Macro Strategy

THE END OF QE

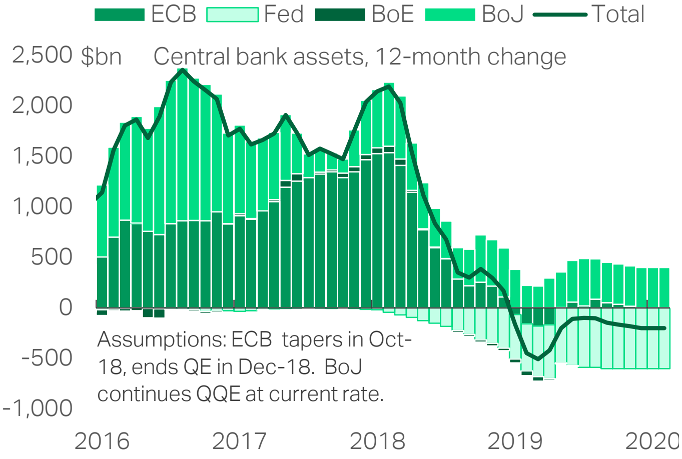
Oliver Brennan

- **As the pace of QE slows, so does its dominance in fixed income markets**
- **Bunds are cornered, but fixed income volatility set to rise in rest of euro area**
- **Gilt outflow suggests rebalancing out of the UK: we sell Gilts vs Bunds**

Fixed income market behaviour is changing. Over the last 12 months we have regularly used principal component analysis as a tool to understand asset market behaviour. At the start of this year, we highlighted how global fixed income market moves could mostly be explained by a single factor, which itself was closely related to the US 10y term premium - a proxy for the distortive effect of QE. Since then, the first PCA factor has declined in its explanatory power, from over 65% of fixed income market variance in April to 50% today.

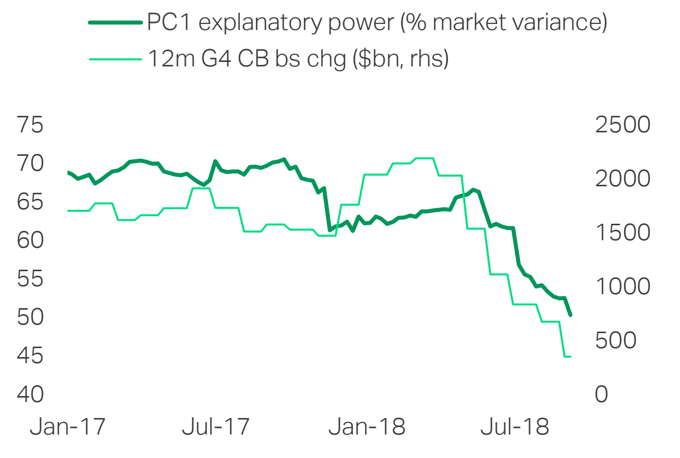
Fed tightening, BoJ duration shifting and ECB slowly tapering. Global central banks are still injecting liquidity into the financial system, and by our calculations will be doing so until the end of the year. Although the BoJ's balance sheet continues to expand at a pace of JPY50tn/year, there are signs that the duration of purchases is slowly falling as the central bank tries to engineer a steeper curve to support domestic banks (purchases of 25y+ bonds have fallen from JPY500bn/m to JPY300bn/m). The ECB will reduce its asset purchases from next month and stop buying altogether by the end of the year.

Pace of QE is falling sharply



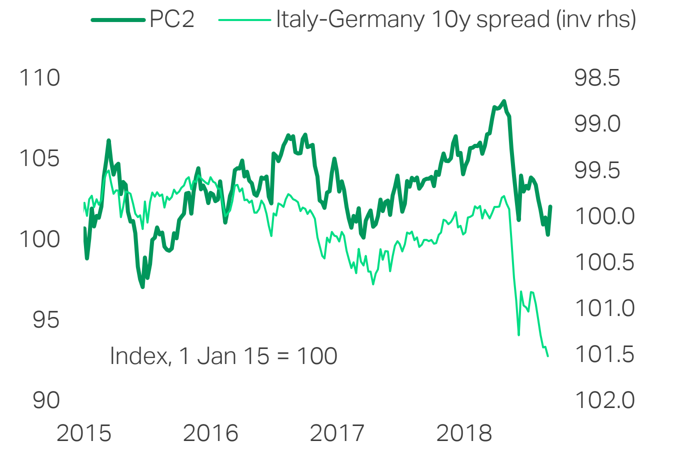
Source: Bloomberg, Central Banks, TS Lombard

Declining QE in line with fading PC1 power



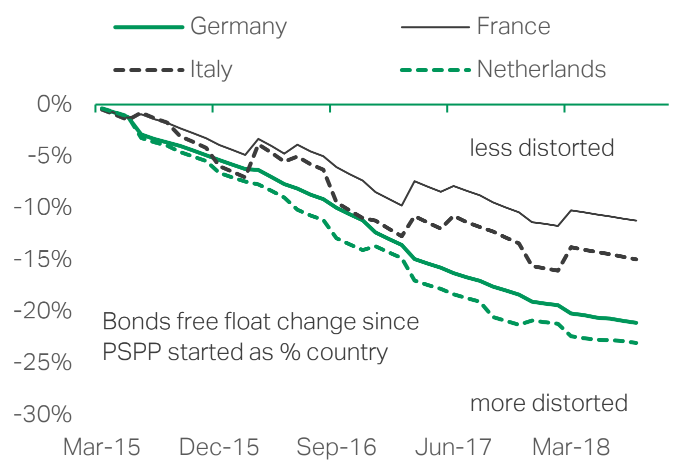
Source: Bloomberg, TS Lombard

PC2 is related to euro area risk



Source: Bloomberg, TS Lombard

ECB Bunds ownership over 20% of German GDP



Source: Bloomberg, TS Lombard

Declining global QE means other market factors can take over. The overall pace of QE has been closely related to the explanatory power of the first fixed income factor; the decline in its power suggests the distortive effect of QE is diminishing. The second factor's explanatory power has been rising, and itself is a reflection of risk appetite. The second factor's power has risen periodically over the last few years, generally whenever euro area spreads have widened. Each time it has subsequently fallen back. But this time its effect could be stronger and longer-lasting as it coincides with a secular decline in the effect of QE.

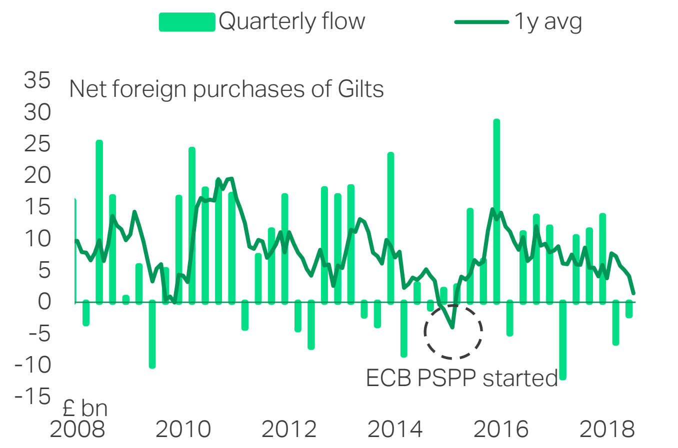
ECB has still cornered Bunds. We reported in March how the ECB has effectively cornered the Bund market. Since the start of QE, the ECB has bought $500bn of German bonds and (factoring in the budget surplus over the same period), the bond free float has fallen by over 20% of GDP. In March we estimated that 90% of outstanding federal German debt was in official – ECB and reserve manager – hands and reckoned the share could rise to 95% by September. Sure enough, based on updated data, up to 94% may now already be in official hands and that may rise by a further 2pp by the time QE finishes. (Recall, the comparative figures for the US and Japan were 50% and 45% respectively: Fed QE was never as dominant as ECB QE and JGBs make up a much smaller fraction of reserve portfolios.)

Asset purchases unlikely to compress spreads this time. On previous occasions, the rise in euro area bond spreads has been met with persistent ECB asset purchases, eventually compressing the spreads again – the global QE factor was powerful enough to outweigh European risks. That may not be the case this time. This change in market behaviour is limited to the euro area, but could still have knock-on effects.

Gilt outflows have begun. Portfolio flows into Gilts rose rapidly after the ECB started to buy bonds. But with the end of the ECB programme now in sight, monthly outflows from Gilts have twice broken records in 2018 – £14bn in January and £15.8bn in July. There have already been two consecutive quarters of outflows this year, as was the case in H1 2012 and mid-2013, and the figures for July suggests there could be a third. That would be unprecedented.

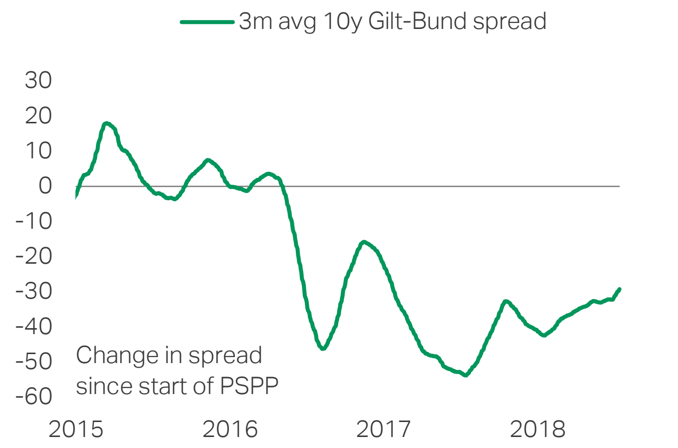
Outflows in 2013 coincided with a 75bp rise in yields, but in 2012 yields fell by 15bp. Domestic and external conditions are also important. In 2012 UK inflation was falling, GDP was weak and yields fell globally. By contrast, the BoE saw signs of a recovery taking hold in mid-2013 and global yields were rising. Currently, monetary policy is being steered away from emergency settings (read: bias to higher rates). Outflows alone do not guarantee rising yields, but the change in euro area fixed income behaviour makes it likely this time.

Gilt outflow starting



Source: BoE, TS Lombard

Gilt spread to Bunds could return to pre-QE level



Source: Bloomberg, TS Lombard

Diminishing ECB bid. As the ECB steps back, euro area bond yield volatility is likely to rise and spreads are set to move closer to their fair value. In our March analysis we showed that the impact would probably be greatest on France and Italy because of their heavy net bond issuance. The widening which has already occurred in Italy suggests it would not be the right vehicle to use to bet on the end of QE – BTPs are more driven by the second PC than the first. In the PCA analysis, Gilts exhibited the highest factor loading to the first ('QE factor') principal component.

Furthermore, crowded-out portfolio flows are likely to return to the EA. The region's broad basic balance of payments returned to surplus in June. That means investment destinations like the UK, which benefitted from portfolio inflows at the start of QE, are likely to see further bond outflows.

Before this process started in 2015, the 10y Gilt-Bund spread was 140bp. It is currently 107bp. We **buy the spread (selling Gilts and buying Bunds), with a target at 135bp and a stop at 84bp**. As the German market is cornered, Bund yields should be the least-affected by the end of QE. And although Brexit risks remain a source of volatility, the overall fall in foreign demand for Gilts should push UK yields higher.

Portfolio update

The model portfolio rose by 26bp this week, thanks to continued underperformance of EM equities vs DM shares. Our trade-war positions remain under water. However, the CNY has weakened afresh despite the PBoC's reintroduction of its counter-cyclical factor in the daily fix. The pressure on the currency, caused by Trump's comments that he is ready to impose tariffs on another $267bn of Chinese imports, suggests that the risk of escalation is still not fully in the price. In the event of still more tariffs, CNY is set to decline further.

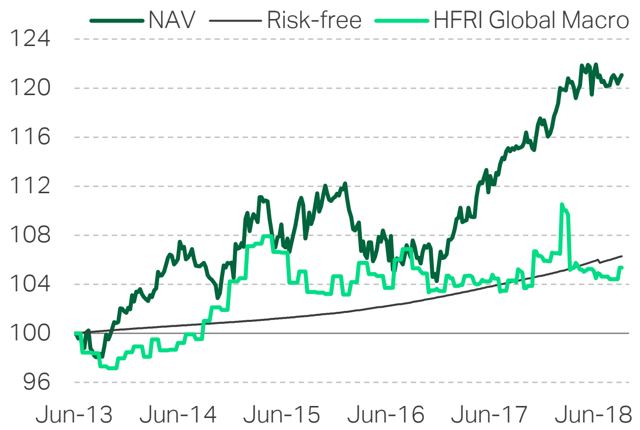
By adding a Gilts trade this week, we increase our exposure to Brexit risks. But recent remarks by EU chief Brexit negotiator Michel Barnier and UK Chancellor Philip Hammond that a deal in the next six to eight weeks is realistic support our long-standing view that the eventual agreement will be a 'Brexit in name only'. The rallies in GBP on these headlines also suggest that the market was too pessimistic on the state of the exit negotiations.

Current trade recommendations

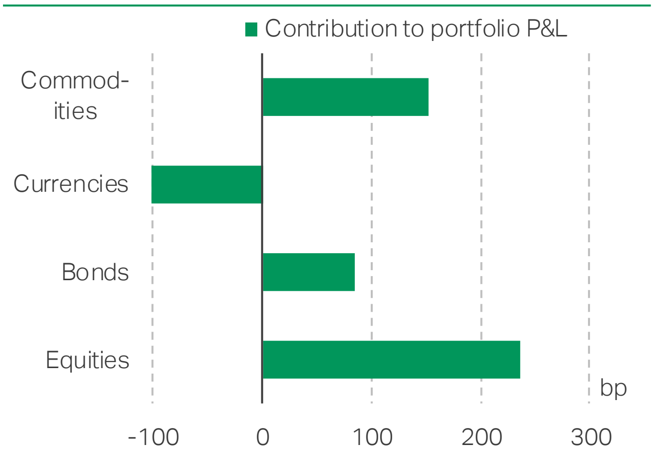
Theme	Trade	Date opened	Entry level	Last	P&L	Target	Stop	Original rationale / comment
Global cycle								
	Long CDX IG 5y protection (short risk)	20-Jun-18	63bp	58bp	-5bp	75bp	55bp	US investment grade to underperform as credit cycle past its peak
	Short MSCI EM vs MSCI DM	01-Aug-18			7.8%			Liquidity conditions to tighten again, and trade w ar risk still looming
Trading trade troubles								
	Long USD/KRW via 3m call spread	25-Jul-18	50bp	45bp	-5bp			Vol relatively low , Korea exposed to CNY risks and trade risks
	Long USD/CNH via 21-Dec 7.20 digi	15-Aug-18	15%	10.4%	-4.6%			CNY likely to continue w eakening to offset tariff risks
	Short CNH/JPY	15-Aug-18	16.00	16.20	-1.2%		16.50	Further CNY w eakness could trigger broad risk aversion
ECB Taper								
	Long EUR/USD via 14-Sep call spread	16-May-18	41bp	0bp	-41bp			EUR to rebound and risk of more haw kish ECB
	Short Gilts vs Bunds	**12-Sep-18**	**107bp**			**135bp**	**84bp**	**Gilt outflow and diminishing QE to widen Gilt-Bund spread**
Brexit in name only								
	Short EUR/GBP via 4m put spread	11-Jul-18	26bp	21bp	-5bp			Despite the noise, BINO is the most likely outcome and is bullish GBP

Bold indicates new trades or changes made this w eek.

Model portfolio historical performance



Performance contribution – last 12 months



Model portfolio metrics since inception

	Portfolio	HFRI Global Macro
Since Inception return	21.07%	5.37%
Annualized Return	**3.69%**	**1.00%**
2015	3.99%	-1.26%
2016	-4.89%	0.14%
2017	9.67%	2.47%
YTD	4.29%	-0.47%
MTD	0.40%	
Volatility (ann.)	4.65%	4.04%
Sharpe ratio (12m)	**0.70**	**-0.11**
Sortino ratio (12m)	**1.89**	**0.05**
Alpha (12m, vs HFRI)	6.80%	
Beta (12m, vs HFRI)	0.16	
Corr (12m, vs HFRI)	0.22	
Corr (12m,vs MSCI World)	0.36	
Corr (12m, vs JPM GBI)	-0.02	
Max draw dow n (12m)	-2.35%	-3.74%

Best and worst trades – last 12 months

Best and worst performing trades of last 12 months	
Best	**Contrib. (bp)**
Long 1y10y USD 2.9% payer (28-Nov-17)	152
Long Canada 10y / short USTs 10y (18-Oct-17)	145
Long WTI / short Brent (06-Oct-17)	86
Long OIH US equity (14-Feb-18)	82
Short MSCI EM / long MSCI DM (1-Aug-18)	76
Worst	**Contrib. (bp)**
Long Bund 10y / short BTP 10y (20-Sep-17)	-140
Long AUD/USD put (25-Oct-17)	-61
EUR/USD Call Spread (16-May-18)	-45
Long 10y UST / short 10y Bund	-42
Long USTs / short Bunds (24-Jan-18)	-33

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