OUTCOMES BEYOND PERFORMANCE

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Economic outlook

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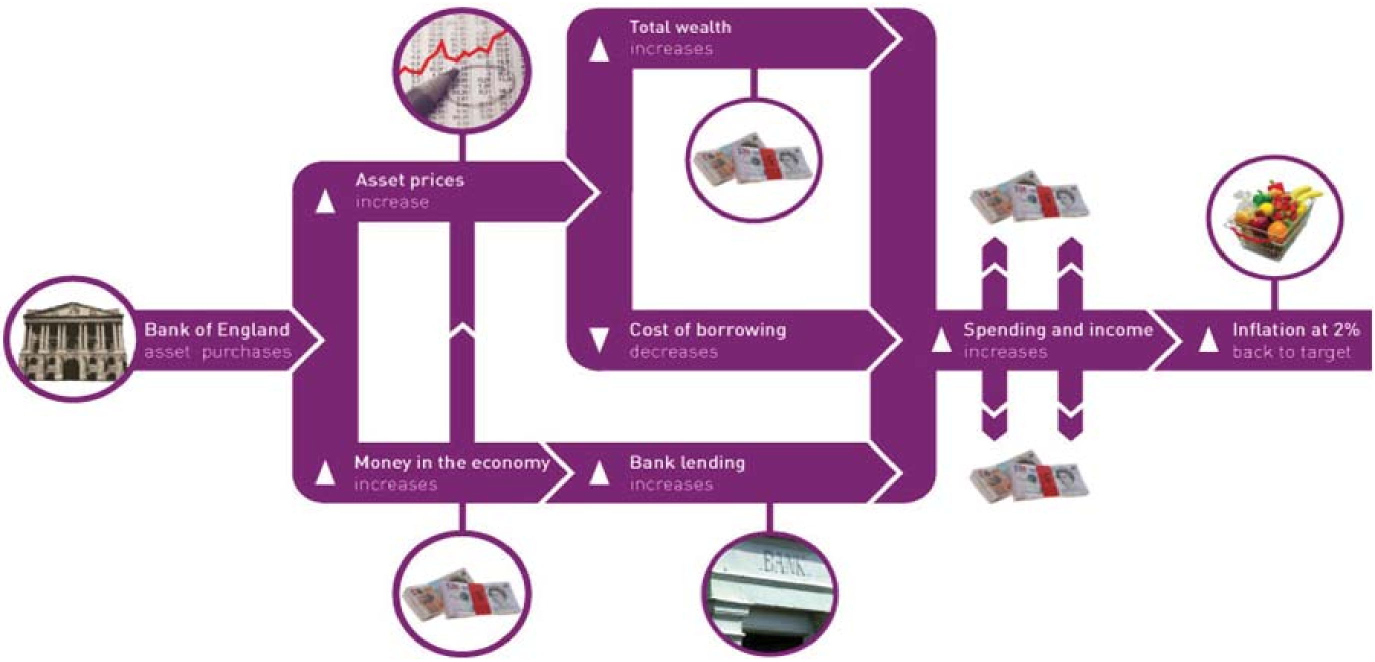
The wrong sort of inflation...

Main points

- By debating the size of their balance sheets, central banks are showing the first signs since the crisis that they may be worrying about our growing addiction to QE. After unclogging the system in 2009, QE has since been an imperfect remedy.
- But, its impact may not have been properly picked up. By taking explicit account of QE & fiscal positions, our analysis suggests the true US policy rate may be as low as -4%, & -3% in the UK.
- This may be just as well, as, without care, an unhelpful jigsaw piece from the 1930s - retaliatory trade protectionism - might yet come crashing into place. The impact of protectionism this time, though, could be far more complicated.
- First, the economic & financial linkages suggest the knock-on would be more far reaching. Global retaliation would activate second-round effects that later offset the initial growth-impulse from Mr Trump's intended tax cuts.
- Second, the deflationary return to the US could thus be much larger than anticipated. China's commitment to US Treasuries would be questioned, supply chains for US corporates disrupted, & the US's already shrinking labour supply & potential growth reduced further.
- Third, should protectionism build, inflation will reappear. But, with the possible exception of the US, it'll be the 'wrong sort' – cost, rather than demand-led. Central banks will 'turn a blind' eye as economies stagflate, so the inflation flame may snuff itself out.
- In which case, while reflation trades looked appropriate at the start of 2017, the spectre of protectionism, cost inflation, and dissipating growth may cause stimulus euphoria to fade.
- The trade-off, though, is that policy rates stay lower than many expect, helped as the US Fed nudges the other monetary lever, 'QT'. Otherwise, if QE endures, assets will continue to be priced more on central bank actions, than underlying fundamentals...

Chart 1. This is how quantitative easing (QE) was meant to work (UK example)...



Source: Hermes Investment Management, adapted from BoE

Comment

By debating the size of their balance sheets, central banks are showing the first signs since the crisis that they may be worrying about our growing addiction to QE. As a result of their asset purchases, the world's big four central banks' balance sheets have reached $14trn. This liquidity injection to the private sector is equivalent to 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.

While QE got to those that needed it least, protectionism would trigger cost-inflation

As a guide, *chart 1* sets out the transmission mechanism the BoE had in mind when it kick started QE in March 2009. It was aimed at an orderly functioning of markets via two main channels. Gilts would be sold to the BoE, freeing up the banks to pass on their higher cash holdings; boosting the money supply, and finding its way to the 'real' economy. The two channels would then be via increased bank lending to consumers/corporates, and via higher asset prices. This would ultimately reduce the deflation risk, and ensure CPI did not fall short of its +2%yoy target. **The US Fed's aim in early 2009 was similar; each broadly assuming a one-for-one money boost to GDP growth.**

But, it was only partly successful. There are no counter-factuals, but the responsiveness of GDP to money growth has been far less than one-to-one, as consumers/producers wary of unemployment and deflation became interest-rate insensitive ('liquidity trap'). No matter how much QE is run, its reflationary impact also depends on how quickly the liquidity is pushed around the system. **In reflation terms, it's no good throwing money 'out of a helicopter' if no-one spends it. In practice, velocity has been slow to recover. So, by bloating asset prices, QE could be accused if getting to those that needed it least.**

QE was useful in loosening the monetary reins at a time when policy rates were already on the floor. **But, its impact may not have been properly picked up. The 'Taylor Rule' the US Fed uses for setting rates does not track explicitly QE and fiscal shifts.** Applying it blindly (without QE and fiscal considerations) currently pitches the 'appropriate' Fed's target funds rate at 4.75% - close to its 5% historic average. Yet, by taking account of both, our *Policy Looseness Analysis* suggests the true US rate is currently -4% *(page 3)*, and -3% in the UK *(page 6)*.

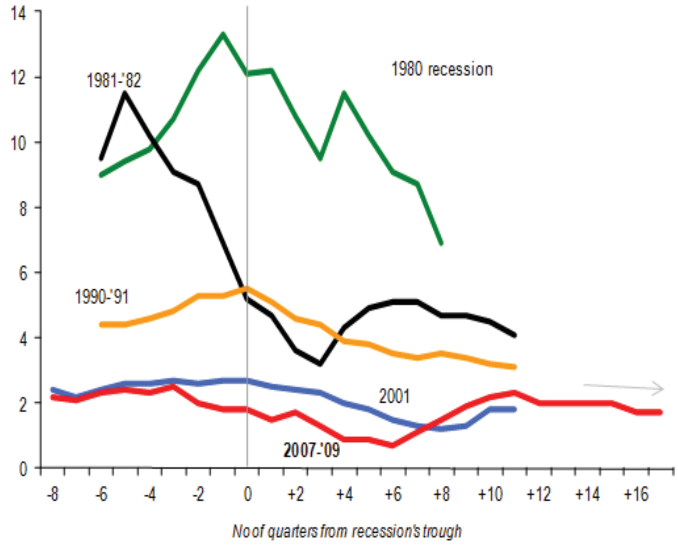
Running true rates this low should make the Fed and BoE increasingly uncomfortable if their QE stock is sustained. But, by starting QT - which the Fed now looks set to around Christmas - they may not have to hike as much as markets assume. **Our expectation of a peak US rate of just 1½% - way lower than the Fed's inferred 3% - suggests we may face another two years of negative real policy rates in the US, and UK.**

This may be just as well, as, without care, an unhelpful jigsaw piece from the 1930s - retaliatory trade protectionism - might yet come crashing into place. In 1930, it was triggered by the Smoot-Hawley reforms that raised US tariffs to up to 20% on over 20,000 imported goods. Congress this time may push back on a general approach. Yet, after threats during his campaign, Mr Trump could still invoke 'Super 301' to impose tariffs without its or WTO approval, on countries deemed (by him) to be engaging in *"unfair"* trade practices against the US.

The impact this time would be more complicated. **First, economic and financial linkages suggest the knock-on would be more far reaching.** Central to our US growth projections *(page 3)* is that retaliation - may it be tit-for-tat tariff rises, qualitative barriers and/or competitive

Chart 2. US - core inflation into and out of recessions

Core CPI (%yoy) into & out of US recessions. Years shown are recessions



Source: Hermes Investment Management, based on BLS, & NBER

currency depreciations - would activate second-round effects that could later offset the growth-impulse from Mr Trump's tax cuts. A strong dollar would reinforce this, at a time when the UK is about to renegotiate its own trade deals. If US experience is a guide, new trade deals take an average four years to complete. But, the UK cannot meantime commit trade-deal 'bigamy' while still in the EU.

Second, the deflationary return to the US could be larger than anticipated. A retaliatory renminbi devaluation that then hurt China's own balance sheets would question its commitment to US Treasuries - just as the US budget deficit widens. China's rating downgrade by Moody's, to A1, reminds us of China's own potential debt strains *(page 7)*. And, threatened US tariffs would surely disrupt US car manufacturers' own supply chains from Mexico, and the ability/cost of US companies' outsourcing their IT production to China.

Also, ring-fencing Mexico and raising the deportation of undocumented immigrants would further shrink the labour pool. The US participation rate, already close to a 36-year low, is contributing to hiring difficulties there. **It also risks an element in short supply in the US's eight-year expansion: potential growth, which the OECD estimates at just 1½%.**

Third, should protectionist forces build, inflation would reappear. But, with the possible exception of the US facing labour shortages, it will be the 'wrong sort' – cost-push, led by tariffs, weaker currencies, and goods shortages, rather than demand-pull. Central banks would thus have to 'turn a blind' eye as economies stagflate. This portends more to the inflation rises of the early 1980s and 1990s recessions, than the overheating of the late 1980s and mid 2000s. **And, as *chart 2* for the US suggests, inflationary flames going into recessions - *i.e.* not stoked by wage increases - tend to snuff themselves out relatively quickly.**

In which case, while reflation trades looked appropriate at the start of 2017, the spectre of protectionism, cost inflation, and dissipating growth may cause stimulus euphoria to fade. The trade-off though is that rates stay lower than many expect, helped as the US Fed nudges the other monetary lever, QT. Otherwise, assets will continue to be priced more on central bank actions, than underlying fundamentals.

United States

The US Fed remains the test case for whether central banks can ever 'normalise' rates. We expect it to try, but fail - hiking the funds target just twice more, probably this June, then in another forecast-round month such as September or December. But, with the lagged effects of previous hikes yet to come (an average 18 months before rate hikes affect consumer spending in full), delayed or deferred tax cuts, protectionism, and cold winds elsewhere (*e.g.* Brexit), this would mean a peak of about 1½% - way lower than the historic average 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 may not have to raise rates as far as markets assume...

At least the FOMC is now debating whether to start reducing the QE stock later this year. QE, while helpful in 2008-09, 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 persistent excess capacity warrants 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%).

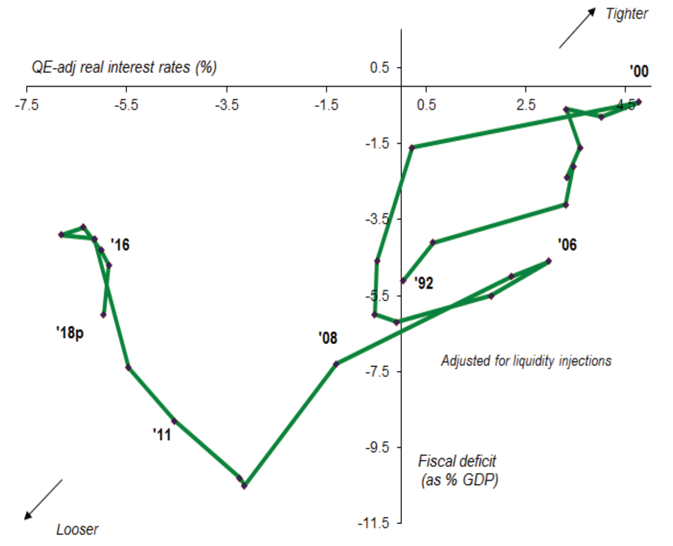
Part of this puzzle is still linked to disparate trends in worker participation rates. The US's unemployment fall has been widespread, but, the labour pool is shrinking. This is keeping the worker participation rate close to a 36-year low, contributing to hiring difficulties and skills shortages at a time when unemployment, at 4.3%, lies easily under the FOMC's 5¼-5½% NAIRU range. This is in contrast to 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 do some of the heavy lifting and help achieve a low peak rate, the Fed could 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, a gentler, less visible tightening signal would be to allow it to erode naturally, by no longer reinvesting the proceeds of their maturing bonds.**

Chart 3. The US's macro-policy mix adjusted for QE

Using QE-adj Fed funds rate, core PCE, & cyclically-adjusted fiscal balance as % GDP



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

Economic & interest rate projections (p)

% yoy unless stated	'12	'13	'14	'15	'16	'17p	'18p
Real GDP	2.2	1.7	2.4	2.6	1.6	2.3	1.7
Personal consumption	1.5	1.5	2.9	3.2	2.7	2.6	2.2
Business investment	9.0	3.5	6.0	2.1	-0.5	3.3	1.8
Industrial production	2.8	2.0	3.1	-0.7	-1.2	1.8	1.4
Consumer prices (nsa)	2.1	1.5	1.6	0.1	1.3	2.4	1.9
Unemployment rate (%)	8.1	7.4	6.2	5.3	4.8	4.5	4.4
Current account (% GDP)	-2.8	-2.2	-2.3	-2.6	-2.6	-2.7	-2.8
Fed budget balance (% GDP)	-6.5	-3.3	-2.8	-2.6	-3.1	-3.3	-3.6
Funds target (yr-end, %)	0.25	0.25	0.25	0.50	0.75	1.50	1.50

Source: National data, Hermes Investment Management, OECD, & Consensus Economics

With this in mind, Fed staff serving the FOMC are now proposing a gradual erosion of QE, by phasing out US Treasury/MBS reinvestment from the end of this year. This is the logical next tightening step, but is 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, but this looks optimistic.

To gauge how the overall (monetary *and* fiscal) policy position should shift into 2018, we update our 'Policy Looseness Analysis'. By taking explicit account of current QE and fiscal positions, our analysis beefs up the 'Taylor Rule' the US Fed traditionally uses for setting rates. The Rule (without QE and fiscal considerations) pitches the Fed's target rate at 4.75% (close to its long-term average). **At 375bp over the Fed's current 0.75-1.0% range, FOMC members targeting an unusually low peak rate seem, helpfully, to be ignoring their own Rule.**

Chart 3 **(and for the UK, *chart 6*) summarises the results.** 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 1% 'official' rate.** This equates to a -6% *real* rate when we adjust with the Fed's +2%yoy core PCE target.

Running rates this low would make the FOMC more uncomfortable if QE is sustained. But, by starting QT, it may not have to hike as much as markets (expecting a hawkish Trump-nominated replacement for chair Yellen) assume. And especially if the dollar tightens for them. Otherwise, the US's eight-year expansion - its third longest from trough to peak - may not in summer 2019 become its longest ever.

Japan

Economic activity may be picking up, but with deflationary psychology still firmly intrenched, PM Abe still has every incentive to prolong a policy loosening now in its nineteenth year. In *real* terms, GDP (growing 1.6%yoy in Q2) has for the first time since 2006 risen for as many as five consecutive quarters. This has been helped by a weaker yen and, linked to that, successive monetary and fiscal stimuli. But, it also reflects deflation effects. First, the measurement distortion where a falling price deflator boosts real activity. This leaves *nominal* GDP, by contrast, dormant as deflation offsets the impact of higher real-activity. While real GDP lies 4½% higher than the start of 2007, the level of nominal GDP is barely back to square one.

With deflationary psychology embedded, nominal GDP's barely back to square one

This is hardly sufficient for an economy running the developed world's highest government debt-to-GDP, at 240%. It means the BoJ daren't cut back on QE. At ¥80trn *per annum* ($720bn) of total asset purchases, the vast bulk being JGBs, the rest ETFs and REITs, it's mopping up JGBs at almost twice the pace of net supply (¥41trn). The BoJ has under Kuroda doubled its share outstanding to 47%, which leaves private institutions chasing riskier assets and/or looking overseas for bonds to buy, helping to soften the yen.

The MoF hopes that, by maintaining a nominal *growth rate* (currently about 1%yoy) above the average long-term interest rate, it can carry on borrowing without raising the debt ratio. But, this catch-22 precludes the BoJ from switching off, or even reducing, its QE. This leaves some officials believing the BoJ will be the last central bank to ever stop QE, and even eulogising the MoF/BoJ's debt symbiosis.

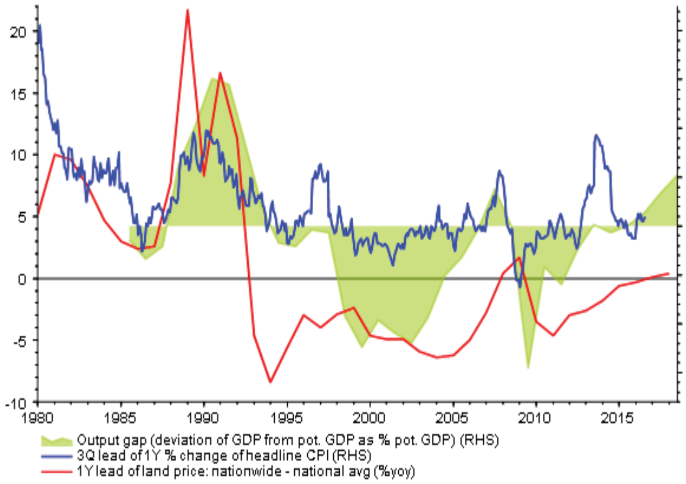
And, second, the muted pricing power still of firms. With their reported import costs seemingly running around twice export prices (an underlying +5½%yoy vs +2.6%), they seem in general to be absorbing much of the margin-hit from the weaker yen. This is surprising given the closing output gap ***(chart 4)*** and maturity of the global recovery, and could correct. But, it reflects an embedded deflationary psychology that has also constrained asset prices and wages. Little wonder the second leg of the consumption tax rise, from 8% to 10%, deferred officially to October 2019, may be abandoned.

Economic & interest rate projections (p)

% yoy unless stated	'12	'13	'14	'15	'16	'17p	'18p
Real GDP	1.5	2.0	0.3	1.2	1.0	1.2	1.3
Private consumption	2.0	2.4	-0.9	-0.4	0.4	0.7	0.7
Business investment	4.2	3.9	4.9	1.1	1.5	1.8	2.0
Industrial production	0.2	-0.6	2.1	-1.2	-0.1	3.0	1.5
Consumer prices	0.0	0.3	2.7	0.8	-0.1	0.5	1.0
Unemployment rate (%)	4.3	4.0	3.6	3.4	3.1	3.0	2.9
Current account (% GDP)	1.0	0.9	0.8	3.1	3.8	3.7	3.8
Gen budget balance (% GDP)	-8.7	-8.5	-7.7	-6.7	-5.7	-6.0	-6.3
BoJ target rate (yr-end, %)	0.10	0.10	0.10	0.10	-0.10	-0.10	-0.25

Source: National data, Hermes Investment Management, OECD, & Consensus Economics

Chart 4. Inflation fizzles out, but land prices have stopped falling
Nation-wide land prices, & CPI (both %yoy), vs output gap estimate



Source: Ministry of Land Infrastructure & Transport, MIAC, & OECD

Our Phillips Curve analysis suggests that, if delivered, wage growth *would* knock-on to the CPI, given the unemployment fall since 2009. BoJ research concurs, by identifying a negatively sloped curve, and a greater degree of long-term wage responsiveness than in the US. **Yet, the spring annual wage-round (*shunto*) was again tame, with the +2%yoy average, one-off wage-hike no higher than 2015 and 2016's. These were not sustained, and political pressure on firms to raise wages will continue to build in FY18 (year starting next April).**

Another important consideration is land prices which, after falling for almost 25 years, is stabilising *(chart 4)*. Building momentum here will be important for inflation, balance sheets, and collateral. Falling land prices was the common link when the MoF raised the consumption tax in 1997, from 3% to 5%, and the BoJ in 2000 ended its zero rate policy. Each time, they had to back-track as consumption slumped.

So, in tandem, policy will have to stay ultra-loose to stamp out deflation. Abe's three-arrow strategy - of a looser monetary stance, expansionary fiscal stimulus, and longer-term structural reforms (labour market, corporate governance) - will continue. So far, payback has been limited. The BoJ has for 15 months been targeting explicitly a zero 'yield' on 10-year JGBs, but has disappointed by not broadening its negative policy rates, currently centred on a 0.1% charge on banks' newly created reserve balances. **Further yen weakness on any US protectionism/repatriation may help in the short term, though BoJ rates might have to be cut again if the yen later receives unwelcome support from Brexit, and an early end to the Fed's rate-tightening.**

And, extending to FY18 the BoJ's pledge to hit its +2%yoy CPI target takes pressure off Kuroda before his term expires next April. (This April's CPI was just +0.4%yoy.) Its latest delay - the fourth - helped Abe achieve last July's Upper House 'super' (two-thirds) majority. This secures his position out to December 2018's Lower House election.

Meantime, tax deferrals and a corporate-tax cut, from 32% to 29%, postpone fiscal consolidation. The consumption-tax postponement foregoes a near proportionate lift to the CPI, and its contribution to a ¥12½trn (2% of GDP) revenue lift from the two hikes together. **Without plugging this gap, Abe's aim of a primary surplus by FY20 thus seems unlikely - even with the Rugby World Cup and Tokyo Olympics.**

Euro-zone

With such a highly-charged political climate, and signs from our own analysis that macro divergence between the so-called 'peripheral' and core euro members is correcting, any contagion - unlike 2008 - is more likely to be political than financial. But, with the solution - generating sufficient economic union to support the monetary union - and the zone's monetary engine overloaded, it looks time to crank up the fiscal side. Mr Draghi's appeal to governments that have *"fiscal space"* to take back the baton from the ECB thus gives added urgency to new administrations and those facing elections.

Convergence is necessary, but not sufficient

The good news is that, after seven years of austerity, Italy and Spain's economic performance-gap, in terms of their relative labour-cost competitiveness versus Germany, is now reducing. But, while encouraging, it comes with significant economic and social costs, suggesting additional stimulus will be needed.

Without it, there's probably a limit to how far Spain and Italy can reform further, given male youth unemployment rates of 40% and 37%. Their real household spending are still 4-6% down on 2008, yet Germany's is 10% up. Then there's Greece, whose deflation improved competitiveness, but exacerbated its real-debt dynamics. Its €86bn package is only a 'sticking plaster', and after losing 30% of its real GDP since 2010, it too has reform fatigue.

So, to test whether the macro strains in the periphery are still holding back the core members, we update our 'Misery Indices' (MIs). Off-the-wall methods for proxying economic hardship include an index adding together a country's unemployment and inflation rates. Though hardly scientific, they become especially flawed in a low inflation world when the components may move in opposite directions. **We offer a more logical alternative to these, and to conventional GDP estimates, for example, which are produced with a lag and frequently revised. For the method, see our April *Europe's highly-charged year* report.**

***Chart 5* summarises our predictions to 2018. Rising MIs predict greater economic hardship, relative to that country's past.** On this basis, it offers the following observations. First, after a marked deterioration in €-zone members' MIs during the global crisis, improvement since 2014 looks to be sustained through 2017. As a bloc, the euro-zone's (weighted) MI, at -1, should be its lowest since 2007.

Economic & interest rate projections (p)

% yoy unless stated	'12	'13	'14	'15	'16	'17p	'18p
Real GDP	-0.9	-0.3	1.2	1.9	1.8	2.0	1.6
Private consumption	-1.2	-0.5	0.8	1.8	1.9	2.0	1.7
Fixed investment	-3.3	-2.5	1.5	3.0	3.5	2.5	2.2
Industrial production	-2.3	-0.7	0.8	2.1	1.5	1.6	1.5
Consumer prices (HICP)	2.5	1.3	0.4	0.0	0.2	1.6	1.4
Unemployment rate (%)	11.4	12.0	11.6	10.9	10.0	9.6	9.3
Current account (% GDP)	1.4	2.2	2.5	3.2	3.3	2.9	2.8
Gen budget balance (% GDP)	-3.6	-3.0	-2.6	-2.1	-1.5	-2.0	-2.3
ECB refi' rate (yr-end, %)	0.75	0.25	0.05	0.05	0.00	0.00	0.00

Source: National data, Hermes Investment Management, OECD, & Consensus Economics

Chart 5. The method & sample data behind our Misery Indices (MIs)

The higher the 'Misery Index', the greater the expected economic hardship

	2017p[1]		**Unemployment rates**						**Misery (p)** *% point [2, 4]*	
	U rate	**CPI**	**2012**	**'13**	**'14**	**'15**	**'16**	**5-yr av**	**2017**	**2018**
Finland	8.5	1.2	7.7	8.2	8.7	9.4	8.8	8.6	**1**	**0**
Italy	11.7	1.2	10.7	12.1	12.6	11.9	11.6	11.8	**1**	**0**
Austria	6.0	1.8	4.9	5.3	5.6	5.8	6.0	5.5	**1**	**0**
Luxembourg	5.9	1.8	5.1	5.9	6.1	6.5	6.0	5.9	**0**	**0**
France	9.7	1.4	9.8	10.3	10.3	10.4	10.0	10.2	**0**	**0**
Belgium	7.9	2.1	7.6	8.4	8.5	8.5	8.0	8.2	**0**	**-1**
Netherlands	5.6	1.2	5.8	7.2	7.4	6.9	6.0	6.7	**0**	**-1**
Germany	4.3	1.8	5.4	5.2	5.0	4.6	4.4	4.9	**-1**	**0**
Greece	22.5	0.9	24.6	27.5	26.5	25.0	23.5	25.4	**-2**	**-3**
Cyprus	11.1	0.9	11.9	15.9	16.2	14.9	13.0	14.4	**-2**	**-3**
Portugal	10.3	1.3	15.6	16.2	13.9	12.4	11.1	13.8	**-3**	**-3**
Ireland	7.0	0.8	14.7	13.1	11.3	9.4	7.9	11.3	**-3**	**-2**
Spain	17.8	1.9	24.8	26.1	24.5	22.1	19.6	23.4	**-6**	**-5**
Unweighted av	*9.9*	*1.4*							*-1*	*-1*
Weighted av[3]	***9.4***	***1.5***							***-1***	***-1***

[1]Standardised unemployment (%), & HICPs (%yoy)
[2] Absolute CPI deviation from 1.9% (+) added to u rate deviation from 5-yr av (+/-)
[3]Using adjusted GDP weights.
[4]Orange shaded areas show 'above-average misery'

Source: Hermes' MIs, based on Eurostat data, & Hermes, & OECD projections (p)

Second, it's not surprising to see as the 'most miserable' some of those members running austerity to cut deficits and debt. Although levels are lower, unemployment and deflationary pressures from the fiscal squeeze are dampening improvement in their *relative* positions. In 2017, Italy will for the eighth year running lie in the above-average-misery zone in ***chart 5***. **But, even these are much improved on 2010-14, and further gains look likely across the periphery**.

But, most revealing is what our MIs say about convergence. The dip in the euro-zone's MI from the mid 1990s reflects Germany's recovery after its 1992-93 unification-led recession, and the benefits as the converging countries tried to reduce inflation, bond yields, debt and deficits. Our MIs reveal the two stages of convergence: from Maastricht in 1992 to the euro's birth; thereafter, with the euro, a steady re-widening as policy discipline waned.

Our MIs confirm that convergence after Maastricht was solid. They proxy convergence by tracking the highest and lowest MIs each year. In 2017, Spain looks the 'happiest' relative to its recent past (where GDP last year grew 3.2%yoy), with Finland/Italy the 'most miserable' (GDP +1.4/1.0%yoy). Greater convergence is shown by the narrowing gap between the two extremes. **It suggests misery is back down to when the euro became the single currency, with the periphery leading.**

This combination of reducing macro strains in the periphery with a relatively slower improvement in the core means the divergence since 2008 is correcting. **This is encouraging, though not of course sufficient for returning to economic health.** This still rests on the core members, which account for 80% of euro-zone GDP. Their MIs are also better.

So, while tacking the causes of the crisis needs more than low rates and QE, without them, some of the benefit to Spain, Italy *et al* from competitiveness gains would be offset by a stronger euro. QE could thus be with us for many years to come, including as a counter-weight to another possible Greece restructuring. **But, while far from fixed, the worst of the euro-zone's macro strains does at least look behind us. Which is just as well, given the years it'll take to reach the *"balanced growth"* sought by G20 governments, and - critically in 2017 and 2018 (Italy's election) - Europe's highly-charged political climate.**

United Kingdom

Theresa May's decision to bring forward the general election looked both a way of consolidating her political position, and tacit recognition that completing onerous Brexit negotiations will take much longer than the two years hoped for by Article 50. Holding the election this June instead of by May 2020 was thus aimed at raising her Commons working majority from just 17 seats, and effectively offers officials an extra two years to strike a deal before having to 'go to the nation' again. The risk, though, is that Brexit is even by then unresolved, given Europe's away-from-mainstream political shift.

Adjusting for QE, the true BoE Bank rate could be as low as minus 3%...

But even this may not be enough, with the biggest Brexit question still about the length of the journey ahead. Our negotiations (from 19 June) could take many years to potentially end up back close to 'square one' in terms of striking the *"free trade agreement"* that all main political parties want. This suggests that officials will negotiate to maintain access to - but no longer full membership of - a tariff-free system (akin to Canada's deal), and/or a customs union (similar to Turkey's).

But, the negotiations could stretch well beyond the two years assumed by Article 50. First, the deal when struck needs Parliamentary approval after input from devolved governments in N. Ireland, Scotland, and Wales. It will then be subject to a 'phasing in' period (Chancellor Hammond suggested two years) to allow firms, consumers and officials to adjust to the arrangements.

Second, the UK is relying on a cooperative sign-off by its 27 EU peers at a difficult political time. The only real precedent we have is Greenland in 1985. This was a 'soft' exit, but it took three years with negotiation centred on fishing rights. We, larger and 44 years entwined in the EU, will need longer.

Third, EU law forbids trade-deal 'bigamy', in terms of enacting agreements elsewhere while still an EU member. This prevents quick tie-ups with say the US. **So, a challenge is to remain close enough to the European 'table' to maintain the best trade/regulatory deals for services.** This makes it more ambitious than a Canada-type deal. Services are 80% of UK gross value added, compared with 50-60% in Germany and France, and have been the heartbeat of the recovery.

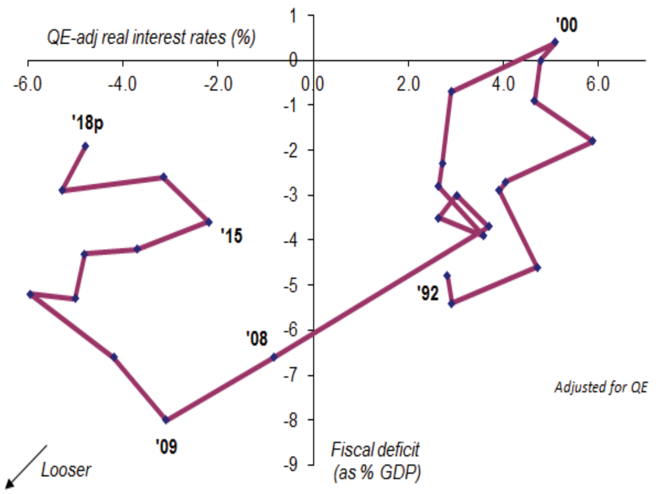
Economic & interest rate projections (p)

% yoy unless stated	'12	'13	'14	'15	'16	'17p	'18p
Real GDP	1.3	1.9	3.1	2.2	1.8	1.6	1.2
Household consumption	1.9	1.6	2.1	2.5	2.8	2.0	1.4
Fixed investment	2.4	3.2	6.7	3.4	0.5	-0.5	-1.5
Manufacturing production	-1.5	-1.0	2.9	-0.2	0.7	1.3	1.0
Retail prices index	3.2	3.1	2.4	1.0	1.7	2.8	2.0
Consumer prices	2.8	2.6	1.5	0.0	0.7	2.4	1.8
Unemp, ILO rate (3mav, %)	8.0	7.6	6.3	5.4	4.9	5.0	5.2
Current account (% GDP)	-3.7	-4.4	-4.7	-4.3	-4.4	-3.8	-3.0
Gen budget balance (% GDP)	-7.3	-5.9	-5.0	-3.8	-2.6	-2.9	-1.9
BoE Bank rate (yr-end, %)	0.50	0.50	0.50	0.50	0.25	0.25	0.25

Source: National data, Hermes Investment Mgmt, OBR, OECD, & Consensus Economics

Chart 6. The UK's macro policy mix, adjusted for QE

Using QE-adj Fed funds rate, CPI, & cyclically-adjusted fiscal balance as % GDP



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

Which leaves the BoE watchful that a weaker pound doesn't pump inflation, especially with the main activity data having held up since June's referendum. Should protectionist forces build, inflation will reappear. But, it will be the 'wrong sort' – cost-push, led by tariffs, goods and labour shortages, rather than 'feel-good' demand-pull. **This portends more to the inflation rises of the early 1980s and 1990s UK recessions, than the overheating of the late 1980s and 2007. In which case, the inflationary flame may snuff itself out without BoE action.**

Our simulations show, at current USD/GBP and oil prices, RPI inflation peaking around this April's 3.5%yoy. But, combinations of a weaker pound and/or higher oil could take the RPI past +4%yoy. This would be a five-and-a-half year high. In each case, the CPI stays above its +2%yoy target this year, with further GBP weakness/oil strength lifting it to +3.3%yoy. But, we doubt the MPC would hike, given the growth hit.

Governor Carney's worry seems to be the *"extent to which"* it breaches target, rather than the breaching itself. **This would be akin to the 'blind eye' governor King turned in 2011, when the CPI climbed to +5.2%yoy as the pound weakened and energy/food prices rose.** We thus update (as we do on *page 3* for the US) our *'Policy Looseness Analysis'* to gauge how the UK's overall policy position should shift into 2018.

In ***chart 6***, we have adjusted the policy rate for the BoE's 2009 estimate that £200bn in QE was akin to 150bp off the Bank rate. **Extrapolating, the cumulative £445bn QE since 2009 (including £70bn announced after the Brexit vote) thus implies a UK policy rate of about -3%: much lower than the 0.25% official Bank rate.** Should Brexit's impact be contained, the MPC may get twitchy fingers in 2018. But, they could in tandem gradually whittle away the QE stock to minimise rate rises.

Selling **the assets is one for later, and would have to be done gradually to minimise the disruption to bond markets. But, as a precursor, terminating the reinvestments would surely be the gentlest way of tightening - in effect by 'doing nothing'. It would help keep peak rates low, and give comfort that the BoE is not 'behind the curve'. It may even go some way to reducing the downside of QE - evidenced by asset-price distortions, suppressed saving, and increased funding strains on many pension schemes.**

China

After a significant fall in real borrowing costs *(chart 7)*, higher money rates and, if needed, renminbi depreciation are likely to take over as the authorities' preferred pressure releases. Expect rates to edge up further as the PBoC tries to tame an overheating housing market, continues to 'import' US monetary policy (by roughly maintaining its quasi-peg against the USD), and limits the shift in credit-demand to the shadow banking sector. Should the economy suffer, though, this would stall, and the renminbi allowed to soften. But, till then, the immediate concern is to avoid another ($1trn since 2014) haemorrhaging of forex reserves, and take back some - if only temporary - control of the currency, as individuals eat again into their $50,000 *per annum* outflow limit.

Hopefully, President Xi can avoid currency depreciation, lower reserves, & defaults...

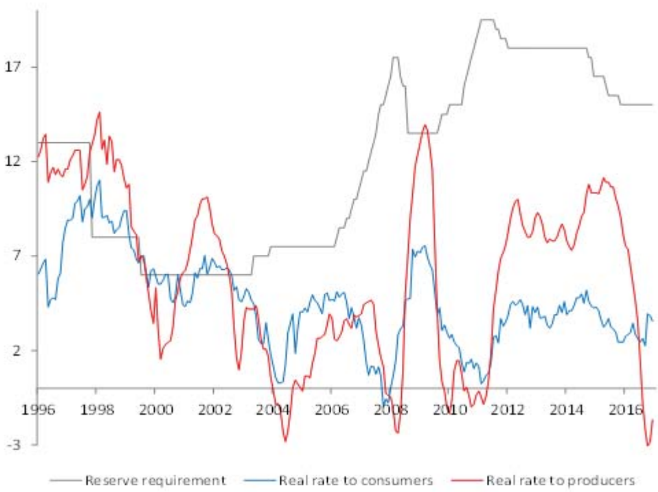
Net outflows since refixing the peg in August 2015 have pushed the RMB/USD to an eight-year low. For the most part, its fall has been stemmed by imposing capital controls, and since last October allowing money rates to drift up. And, with the PBoC quick to play down higher rates as *"market led"*, it looks targeted more at avoiding disruption ahead of President Xi's Politburo reshuffle this autumn (when five key members reach age limits), than the start of an aggressive tightening.

It also sends a signal to the banks to rein in credit expansion, as the PBoC tries to support growth yet cool an overheating housing market. **Affordability (the ratio of average house prices to incomes) in the main cities has deteriorated faster than in other world centres.**

But, tellingly, the RMB's been allowed to fall fastest during bouts of global influence, such as rising US rate expectations in Q4 2015; Brexit fears in Q2 2016; and higher, Trump-inspired US inflation expectations in Q4 2016. **The likely persistence of these forces and the risk of protectionism as China's bilateral surplus with the US builds, thus suggest some further downside for the RMB *(chart 8)*.**

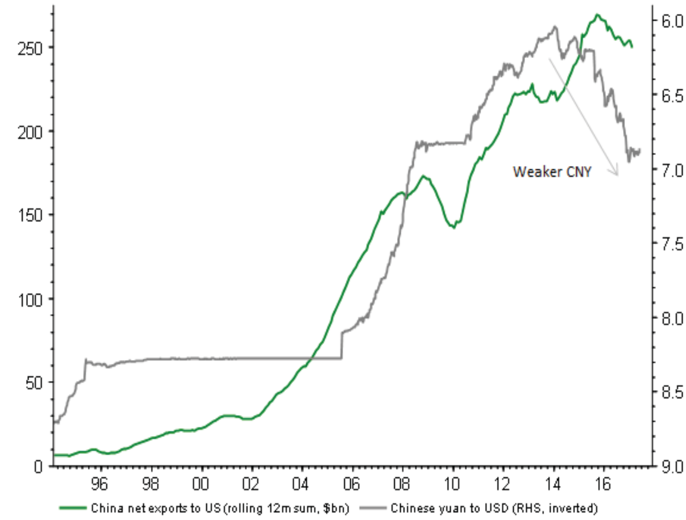
Yet, for as long as 'free' trade continues, this should be gradual. The PBoC's preference is to avoid undue downward pressure on the renminbi, while also *"..ensuring aggregate demand management"*.

Chart 7. There will be much less scope for monetary loosening...
China's 3-5yr lending rate deflated by CPI/PPI, vs RRR for small banks (all %)



Source: Thomson Reuters Datastream, based on NBS, & PBoC data

Chart 8. ...Which suggests the renminbi will be a pressure release
CNY/USD on an inverted axis, vs the China/US bilateral surplus, 12m rolling total, $bn.



Source: Thomson Reuters Datastream

Given currency depreciation effectively 'taxes' consumers (via inflation) over exports, 'gradual' fits with the long-term aim of rebalancing which has stalled since 2008. After all, a lesson from August 2015 to October 2016's sharp $437bn reserve outflow (12% of total) is that depreciation is preferable to prolonged support of overvalued levels. Especially as the latter questions China's commitment to US Treasuries.

Politically, the PBoC's various interventions since 2014 to *contain* CNY/USD depreciation - including its new trade-weighted basket - water down accusations of it being a downward currency manipulator. **Within China's trade data, the net effect of declining hard currency supplied by exporters (especially) and that demanded by importers broadly tallies with the fall in reserves.** While consistent with a slimmer current-account surplus (1.8% of GDP in 2016 from 2.8% in 2015), the apparent shift in currency preference away from RMB seems to lie behind much of the recorded outflow.

Adding to last November's capital controls (SAFE vetting of overseas transfers, scrutiny of foreign acquisitions, monitoring of cross-border flows through Shanghai, suspended issue of dual-currency credit cards) would further slow the rate of depreciation in coming months. **But, the more serious risk is US trade tariffs.** Retaliation by China could yet be sought by *inter alia* a large, 'bazooka' devaluation that clawed back some of the competitiveness-hit. But, this in turn risks imploding China's corporate and banks' balance sheets most exposed to USD debt. **In which case, the PBoC may yet have to delve into its $3trn reserves (about 25% of China's GDP, or 12% of world central bank assets) to cushion the indirect blow on China's balance sheets.**

In which case, an uneasy mix of currency depreciation, lower reserves, and selective defaults may be the least disruptive option for President Xi, especially if he can blame them on the US. Slower world trade would also make it easier for him to explain any shortfall from China's *"around 6½%"* growth target. **Hopefully, given China's sizeable US Treasury holdings (about 15% of total, the largest foreign holder), these provide a mutual deterrent. But if not, the mild 5-6% RMB/USD devaluation currently implied by forward contracts two-years out may be significantly underestimating the risk.**

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