INVESTMENT PERSPECTIVES

Euro-denominated credit: How currency hedging may benefit USD investors

January 2019

Key insights:

- The European credit market is a large and increasingly important bond market.
- The US dollar (USD) status as a perceived safe-haven currency may create an opportunity when hedging overseas currency risk.
- US investors may achieve a significant yield pickup when investing in European credit.

Investing in European credit may enhance a US investor’s yield and increase diversification

The European credit market offers a large opportunity set and may be an important source of diversification given the different countries, economic policies and issuers in the European Union. This market has doubled in size over the last 10 years, from just under 1 trillion euros to over 2 trillion euros, according to S&P LCD. However, despite this, USD investors do not necessarily take full advantage of the opportunities that euro-denominated credit offers.

Compared with investing in domestic USD credit, euro-denominated credit presents USD investors with the challenge of how to manage currency risk. Exposure to foreign currency risk can significantly alter the risk and return profile of an investment. This, along with a generally lower or even in some cases negative yielding environment in Europe, partly explains why USD investors have, to date, been reluctant investors in euro-denominated credit.

This paper will show that by managing currency risk through hedging, USD investors can explore a 2-trillion-euro credit market and potentially enhance their yield at the same time.
Currency hedging explained

What is a currency hedge and how might it affect euro-denominated credit hedged into USD?

The aim of a currency hedge is to minimise the effects of foreign currency exchange rate movement between two currencies over the term of an investment. As a result of a currency hedge, the value of a EUR investment hedged into USD will not change with moves in foreign exchange rates. However, the expected return on an investment needs to be adjusted for the interest rate differential between the currency of the investor (USD) and the currency of the hedged assets (EUR) as well as for the cross-currency basis swap spread, which captures the relative demand in the market for each currency. Let us discuss these two components within the context of the most common mechanism to hedge currency risk—foreign exchange (FX) forward contracts:

1. **Interest rate differential:** A USD investor executing a currency hedge using an FX forward contract will receive the USD risk-free rate and pay the EUR risk-free rate. Covered interest rate parity is the theoretical condition that the forward exchange rate is based on the difference between the short-term foreign and domestic interest rates. In practice, this means that where the risk-free rate of the investor's currency (in this case, USD) is higher than the risk-free rate of the asset currency (in this case, EUR), under the terms of the FX forward contract, the USD investor should earn higher returns versus a EUR investor due to the positive differential of USD interest rates being higher than EUR interest rates. Figure 1 illustrates this principle.

2. **Cross-currency basis swap spread:** The covered interest rate parity principle must be refined to reflect that competing demands for currencies generate a forward rate, which is different from the rate implied by covered interest rate parity. The difference between the two is known as the cross-currency basis swap spread and introduces a profit or cost for the currency hedger. When the demand for USD is high, non-USD-denominated investors may be willing to receive less interest when executing the hedge transaction. It therefore follows that it becomes cheaper for USD investors to hedge their non-USD investment back to USD. The USD investor will effectively earn the cross-currency basis swap spread as an added return on top of the USD interest rate.

Changes in the cross-currency basis swap spread have been larger and more frequent since the global financial crisis, and these can be either positive or negative. Figure 2 illustrates the evolution of this spread from the perspective of a USD investor. As of 31 December 2018, the EUR/USD cross-currency basis swap spread generated approximately 10 basis points (bps) per annum for the USD currency investor, and this figure was as high as 45 bps at the end of 2017.

**Figure 1. A USD investor earns a higher return because USD interest rates are higher than EUR interest rates**

**Illustrative example**

<table>
<thead>
<tr>
<th>USD 100</th>
<th>USD 102.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td><strong>Dollar risk-free interest rate = 2.5%</strong></td>
<td><strong>Euro exchange rate = 1</strong></td>
</tr>
<tr>
<td><strong>Euro forward exchange rate = 1.03</strong></td>
<td><strong>Euro risk-free interest rate = -0.5%</strong></td>
</tr>
<tr>
<td><strong>EUR 100</strong></td>
<td><strong>EUR 99.5</strong></td>
</tr>
</tbody>
</table>

**Source:** Wells Fargo Asset Management

**Figure 2. The cross-currency basis swap spread has been positive for US investors in recent years**

**USD/EUR cross-currency basis spread**

**A stylised example**

Let us consider an example using a hypothetical European bond index with a yield of 4% and duration of four years to illustrate. This example uses government bond yields, commonly referred to as the risk-free rate, as a proxy for interest rates to calculate the interest rate differential. As shown in Figure 3, as a result of the interest rate differential and the cross-currency basis swap spread, the expected yield to a USD investor after the currency hedge is 3.2 percentage points higher than the local currency yield at 7.2%.
Figure 3. After currency hedging, a USD investor could potentially expect a yield 3.2% higher than the local EUR currency yield

<table>
<thead>
<tr>
<th>Hypothetical European Bond Index yield</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US government bond yield (risk-free rate)</td>
<td>2.6</td>
</tr>
<tr>
<td>EUR government bond yield (risk-free rate)</td>
<td>-0.5</td>
</tr>
<tr>
<td>Interest rate differential</td>
<td>3.1</td>
</tr>
<tr>
<td>Cross-currency basis swap spread</td>
<td>0.1</td>
</tr>
<tr>
<td>USD EUR hedging effect</td>
<td>3.2</td>
</tr>
<tr>
<td>Yield (EUR)</td>
<td>4.0</td>
</tr>
<tr>
<td>Expected yield (USD)</td>
<td>7.2</td>
</tr>
</tbody>
</table>

Sources: WFAM Credit Europe team, Bloomberg and ICE BofAML Indices (G0A0, G0D0), 31 December 2018

Implications for USD investors allocating to euro-denominated credit

Figure 4 shows the expected yields in both EUR and USD terms for a wider set of traditional fixed income asset classes. It also illustrates the compelling yield pickup that USD investors can potentially take advantage of with no added currency risk.

Figure 4. USD investors may have a compelling yield pickup after hedging

<table>
<thead>
<tr>
<th>Asset class</th>
<th>European assets (%)</th>
<th>US assets (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>European/US government bonds</td>
<td>EUR (local)</td>
<td>USD-hedged</td>
</tr>
<tr>
<td></td>
<td>0.7</td>
<td>3.7</td>
</tr>
<tr>
<td>European/US investment grade bonds</td>
<td>1.8</td>
<td>4.6</td>
</tr>
<tr>
<td>High yield bonds</td>
<td>4.7</td>
<td>7.8</td>
</tr>
<tr>
<td>Leveraged loans</td>
<td>4.2</td>
<td>7.3</td>
</tr>
</tbody>
</table>

Sources: WFAM Credit Europe team, Bloomberg, ICE BofAML Indices (G0A0, EGOE, COA0, ER06, H0A0, HE00) and S&P LCD, 31 December 2018

The mechanics of hedging euros to USD

When a USD-based investor buys a EUR-denominated asset, USD are converted into EUR at the spot rate in order to purchase the EUR securities. Simultaneous to the spot conversion, an FX forward contract is executed at the forward rate to sell EUR and buy back USD at some specified time in the future. The FX forward contract effectively locks the foreign currency exchange rates between USD and EUR, ensuring the USD investor is not exposed to currency exchange rate risk for the duration of the contract. The FX forward contract is typically rolled on a monthly basis for the life of the investment to ensure it is approximately equal to the value of the hedged assets.

In periods of high volatility, the FX contract may be rolled more frequently to ensure the values of the EUR assets being hedged are approximately equal to the value of the FX contract.

The hedging process has no direct effect on the investment management decisions made by the portfolio manager. The values to be hedged are determined by the aggregate net values of each currency in the pooled portfolio. This process is cheaper and simpler than implementing a line-by-line hedge on the underlying instruments, and transaction costs are generally low for hedging highly liquid currencies such as USD, EUR and GBP. Further, currency hedging using FX forward contracts may be efficiently and cost effectively applied to a segregated account or a share class of a pooled fund or mutual fund.

We must point out that the currency-hedging process is not perfect for several reasons:

- The gain or loss on the currency hedge forms part of the hedged portfolio’s periodic net asset value (NAV) calculation but cannot be invested by the portfolio manager in underlying securities until the profit or loss is realised. This occurs when the hedge is rolled over or crystallised. If an FX forward contract is in profit, this amount is effectively a cash drag on performance until the contract is closed out, and vice versa if the contract is in loss.

- Transaction costs will erode a small portion of the overall return. The more frequently the hedge position is rolled or adjusted, and the more volatile the NAV of the hedged portfolio and/or the exchange rates are, the higher the transaction costs will be.

- There could be a timing gap between when the portfolio’s NAV is calculated and the time at which the currency hedge is executed. This can lead to a hedged portfolio being over-hedged or under-hedged for a short period.

- To mitigate the effects of the performance cash drag, transaction costs and the potential to over-/under-hedge, hedged portfolios typically use a buffer on either side of the target hedge so that a new contract is only taken out when the buffer is breached.
A comparison of currency-hedged returns

Figure 5 (below) compares the USD-hedged performance of the S&P European Leveraged Loans Index (S&P ELLI) with the EUR returns of the same index. Specifically, we show the cumulative total returns of the two indices in both euro terms and USD-hedged terms. The higher total return received by USD investors during this period is a trend that we expect may continue due to the status of the USD as a perceived safe-haven currency and the large differential between respective interest rates for each currency.

Figure 5: Performance results of S&P European Leveraged Loan Index in EUR terms and hedged USD terms

S&P European Leveraged Loan Index in EUR- and USD-hedged since inception (May 2013)

Conclusion

Investing in euro-denominated credit offers USD investors a broader opportunity set and potential diversification benefits resulting from different regulatory frameworks, economic policies and issuers. However, these opportunities need to be balanced with the risks associated with investing in non-USD assets. Currency hedging may provide an effective means to mitigate this risk, potentially allowing USD-based investors to take full advantage of investing in euro-denominated credit assets without exposure to the associated currency movements.

The process of currency hedging may be done in a cost-effective and efficient manner using FX forward contracts. It also may be done in an investor’s preferred investment structure, including segregated accounts and pooled accounts, such as mutual funds. This process potentially allows USD investors to access these compelling opportunities and the yield pickup with no added currency risk. In today’s low-yielding environment, we see investing in euro-denominated credit as an attractive opportunity for USD investors.

USD-based currency investors investing in euro-denominated credit have been benefitting from a significant yield pickup when hedging the currency risk. We believe this trend should continue going forward due to the status of the USD as the world’s leading reserve currency and the large differential between European and US interest rates.

We want to help our clients build for successful outcomes, defend portfolios against uncertainty and create long-term financial well-being. To discuss your investment needs, please contact us.

- To reach our international investment professionals, contact your regional client relations or sales director, or contact Ben Foley in London at either ben.foley@wellsfargo.com or +44 20 7518 2947.

- To reach our US-based institutional professionals, contact your existing client relations director, or contact us at WFAMInstitutional@wellsfargo.com.

- To reach our US-based intermediary sales professionals, contact your dedicated regional director, or call us at 1-888-877-9275.

- To reach our US-based retirement professionals, contact Nathaniel Miles, head of Defined Contribution at Wells Fargo Asset Management, at nathaniel.s.miles@wellsfargo.com.

- To discuss environmental, social and governance (ESG) investing solutions, contact Jessica Mann, head of ESG at Wells Fargo Asset Management, at jessica.mann@wellsfargo.com.

The views expressed and any forward-looking statements are as of December 31, 2018, and are those of Jens Vanbrabant, Senior Portfolio Manager and Head of European Loans and High Yield Bonds. Discussions of individual securities, or the markets generally, or any Wells Fargo Fund are not intended as individual recommendations. Future events or results may vary significantly from those expressed in any forward-looking statements; the views expressed are subject to change at any time in response to changing circumstances in the market. Wells Fargo Funds Management, LLC, disclaims any obligation to publicly update or revise any views expressed or forward-looking statements.

All investing involves risks, including the possible loss of principal. There can be no assurance that any investment strategy will be successful. Investments fluctuate with changes in market and economic conditions and in different environments due to numerous factors, some of which may be unpredictable. Each asset class has its own risk and return characteristics.

Asset allocation and diversification do not ensure or guarantee better performance and cannot eliminate the risk of investment losses.

Wells Fargo Asset Management (WFAM) is the trade name for certain investment advisory/management firms owned by Wells Fargo & Company. These firms include but are not limited to Wells Capital Management Inc. and Wells Fargo Funds Management, LLC. Certain products managed by WFAM entities are distributed by Wells Fargo Funds Distributor, LLC (a broker/dealer and Member FINRA).

FOR INSTITUTIONAL INVESTOR USE ONLY – NOT FOR USE WITH THE RETAIL PUBLIC

INVESTMENT PRODUCTS: NOT FDIC INSURED • NO BANK GUARANTEE • MAY LOSE VALUE

© 2019 Wells Fargo Asset Management Luxembourg S.A. All rights reserved.