Global FX Strategy

J.P.Morgan

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JPM FX - Derivatives Chartpack Notes

Oddities in the AUD vol complex

- AUD risk-reversals are historically stretched near GFC extremes as a ratio to ATM vol even after the pullback in risk in April, and is one of the better skews to fade in our view post-DM policy interventions given the structural dampening of AUD's risk beta over the years and disappearance of the carry-seeking spec investor base of the GFC years. Buy 3M ATM vs. sell 3M 25D AUD puts/USD calls, vega-neutral (~100:150 ratio), delta-hedged.

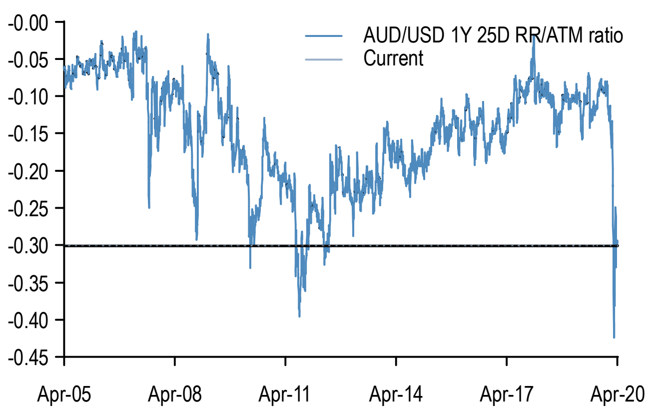
- Long-end (2Y) AUD/JPY vs. AUD/USD vol spreads are near all-time historical extremes of tightness – the 1Y1Y FVA spread is in fact marked sub-zero on mids as dealers have been delivered long AUD/JPY vega from Uridashi structures. The 2Y vol spread is a low/no decay asymmetric hedge against another sizeable shock to risk markets.

- AUD vs. NZD correlations are priced near multi-year highs in the high 80s, ignoring the divergence opening up between the two currencies as a result of differences in QE programs and New Zealand's greater medium-term hit from lost tourism revenues as a result of Covid-19. AUD/NZD vol is cheap, therefore consider buying call spreads for medium-term spot appreciation. NZD/USD vs. NZD/AUD correlations are a decent buy from attractive levels as a play on successful across-the-board currency debasement as a result of RBNZ's aggressive QE program.

AUD/USD risk-reversal / ATM ratios near GFC extremes

Even after the ~50% pullback from the manic extremes of March, AUD/USD risk-reversals are at 2008 GFC extremes as a ratio to ATM vols (Exhibit 1). The short-memory of the unhinged collapse in AUD spot and spike in AUD vol in March likely has everything to do with this extreme pricing, since realized spot-vol correlation has halved from YTD wides (trailing 30-day % Δspot vs. Δ1Y ATM corr running at -40% at present vs. -80% at the 1Q peak) and is clocking below SABR-calibrated spot-vol corr. implied by the 1Y AUD skew (-55%). Risk premium in option prices after a market crash is not uncommon; the oddity in this case is the extreme nature of the distortion, and the persistence of this fear even after broader risk markets have retraced to the extent that they have.

Exhibit 1: AUD/USD 1Y 25D risk-reversal / ATM ratios are wider than GFC extremes even after the sharp recent pullback in option prices



Source: J.P. Morgan

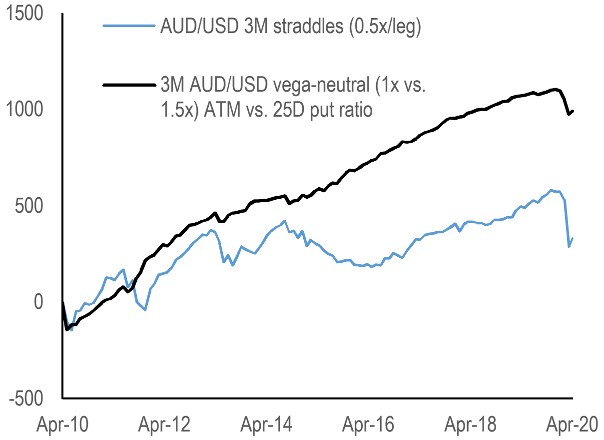
We have long held the view that AUD vols and skews have lost their ability to erupt explosively like they did during the GFC, so the price action in AUD options in Q1 came as a shock. The downbeat view on AUD's reduced risk beta is informed by the changing structure of the Australian economy with the petering out of the China-led commodity boom, the attendant RBA rate cuts to cushion its economic impact and the drop-off in carry-seeking flows that left little by way of one-sided length (indeed speculative positioning has been short AUD for much of the past 2-years, basis CFTC data) at risk of a deleveraging rout (see note) – hence our surprise at the speed and scale of the AUD rout in March. Structural arguments for AUD's dampened risk-beta could not have changed in a month of course, but aside from option markets offering substantially better levels for re-selling AUD options, the raft of DM policy interventions that have likely curbed the worst tail outcomes, and a significant build-up in USD longs that may slow the speed of additional gains, we also take comfort from the shifting contours of the in-house JPM view around AUD which has turned less bearish in recent weeks as RBA QE begins to look distinctly lighter than elsewhere in G10 (note).

Stretched risk-reversal/ATM ratios are well faded via vega-neutral ratio AUD put spreads. Such delta-hedged put ratios have a decent long horizon track record of alpha generation, with materially better Sharpes than short ATM straddles (**Exhibit 2**). A good part of the better risk-reward of ratio put spreads vis-à-vis straddles is explained by their vega-neutral construction (~100:150 notional ratio for ATM vs. 25D puts) which is market-neutral to a greater degree and offers some protection against drawdowns during fierce risk-offs.

Buy AUD/USD 3M ATM vs. sell 3M 25D AUD put/USD call, 100:150 notional ratio, delta-hedged @ 11.45 choice vs. 13.4 / 14.2 indicatively.

Exhibit 2: Scalping smile theta via AUD/USD ratio put spreads, delta-hedged, is a higher Sharpe risk premium earning ploy than selling straddles

Cumulative P/Ls (bp AUD notional) of (a) selling AUD/USD 3M ATM straddles (0.5x notional / leg); and (b) buying 3M ATM vs. selling 3M 25D AUD puts/USD calls in vega-neutral notionals (~1x:1.5x notionals on each leg). All options delta-hedged daily at CoB (~4pm LDN) using smile forward deltas and option-expiry matched forwards, and rolled into fresh strikes monthly. No transaction costs. Note this chart **understates** the degree of AUD put ratio outperformance vis-à-vis straddles because it does not normalize P/Ls for differences in return variability; the monthly std. deviation of the put ratio is ~50% that of straddles.



Source: J.P. Morgan

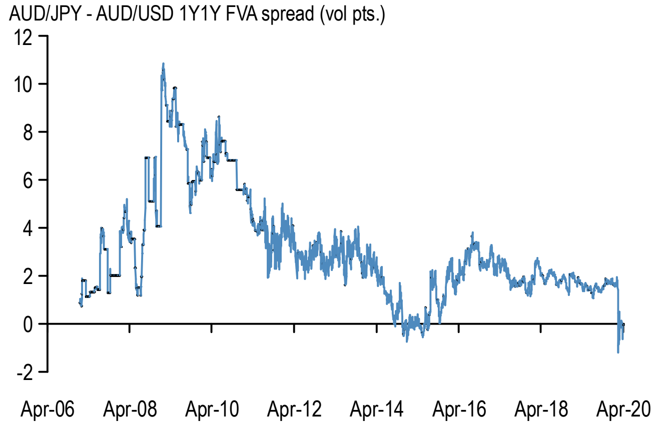
EUR call/AUD put ratios may be even more appealing than AUD put / USD call ratios as smile-theta scalping vehicles (usual caveat of liquidity applies) given the re-emergence of European political risk to go with the moderation in AUD negativity. The semi-constructive tone to last week's Eurogroup meeting and the ongoing run-up in risk markets this week may have taken the edge off immediate anxieties around the North vs. South European divide, but if the Euro and hence EUR-crosses remain quasi-permanently heavy going forward as the spectre of political risk continues to hang over the common currency, it will prove difficult for EUR/commodity FX or EUR/EM FX risk-reversals to continue reliably delivering enough "upside realized volatility" via explosive spot rallies to justify a sustained premium for EUR calls. Fading the elevated risk premium in the likes of EUR/AUD riskies – which also neutralizes exposure to the broad dollar and imparts an additional degree of market-neutrality in most conditions (save of course the odd month of explosive liquidation of EUR-funded carry trades) – may therefore prove an even better risk-adjusted bet than selling AUD/USD riskies.

Record RV cheapness of long-end AUD/JPY vol vs. AUD/USD

Persistent nervousness around the global risk backdrop so distinctly visible in AUD risk-reversals is nowhere to be seen at the long-end of the vol curve in AUD/JPY, *the* bellwether risk-sensitive cross in G10 FX. A surprising – and rare – RV set-up in option markets today is that 1Y1Y forward volatility in AUD/JPY is marked marginally *under* 1Y1Y AUD/USD forward vol on mids (**Exhibit 3**). Because AUD/JPY spot on average moves almost at par with AUD/USD on normal days but by as much 1.3x – 1.4x in high vol periods, no AUD/JPY vol variable ought to be priced at par with or at a discount to the corresponding AUD/USD vol quantity, particularly in longer tenors that are less subject to high-frequency flow distortions common in shorter expiries. But such are conditions today, caused by spot moves that have delivered market making option books longer of AUD/JPY vega on previously traded Uridashi structures and in need of selling vol to flatten Greek profiles. We have no visibility on the degree of vega imbalance that still exists on option books and therefore the longevity of the ongoing AUD/JPY vol softness; all one can say with some assurance is that the vol spread has historically been positively convex w.r.t. to overall risk conditions, and that odds of negative returns from buying the spread at current market are fairly slim judging from available history. In practice, current liquidity conditions do not permit acceptable pricing on the FVA product that is the cleanest expression of fading this dislocation; investors need to be content with the muddier expression via 2Y vanilla ATM straddles that incur more realistic bid-offers.

Buy AUD/JPY vs. AUD/USD 2Y ATM straddle spread @ 0.15/1.15 vol indicatively (mid 0.75v)

Exhibit 3: On mids, the AUD/JPY – AUD/USD 1Y1Y forward volatility (FVA) spread is priced a shade *below* zero

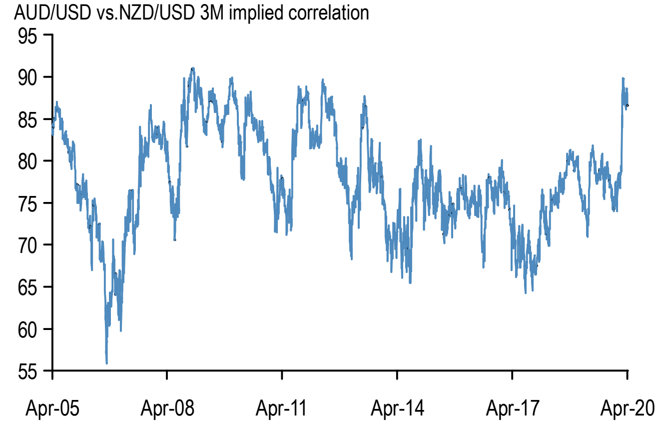


Source: J.P. Morgan

AUD vs. NZD implied correlation is at multi-year highs

Option markets have so far been heedless to the diverging paths of RBA and RBNZ QE, and by extension to the still early stage differentiation between AUD and NZD. Our antipodean strategists have noted the distinction between RBA (price-targeting and already tapering) and RBNZ (quantity commitment, more aggressive rhetoric around overseas asset purchases as well) QE programs, as well as New Zealand's greater reliance on services exports (tourism in particular) as reasons to favor medium-term AUD/NZD upside (note). Option markets however continue to price AUD vs. NZD correlation in the high 80s (**Exhibit 4**), meaning that AUD/NZD vol is depressed and options there can be a legitimate instrument to express bullish AUD/NZD views. One still needs to be careful in terms of not incurring too high a decay cost in such structures given that AUD/NZD ultimately is a bounded cross and not renowned for its explosive potential, hence vanilla call spreads such as 2M 1.08/1.10s (~43 bp AUD premium off 1.0690n spot ref., 4.1x max gearing, 30% discount to 2M 1.08s) are likely to suit most macro portfolios better than outright calls.

Exhibit 4: AUD vs. NZD implied correlation has climbed to multi-year highs…..

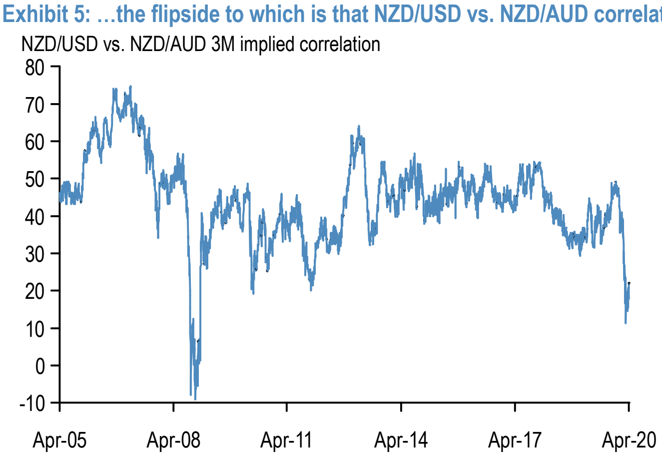


Source: J.P. Morgan

A more interesting correlation play to combine low AUD/NZD vol with a view of across-the-board NZD under-performance vs. G10 FX as more aggressive RBNZ QE successfully debases the currency is to buy NZD/USD vs. NZD/AUD correlation swaps. This is a permutation of the AUD vs. NZD correlation above, but reset to NZD as the pivot currency which is in the eye of RBNZ's QE storm at present, and purports to buy a NZD-centric correlation pair – which, even if not convexly geared to risk market meltdowns, has only limited room to collapse further from here– at historically depressed levels (**Exhibit 5**). The choice of currencies in the NZD basket in this instance is also fortuitously identical to the cash basket that the macro FX Strategy portfolio sold NZD against last week (note)

NZD/USD vs. NZD/AUD 1Y correlation swap is offered @ 25/34 indicatively (mid 27.6)

Exhibit 5: …the flipside to which is that NZD/USD vs. NZD/AUD correlation has plunged to near multi-year lows



Source: J.P. Morgan

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