The Opportunity in USD-Hedged Global Treasuries

Investors surveying the developed market sovereign bond landscape are often left disillusioned with the paltry yields on offer around the globe. Some major central banks have adopted quantitative easing and asset-purchasing strategies since the 2008 – 09 financial crisis, and many others maintain negative interest rate policies. As a consequence, there is still approximately $10 trillion in negative yielding debt outstanding.

With the Federal Reserve hiking rates four times in 2018, the U.S. has increasingly been considered an attractive source of carry in an otherwise low-yield global developed sovereign bond market. However, and perhaps less obviously, the rest of the world does present an opportunity for U.S. dollar-based investors to find superior high-quality yield.

How can this be? The answer lies in currency-hedged fixed income investing. Figure 1 provides a snapshot of yields, 100% hedged back to USD, across a sub-section of the global opportunity set. Unexpectedly, perhaps, the U.S. Treasury yields that look so attractive on a local-currency basis not only lag investment-grade, high-yield and emerging-markets spread sectors, but even other sovereign bonds beholden to negative interest rate monetary policy.

FIGURE 1: GLOBAL YIELDS, HEDGED TO USD



Source: Neuberger Berman calculations, Bloomberg. Data as of March 31, 2019.

The Mechanics of Currency-Hedged Yields

To demystify this, it helps to understand the mechanics of currency-hedged yield. In simple terms, it is a function of three things:

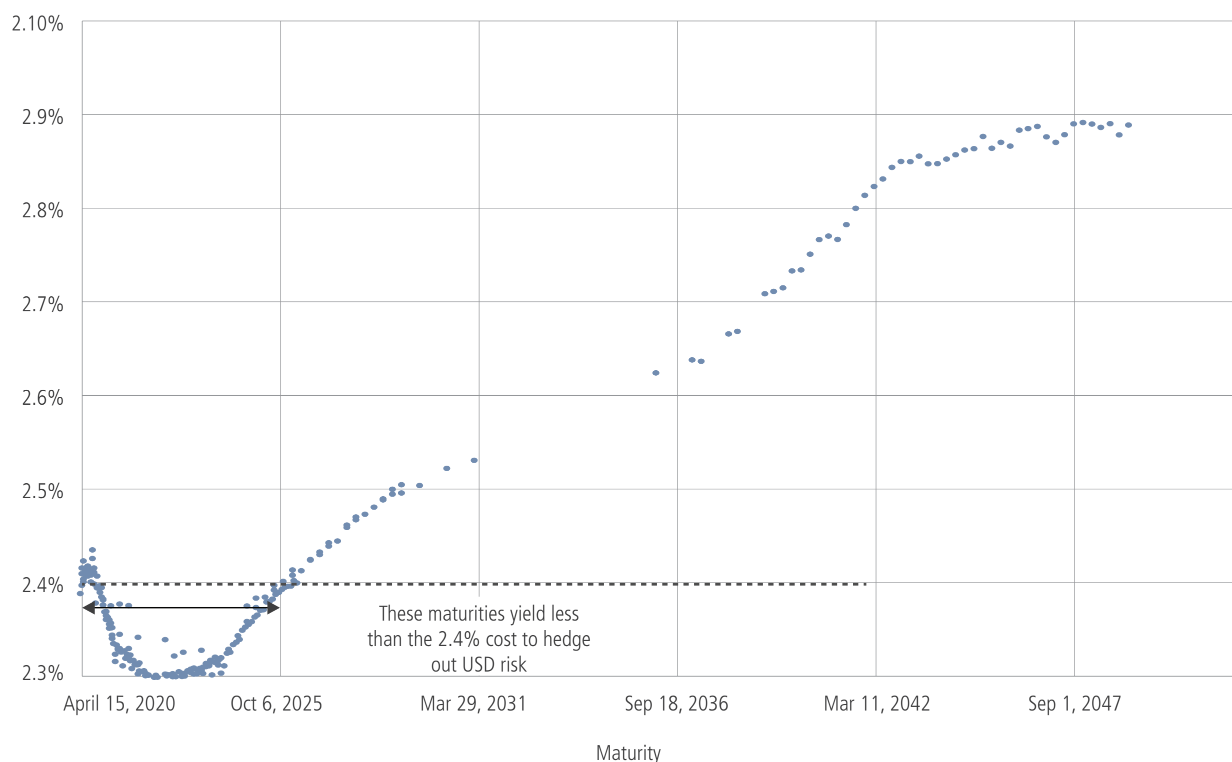
- The relative short-term rate expectations for the (foreign) asset currency and investor's (domestic) base currency
- The relative steepness of the foreign and domestic yield curves
- Technical dynamics, usually manifested in movements in the "cross-currency basis"

The Federal Reserve has gradually tightened monetary policy over the last few years, and the U.S. policy rate now sits within a target range of 2.25%-2.50%, the highest rate among the G10. The consequent widening of short-term rate differentials in favor of the U.S. translates into higher hedging costs for foreign investors who buy U.S. debt and hedge out the USD risk. On the other hand, U.S. investors—or more broadly investors who have U.S. dollars—can 'earn' this hedging cost by effectively investing their dollars in overseas markets.

The second driver of currency hedged yields is the relative steepness of foreign and domestic yield curves. For example, a EUR-based investor may need to pay hedging costs to invest in U.S. fixed income, but if longer-term U.S. yields are sufficiently high, it can be an attractive investment. However, that is currently not the case: the U.S. yield curve is relatively flat, while EUR-based yield curves are generally quite steep, which creates a further headwind for EUR investors, but an additional source of potential opportunity for U.S. investors. Given the current shape of the U.S. yield curve, the effective U.S. short-term rate of 240 basis points is higher than yields all the way to 2025—leaving the non-USD currency-hedged investor with a clearly sub-optimal investment out to that maturity (figure 2).

FIGURE 2: FRONT-END INVERSION DRIVING NEGATIVE CARRY FOR NON-USD INVESTORS

U.S. Treasuries yield-to-worst



	$Trillion	% of UST Index
U.S. Treasuries yielding <2.4% effective rate:	5.7	69%
U.S. Treasuries yielding >2.4% effective rate:	2.6	31%
Total	8.3	100%

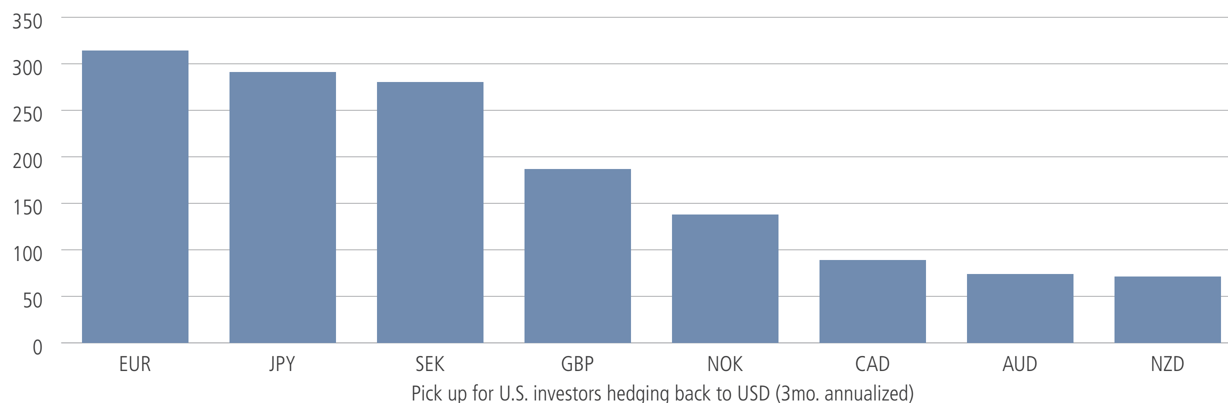
Source: Neuberger Berman calculations, Bloomberg. Data as of March 31, 2019.

Finally, the market sometimes demands a premium to swap one currency for another. This premium, called the cross-currency basis, represents a deviation from the theoretical no-arbitrage, or "covered interest rate parity" relationship between currency spot and forward exchange rates. It can persist due to currency supply-and-demand imbalances (the basis is wider when swapping a less sought-after currency for an in-demand currency), or regulatory impediments to closing that arbitrage. For example, the banking system may not be able to correct arbitrage discrepancies because of the amount of capital required to support such potentially profitable positions. At the moment, there is a high cross-currency basis in favor of the USD against many other currencies, which increases the costs of hedging out USD risk. Intuitively, it can be thought of as the financial systems' preference for or shortage of U.S. dollars.

A EUR-based investor who purchases a U.S. Treasury, for example, will currently give up around 310 basis points annually to insulate themselves from currency movements: this consists of the 260-basis point short rate (3-month USD LIBOR) paid away for selling the USD, the negative 35-basis point short rate (3-month EUR LIBOR) "received" for buying the EUR, plus 13 cross-currency basis points paid to swap EUR for USD. On the other hand, a USD-based investor who purchases EUR assets will "earn" this additional 310 basis points.

Figure 3 depicts the potential yield pick-up that a USD investor receives from rolling three-month foreign-exchange swaps with eight other currencies, assuming interest rate expectations remain unchanged. (It is important to note that hedging with a three-month forward, which is the most common and convenient approach, introduces rollover risk: should the hedge be maintained for longer and interest rate expectations change, the annualized pick-up may undershoot or overshoot the original forecasts.)

FIGURE 3: HEDGING-RELATED YIELD PICK-UP FOR USD INVESTORS INVESTING IN NON-USD MARKETS
Annualized three-month yield pick-up from hedging back to USD, basis points



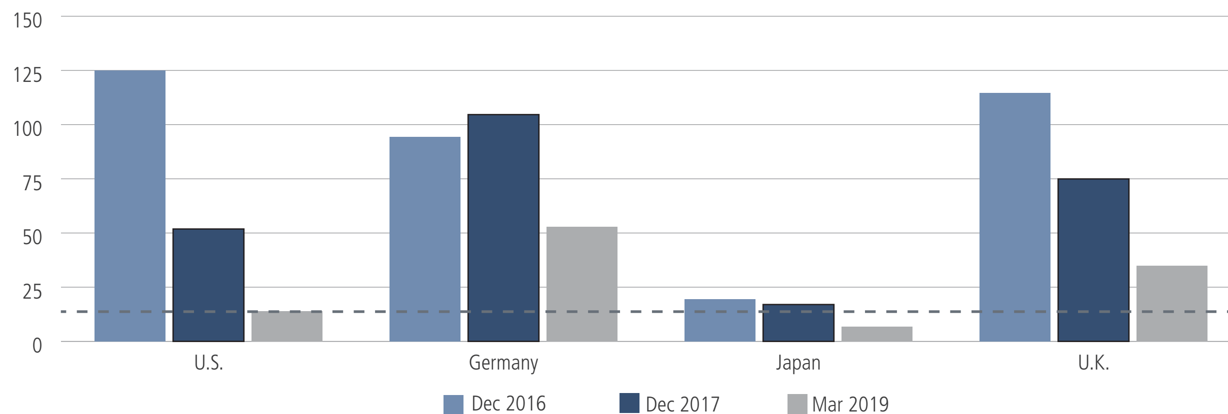
Source: Neuberger Berman calculations, Bloomberg. Data as of March 31, 2019.

The Impact of Currency Hedging on non-USD Yields for USD-Based Investors

Hedged yields have become an increasingly important consideration in the current environment, where unconventional monetary policy has flattened yield curves and starved investors of traditional income opportunities.

Figure 4 shows the gradual decrease in yield curve slopes across the G4, but what is particularly striking is that the U.S. 2s10s curve slope is not much wider than that of Japan, where the central bank is explicitly intervening to keep its curve artificially flat in a bid to reflate its economy.

FIGURE 4: AMID GLOBAL YIELD-CURVE FLATTENING, THE U.S. HAS CONVERGED WITH THE EXTREMES OF JAPAN
2s10s yield curve spread, basis points



Source: Bloomberg. Data as of March 31, 2019.

Combine that extremely flat U.S. curve with the prohibitive USD currency-hedging costs we have already described, and U.S. Treasuries begin to look very unattractive to foreign investors who need to hedge out the currency risk. The flipside, however, is that relatively steeper curves and gains from currency hedging combine to make non-USD investments highly attractive to USD-based investors. Indeed, the boost from currency hedging makes even the relatively flat Japanese yield curve look more favorable to a USD investor. Figure 5 sets out the hedged yields available to a USD investor across a range of sovereign markets at two, five, 10 and 30 years maturity.

FIGURE 5: THE U.S. YIELD CURVE COMPARED WITH CURRENCY-HEDGED ALTERNATIVES

Currency-hedged yields for 14 markets at four maturities

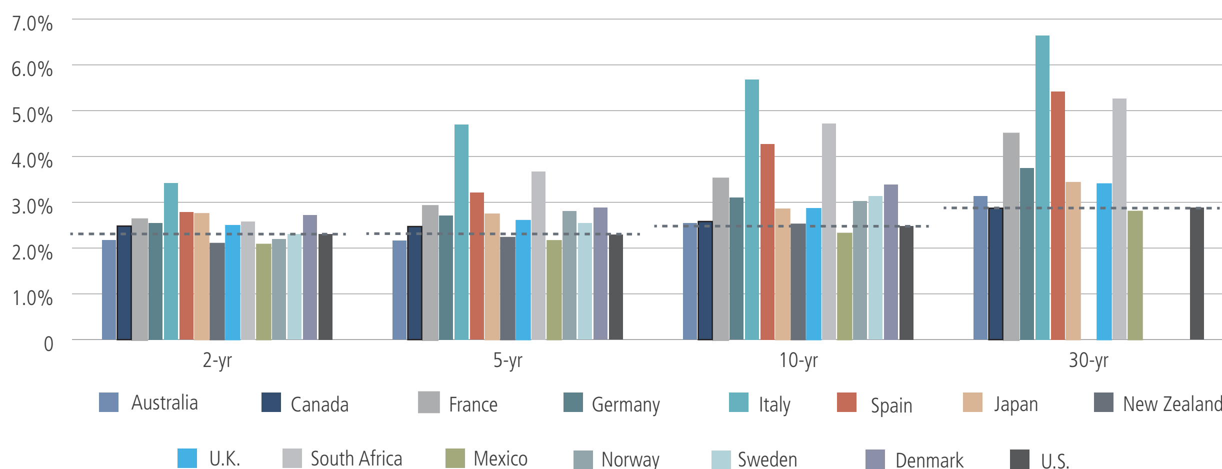
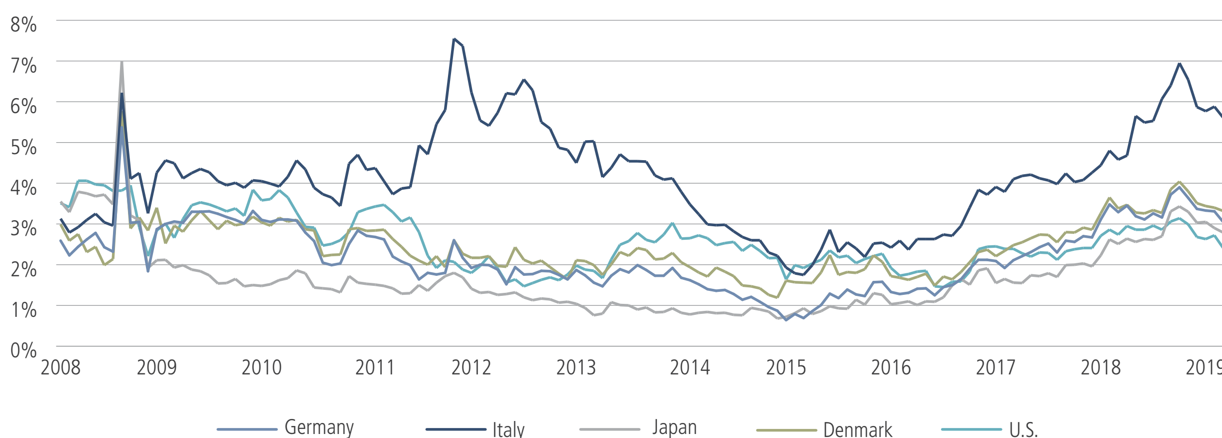
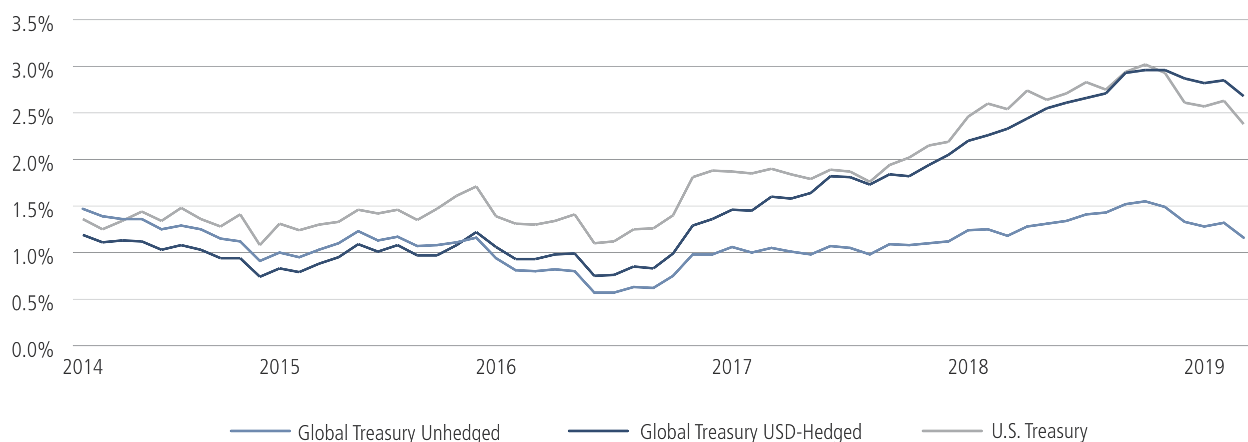


FIGURE 6: 10 YEAR CURRENCY-HEDGED YIELDS FOR FOUR MARKETS, 2008 – 2018



Source: Neuberger Berman calculations, Bloomberg. Data as of March 31, 2019.

FIGURE 7: YIELD OF THE BLOOMBERG BARCLAY'S GLOBAL TREASURY INDEX, UNHEDGED AND USD-HEDGED, 2014 – 2019



Source: Bloomberg. Data as of March 31, 2019.

Can This Currency-Hedged Yield Pick-Up Persist?

Hedged-yield opportunities such as these are subject to change as investors reprice interest rate expectations. However, we believe that developed market monetary policy is likely entering a phase of relative calm in which interest-rate expectations will remain anchored and steady.

In 2018 the Federal Reserve and the Reserve Bank of Canada (RBA) continued to make progress toward normalizing policy. However, both central banks have recently tilted in a dovish direction as policymakers err on the side of caution in the face of declining global growth and nascent signs of tightening financial conditions. Meanwhile, the European Central Bank (ECB) extended its forward guidance in its March 2019 meeting, pre-committing to keeping rates on hold until at least the end of 2019 while announcing an additional round of Targeted Long-Term Refinancing Operations ("TLTRO 3"). Lastly, the Bank of Japan (BoJ) has also displayed an aversion to withdrawing monetary stimulus as it attempts to navigate a stubbornly low inflation environment.

As figure 8 shows, markets have started to price a movement away from monetary policy normalization, with a full rate cut priced for the Fed, around two full cuts priced for the RBA and the Reserve Bank of New Zealand, and other markets pricing in increasing probabilities for monetary easing in the next 12 months.

FIGURE 8: CENTRAL BANK RATES AND WHAT'S PRICED IN

Country	Central Bank Rate (%)	Current 3-Month Currency Hedge Yield Pick-Up (%, Annualized)	Implied Policy Change Over Next 12 Months (bps)
U.S.	2.50	-	-30
Euro zone	-0.40	3.11	-1
Japan	0.10	2.87	-4
U.K.	0.75	1.83	-5
Canada	1.75	0.89	-17
Australia	1.50	0.69	-47
New Zealand	1.75	0.71	-51

Source: Neuberger Berman calculations, Bloomberg. Data as of March 31, 2019. The currency hedge yield pick-up is based on current 3-month foreign-exchange swap rates; the annualized yield pick-up of subsequent 3-month swaps is subject to changes in policy rates and market rate expectations and therefore the estimated yield pick-up is not guaranteed to be realized.

What Does This Mean for Investors?

U.S. investors who are looking at their high-quality government bond portfolios, or who are constrained to the high-quality sector, may wish to consider substituting currency-hedged German Bunds, French OATs, U.K. Gilts, Japanese government bonds and Danish government bonds for at least some of their U.S. Treasuries on an FX hedged basis. As discussed, a globalized portfolio currently offers better yield, and these high-quality markets preserve the diversification against risk assets that investors get from U.S. Treasuries.

For U.S. investors who are able to look for additional carry, a diversified allocation to currency-hedged global government bonds, including peripheral eurozone exposure, for example, can potentially deliver an even higher yield. The diversification benefits from such a portfolio remain considerable: the long-term correlation between the Bloomberg Barclay's Global Treasury USD-Hedged Index and developed-world equities has been around -0.18 to -0.20, and with U.S. high yield around -0.10.

As figure 9 shows, the USD-hedged global treasuries index has also delivered attractive long-term risk-adjusted returns compared with U.S. Treasuries, U.S. equities and global equities, and maintained that superiority in the years since the 2008 – 09 financial crisis. We believe that performance speaks to the benefit of having diverse high-quality investments from across many countries and regions, with a range of foreign-currency hedges.

FIGURE 9: SUPERIOR RISK-ADJUSTED RETURNS FROM USD-HEDGED GLOBAL TREASURIES

Dec 31, 1995 – Mar 31, 2019	Bloomberg Barclays Global Treasury USD-Hedged Index	U.S. Treasury	S&P 500 Index	MSCI AC World Index	50/50 MSCI AC World Index Unhedged + Global Treasury USD-Hedged Index
Avg. Ann. Return	5.86%	4.59%	7.58%	5.54%	5.30%
Avg. Ann. Volatility	2.86%	4.29%	14.82%	15.21%	7.45%
Risk-Adjusted Return	1.77	1.07	0.51	0.36	0.71

Dec 31, 2008 – Mar 31, 2019	Bloomberg Barclays Global Treasury USD-Hedged Index	U.S. Treasury	S&P 500 Index	MSCI AC World Index	50/50 MSCI AC World Index Unhedged + Global Treasury USD-Hedged Index
Avg. Ann. Return	3.27%	2.12%	11.17%	8.02%	5.65%
Avg. Ann. Volatility	2.69%	3.66%	13.60%	14.64%	7.15%
Risk-Adjusted Return	1.22	0.58	0.82	0.55	0.79

Source: Bloomberg, Neuberger Berman. Data as of March 31, 2019.

Even U.S. investors who decide not to change their allocations, or indeed investors who are not USD-based, can benefit from thinking about the capital-flow dynamics that are leading to the current, unusual mix of wide short-rate differentials, wide cross-currency basis in favor of the USD, and substantial and globally divergent yield-curve flattening and inversion.

In summary, we regard global government bonds to be a high-quality asset class that has been a source not only of attractive risk-adjusted returns, but also diversification against both portfolio risk assets and U.S. Treasuries. For some time now, global interest rate differentials, the relative steepness of global yield curves and the cross-currency basis have all come together to make a USD-hedged allocation to global treasuries particularly attractive for USD-based investors. While the persistence of this opportunity will depend upon a continuation of current central-bank policy, we believe it is highly likely that we have entered a period of extended policy stability that will underpin the current dynamics.

When considering opportunities across the global landscape, it is invaluable to have a manager that has the breadth and depth of understanding to navigate macroeconomic complexities and regional idiosyncrasies. Neuberger Berman is well positioned to exploit such opportunities given its strong global presence—fixed income investment teams based in eight cities across North America, Europe and Asia—and integrated investment teams and processes.

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INDEX DEFINITIONS

The **Bloomberg Barclays Global Treasury Total Return USD-Hedged Index** measures the total return of fixed-rate, local currency government debt of investment grade countries, including both developed and emerging markets, hedged to the U.S. dollar.

The **Bloomberg Barclays U.S. Treasury Total Return Unhedged USD Index** measures the total return of USD-denominated, fixed-rate U.S. Treasury bonds with a maturity longer than one year.

The **S&P 500 Index** consists of 500 U.S. stocks chosen for market size, liquidity and industry group representation. It is a market value-weighted index (stock price times number of shares outstanding), with each stock's weight in the Index proportionate to its market value.

The MSCI All Country World Index is a market value-weighted index of more than 2,700 stocks from 23 developed and 24 emerging countries.

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