

# EUR-USD – EUR rates don't matter much anymore

- EUR-USD was well explained by forward rates through end-2018
- In 2019, the impact of euro-area forward rates has been much weaker
- This has limited the drop in the EUR this year, despite the fall in euro-area rates

## EUR rates drop out of the picture

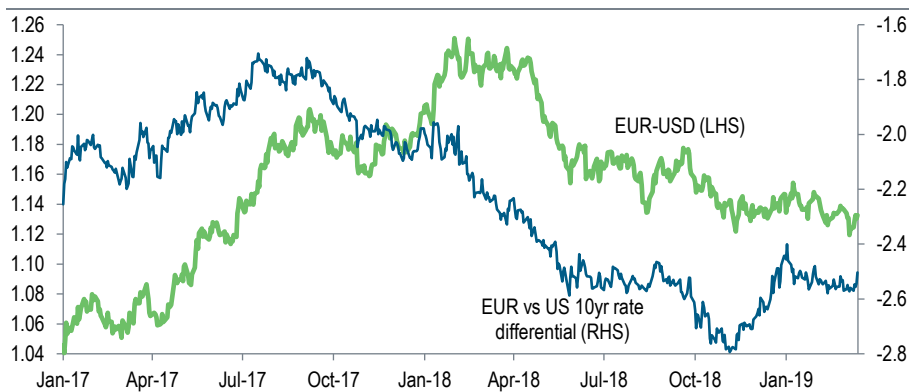
There has been little correlation between US-European rate differentials and EUR-USD in recent months (Figure 1), and many investors are puzzled that the widening of the differential has not produced a stronger USD. In this note, we provide evidence that investors are reacting less to a lower euro-area rates curve in 2019 than they did in 2017-18. The implication is that investors should pay more attention to moves in US rates than to moves in euro-area rates. This may explain why the very dovish ECB policy meeting did not have a lasting impact on the EUR, and suggests that careful attention should be paid to the outcome of the FOMC meeting on Wednesday (20 March).

Our framework, originally presented in *EUR-USD – Why don't rates matter?*, uses forward Eurodollar and Euribor rates to explain EUR-USD. We find that the impact of euro-area forward rates on EUR-USD has diminished. While it is unclear why this has occurred, investors appear to be largely ignoring the drop in forward Euribor rates and are trading EUR-USD primarily off US rates. This appears to have mitigated the drop in EUR-USD relative to what rate moves would have suggested – based on prior relationships, the slower pace of expected euro-area rate rises would have had a much bigger negative effect on EUR-USD. The current lack of impact is unlikely to be permanent, but for now, the takeaway is that investors appear to be reacting more to US than to euro-area rate moves.

In the earlier note, we presented an equation based on the Eurodollar and Euribor rates curves that fit recent movements in EUR-USD much better than standard equations based on yield differentials. The novelty of this approach was: (1) we were agnostic with respect to which rates should matter, (2) we found that forward rates could explain EUR-USD better than standard 2Y, 5Y and 10Y rate differentials, and (3) EUR-USD was responding to expected changes in the slope of the yield curve more than to the level of rates. The expected flattening of US rates and steepening of euro-area rates mitigated the impact of rising spot rate differentials on EUR-USD.

**Figure 1: US, euro-area rate differentials are loosely linked**

EUR-USD (LHS), % (RHS)



Note: Differential measured as euro area minus US; Source: Macrobond, Standard Chartered Research

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Figure 2 presents a similar equation, estimated for 2017 and extrapolated from 2018 onwards. It regresses EUR-USD on ED5, ER5, ED17-ED9 and ER17-ER9, where ED5 is the 5th Eurodollar contract, ER5 is the 5th Euribor contract, etc. The model worked well for 2017 and 2018. In effect, the estimated equation said that investors were reacting primarily to how fast they expected rates to be rising in two to four years (as reflected in forwards); and secondarily to where rates were expected to be roughly a year out. All of the coefficient signs were as expected – higher euro-area rates pushed up the EUR, and higher US rates pushed up the USD. The surprise was that the expected change in rates over a two- to four-year horizon had almost three times as big an impact as the expected change one year out.

The equation fit well over 2017 and 2018 (as shown in Figure 2), even during the out-of-sample period. Similar to our earlier analysis, it suggests that investors are focused on the shape of the rates curve over the medium term – the EUR is supported as long as the euro-area forward rates curve points to rising rates over this period.

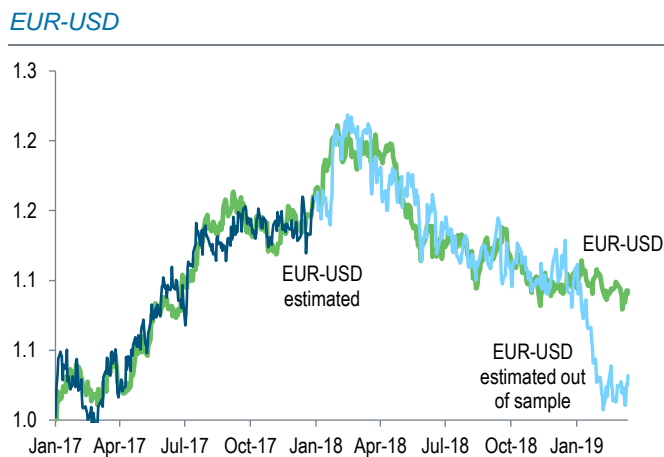
The equation's explanatory power falls apart in 2019. The equation goes from capturing the ups and downs of EUR-USD extremely well to missing by 6% – a significant deterioration for an equation with a standard error of about 1.3%. The 2017-18 equation would have predicted EUR-USD at 1.07, not 1.13.

This robustness of EUR-USD, despite factors that should be pulling it down sharply, has been noted by many investors. Here we try to identify whether there is a systematic shift that can explain why EUR-USD has not dropped a lot further.

To see whether the large misses have such a systematic driver, we introduce terms to statistically capture whether a big change in the coefficients has occurred in 2019<sup>1</sup>. We re-estimate the equation over the entire sample period, introducing the interaction terms discussed in the footnotes. We introduce them one by one to reduce the risk of multicollinearity.

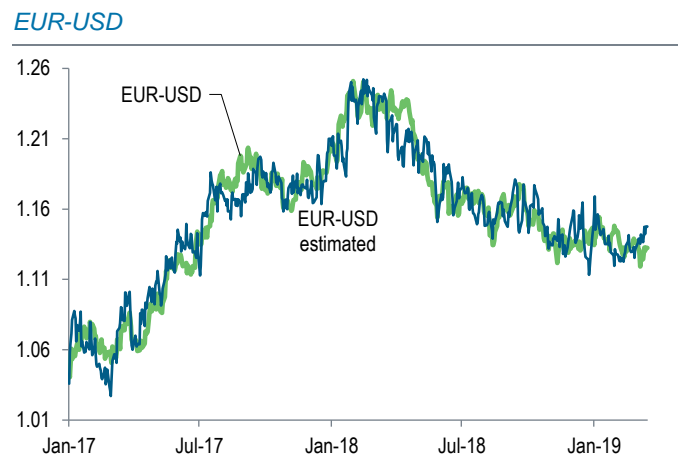
We find that the most significant shift by far is in the coefficient of the Euribor difference term (ER9-ER17). The estimated 2019 shift wipes out two-thirds of the 2017-18 effect of this variable, but the weaker impact makes the equation fit much better in 2019 (Figure 3). Allowing for a shift in the impact of expected medium-term

**Figure 2: EUR-USD model breaks down in 2019**



Source: Macrobond, Standard Chartered Research

**Figure 3: Shift in impact of euro-area rates improves fit**



Source: Macrobond, Standard Chartered Research

<sup>1</sup>We introduce a dummy variable that has a value of one in 2019 and zero before. We then interact it with US and euro-area rates terms. If there is no shift, the impact should be insignificant. If there is a shift, it will be captured in significant coefficients on the interaction terms.



forward rates greatly improves the fit. However, the shift implies that the change in rates two to four years out has about one-third as much effect in 2019 as in 2017-18.

None of the other variables, when allowed to shift similarly, improves the fit of the equation much. Even including all the interaction terms simultaneously does not make the 2019 fit much better than just including the ER-ER17 shift term on its own.

We do not present this as a long-term behavioural equation, nor do we have an explanation for the drop in the influence of euro-area rates. However, in terms of assessing where EUR-USD is headed, it is useful to know that investors are largely ignoring euro-area rates.



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