

# Global Rates Strategy

## How crowded are carry trades?

- We compare short end carry and roll globally from spot out to 5y5y. Despite the higher absolute and volatility-adjusted carry and roll on offer from USD and GBP, we find the premium over EUR on offer is insufficient to compensate for the additional risks. Our analysis suggests that the sweet spot on the EUR curve from a carry perspective is 2y maturities, 4 or 5 years forward, or 3y3y. In USD the sweet spot is shorter.
- Our analysis of swap flows clearly suggests that front end carry trades in EUR have becoming increasingly crowded. Receiving has been strong and any reduction of short end exposure has been limited and short-lived over the last 6 months. This provides additional backing for our volatility strategist's recommendation to position for 'lower for longer' in Europe via receivers, rather than outright. In GBP the recent increase in paying of the front end has not yet unwound the prior receiving.
- The second, and increasingly popular, carry trade is long peripheral risk. Demand for yield is outweighing its supply and our flow data clearly shows peripherals behaving like Veblen goods, with demand increasing with their price. Appetite for the periphery as a whole has been very strong since the beginning of the year, but for the ex/programme countries in particular. We look at the growing concentration risk, the changing positioning of different client types, and potential warning signals for a correction. Our analysis underlines the constructive view of our European team on peripherals as reflected in our latest forecasts: see [Global Economic Outlook and Strategy - March 2014](#).

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## How crowded are carry trades?

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**Is the lower numerical total carry in EUR more attractive than in USD or GBP, where the carry component alone is higher than the combined roll + carry in EUR?**

**Are these front end carry trades still as crowded as they used to be?**

There have been two carry trades which have captured the imagination of the market. The first is positioning for front end roll, exemplified by EUR 3y1y, and its many variants. Despite the higher absolute and volatility-adjusted carry and roll on offer from USD and GBP, we find the premium over EUR on offer is insufficient to compensate for the additional risks. Our analysis of front end EUR swap flows provides additional backing for the recommendation to position for 'lower for longer' via receivers, rather than outright<sup>1</sup>.

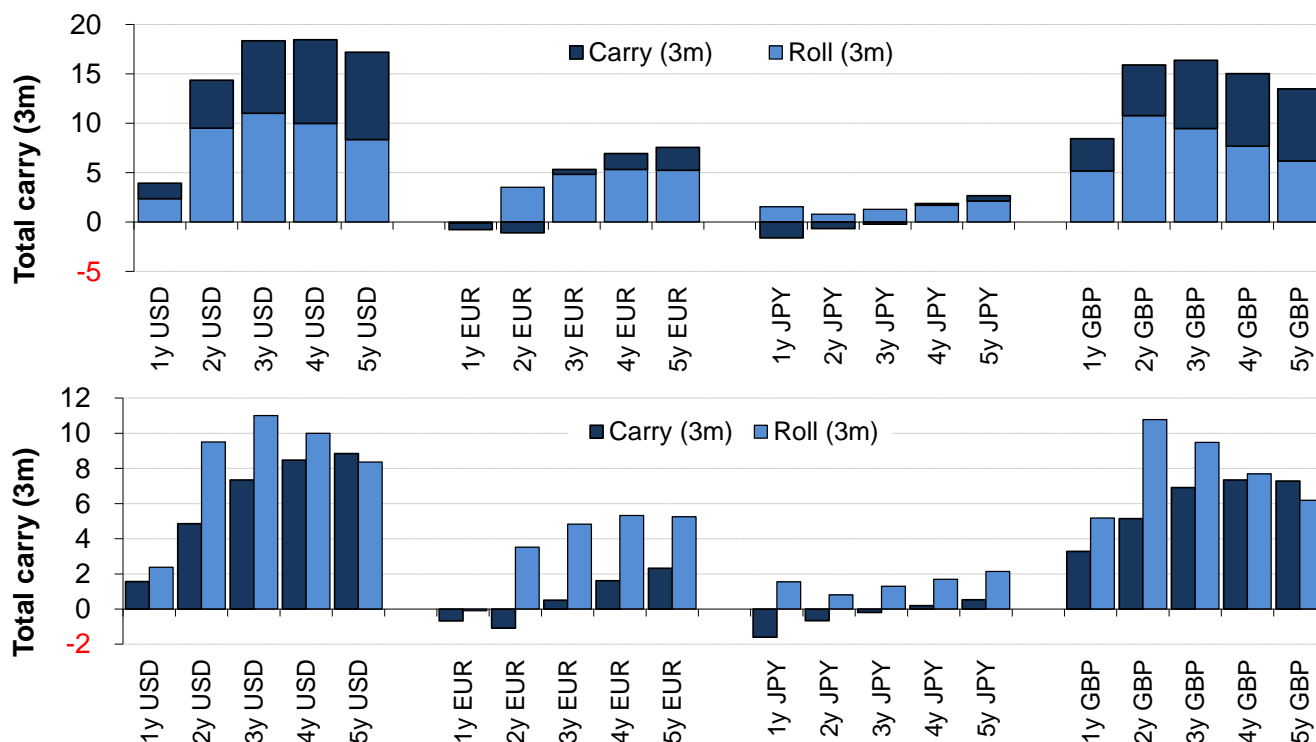
The second, and increasingly popular, carry trade is long peripheral risk. Here too, position concentration risk is growing. Momentum is still strong, and it is still too early to head for the exit, but the price action is important. Watch closely for spreads stalling. Lack of progress could quickly make longs feel uncomfortably overweight, or at least exposed<sup>2</sup>.

### Where does carry look best globally?

Figure 1 shows carry for spot swaps with tenors ranging from 1 to 5 years. On a purely numerical basis the 2-3yr maturities in USD and GBP look most attractive from a total carry perspective: the roll component is highest here, and while carry rises with maturity, it starts to level out beyond 3y maturities.

Obviously total carry is highest in USD and GBP because policy rate rises are coming over the horizon. But in Europe, the market is focused on whether the next policy rate move will be lower. So, there are two key questions: (1) is the lower numerical total carry in EUR (which as Figure 1 shows is nearly all roll - so collecting it relies on a stable yield curve) more attractive than in USD or GBP, where the carry component alone is higher than the combined roll + carry in EUR? And (2) are these front end carry trades still as crowded as they used to be?

Figure 1. Front end carry and roll in USD, EUR, JPY and GBP (spot swaps)



Source: Citi Research

<sup>1</sup> See Matteo Regesta's *European Rates Weekly*

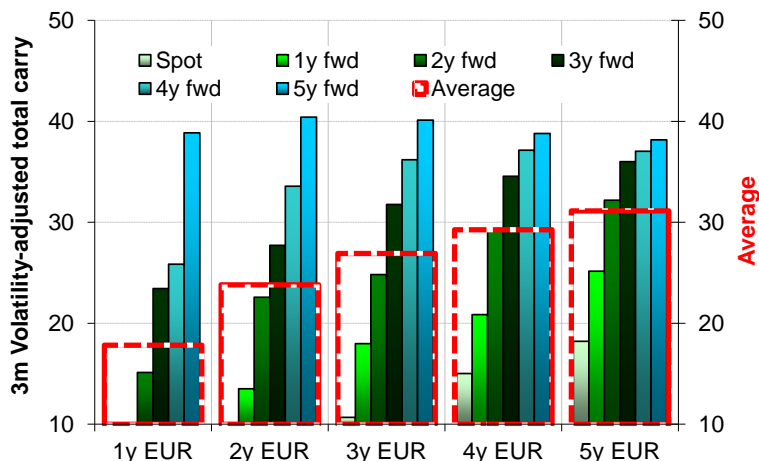
<sup>2</sup> Here we just look at the situation from a flow and positioning perspective. For comprehensive analysis of peripheral prospects see the latest *European Rates Weekly*.

## Where is the sweet spot on the EUR curve?

### Comparing volatility-adjusted carry

Figure 2 shows carry for 1-5yr maturity EUR swaps, adjusted for volatility<sup>3</sup>. The shortest tenors are attractive because of the lower uncertainty compared to longer maturities, but the vol-adjusted carry is lower. But as Figure 2 shows, this is less of a function of tenor than of the forward start. Taking this trade-off into account, the sweet spot looks like 2y maturities, 4 or 5 years forward, or 3y3y.

Figure 2. Volatility-adjusted carry in short-dated spot and forward-starting EUR swaps

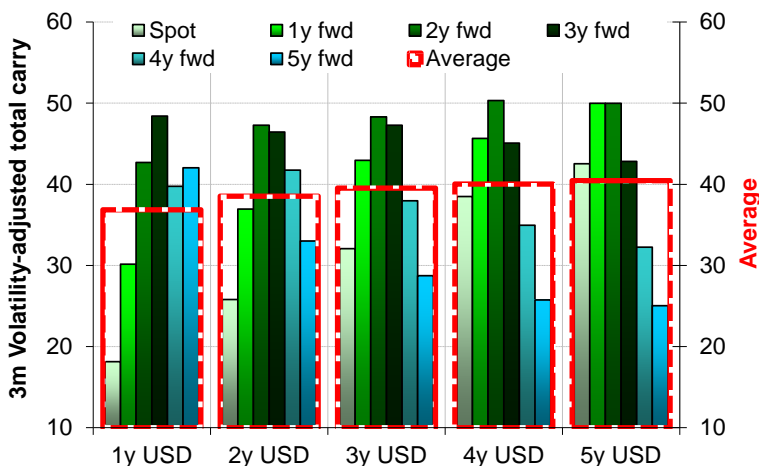


Source: Citi Research

## Where is the sweet spot on the USD curve?

In USD (Figure 3) the chart shows the sweet spot is 2 or 3-years forward, with little difference between the level of vol-adjusted carry on offer from different maturities.

Figure 3. Volatility-adjusted carry in short-dated spot and forward-starting USD swaps



Source: Citi Research

Whether the extra 10bps of vol-adjusted carry on offer in USD (and GBP) relative to EUR compensates for the extra risk is a function of your view on the growth and policy rate risks. We don't think it does. But it is easy to focus on the relative risks when the absolute ones matter more. Perhaps the greatest risk is posed by the very attractiveness of this carry and roll on offer. We examine this below.

<sup>3</sup> We divide the 3-month carry by the 3-month realised volatility of the swap.

## Are front end carry trades still crowded?

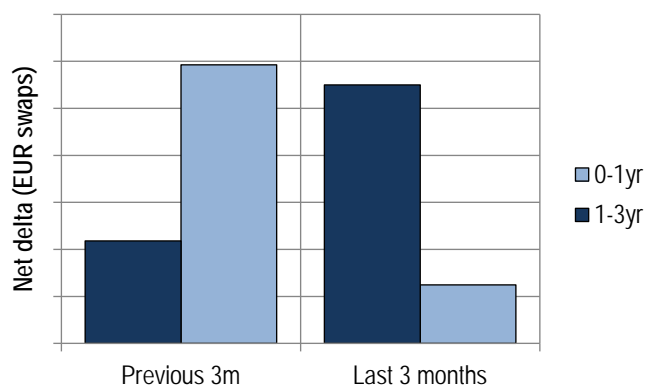
EUR 3y1y (and variants) has been a very popular trade, and is still 30bps from its 2013 lows. But with global growth picking up and experience of painful washouts of crowded carry trades still in recent memory, you might think that risk had been reduced and weight of positioning was less of a danger than it was. Our data suggests that you'd also be wrong<sup>4</sup>.

### Continued receiving of the front end of Europe

Figure 4 shows the net delta of EUR swap trades in the 0-1yr and 1-3yr buckets over the last 3 months and the previous 3 months. As you can see, the net delta was positive in both periods, but the receiving migrated from the very front end to the 1-3yr bucket. The accumulated risk in the two buckets over the last 6 months is now almost equal.

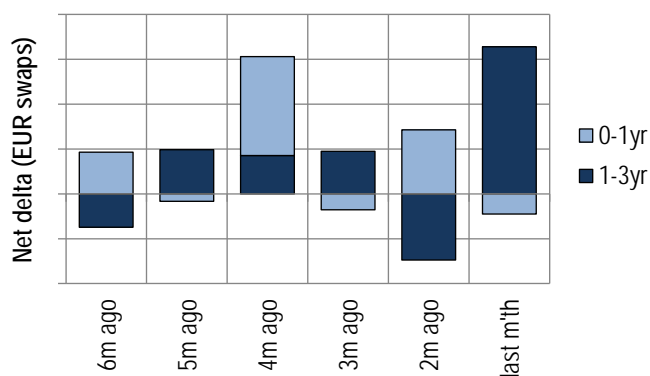
Figure 5 puts this surge in receiving of the 1-3yr sector over the last month into perspective. It is the strongest demand we have seen in over 6 months. The previous month's reduction in 1-3yr risk was more than offset by this month's renewed receiving. Figure 5 also makes it clear that front end positions have been added to nearly every month. The carry trade is alive and well.

Figure 4. Increasing exposure to the front end of the EUR curve



Source: Citi Research

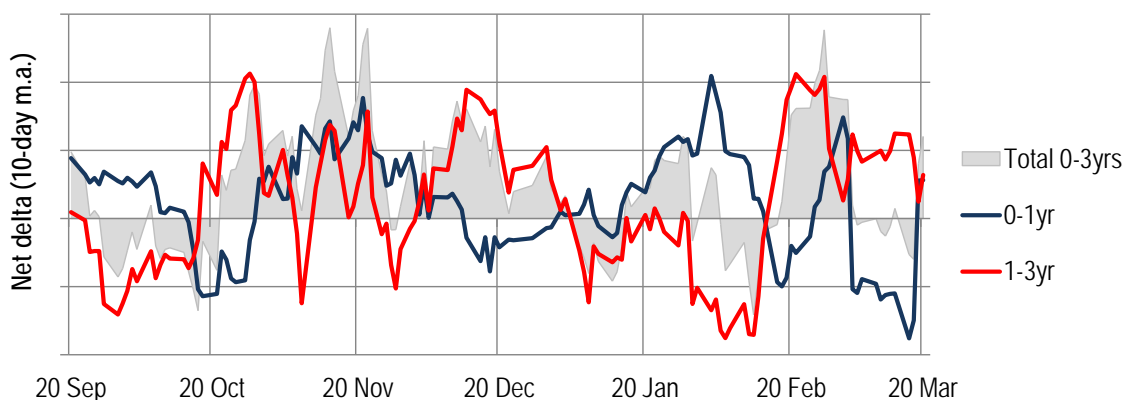
Figure 5. Surge in receiving of 1-3yr bucket



Source: Citi Research

The time series of the net delta of flow in the two buckets (Figure 6) shows that risk reductions over the last 6 months have been small and relatively short-lived.

Figure 6. Reductions in risk at the short end of the EUR curve have been relatively small and short-lived. The accumulated long is growing.



Source: Citi Research

<sup>4</sup> The net delta of customer swap trades executed by Citi over the last 6 months can be used to give an idea of the stock of positions, and how positioning has changed over time.

**Look at conditional lower for longer trades, not outright ones**

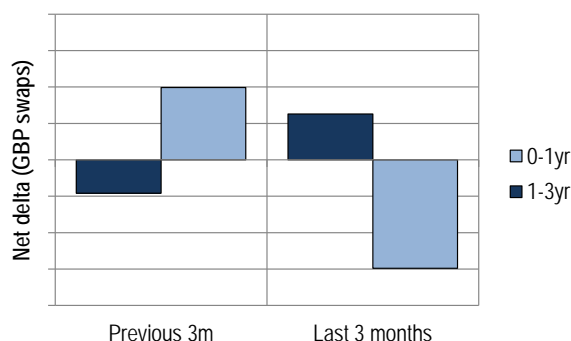
**It is only in EUR that we have seen this one-way net flow**

This relentless increase in positioning in the front end adds further weight to our European strategists' recommendation to buy 1y3y ATMf receivers to position for lower for longer. Gamma is cheap, but more importantly the downside is limited.

### Front-end trades in USD and GBP not crowded (yet)

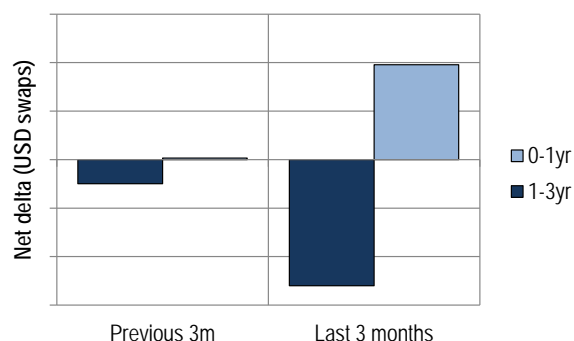
It is only in EUR that we have seen this one-way net flow. Net front end flows in GBP have turned negative in the last 3 months, as you would expect, having previously been positive (Figure 7). But there is nowhere near the same imbalance of positioning that exists in EUR. In USD, net flows across both maturity buckets have been only marginally negative over the last 6 months (Figure 8).

Figure 7. Net receiving of GBP has turned to net paying



Source: Citi Research

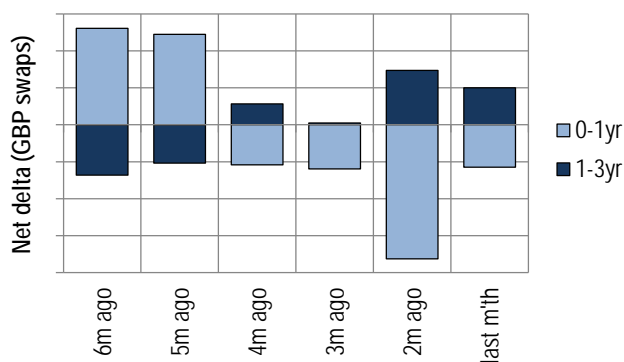
Figure 8. Flow suggests front-end led steepeners in USD



Source: Citi Research

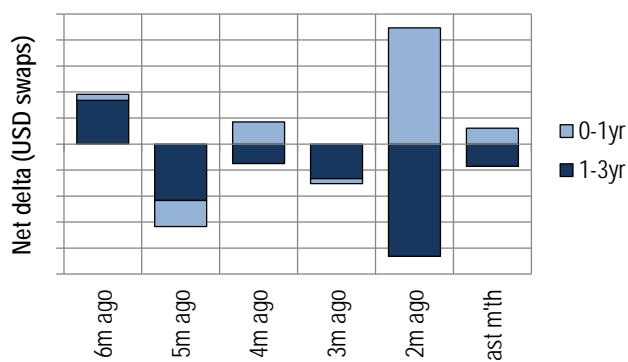
A clear bias to paying the very front end of the UK is emerging (Figure 9), but this has been partially mitigated by receiving of 1-3yrs. (We think the increase in yields will easily outstrip the negative carry - see our latest *Forecasts vs the Forwards*). In USD the paying bias has been concentrated in the 1-3yr bucket (Figure 10).

Figure 9. Consistent net paying of the front end of the UK in recent months



Source: Citi Research

Figure 10. USD swap flow points to the popularity of front-end steepeners



Source: Citi Research

While the increased positioning in front end trades in Europe gives us cause for concern (and points to expressing lower for longer views conditionally), there seems to be much more room to pay the front end of the UK if you share our bearish view<sup>5</sup>. But if the weight of consensus positioning is a worry in the front end of Europe it is even more pronounced in the other major class of carry trade: long peripherals.

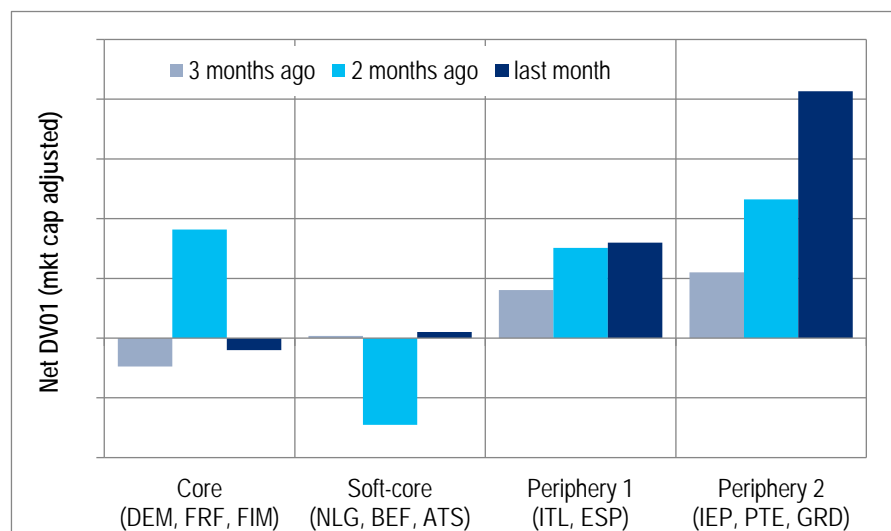
<sup>5</sup> See the latest forecasts in the 26 March *Global Economic Outlook and Strategy*, and our UK strategy by Jamie Searle.

## Yield matters

### Demand for peripherals has been growing very strongly<sup>6</sup>

Figure 11 shows net demand for European government bonds over each of the last 3 months. Demand for the periphery as a whole has been strong, but for the ex/programme countries in particular.

Figure 11. Clear, and growing, investor preference for the outer periphery reflects the need for yield against a backdrop of belief in tail risk suppression.

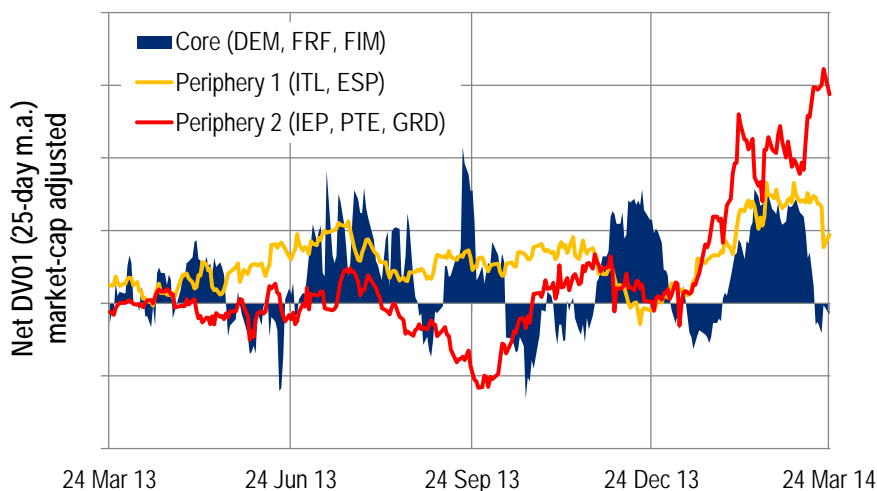


Source: Citi Research

Positioning in peripherals is getting longer, and clients are moving down the credit spectrum in their search for yield

You can see just how strong appetite has been since the beginning of the year in Figure 12 below.

Figure 12. Very strong appetite for peripheral yields since the beginning of the year



Source: Citi Research

Positioning in peripherals is getting longer and clients are moving down the credit spectrum in their search for yield. But *who* is behind this demand?

<sup>6</sup> This section is based on customer bond trades executed with Citi. This includes both electronic and voice trades. Larger trades tend to be executed on the phone, while smaller trades are executed electronically.

### But who is doing the buying?

Our data shows real money behind the acceleration in demand for peripherals (Figure 13). It also shows banks reducing their exposure around year end before replacing about half the reduction in Q1. But while real money demand has been accelerating, demand from banks has fallen back to flat

Figure 13. Real money have been getting longer peripherals. Banks reduced their exposure around year end and have only replaced about half of this in Q1.



Source: Citi Research

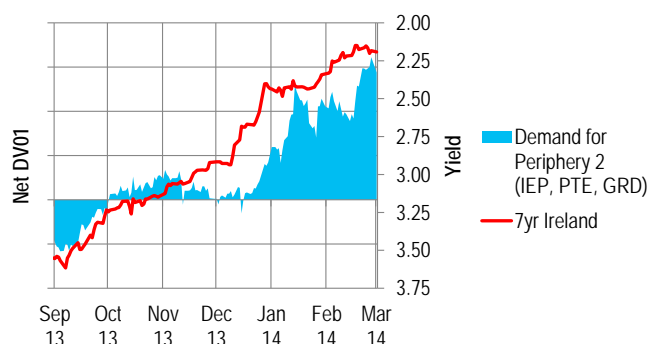
### Demand for yield is outweighing its supply

### Peripherals are behaving like Veblen goods

### Watch out for stalling spreads

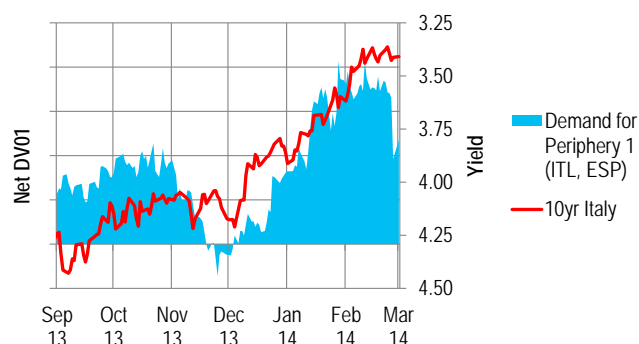
Economics teachers are always fond of Veblen goods, demand for which varies positively with price. Peripheral bonds have been doing a very good impression of these recently. With the continued rally making yield increasingly scarce, and the pool of investors widening, demand is intensifying. But given the positioning outlined above, keep an eye out for spreads stalling. Sideways price action could easily see investors start to lighten positions to make room to add, or simply to reduce risk with the spread not moving. A small change in risk appetite at the margin, replicated across a large group of investors could add up to a meaningful short term correction. While belief in the suppression of tail risks remains strong, we think that corrections will continue to be seen as buying opportunities, but with positioning getting ever longer, the risk of a correction is growing. Based on the above, we think the most likely catalyst for this is simply spreads stalling.

Figure 14. Demand for the periphery has varied positively with price



Source: Citi Research

Figure 15. Demand for the periphery has varied positively with price



Source: Citi Research

### Conclusions

Positioning and concentration risk are of course only two factors<sup>7</sup>. But given the weight of money chasing peripheral yields, keep a close eye on the flow and behavior of the spreads. In short-dated EUR swaps, look at making lower for longer exposure conditional. By contrast, positioning at the front end of the GBP curve - where we see the greatest gap between our 2yr yield forecasts at the forwards - still looks relatively light, suggesting that outright risk is still relatively safe.

<sup>7</sup> See the latest *European Rates Weekly* for our latest views and comprehensive consideration of a broader range of factors driving peripheral risks and pricing.

## Appendix A-1

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