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Hermes Investment Office

Ahead of the curve

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US Fed - addressing the balance sheet...

- The US Fed is the first central bank to suggest it's worrying about our addiction to QE. It's about to become the test case for how to push both levers: gradual rate hikes & balance-sheet correction.
- To quantify the impact on rates & gauge how policy should shift, we update our 'Policy Looseness Analysis'. By including QE, QT, & fiscal considerations, our analysis beefs up the Fed's Taylor Rule which recommends an unrealistically high & damaging peak rate.
- By sustaining its proposed 'non re-investment' (QT) programme, the Fed could 'take out' as much as 130bp of further rate hikes by 2019. But, unless it's accelerated, it would take till 2023 before the balance sheet is taken back to the $1trn considered 'normal'.
- Interest-rate normalisation will also be slow. Even a possible $1.1trn QT by 2019 leaves the *de facto*, QT-adjusted, real funds rate negative - on both our dovish & the FOMC's hawkish rate views.
- This gives credence to the 'new normal' view of low-for-longer global rates/yields, rather than a 'normalisation' in coming years to pre-crisis levels. Otherwise, the US's eight-year expansion (its third longest) may not in summer 2019 become its longest ever...

A very long road back to 'normal'...

"The Committee...expects to begin implementing a balance sheet normalisation program this year..." (FOMC Statement, 14 June) *"...the federal funds rate would not have to rise all that much further to get to a neutral policy stance."* (Janet Yellen, Semi-Annual Testimony, 12 July)

By debating the size of its balance sheet, the US Fed is the first central bank since the global crisis to suggest that policy-makers are worrying about our growing addiction to QE. As a result of their asset purchases, the world's big four central banks' balance sheets have passed $14trn *(chart 6)*. This liquidity injection to the private sector is equivalent to about three quarters of US GDP, or 1¼ times China's.

And it means over half of the world's $25trn central bank assets has amassed in just eight years. That is, after the last US (NBER-defined) recession ended in mid 2009. Early QE can be credited with unclogging the system in 2009, but has since been an imperfect tool, bloating asset prices but with little accompanying impulse to demand inflation.

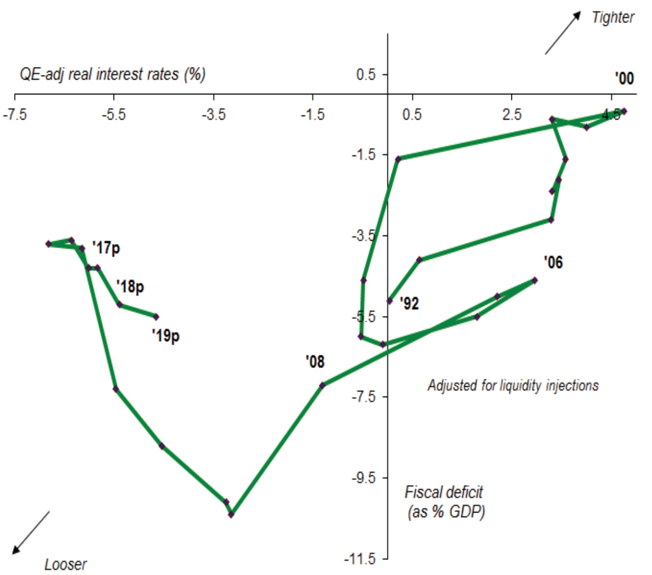
Linked to that, the US Fed also remains the test case for whether central banks can ever 'normalise' rates. We still expect it to try, but fail

Chart 1. The US Fed's potential 'non re-investment' programme

QT 2017-19			$4,500bn = total balance sheet
	Potential non re-investment ($bn per quarter)		*Equivalent rate hike (Full year, bp, rounded)
2017 Q4	30	= 3x$10bn p/m	5
2018 Q1	60	= 3x$20bn p/m	
2018 Q2	90	= 3x$30bn p/m	
2018 Q3	120	= 3x$40bn p/m	
2018 Q4	150	= 3x$50bn p/m	50
2019 Q1	150	= 3x$50bn p/m	
2019 Q2	150	"	
2019 Q3	150	"	
2019 Q4	150	"	75
Total =	1,050		130

Source: Hermes Investment Management*, based on FOMC June Statement & *Addendum*

Chart 2. US policy - a long road back to 'normal' (dovish rate case)...
Using QE-adj Fed funds rate, core PCE, & cyc-adj fiscal balance. ***Hermes rate view.***



Source: Hermes Investment Management, based on OECD, & Bloomberg data

- hiking the funds target just once more, probably in another forecast-round month such as this December. But, with the lagged effects of the previous four 25bp hikes yet to come (an average 18 months before rate hikes fully affect consumer spending), deferred tax cuts, tame core inflation ***(chart 5)***, and possible protectionism, this would mean a peak of about 1½%. This is way lower than the 3% inferred in the FOMC's 'dot-plot' of interest rate assumptions ***(chart 4)***, and a historic average rate of 5%. On this basis, we may thus be facing another two years of negative real policy rates, in the US and UK.

By starting QT, the Fed will take some of the heavy lifting away from rate rises..

In addition, the Fed's focus now on addressing its balance sheet, by gently eroding its combined $4½trn QE stock of US Treasuries and MBS, offers them a second lever to pull to 'normalise' conditions. This will take some of the heavy lifting away from rate rises. In the faster-growing US and UK, QE looks past its best. While helpful in 2008-09, it offers little to push productivity and wages, still the missing piece from most recoveries. An element behind the view of the FOMC's Brainard *et al is* that insensitivity of demand to rate cuts (liquidity trap) and persistent excess capacity thus warrant a much lower 'neutral' (or 'Goldilocks') policy rate than in previous recoveries.

Encouragingly in the US, though, the presence of some productivity gain (+12% since the crisis) has helped average wages (+22%) beat the CPI (+15%). By contrast, the UK's flat productivity has impeded wage growth (17%) relative to the RPI (+28%).

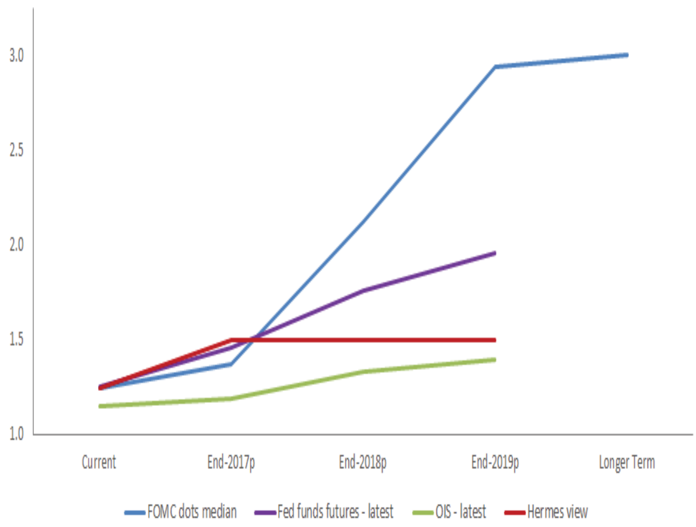
Part of this puzzle must surely be linked to disparate trends in worker participation rates. The US's unemployment fall has been widespread, but the labour pool is shrinking. This is keeping the worker participation rate close to a 36-year low, contributing to hiring difficulties and skills shortages at a time when unemployment, at 4.4%, lies under the FOMC's 5¼-5½% NAIRU range. This compares with steadily *rising* labour forces in the UK, euro-zone and Australia.

The US Fed, with its dual, employment and CPI mandate, stands out from others. **As a guide, our simulations suggest that an FOMC determined to follow through on its current assumptions would *ceteris paribus* slice about 1½%point off cumulative GDP-growth over the next three years, relative to broadly leaving rates unchanged.**

So, to take pressure off rate rises and help achieve a low peak rate, the Fed is bracing to in tandem push on the other monetary lever: quantitative tightening (QT). Admittedly, after eight years of running QE, the challenge will be to ultimately sell back some of the assets without a sharp rise in US mortgage rates from higher long yields. **But, with the Fed believing it's the QE *stock* that matters, it is sending a far gentler, less visible tightening signal that it will allow it to erode naturally - by no longer reinvesting the proceeds of their maturing bonds.**

Chart 4: The Fed has in a mind a rate-path all the way back to 3%

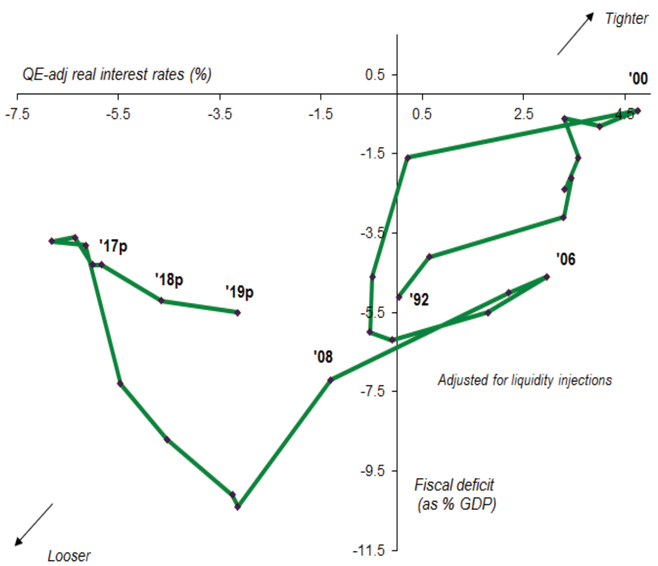
'Dot-plot' mapping FOMC members' median assumptions for Fed funds target (%)



Source: Bloomberg, based on US Federal Reserve Board

Chart 3. ...Even if the Fed does follow through on its rate threats

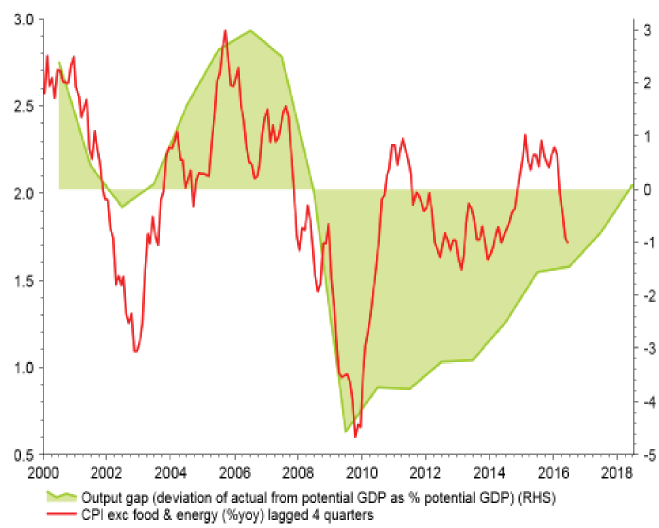
Using QE-adj Fed funds rate, core PCE, & cyc-adj fiscal balance. ***Fed's rate view***



Source: Hermes Investment Management, based on OECD, & Bloomberg data

Chart 5. But, core inflation is falling back again, frustrating the Fed

CPI excluding food & energy (% yoy) lagged four quarters, vs output gap



Source: Thomson Reuters Datastream, & OECD

With this in mind, Fed staff serving the FOMC are proposing a gradual erosion of QE, by starting to phase out US Treasury/MBS reinvestment *"relatively soon"* (July Statement). It is the logical next tightening step, but the gentlest possible form of QT. Asset sales would be deferred, but their replacement-rate on the balance sheet tapered increasingly every three months. FOMC member John Williams suggests *"...something like five years"* before the $4½trn balance sheet returns to a more normal ($1trn) size. This is optimistic, but achievable.

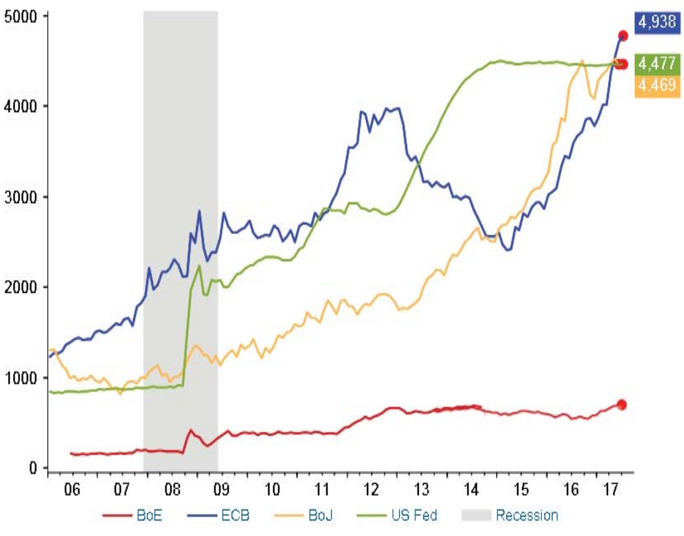
This gives credence to the 'new normal' view of low-for-longer rates & yields...

The FOMC could announce this at their 20 September meeting, with the first 'non re-investments' in October. What the Fed has in mind is to *"...announce a set of gradually increasing caps...on the securities that would be allowed to run off each month, and only the amounts of repayments that exceeded the caps...reinvested. These caps would initially be set at low levels and then be raised every three months... until the balance sheet was normalised"* (FOMC's May Minutes). FOMC staff are proposing an initial $10bn monthly 'roll off' ($6bn Treasuries, $4bn MBS), rising in $10bn increments to $50bn, before it is reviewed.

To quantify the impact on rates and gauge how the overall (monetary and fiscal) policy position should shift to 2019, we update our 'Policy Looseness Analysis'. By taking explicit account of the past eight years of QE, proposed QT, and also fiscal positions, our analysis beefs up the 'Taylor Rule' the US Fed traditionally uses for setting rates. The Rule (without QE and fiscal considerations) currently pitches the Fed's target rate at 4½% (close to its long-term average). **At 325bp over the Fed's current 1.00-1.25% range, those FOMC members targeting an unusually low peak rate are, helpfully, ignoring their own Rule.**

***Charts 1, 2, 3 and 7* summarise the results.** In each, we quantify the impact of QE on rates by adjusting real rates for former Fed chairman, Bernanke's assertion that the $600bn part of QE2 back in 2011 was equivalent to slicing an extra 75bp off the Fed funds target. See our May *Tightening by doing nothing* report for more. **This has led to a *de facto* (QE-adjusted) *nominal* Fed funds rate now of about -4%: much lower than the 1¼% 'official' rate.** This equates to a near -6% *real* rate when we adjust with the Fed's +2%yoy core PCE target.

Chart 6: Central banks have been pumping hard
Central banks' balance sheets into & during QE ($bn). Grey is US recession



Source: Thomson Reuters Datastream, based on central bank data

Chart 7. In the long-run, the Fed & BoE can keep peak rates down
Possible trade-offs between ultra-low peak rates & whittling down QE stocks (QT)

Market	Current policy rate (%)	Pref *long-term* peak rate?	Long-term average rate	Extra tightening required?	*Implication for *long-term* QT?
US	1.25% max	**3.0%** (e.g. Fed dot-plot)	circa 5.0%	+175bp	**$1,400bn** (= 31% of QE stock)
UK	0.25%	**2.25%** (e.g. Return to +ve real)	circa 5.0%	+200bp	**£267bn** (= 60% of QE stock)

*Derived from our Policy Looseness Analysis

Source: Hermes Investment Management, based on US Fed, & BoE staff simulations

On this basis, our analysis suggests the following.

First, assuming symmetry for QT (that is, a hypothetical $600bn of QT would be equivalent to an around 75bp *on* the Fed funds rate *etc*), the Fed could by sustaining its programme 'take out' as much as 130bp of further rate hikes by 2019. *Chart 1* is based on the Fed starting QT in October, and maintaining the $50bn per-month pace after its review.

To put into perspective, the possible cumulative $1.1trn of QT by 2019 would be significant (5% of US GDP), representing about a quarter of the current balance sheet, or approaching a third of 'excess reserves' (*i.e.* the around $3½trn accumulated since the global crisis). **But, unless the pace of QT is accelerated further, it would on this basis take till 2023 before it's taken back to the $1trn considered 'normal'.**

Second, given the assumed trade-offs, the process of interest-rate normalisation will also be slow. *Chart 2* is mapped on the basis described above, proxying both monetary and shifts, and uses our own Fed funds assumption of just one more hike, to 1½%, partly facilitated by QT. On this basis, even the cumulative $1.1trn QT leaves the *de facto*, QT-adjusted, real funds rate in negative territory, and there's little compensating shift in the underlying fiscal stance (OECD projections).

Alternatively, even the more hawkish rate assumptions of the FOMC, would (other things being equal) leave the QT-adjusted real rate abnormally low. *Chart 3*, drawn using the same QT and fiscal assumptions, but using the FOMC's 'dot-plot' rate path to a 3% peak, offers a still negative QT-adjusted real rate even in 2019. **This gives credence to the 'new normal' view of low-for-longer global rates and yields, rather than an imminent 'normalisation' to pre-crisis levels.**

Running nominal policy rates this low would make the FOMC and other central banks more uncomfortable, if their balance sheet were not also addressed. **The Fed thus is also the test case for how to push both levers - gradual rate hikes and balance sheet correction - given the latter still seems off the BoE's radar, while the BoJ and ECB are still running QE.** In Japan, having run it for 19 years leaves some officials believing the BoJ will be the last to switch off QE, and even eulogising the BoJ/MoF's debt symbiosis. And China too could eventually take up QE if its debt strains become more visible.

The FOMC will opine it's their cherished policy rate that needs to get closer to 'normal'. Yet, once QT gets under way, it may become clearer they needn't hike as far as the current dot-plot suggests - especially if inflation stays tame, the dollar lifts, and/or chair Yellen is replaced by an even more pro-growth, Trump-nominated candidate. Otherwise, the US's eight-year expansion - its third longest from trough to peak - may not in summer 2019 become its longest ever.

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