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Xccy ASW

Carry opportunity amid low rates

- **With the Fed and other major central banks becoming more dovish and the market expecting yields to decline further and stay low for longer, cross-currency asset swaps (xccy ASW), which generate excess yield from distortions in bilateral yield arbitrage, should provide an opportunity to earn carry.**
- **The USD ASW JGB spread (vs. USD 3m LIBOR) turned positive after the global financial crisis, widened considerably in 2012 and 2016, turned to a narrowing trend, and then reverted to a moderate widening trend in 2019.**
- **Although the USD ASW JGB spread levels are admittedly less attractive now than they were in 2016 when USDJPY basis widened sharply, volatility declined in both the USDJPY xccy basis and JGBs, making volatility-adjusted ASW spreads comparable to levels last seen in H2 2016.**
- **Looking ahead, we expect the USDJPY xccy basis, a major source of volatility, to remain relatively stable outside of seasonal fluctuations. Although the continued narrowing of JPY swap spreads is a negative factor for xccy ASW, this impact is likely to be largely offset by a tightening of 3v6 basis.**
- **For a trade to secure stable carry, we recommend buying 2y USD ASW JGB.**
- **The attractiveness of JGB investments using xccy ASW is not limited to the USD. Although EUR ASW spreads are less attractive, GBP ASW offer roughly the same spread as the USD version. The AUD even offers better ASW spreads than does the USD across the curve, and also has significant rolldown effects in the short-term sectors.**

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Xccy ASW: carry opportunity amid low rates

In a low-yield environment, xccy ASW looks attractive

With the Fed and the other major central banks becoming more dovish, major government bond yields are declining, making it much more difficult to earn carry revenues. With the market expecting yields to decline further and stay low for longer, cross-currency asset swaps (xccy ASW), which provide excess yield from distortions in bilateral yield arbitrage, should provide an opportunity to earn carry.

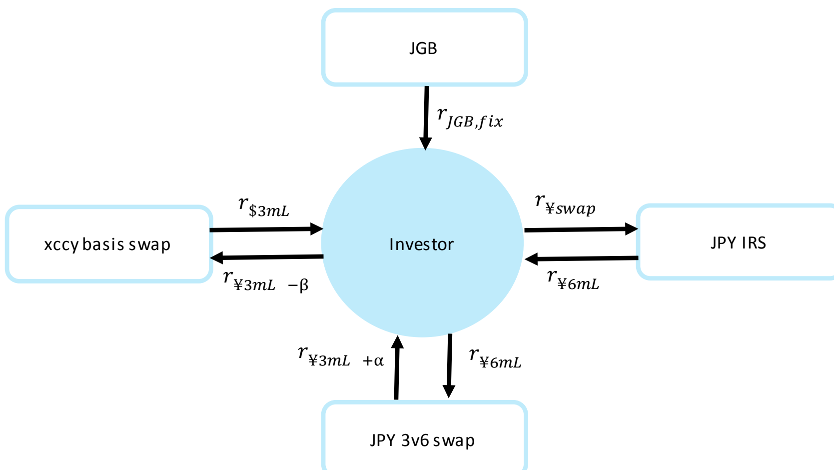
What are xccy ASW?

Xccy ASW provide currency conversion of bond coupons

Xccy ASW converts the coupon income from bonds (eg, government bonds) into a different currency using various swap transactions. For example, an investor could convert the JPY-denominated fixed rate income earned from JGB investment into 6m floating rate using JPY interest rate swap, convert that into 3m floating rate using 3v6 basis swap, and finally convert that into USD 3m floating rate via USDJPY xccy basis swap market (Figure 1). The motivation of this transaction, called USD ASW JGB investment, is to earn some excess carry over US Treasury bonds of the same maturity.

FIGURE 1

Transaction flow of USD ASW JGB investment



Source: Barclays Research

The spread on USD ASW JGB comprises the JGB ASW, 3v6 basis, and USDJPY xccy basis

Furthermore, as shown in the formula below, the yield on USD ASW JGB has four components—1) JGB yield (r_{JGB}), 2) JPY interest rate swap paid ($-r_{¥swap} + r_{¥6mL}$), 3) JPY swap 3v6 basis received ($-r_{¥6mL} + r_{¥3mL} + \alpha$), and 4) USDJPY xccy basis paid ($-r_{¥3mL} - \beta + r_{\$3mL}$), which nets out to a final yield of $r_{JGB,} - r_{¥swap} + \alpha - \beta + r_{\$3mL}$. Hence, combining JGB ASW ($r_{JGB,} - r_{¥swap}$) with 3v6 basis (α) and USDJPY xccy basis (β) generates the excess return of USD ASW JGB over to USD 3m LIBOR.

Yield on a USD ASW JGB:

$$r_{\mathrm{xccyASW}} = r_{JGB} + \left(-r_{¥swap} + r_{¥6mL}\right) + \left(-r_{¥6mL} + r_{¥3mL} + \alpha\right) + \left(-r_{¥3mL} - \beta + r_{\$3mL}\right)$$

$$= \boldsymbol{r_{JGB,} - r_{¥swap} + \alpha - \beta + r_{\$3mL}}$$

Note: $\boldsymbol{r_{xccyASW}}$ is the xccy ASW yield, $\boldsymbol{r_{JGB}}$ is the JGB yield, $\boldsymbol{r_{¥swap}}$ is the JPY interest rate swap, $r_{¥6mL}$ is JPY 6-month LIBOR, $r_{¥3mL}$ is JPY 3-month LIBOR, α is JPY swap 3v6 basis, β is USD/JPY basis, and $r_{\$3mL}$ is USD 3-month LIBOR.

Xccy ASW carry and source of volatility

The primary source of excess carry is USDJPY xccy basis

USD ASW JGB spread (vs. USD 3m LIBOR) turned positive after the global financial crisis, widened considerably in 2012 and 2016, turned to a narrowing trend, and then reverted to a moderate widening trend in 2019 (Figure 2). Looking at the composition of USD ASW JGB spread (1y), i.e., the excess carry over USD LIBOR, both JGB yield and USDJPY xccy basis were about equally positive up until around 2012, but the JPY interest rate swap more than offset the positive carry from JGBs (that is, JPY swap spread was positive). Hence, the source of excess return has come primarily from the USDJPY xccy basis even then (Figure 3).

This composition has changed under the large-scale monetary easing of the Kuroda-led BoJ since 2013, with the positive contribution from JGBs turning negative and the negative contribution from swaps narrowing, but USDJPY xccy basis is still the primary source of carry for USD ASW JGB investments. Note that source of spreads differs across maturities. In 3-4y sector, the negative contribution from JPY interest rate swap spreads (the net from JGBs and swaps) has narrowed, while in the long-term sectors, most of the impact comes from the USDJPY xccy basis as the JPY rates have little impact (Figure 4).

USD/JPY basis is a source of volatility, but volatility is declining

Volatility of USD ASW JGB spreads is also primarily caused by USDJPY xccy basis, but the overall volatility has been declining recently. Up until around 2013, USD ASW volatility moved nearly in lockstep with USDJPY xccy basis, but the contribution from JGBs increased in 2016-17 on the change in BoJ policy and fluctuations in global interest rates. However, JGB volatility started declining again in 2018 and USDJPY xccy basis volatility also declined in 2019, with the result being that USD ASW volatility has dropped to its lowest level since 2014 (Figure 5).

Xccy ASW outlook and trading opportunities

Amid a low-yield environment, USD ASW JGBs provide stable carry

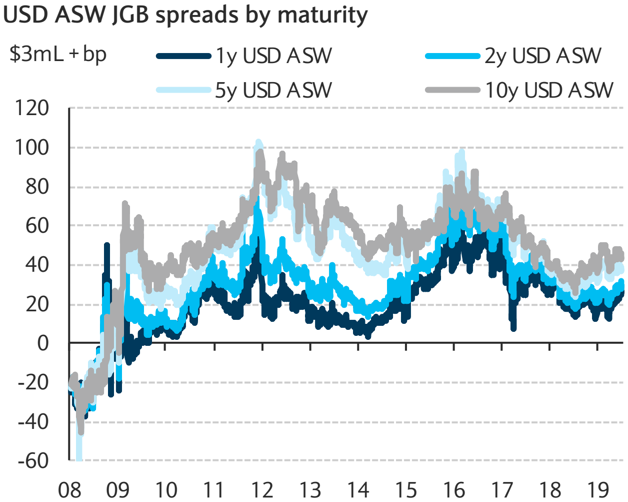
In this environment of low yields globally, USD ASW JGB can provide stable carry income. It is true that the levels of USD ASW JGB spreads are not as attractive as they were in 2016, when there was a sharp widening of USDJPY xccy basis. As already noted, however, volatility declined in both the USDJPY xccy basis and JGBs, making volatility-adjusted ASW spreads comparable to levels last seen in H2 2016 (Figure 6).

USDJPY xccy basis should remain rangebound

The question is whether there is room for a widening of the ASW JGB spread over the near term. We expect USDJPY xccy basis, a major source of ASW volatility, to remain relatively stable outside of seasonal fluctuations. The primary sources of volatility in short-term USDJPY xccy basis are supply of dollars (eg, US regulatory and money market fund reform)

FIGURE 2

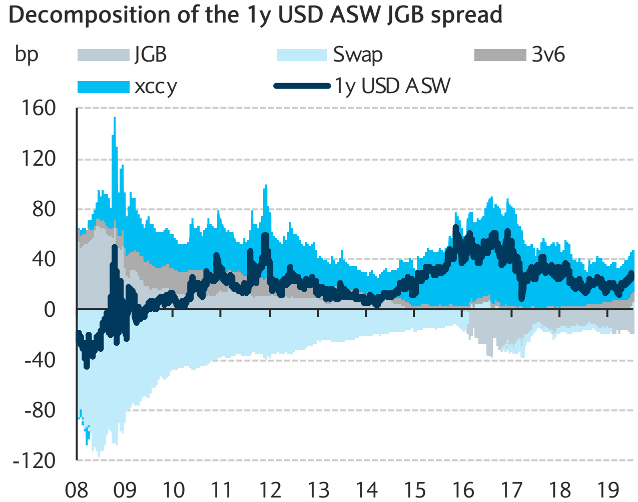
USD ASW JGB spreads by maturity



Source: Bloomberg, Barclays Research

FIGURE 3

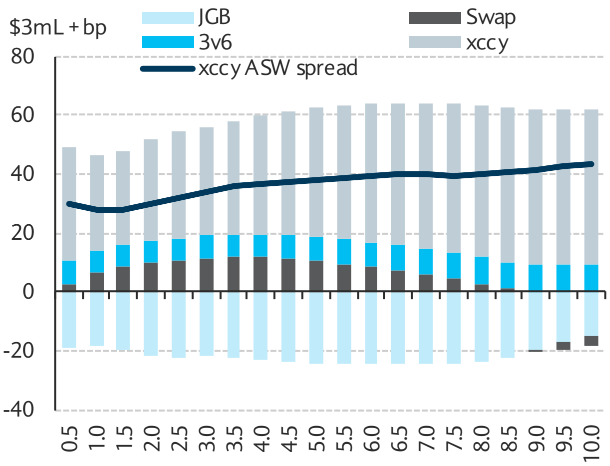
Decomposition of the 1y USD ASW JGB spread



Source: Bloomberg, Barclays Research

FIGURE 4

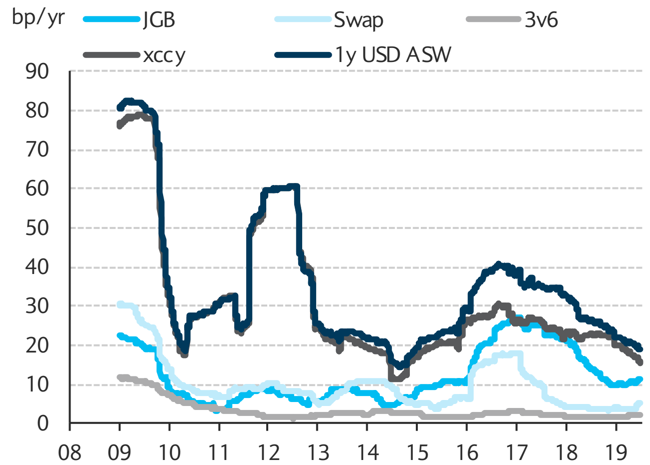
Decomposition of USD ASW JGB spreads by maturity



Source: Barclays Research

FIGURE 5

Daily standard deviation of 1y USD ASW JGB spreads and their components



Note: 260 trading day rolling. Source: Barclays Research

and demand for dollar funding from Japanese investors. However, as can be also seen in the US repo spreads and other markets that are easily affected by balance sheet constraints, the former had peaked in 2016 and there has been a pause in xccy basis widening pressures.

Dollar funding demand from Japanese investors has also already peaked as a result of their shifting from FX-hedged US Treasuries with deteriorating yields into European bonds, which still offer positive FX-hedged yield, and reduction of FX hedging ratio in USD (of course, recent concerns over the risk of JPY appreciation have halted this hedge reduction to some extent). Consequently, we think it likely that the short-term USDJPY xccy basis used by Japanese investors for foreign currency funding will remain rangebound near the current levels, beyond the quarter/year-end seasonal fluctuations (see *Barclays Japanese Investor Survey: Pursuing foreign bonds across the board*, 25 April 2019). Meanwhile, the narrowing of xccy basis in the medium-term sectors, which is affected more by FX-hedging of credit product investment and bond issuance, is likely to remain more constrained than in the short-term sectors because of particularly robust demand for hedging credit investments.

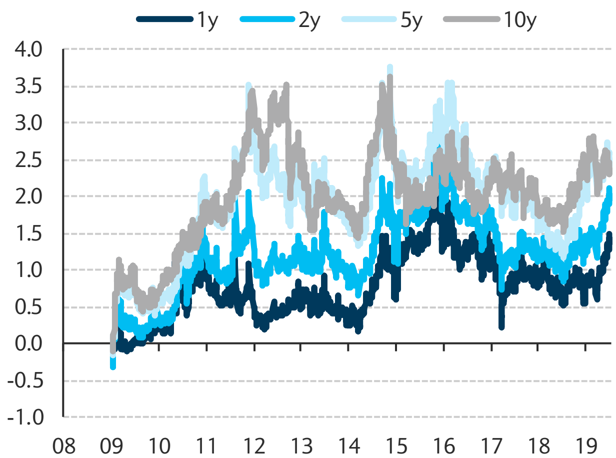
Short-term to intermediate JPY swap spreads in a tightening trend

JPY swap spreads in the short-term to intermediate sectors have remained in a tightening trend since last fall (JGBs have underperformed and JPY swaps have outperformed) and have recently been at their tightest since the fall of 2016 (Figure 7). During the period of declining rates since last fall, short-term to intermediate interest rates have had a stronger downward bias in the swap market than in the JGB market, and because swap rates have been declining relatively faster recently amid rising speculation that the BoJ may deepen its negative interest rate policy (NIRP), tightening bias in swap spreads have remained. As the carry earned on swap spread long positions (JGB buy/ JPY swap pay) could be negative recently, swap spreads in the short-term to intermediate sectors are likely to maintain their near-term tightening bias, in our view.

Furthermore, if the BoJ does deepen its NIRP, although there are differences between the current JPY rates market and that of 2016, when the BoJ first introduced its NIRP, we expect there will be a further tightening of swap spreads as swap rates lead the decline in rates in the short-term to intermediate sectors, as occurred then. After that, when the carry from positions for which swap spreads are expected to tighten switch from positive to negative, we expect swap spreads to turn to a widening trend.

FIGURE 6

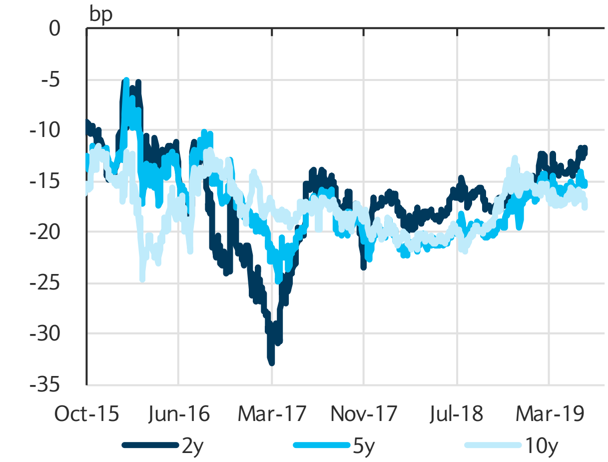
Volatility-adjusted spreads of USD ASW JGB



Source: Bloomberg, Barclays Research

FIGURE 7

JPY swap spreads



Source: Barclays Research

In this regard, the tightening bias in JPY swap spreads in the short-term to intermediate sectors goes against ASW longs. However, as we explain below, we expect the 3m/6m LIBOR tenor basis (3v6 basis) to turn to a tightening trend over the near term, which should be supportive of USD ASW long positions.

Short-term to intermediate 3v6 basis should tighten over the near term on seasonal factors

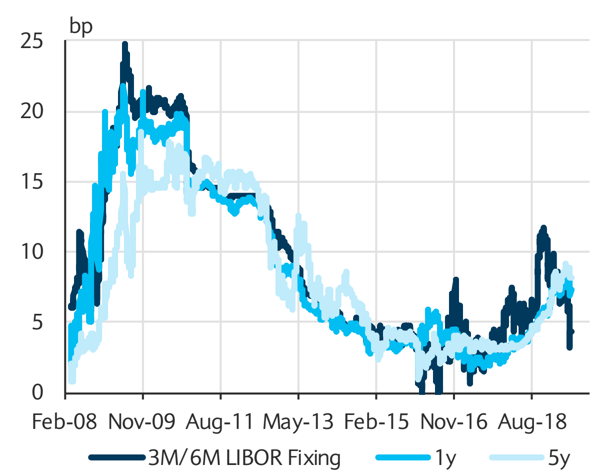
With the spot-based spread between 3m LIBOR and 6m LIBOR widening, the 3v6 basis has remained in a moderate widening trend. Recently, however, with the year-end having passed the declining trend in 6m LIBOR has accelerated, and the 3m/6m LIBOR spread has started narrowing (Figure 8). In addition to this seasonality in LIBOR fixing, there tends to be a pause in samurai bond issuance during the summer holidays in July-August, while the 3v6 basis in the short-term to intermediate sectors tends to widen in May-June and increasingly adopt a tightening bias after that (Figure 9). These seasonal patterns suggest that we are entering a phase when there should be some tightening of the 3v6 basis.

We recommend buying 2y USD ASW JGB

With such market outlook, we recommend buying 2y USD ASW JGB as a trade to earn stable carry amid global low-yield environment. First, the current USD ASW spread is \$3mL+32bp (or 2.11% in expected yield terms, using USD swaps), exceeding the same-maturity US Treasury yield by 36bp. Additionally, volatility-adjusted spreads have recovered to levels last

FIGURE 8

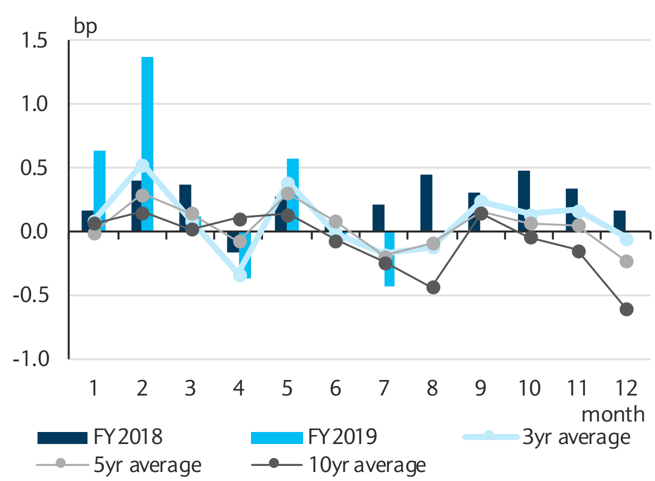
3v6 fixing and basis



Source: Bloomberg, Barclays Research

FIGURE 9

Seasonality of 3v6 basis (MoM, average during the month)



Source: Bloomberg, Barclays Research

seen in 2016 in 1y+ sectors, and with major changes beyond seasonal factors unlikely anytime soon, this trade is likely to provide stable carry profits. Furthermore, carry and rolldown is the largest in the short-term sectors of the USD ASW curve, with 2y sector offering carry and rolldown of 12bp/6m.

Risks are the forex hedging trend among Japanese investors and the US federal debt ceiling

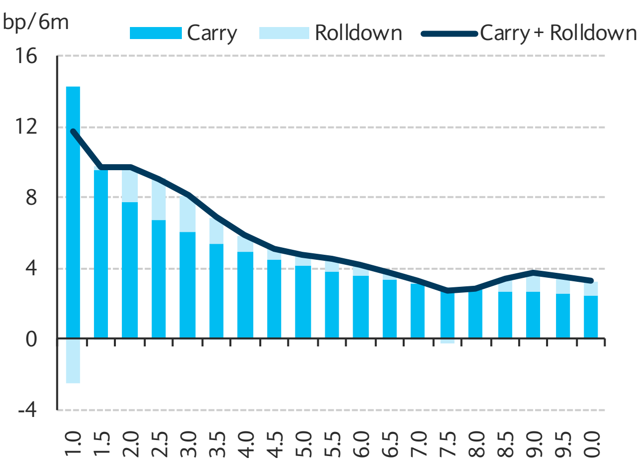
Risk to this trade is a sharp widening in xccy basis due to a significant increase in USD hedging demand from Japanese investors on declines in USD funding costs from a Fed rate cut and concerns over JPY appreciation. Nevertheless, we think the FX-hedged 10y Treasury yield would likely remain in negative territory even after a 75bp Fed rate cut and do not expect any significant widening in xccy basis. Additionally, the volatility of T-bill issuance related to the US federal debt ceiling, potentially this fall, could amplify the seasonal widening that usually occurs in Q4 and become a source of volatility in the USDJPY xccy basis (this impact would be large, but likely only temporary).

Xccy ASW JGB investments in other currencies also attractive

The attractiveness of JGB investments via xccy ASW is not limited to the USD. Although EUR ASW spreads are less attractive, GBP ASW offer roughly the same spread as the USD. AUD even offers higher spreads than USD across the ASW curve and its rolldown effects in the short-term sectors are large (Figure 11). Although these xccy ASW are less common than USD ASW, they may attract more attention going forward as central banks outside the US (eg, RBA) strengthen their dovish stance, leaving interest rates low for longer.

FIGURE 10

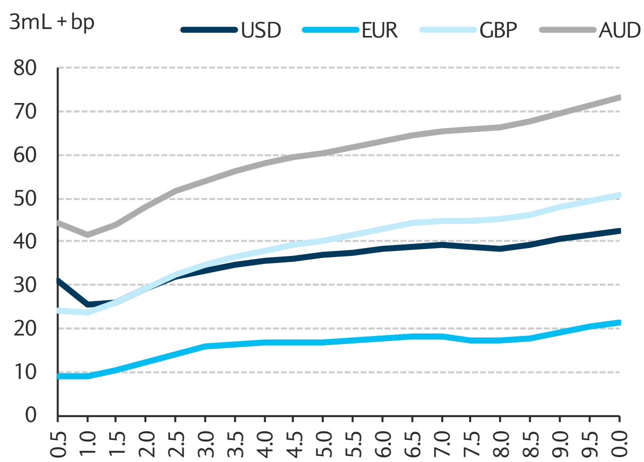
Carry and rolldown for USD ASW/JGB



Source: Bloomberg, Barclays Research

FIGURE 11

Comparison among currencies of cross-currency ASW/JGB spreads



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