

2020 - Navigating FX Trends in a Low Yield World

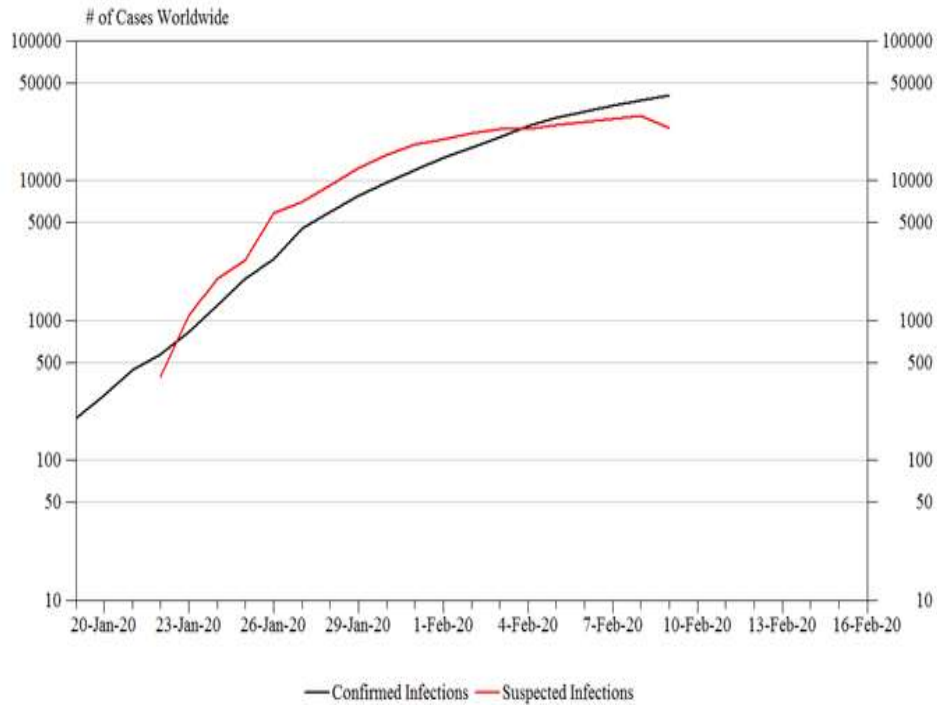
February 2020

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Wuhan Coronavirus: New downside risk for global growth

Fear of WARS

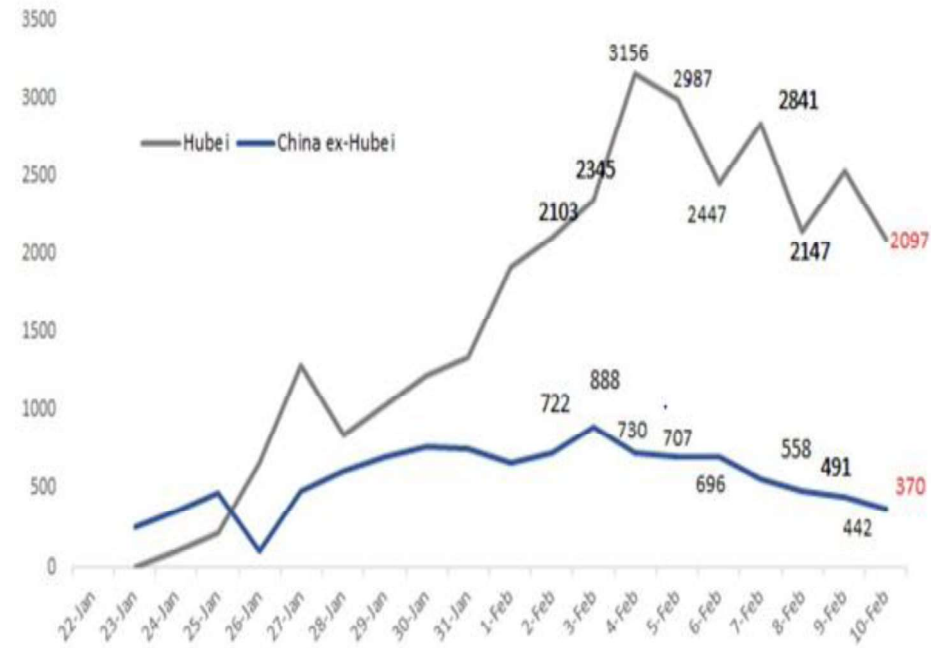
The Wuhan Coronavirus May Still Be on a Geometric Path



Source: CEIC

Last Data 20200209

nCov: New Cases per Day, Hubei vs Provinces



Source: CNHC & BNO

The Wuhan Coronavirus (1)

- Our sympathies, thoughts with the suffering
- **We assume WARS will be more severe than SARS**
- More contagious
 - SARS, 8,098 infected
 - Imperial College: 30,000 to 200,000 (some say a million)
 - HKU in *Lancet*: 75,815 in Greater Wuhan by 25 Jan 2020, eg
 - Depends on R_0 = how many others does one carrier infect? Early studies: 2 to 4; HKU 2.68; SAR 0.5, measles 12-18
 - We assume peaks in late April to early May 2020 (warmer weather)
- Less deadly, but perhaps not much less
 - Ultimate mortality SARS 9.6%
 - Initial WARS sample proportions 2-3%

The Wuhan Coronavirus (2)

- We assume bigger subtraction from **Chinese growth** than SARS, **-1 to -2ppt**

- SARS was -1ppt

- But much larger impact on the ROW

- In 2003, China had 20.2mn resident departures; in 2018, 162mn
- China 4% of world economy in 2003; now 17%
- East Asian neighbors: -0.25 to -0.5ppt? Rest of Asia: -0.25ppt?
- US/EU/UK: -0.1 to -0.2ppt (partly based on BOE studies)
- Surely assumptions will have to be adjusted again in coming weeks as more information rolls in

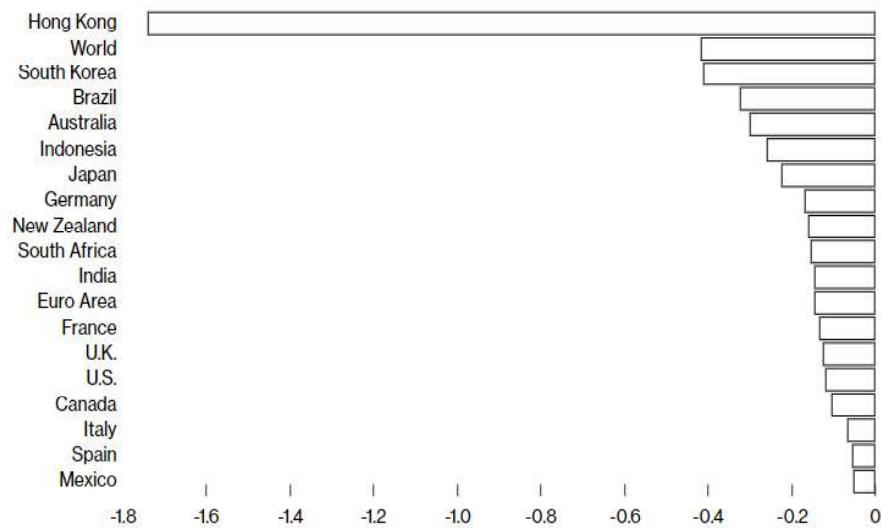
- Will affect monetary policy decisions around the world! Eg, BOK to cut twice in 2020 (we previously expected none)

- China → US phase 1 purchase commitments are *kaput!*

Who is likely to be hit hardest by virus-related disruption?

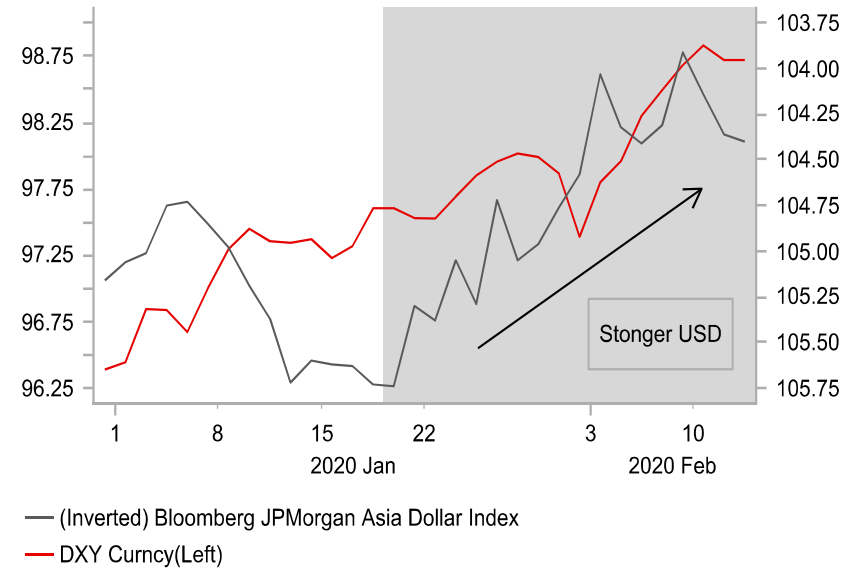
Global Impact in a Contained Scenario

Percentage point deviation in year-on-year growth from Q1 2020



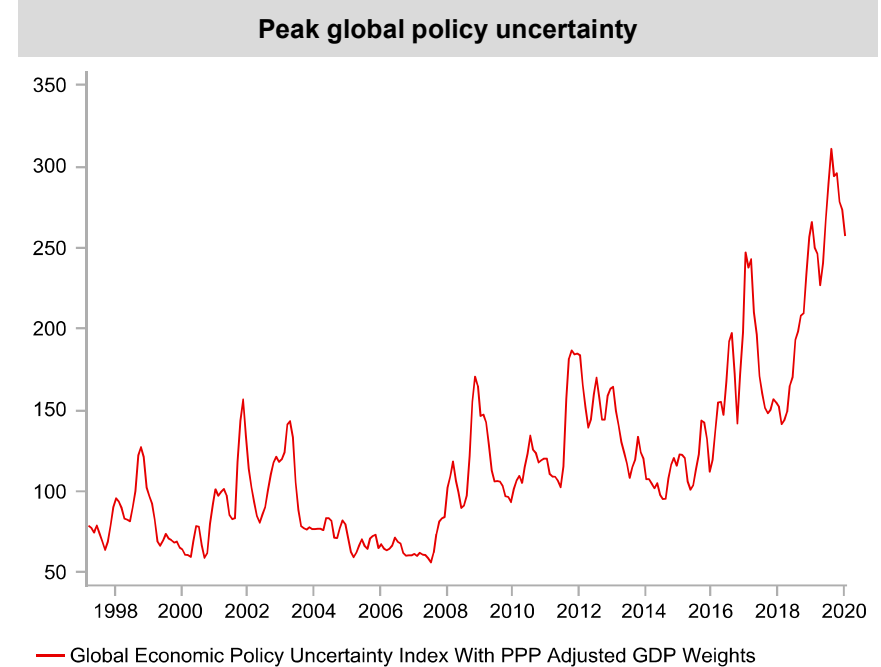
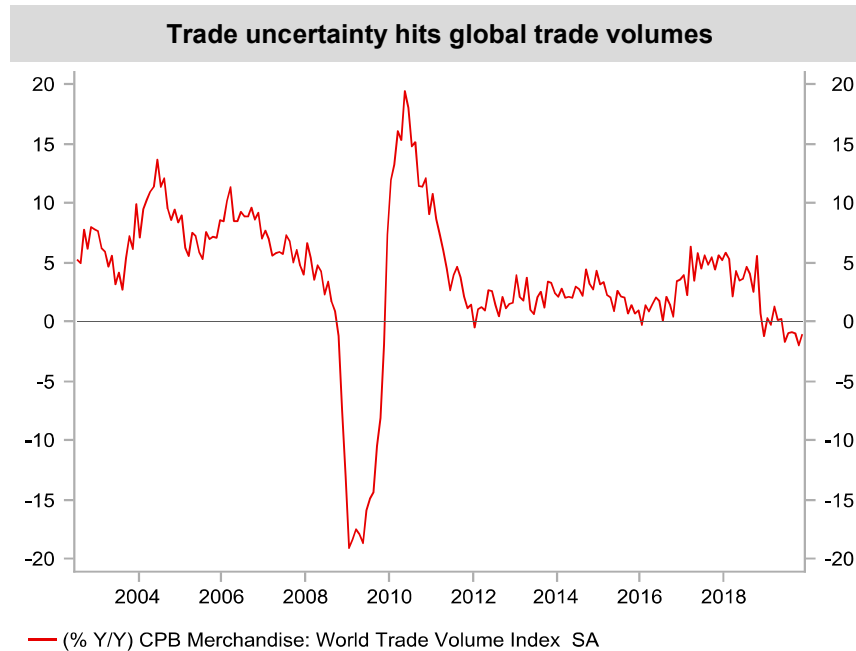
Source: Bloomberg Economics

Virus boosts relative attractiveness of USD



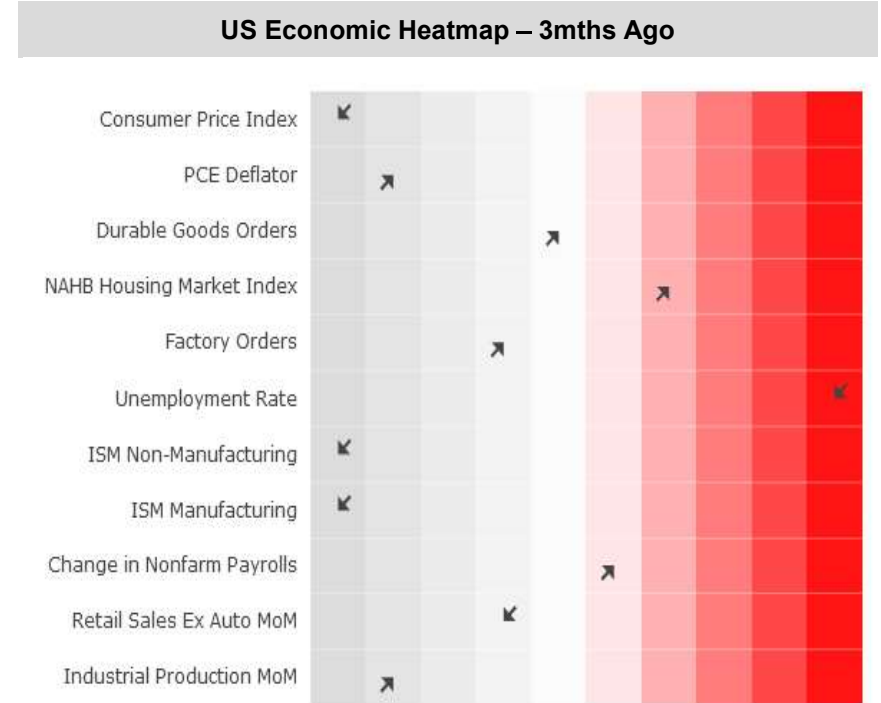
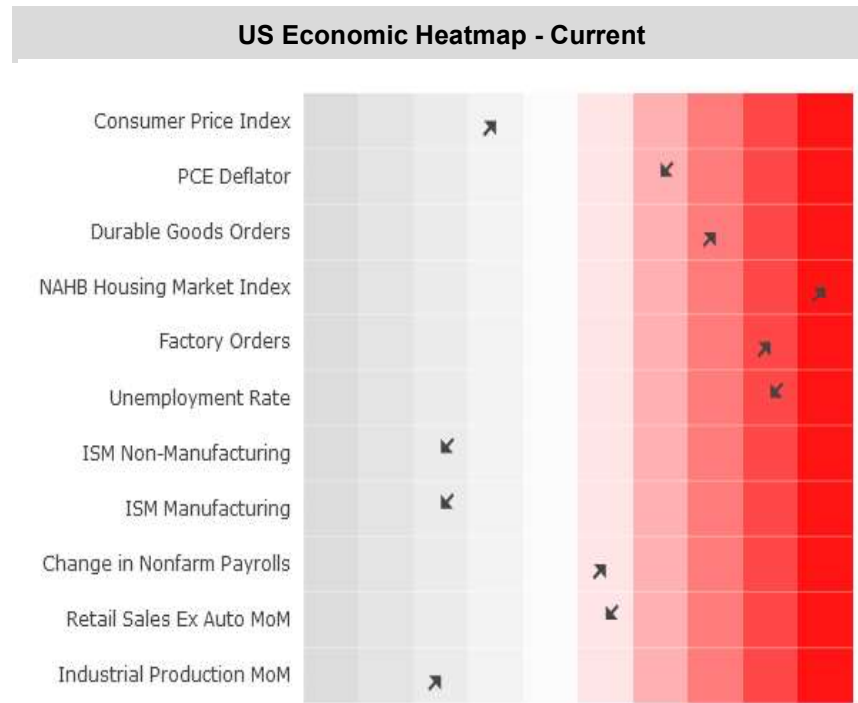
USD: The Fed pauses – but lower for longer the key strategy

Peak US-China uncertainty hit global trade volumes



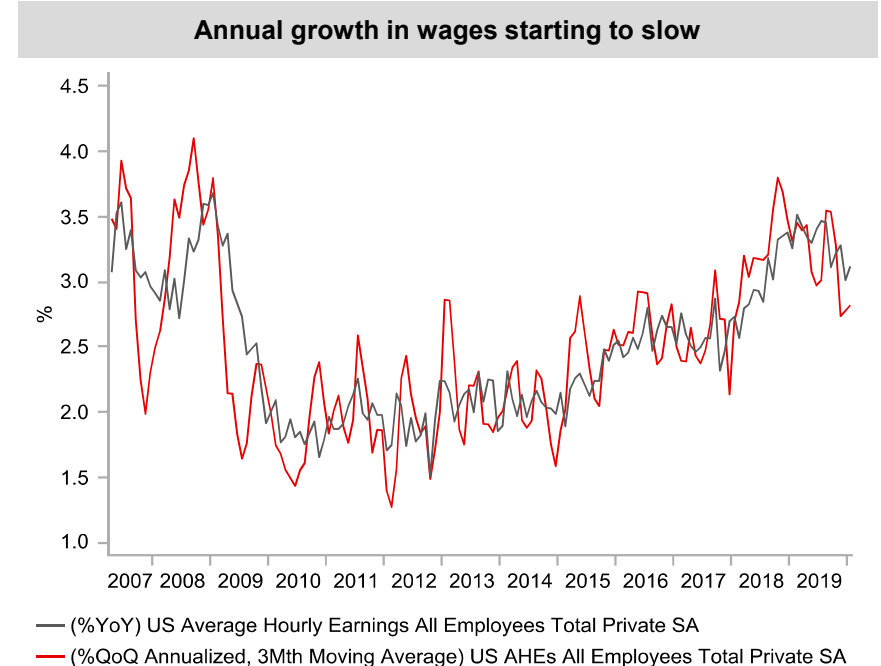
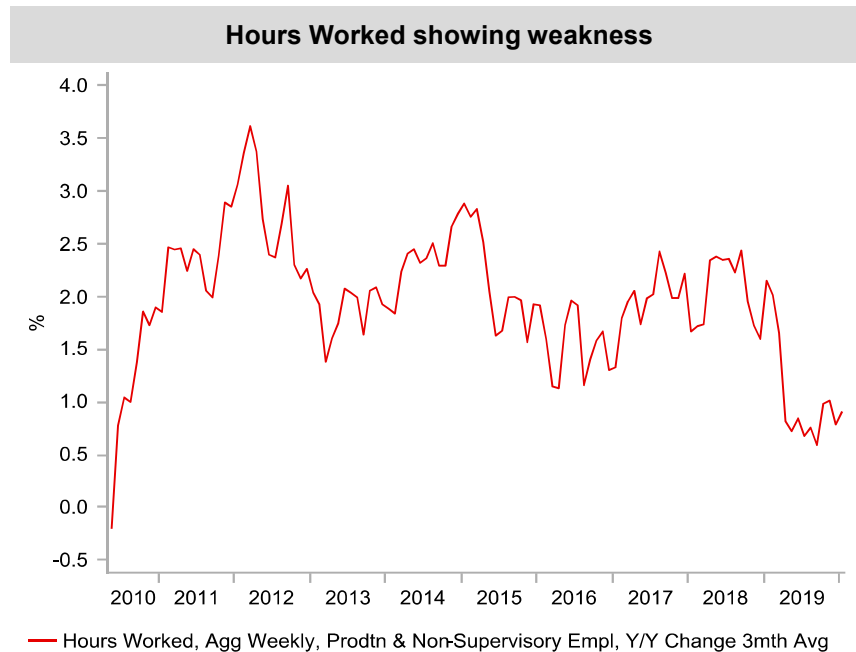
- 2020 will have many uncertainties but global trade tensions may recede somewhat.
- The signing of the Phase 1 US-China trade deal has at least for now diminished risks.
- But the damage is clear with the volume of global trade contracting on an annual basis. CPB trade volumes fell 1.0% in November from a year earlier, the worst since October 2009.
- Most tariffs will remain in place until Phase 2 is signed – so trade unlikely to revive notably.
- We may well be at peak uncertainty, but we still see plenty to maintain uncertainty levels high this year.
- The IMF has already downgraded its global growth forecast from 3.4% to 3.3% this year and from 3.6% to 3.4% in 2021.

....but the US economy has been resilient



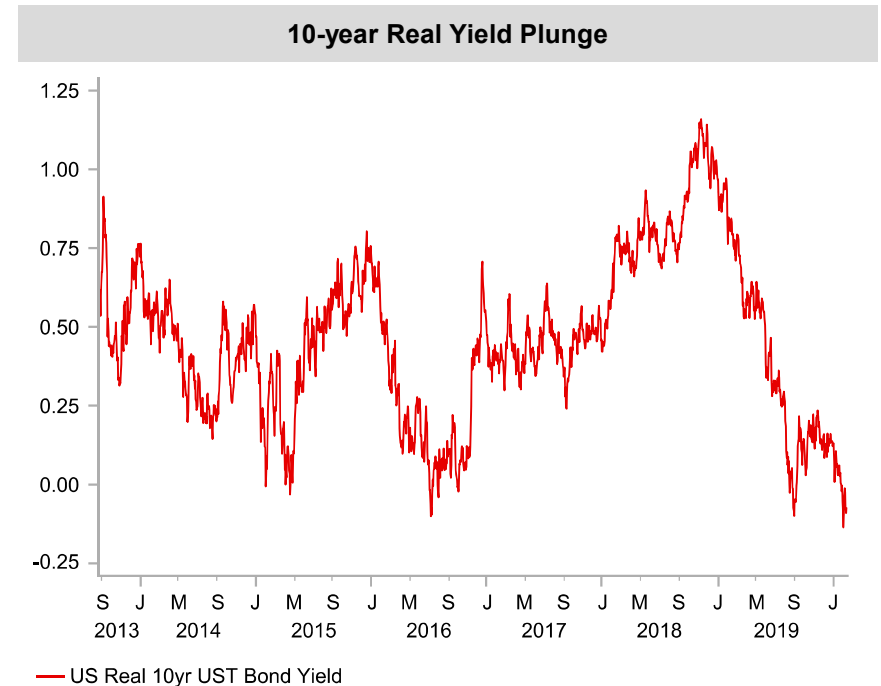
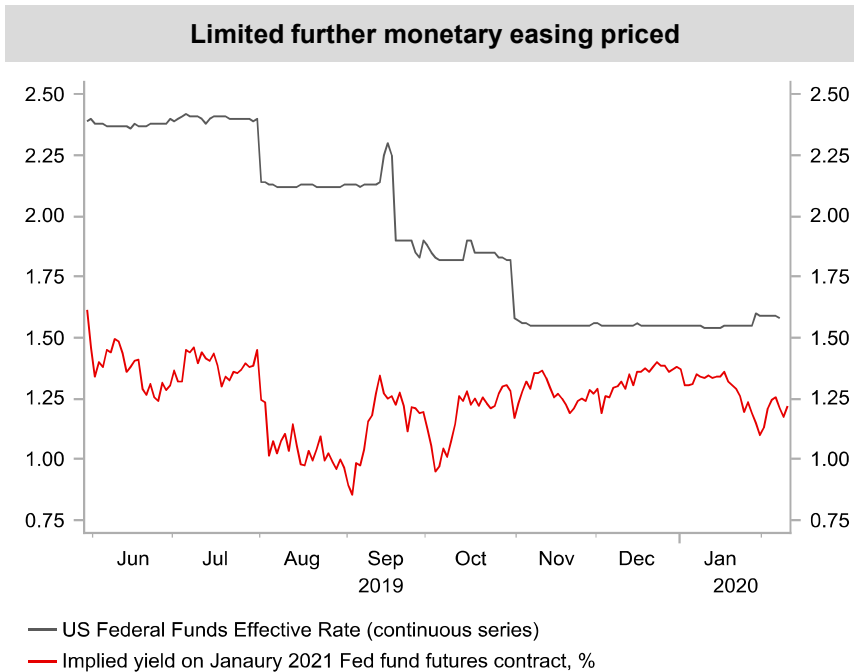
- 8 Economic Indicators have improved over the last 3mths; 1 are unchanged; and 1 has worsened.

US labour market still healthy but some tentative signs of softening



- Nonfarm payrolls gained 225k in January. Employment growth has picked up since the middle of last year.
- The US labour market has been resilient but has been slowing gradually in recent years. The 12mth average ended 2019 at 175k, compared to 193k in 2018.
- Crucially, wage growth is now moderating also.
- The annual change in aggregate hours worked is now the weakest since the Great Recession of 2008-09.
- Policymakers for now appear content to assume growth will persist rather than slow further.

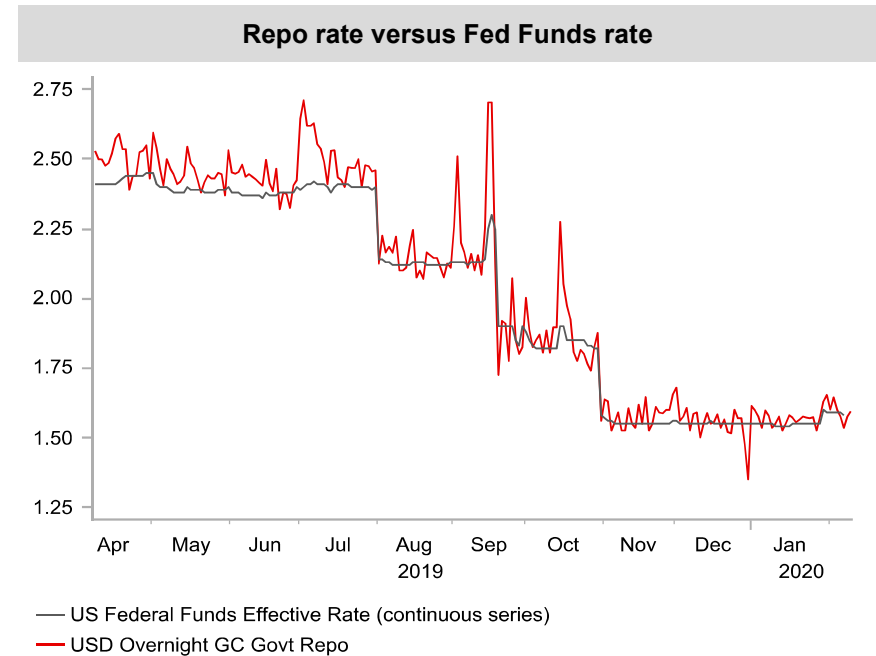
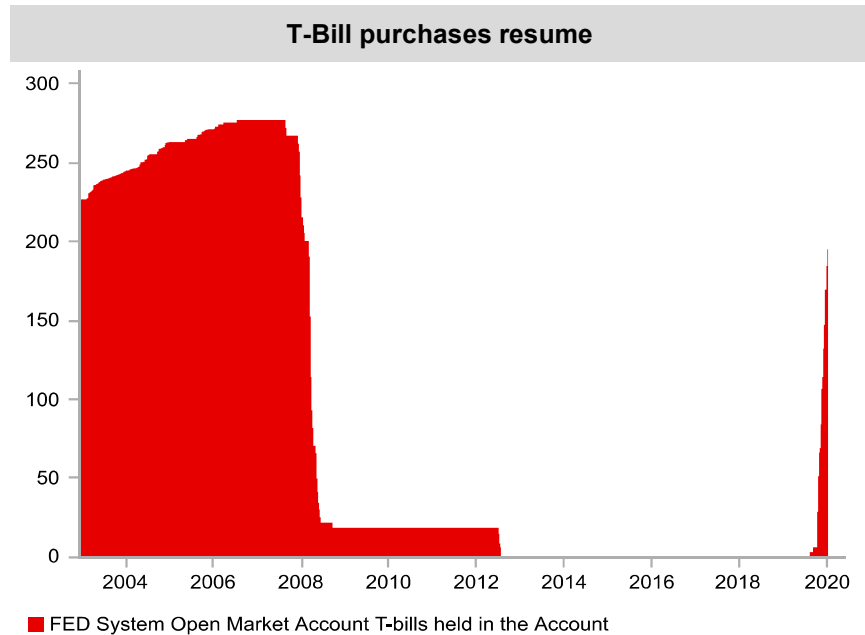
What's priced for 2020?



Source: Bloomberg as of 11th Feb

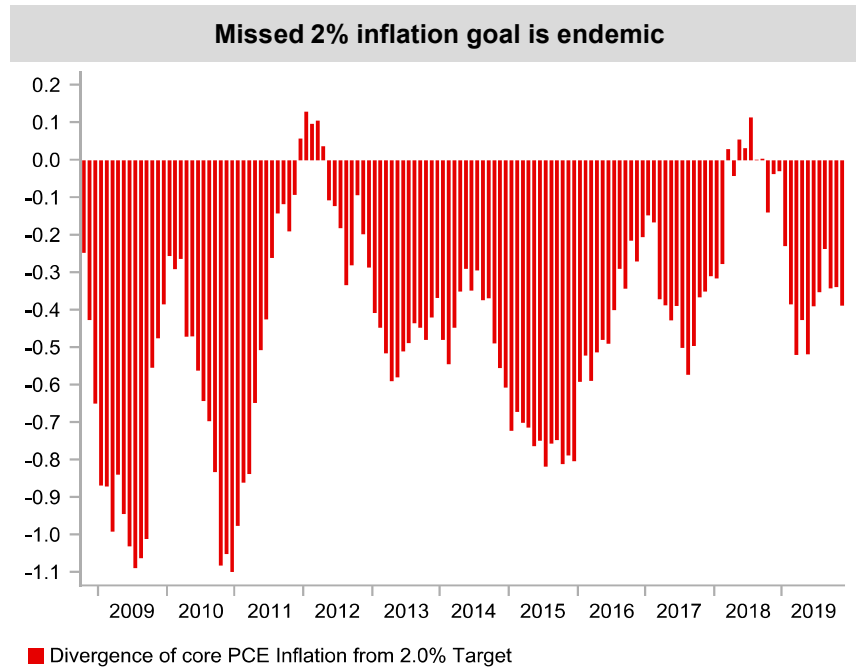
- After delivering 75bps of easing since July, the financial markets still expect the Fed to deliver at least one more rate cut.
- Fed proved last year it was sensitive to external risks. Impact from coronavirus will be monitored closely.
- Fed Chair Powell is currently planning to keep rates on hold this year.
- The decline in the 10-year UST real yield illustrates the dramatic paring of economic growth expectations going forward.
- The Trump tax cuts have had no lasting impact on long-term economic growth expectations.

Fed will be very slow to remove liquidity



- The Fed commenced purchases of T-Bills in November, with around USD 60bn per month planned through to end-Q2 2020.
- The Fed is also providing reverse repo operations to ensure ample liquidity.
- Since mid-September, the Fed's balance sheet has grown from USD 3.77trn to 4.15trn – an increase of USD 380bn.
- The Fed is committed to term repo auctions to provide liquidity through to the end of February with the size offered at USD 35bn in January, reduced to USD 30bn in February – a clear signal the Fed will be ultra-cautious removing liquidity.

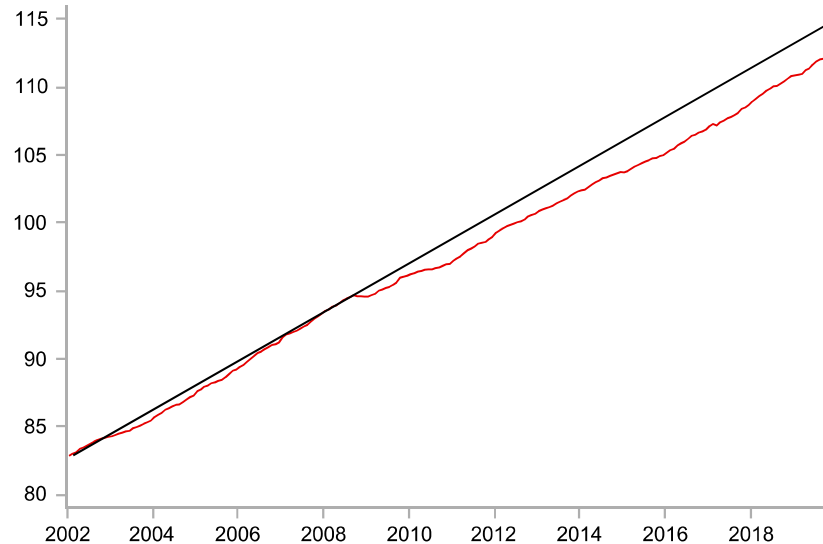
Policymakers deliberating a new framework to tackle too low inflation



- The current review of the Fed's monetary policy framework reflects poor results since the GFC.
- Covering 11 yrs since inflation fell below 2.0% during the crisis (132 data points), the Fed has managed to hit 2% or above on 11 occasions – or 8% of the time.
- The trend in inflation expectations will also concern the Fed as the consequence of its failed policy.

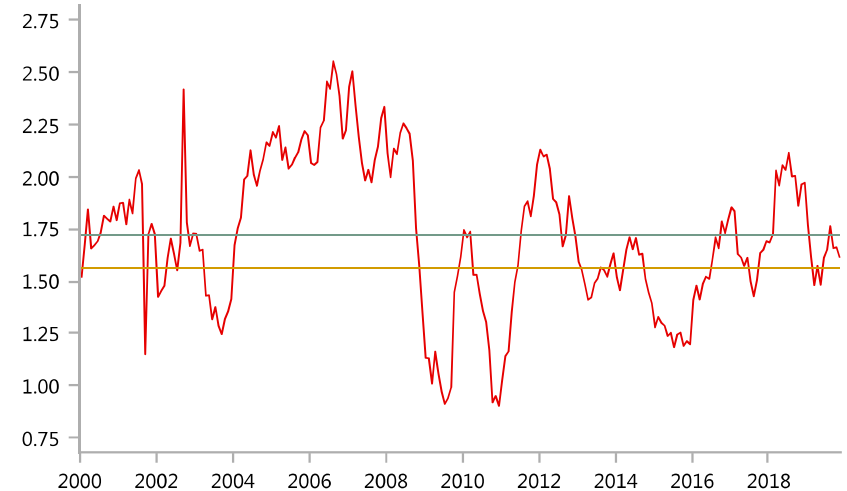
..... And the answer is : some form of “lower for longer”

1. Targeting the Price Index, not Inflation



— US Personal Consumption Expenditures Ex Food & Energy Deflator SA
— Versus extrapolated trendline from 2002-2008 (avg 2.0%)

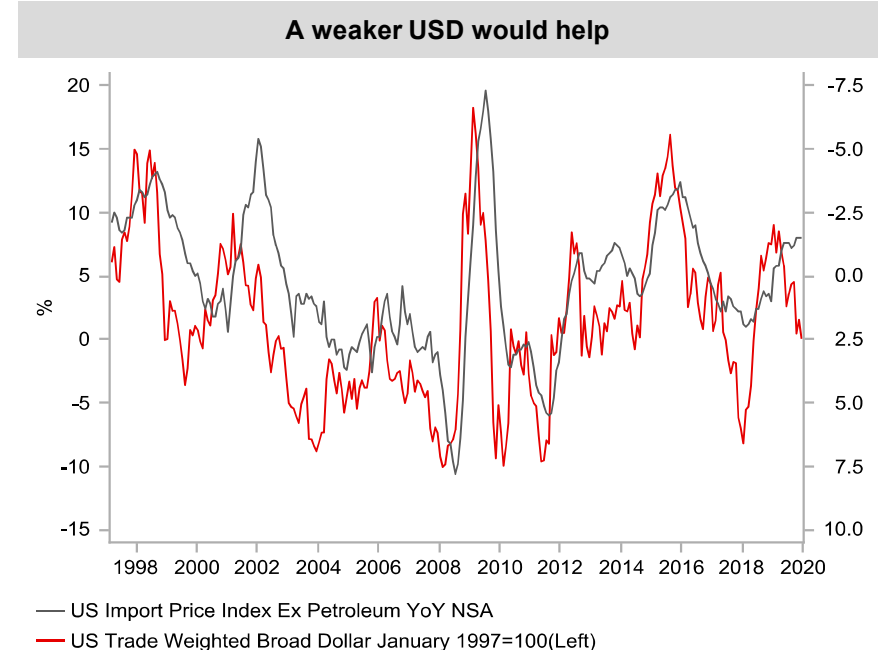
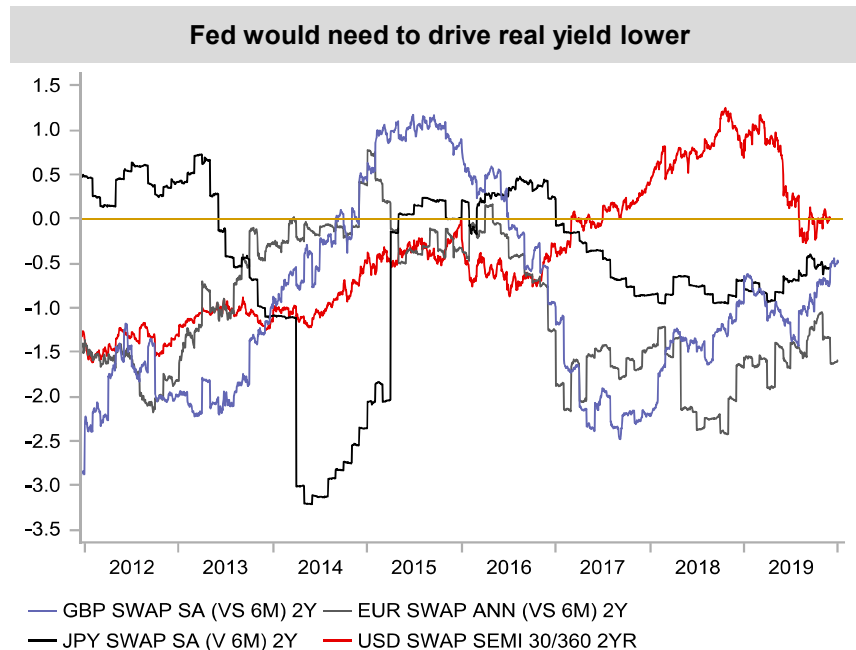
2. Targeting a longer-term Average Inflation Rate



— Average Core Pce Inflation since Great Recession
— Average Core PCE Inflation since 2000
— US Personal Consumption Expenditure Core Price Index YoY SA

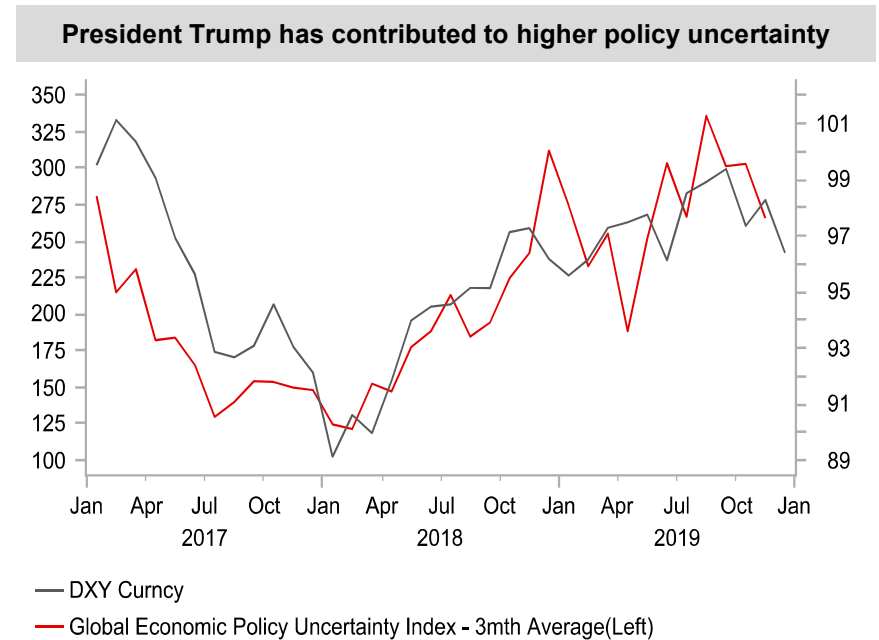
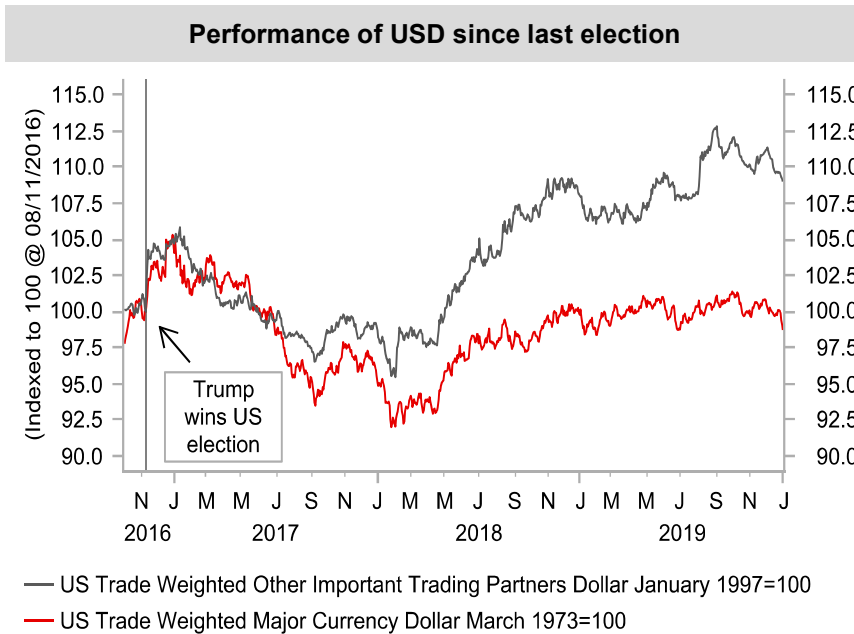
- Price Level Targeting has been promoted by former Fed Chairman Ben Bernanke. This would be a form of “make-up” inflation to ensure any misses are compensated for to bring price level back to trend.
- The current core PCE inflation index 2% trendline from 2002 is 1.9ppt higher than the current level.
- By creating a period of higher than target inflation, the price level is allowed to return to the correct price level trend.
- Targeting an average inflation rate would be more aggressive in compensating for previous misses. The average core inflation rate so far this millennium is 1.72%. Since the Great Recession its 1.56%.
- This ensures these misses are not permanent the Fed would announce an average inflation of 2.44% for 10yrs.

But Fed's reaction function will be crucial to credibility



- A successful change in policy framework would likely result in short-term and long-term real yields in the US falling further.
- This initially would probably be through a decline in nominal yields and a rise in inflation expectations.
- A new Fed policy framework could have most dramatic impact when a more meaningful pick-up in growth and inflation is not met with a change in Fed policy.
- A feedback loop would then quickly materialise of higher inflation expectations; a fall in real yields; and a fall in the dollar feeding into a further rise in inflation expectations.
- While we may be some way off that scenario, circumstances could change very quickly!

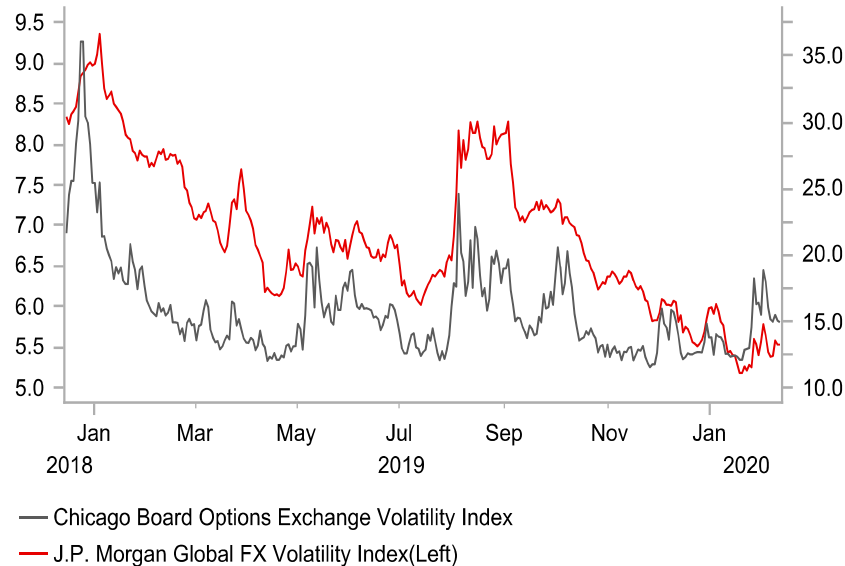
Presidential Election Scenario 1: Trump Secures a Second Term



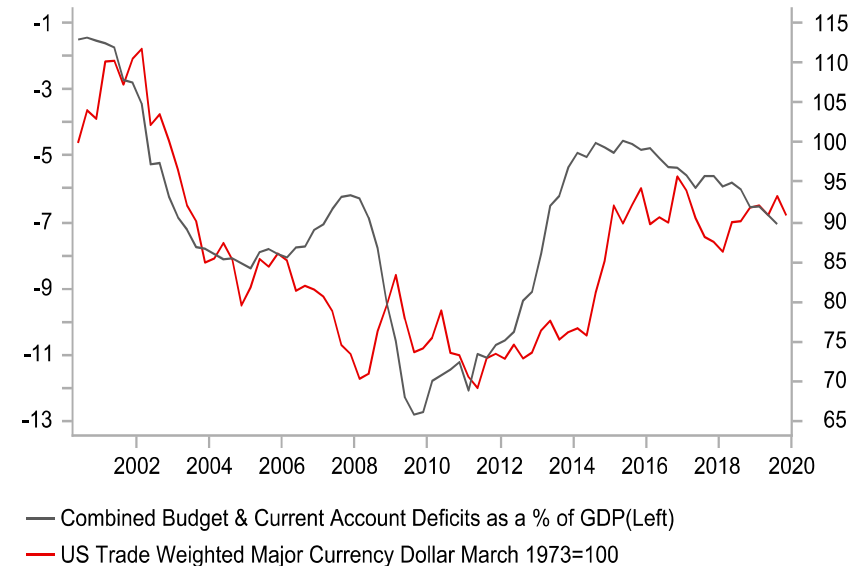
- A second term for President Trump would be viewed initially as the most positive outcome for the USD. It would favour a continuation of the policies implemented in his first term including the potential for further tax cuts to boost growth and the ongoing shift to more protectionist trade policies.
- During President Trump’s first term the US dollar has strengthened further against emerging market currencies and held at overvalued levels against the other major currencies.
- A second maybe less positive for the US dollar if the House remains divided thereby limiting room for further stimulus to support growth which is expected to slow.

Election Scenario 2: US Swings to left under Progressive President

It would challenge current low FX volatility regime



Fiscal deficit concerns could undermine appeal of US dollar

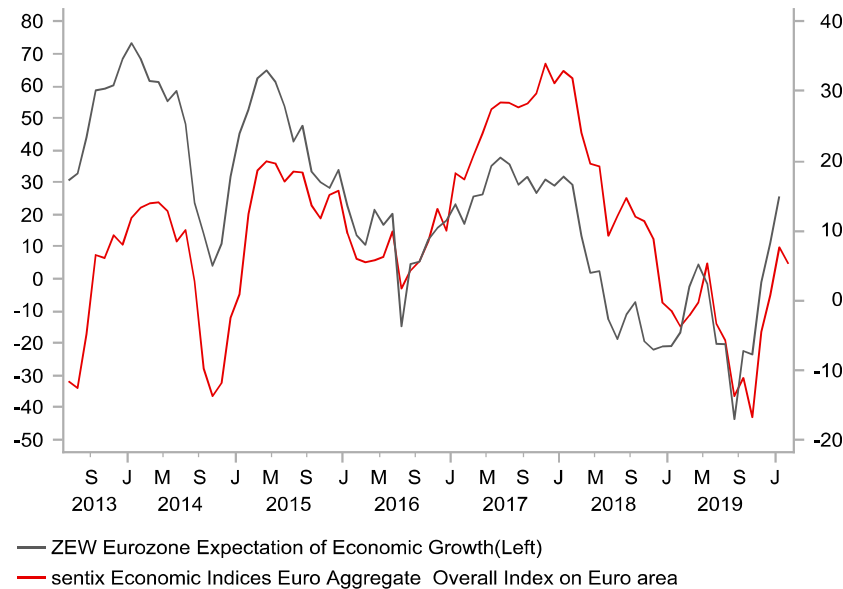


- The biggest negative shock for the US dollar would be the election of a Progressive President such as Bernie Sanders or Elizabeth Warren.
- A shift to a less business friendly environment and higher public spending could undermine the relative appeal of US assets and the US dollar.
- The US twin deficits have already re-widened back out towards 7% of GDP.
- Elizabeth Warren has specifically mentioned intervening to weaken the US dollar.
- However, even with a slim majority it may still prove difficult to implement a far left agenda.

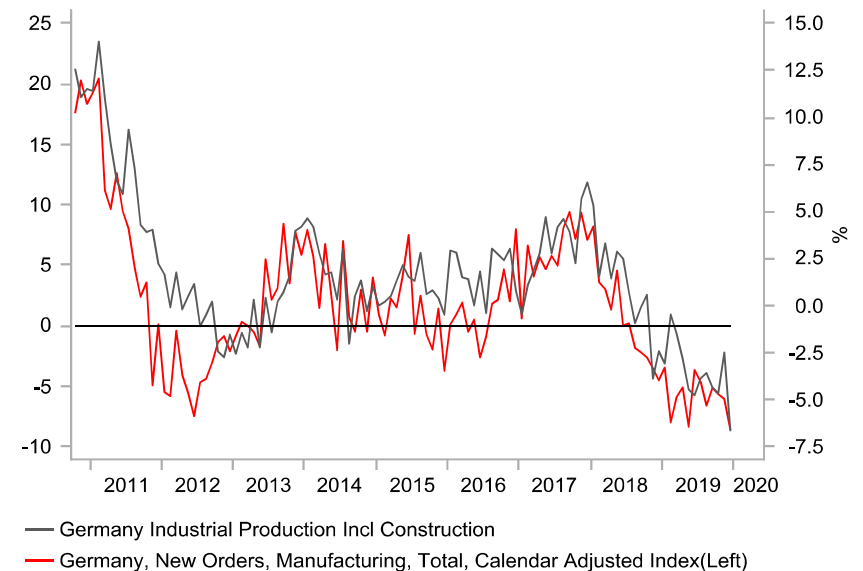
EUR: ECB set to maintain loose monetary policy

A ray of hope for Europe in doubt...coronavirus could delay recovery

Euro-zone business sentiment rebounds



But German IP & Factor Orders remain very weak

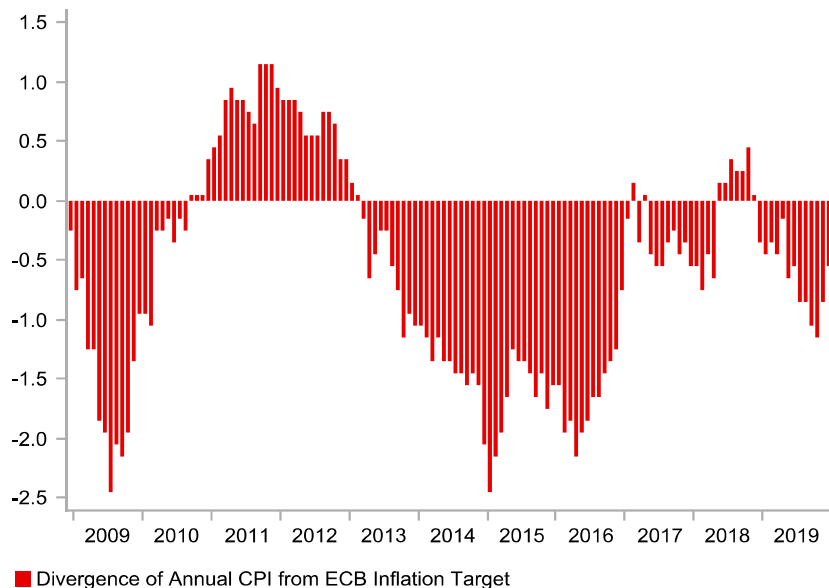


Source: Bloomberg & Macrobond

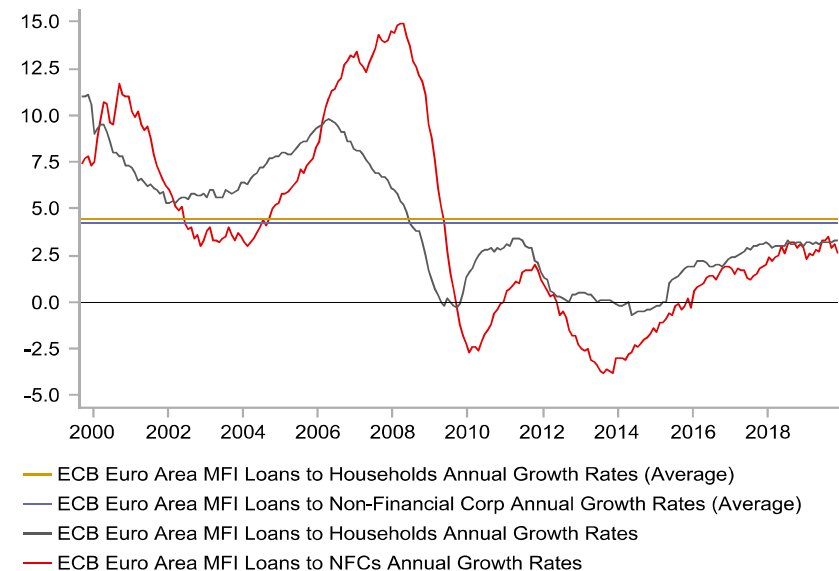
- Business sentiment in Europe, and Germany in particular has rebounded since late last year.
- The euro-zone economy has been slowing steadily since the escalation of US-China trade conflicts in April 2018.
- Other factors (auto emissions; weather; Italian politics; Turkey crisis) impacted growth as well.
- Bank lending growth, M1 Money supply and PMIs point to a moderate rebound in Real GDP growth in 2020.
- However, it has not been backed up by an improvement in the hard activity at the end of last year.
- German industrial production fell by a further -3.5% in December and is almost 10% below peak from 2017.
- The euro-zone economy expanded by just 0.1% in Q4, and contracted in France, Italy and likely in Germany as well.
- ECB to revise growth forecast for 2020 to below 1.0%.

The ECB risks entrenching disinflation expectations

Like the Fed, the ECB failing to hit target



ECB policy failing to invigorate bank lending



- ECB set to continue easing policy in 2020 – Negative rates & EUR20bn/month of QE purchases.
- The ECB has a similarly poor record as the Fed in hitting its inflation goal. Only because of energy prices in 2011 and 2012 does it have a better record of achieving its inflation goal.
- In fact measuring the ECB's success in achieving the inflation target on core CPI, the ECB has failed in 100% of the time since November 2008.
- The ECB's TLTRO support and negative rates on top of QE appears to have limited impact on lifting bank lending, which remains below the average since the turn of the millennium.

Lagarde needs to unify Council around fresh policy framework

Build up of housing costs

Annual % change of house prices in the Eurozone



Source: Eurostat
© FT

- ECB Chief Economist Philip Lane stated recently “we at the ECB would agree that there should be more weight on housing”.
- Currently, it could lift headline inflation by about 20-30 basis points.

The differing views on ECB policy review

- ECB President Lagarde formally announced details on monetary policy framework review in press conference following policy meeting on 23rd Jan.
- The GC have a wide array of views on what changes are required in the policy review.

Jens Weidmann – No change in inflation goal required

Francois Villeroy de Galhau – ECB needs to adopt a **symmetrical inflation target**.

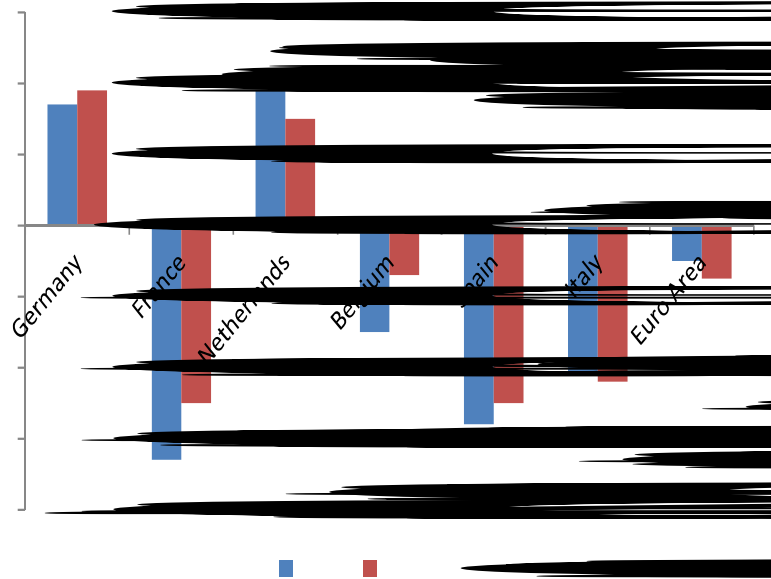
Isabel Schnabel – Inflation target needs clarification.

Klaas Knot – The ECB needs to adopt a **target range** in order to give policymakers greater flexibility.

Robert Holzmann – Could make sense to **lower the inflation target**. We should consider incorporating housing into inflation through owner equivalent rent.

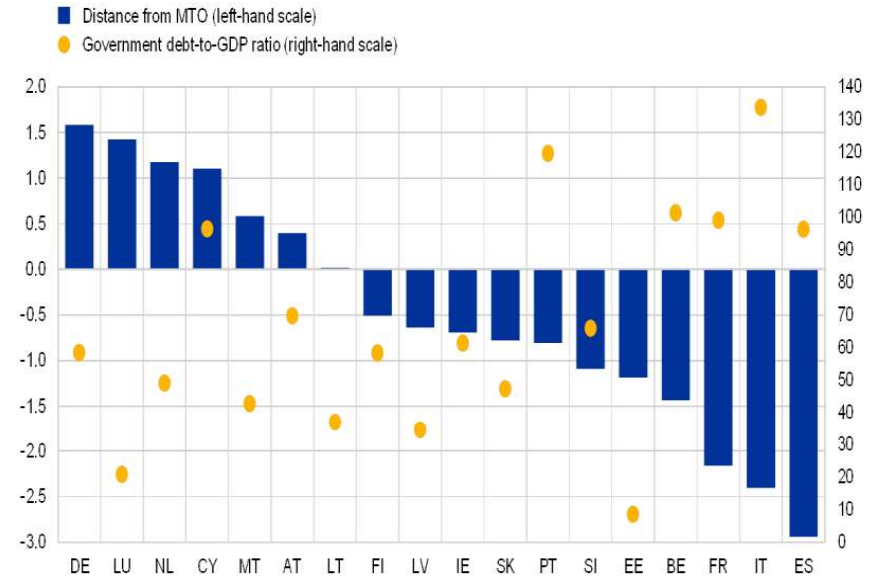
ECB will likely place greater emphasis on need for fiscal expansion

Fiscal balances of key Euro-zone countries



Source: European Commission

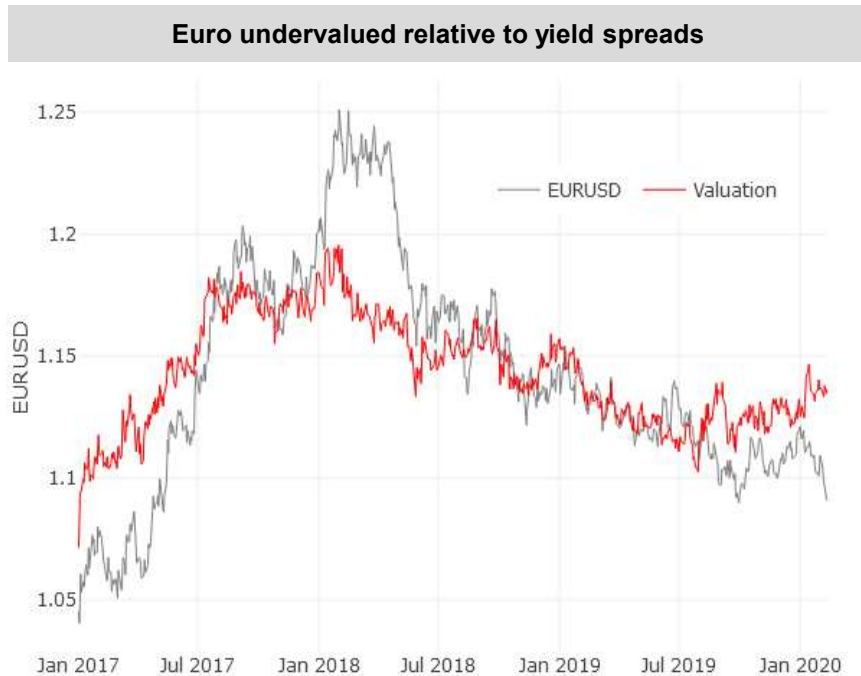
EZ countries with highest debt furthest from budget objectives



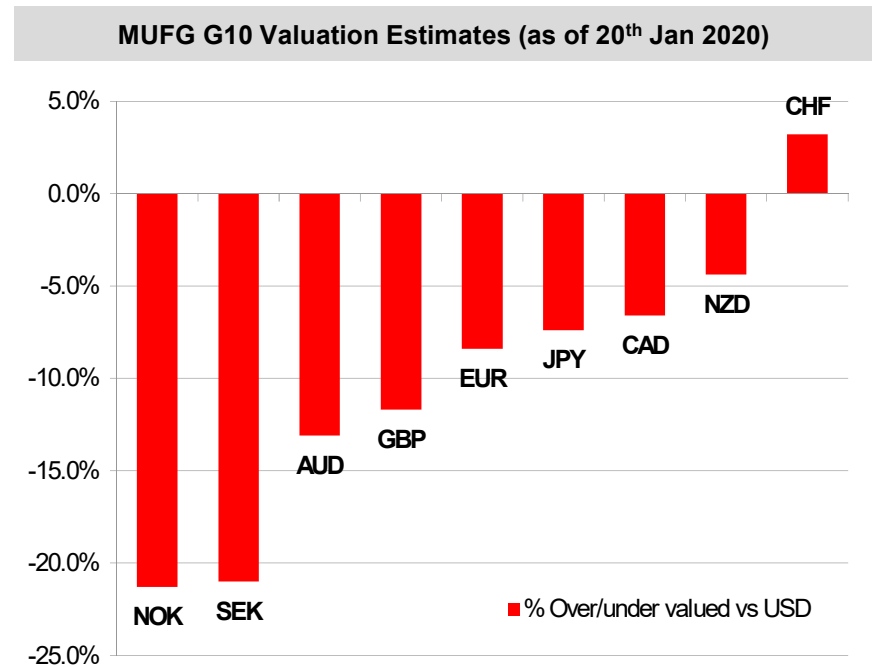
Source: ECB

- Some countries have greater fiscal space than others.
- We do not see any near-term plan being agreed for coordinated fiscal policy response.
- However, political pressure will continue to mount and despite less fiscal space in many countries, greater fiscal loosening could be anticipated in 2021/22.
- Germany recorded a record EUR 13.5bn budget surplus in 2019.
- The German government's reserve now holds EUR 48.2bn, with EUR 17bn still not allocated.
- Lowering corporate taxes and/or reducing the solidarity tax are being considered.

Euro undervaluation another support



Source: MUFG Calculations



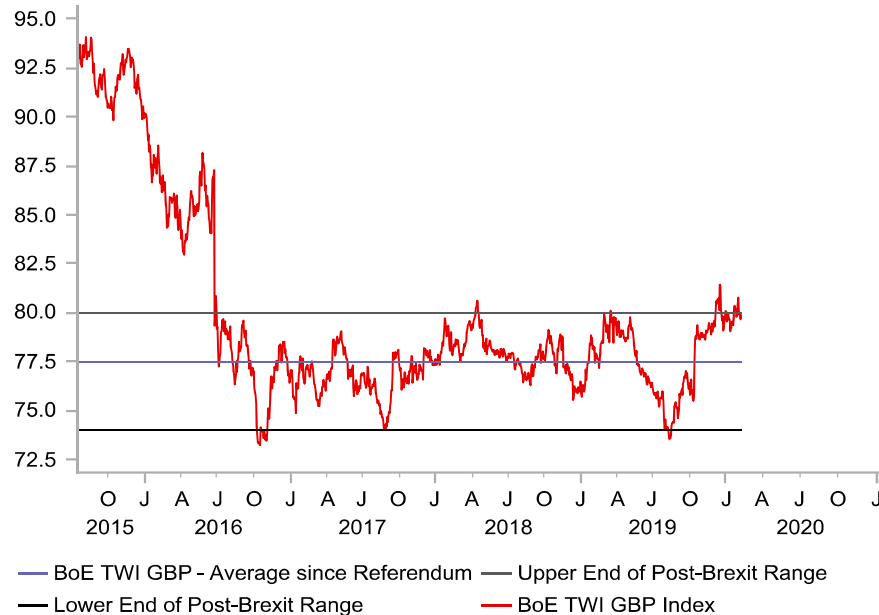
Source: Bloomberg, MUFG Calculations, Peterson Institute

- The MUFG Yield Regression model points to fair-value of around 1.1350. So current spot not significantly under-valued based on yields.
- Longer-term MUFG valuations point to larger under-valuation.
- However, within the G10 space, EUR not yet at extreme under-valuation levels.
- NOK & SEK are most extreme under-valued G10 currencies.

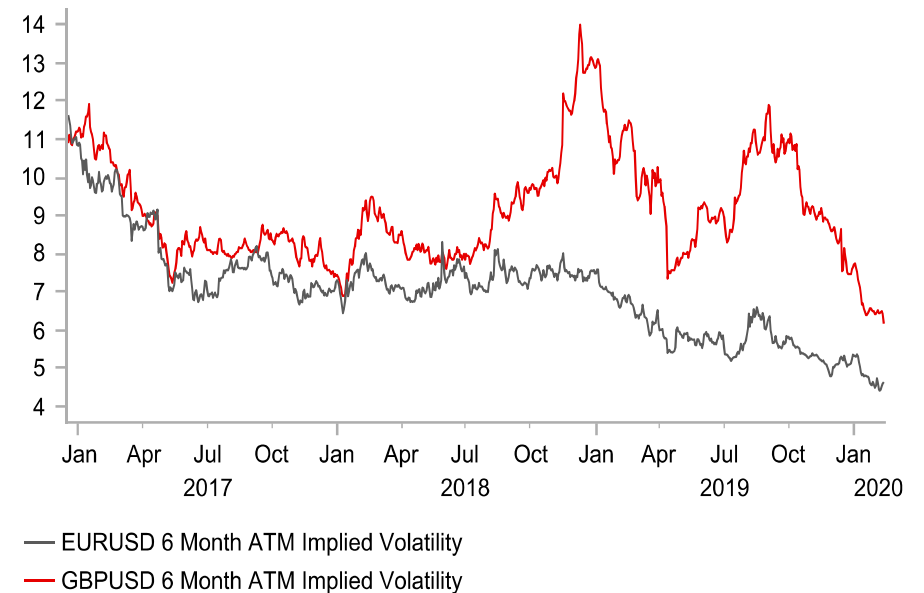
GBP: Brexit uncertainty still remains a weight on the pound

Pound remains close to post-Brexit referendum highs

TWI GBP strengthened towards the end of last year



GBP volatility plunges as Brexit risk removed



- We do not expect the pound to advance while the UK government pushes forward with a no-alignment free trade deal with the EU. A bare-bones deal will ensure uncertainty persists.
- Near-term implied GBP volatility has fallen back but uncertainty persists.
- Sajid Javid made clear in FT article on 18th January that the UK will make full advantage of Brexit by diverging from the EU in many sectors – he warned UK businesses to prepare.
- PM Boris Johnson wants a Canada-style free trade deal but willing to trade on WTO terms if UK can't agree with EU on regulatory alignment, role of ECJ, fishing rights, etc.

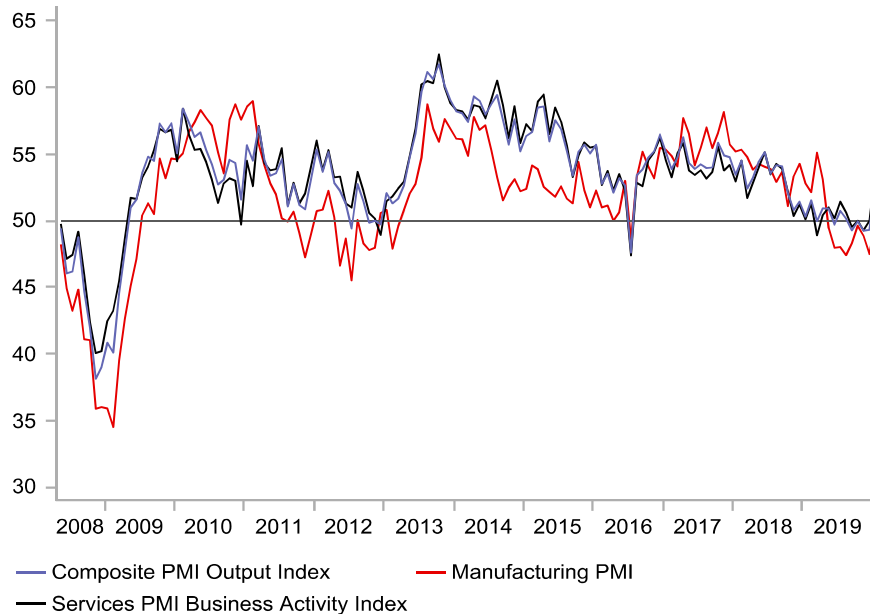
Brexit Timeline

February 2020	March – June 2020	June – December 2020	Beyond December 2020
<p>UK actions</p> <p>1 February 2020 onwards UK able to start negotiating FTAs with non EU countries UK Cabinet to finalise EU negotiation objectives</p>	<p>UK actions</p> <p>4 April 2020 New Labour leader to be announced</p>	<p>UK actions</p> <p>3 November 2020 US Presidential election date. US administration will wish to conclude any US-UK deal before this.</p> <p>31 December 2020 Government aims to have negotiated the future economic partnership with the EU by this deadline.</p>	<p>UK actions</p> <p>1 January 2021 onwards UK able to implement FTAs with non-EU countries Implementation of new EU-UK trade terms or implementation of 'no deal' measures.</p> <p>1 January 2021 New UK immigration system to come into force?</p>
<p>Joint actions</p> <p>1 February 2020 onwards Start to Phase 2 negotiations to decide the future EU/UK economic partnership February - discussion to determine structure of future negotiations March onwards - Phase 2 negotiations on substantive issues</p>	<p>Joint actions</p> <p>March – June 2020 Negotiations for the future economic partnership continue</p> <p>30 June 2020 Agreement of financial settlement. EU and UK to aim to complete financial services equivalence assessments by 30 June 2020 Legal deadline for agreeing extension to transition period. ★</p>	<p>Joint actions</p> <p>June – December 2020 Negotiations continue re future economic partnership plus approval process for the deal ★</p> <p>31 December 2020 End of transition period per the Withdrawal Agreement.</p>	<p>Joint actions</p> <p>1 January 2021 – beyond If a deal has been agreed: • Potential implementation period? • Provisional application of deal, pending approvals? If a deal has not been agreed: • Basis of trade reverts to WTO terms • 'No deal' provisions apply</p> <p>31 December 2022 An extension of the transition period to 31 December 2022 may be agreed by the EU and UK, but this is not the UK Government's intention.</p>
<p>EU actions</p> <p>February EU negotiation mandate to be agreed with EU27</p>	<p>EU actions</p> <p>27/27 March 2020 EU Council meeting</p> <p>18/19 June 2020 EU Council meeting</p>	<p>EU actions</p> <p>15/16 October 2020 EU Council meeting</p> <p>10/11 December 2020 EU Council meeting</p>	<p>EU actions</p> <p>1 January 2021 onwards Interim application of new EU-UK trade terms, or implementation of 'no deal' measures</p>

Source: PWC

Boris bounce encourages BoE to keeps rates on hold

PMI surveys rebound strongly in January

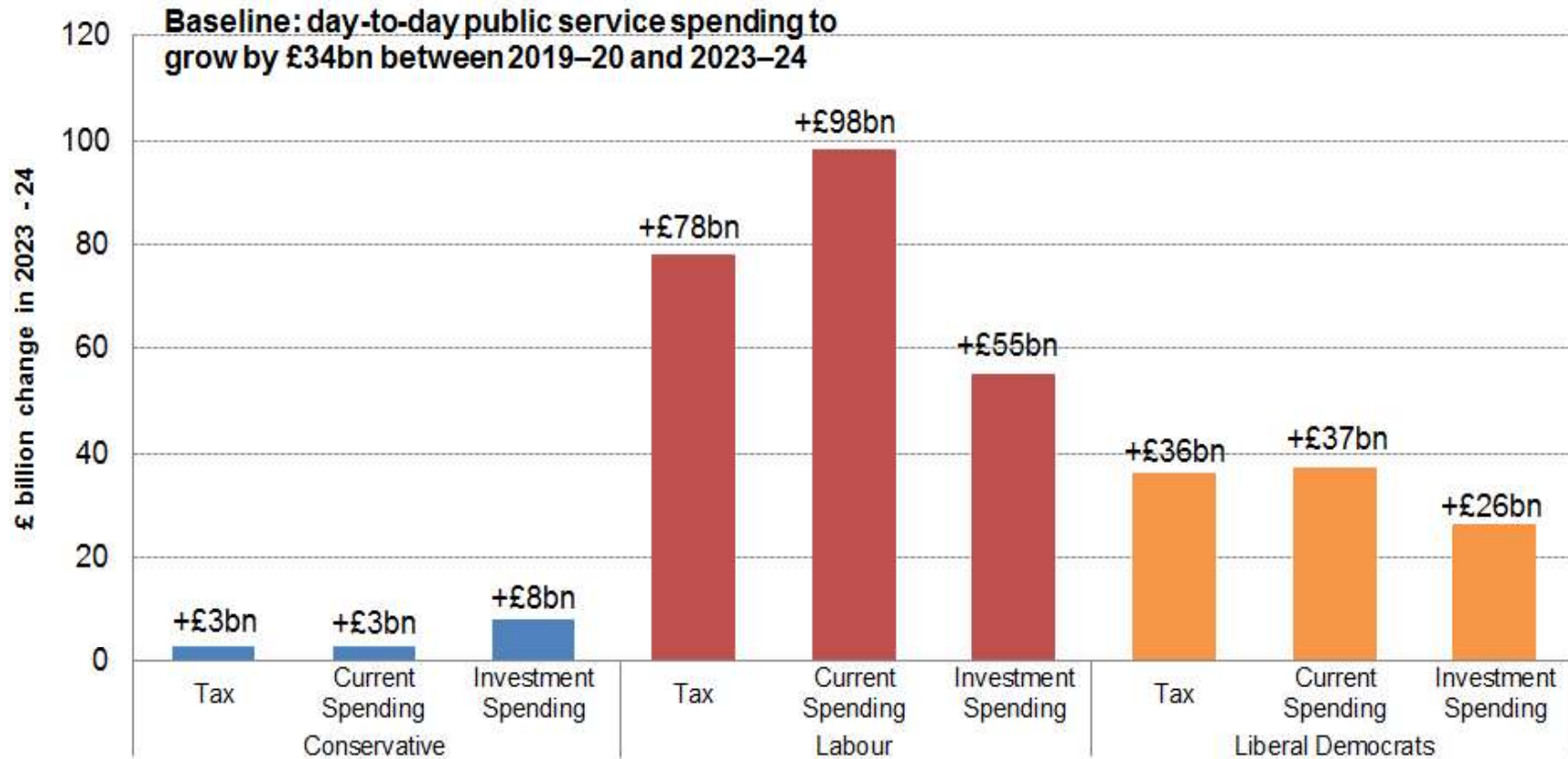


GBP/USD vs. Yield Spread



- UK economy is holding up relatively well despite Brexit & political uncertainty. Growth increased to 1.4% (+0.1pt) in 2019.
- Michael Saunders; Jonathon Haskel continued to vote for a rate cut at last MPC meeting. Majority including Governor Carney preferred to leave rates on hold but are closely watching incoming data to see if activity picks up as expected.
- The BoE lowered GDP forecasts to 0.8% for 2020 and 1.4% for 2021.
- Business surveys showed a surge in confidence post-general election.
- The Rightmove House Price Index jumped 2.3% m/m in January – the largest January increase on record.
- GDP strengthened by 0.3% in December, but growth flat for Q4 as a whole. Start of a Boris bounce?

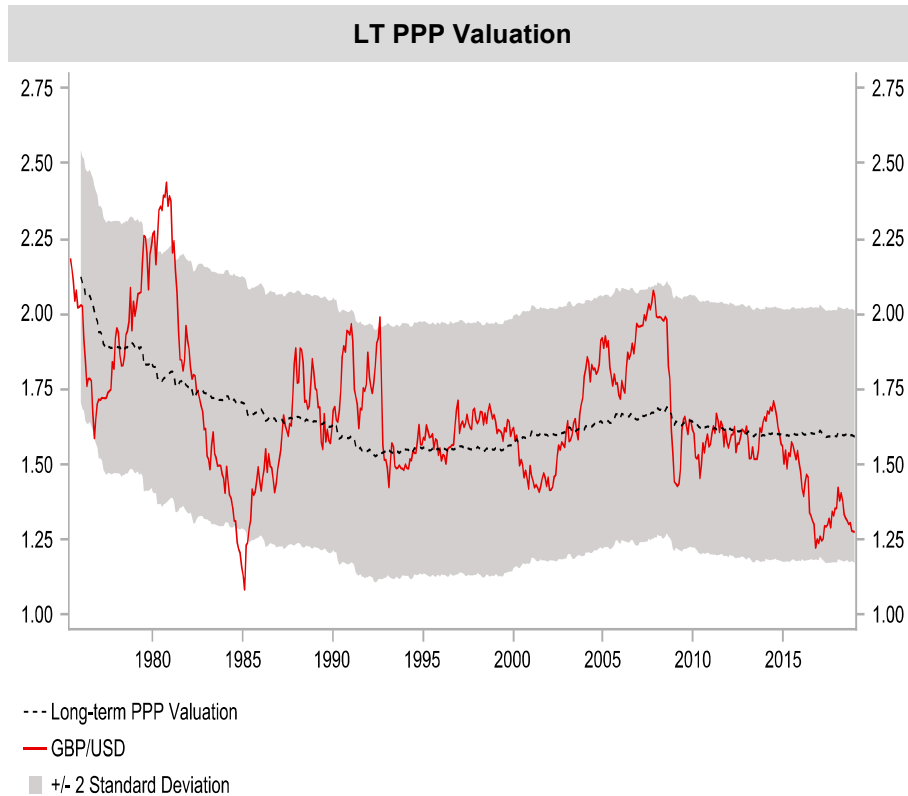
Looser fiscal policy is on the way...but more modest under Tories



Note: Figures relate to 2023–24, based on each parties manifesto.

Source: Resolution Foundation

Pound is undervalued – but not extreme above 1.3000

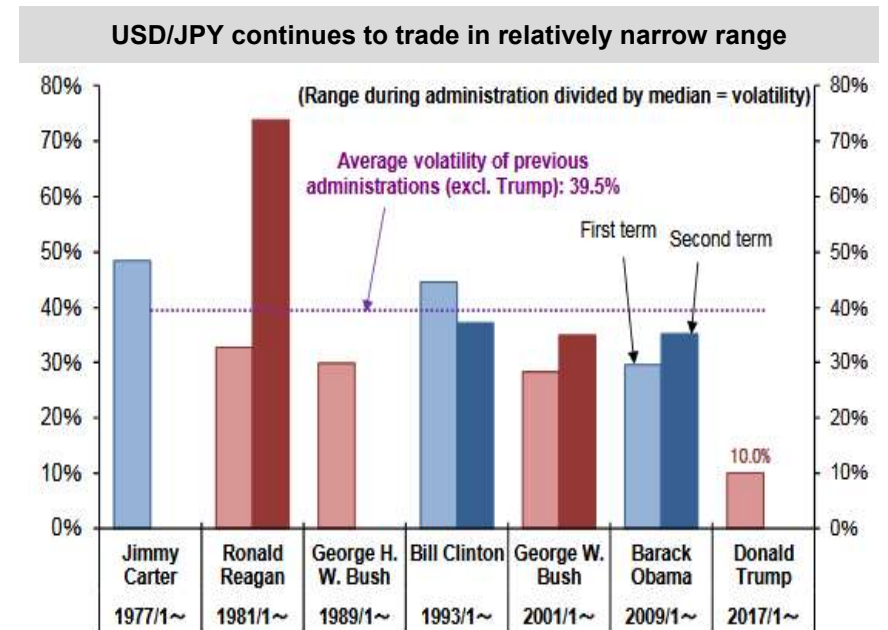
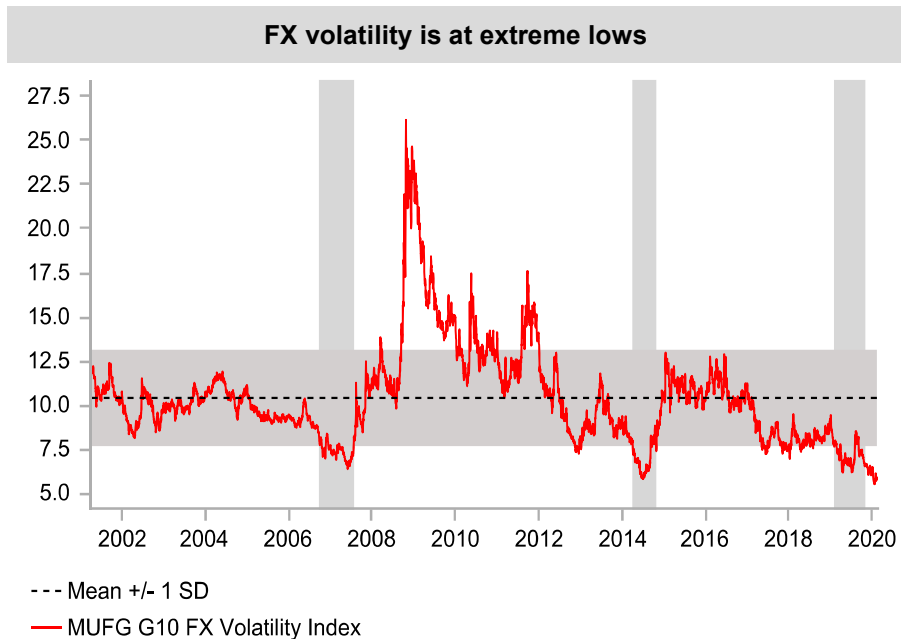


LT Fair Value Estimates

	GBP/USD
FEER	1.35
PPP	1.63
LR AVG	1.59
BEER	1.38
Overall FV	1.47
Current Spot	1.30
% Over/under valuation	-11%

JPY : Japanese policymakers watching global factors

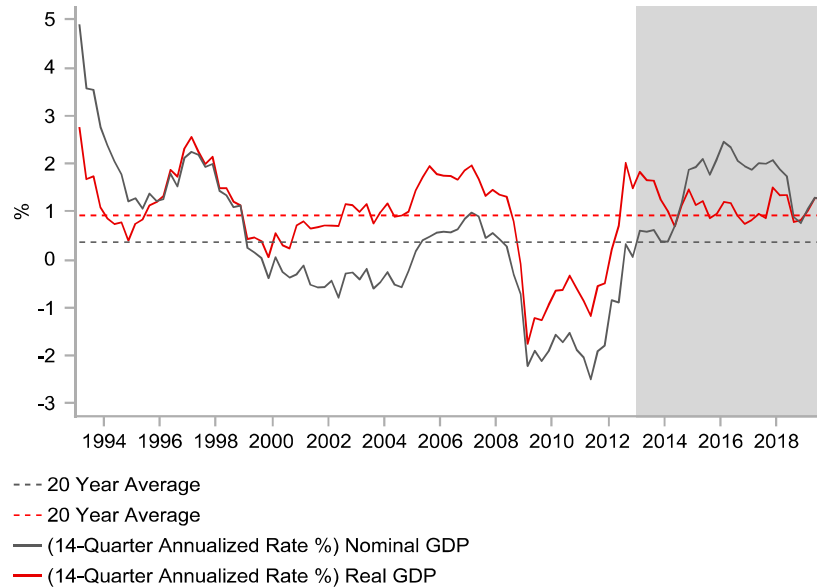
Favourable carry conditions – global growth stabilization & looser policies



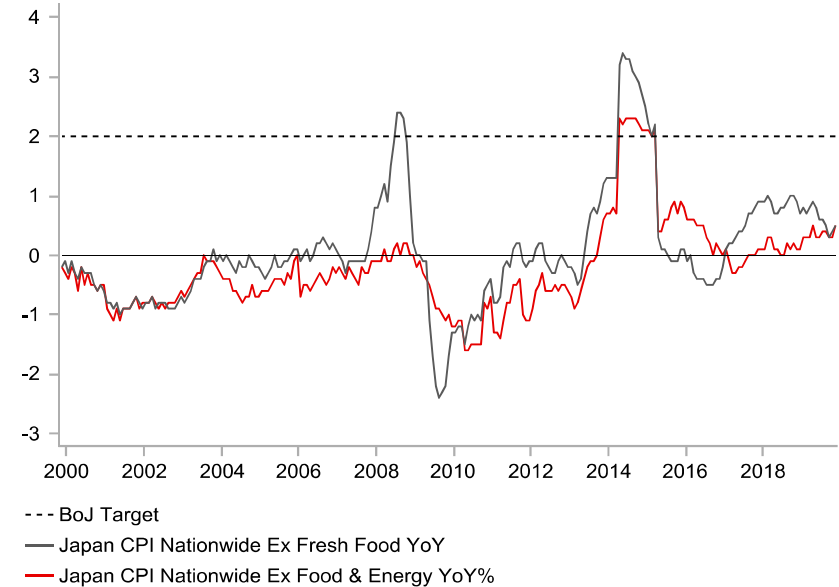
- The recent easing of downside risks to the global growth outlook reflecting: i) Phase 1 Deal between US-China trade done, ii) No Deal Brexit risk clear for now, iii) ongoing monetary easing and commitment to loose policy, and iv) tentative evidence that global growth appears to be at least stabilizing in the near-term has triggered further JPY depreciation.
- FX volatility has fallen to new lows which is also encouraging the rebuilding of carry trades at the expense of funding currencies such as the yen.
- Technically, USD/JPY looks positive with 2015-2018 trendline resistance broken – just at 110.15.

Abe government decides on more stimulus & the IMF agrees

More stimulus on the way – to support GDP post-Sales Tax



Longest period of positive inflation since start of deflation



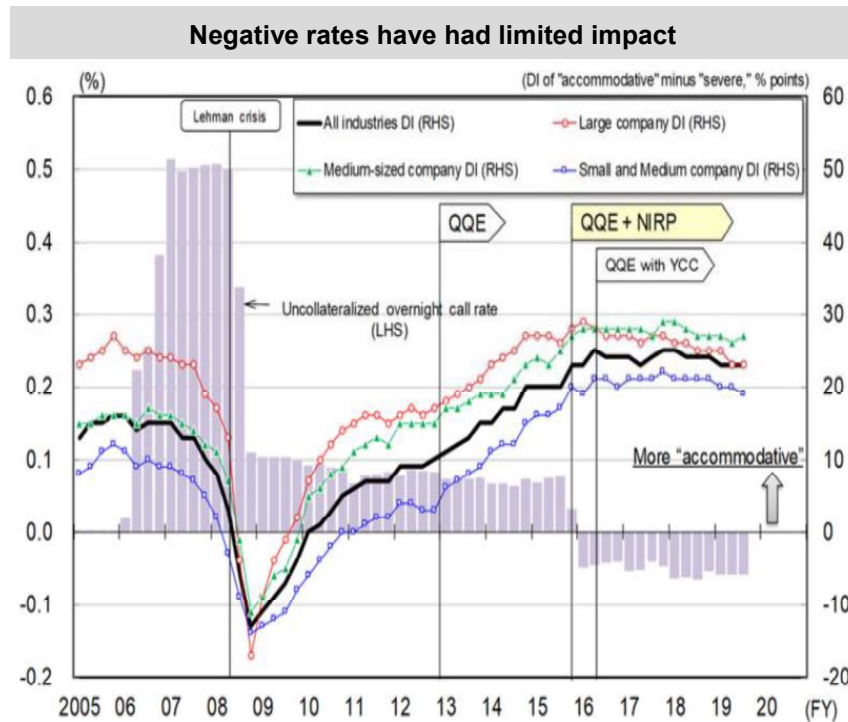
- After the typhoon disaster in October and in order to support the economy through the negative impact of the Sales Tax increase, the government has agreed another fiscal stimulus package.
- It is looking more and more like the package implemented in 2016.
- Real GDP in Q1 2017 jumped to 4.6% Q/Q annualised, helped by fiscal support.
- The IMF recently completed Review hinted at support for fiscal stimulus as did BoJ Governor Kuroda.
- More stimulus coming with Japan currently experiencing the longest period of inflation since 1990's.

BoJ disappoints expectations for more imminent easing

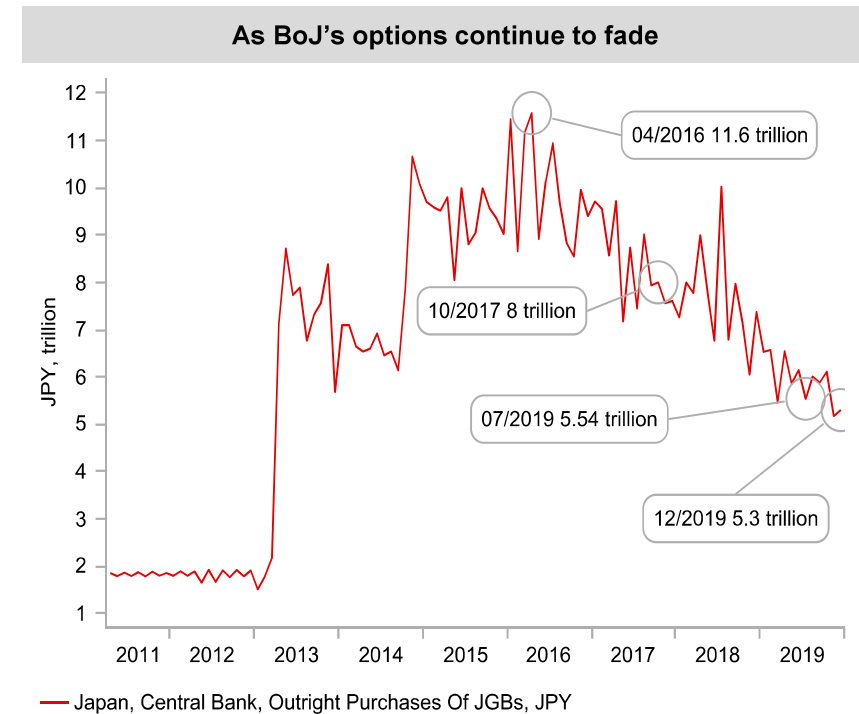
Guidelines for Monetary Policy Conduct				
Policy guidance		Current level	Time of introduction or update	Contents
(1) Policy rates	Short-term policy interest rate: The rate applied to the Policy-Rate Balance in current account	Minus 0.10%	Updated in Oct 2019	As for the policy rates, the Bank expects short-and long-term interest rates to remain at their present or lower levels as long as it is necessary to pay close attention to the possibility that the momentum toward achieving the price stability target will be lost.
	Long-term policy interest rate: 10-year JGB yields	Around zero%		
(2) YCC	Yield curve control		Introduced in Sep 2016	The Bank will continue with "Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control," aiming to achieve the price stability target of 2 percent, as long as it is necessary for maintaining that target in a stable manner.
(3) Monetary base	Expanding monetary base			It will continue expanding the monetary base until the year-on-year rate of increase in the observed consumer price index (CPI, all items less fresh food) exceeds 2 percent and stays above the target in a stable manner.
(4) Guidance for policy change			Updated in Jul 2018	The Bank will examine the risks considered most relevant to the conduct of monetary policy and make policy adjustments as appropriate, taking account of developments in economic activity and prices as well as financial conditions, with a view to maintaining the momentum toward achieving the price stability target.
(5) Guidance for additional easing			Introduced in Jul 2019	In particular, in a situation where downside risks to economic activity and prices, mainly regarding developments in overseas economies, are significant, the Bank will not hesitate to take additional easing measures if there is a greater possibility that the momentum toward achieving the price stability target will be lost.

Source: MUMSS

Japan policymakers' focus in 2020 – the reversal rate!

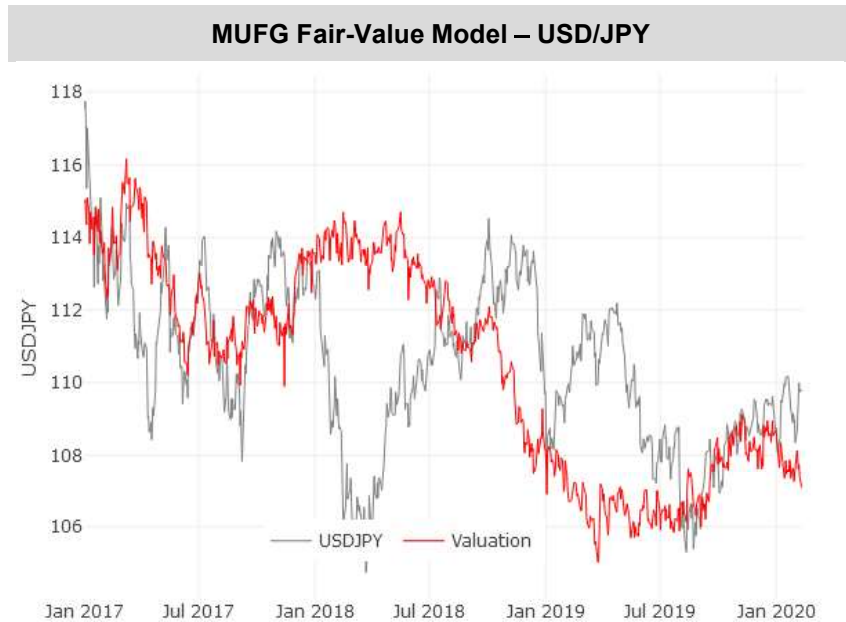


Source: MUMSS

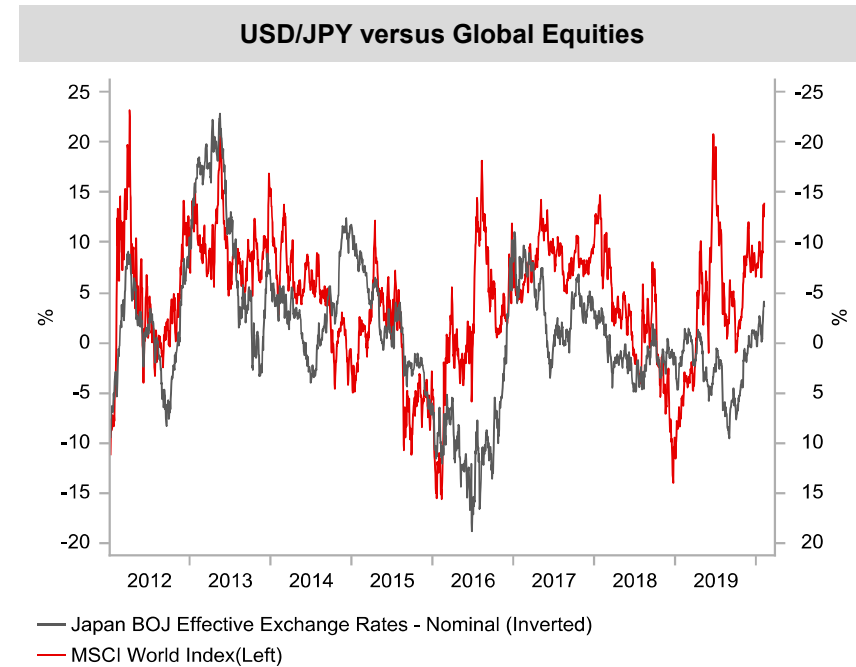


- The greatest debate over whether negative rates are having a net benefit is in Japan.
- Measures of lending conditions for Companies have not shown any improvement since negative rates were introduced.

Yield valuation suggests JPY strength, but risk favourable to weakness



Source: MUFG Calculations



Forecasts: USD set to remain strong

USD depreciation to be only modest versus G10

Currency Forecasts				
	Q1 2020	Q2 2020	Q3 2020	Q4 2020
EUR	1.0900	1.1000	1.1100	1.1300
JPY	108.00	107.00	106.00	105.00
EUR/JPY	117.72	117.70	117.66	118.65
GBP	1.2976	1.3018	1.3059	1.3216
EUR/GBP	0.8400	0.8450	0.8500	0.8550
CHF	0.9817	0.9636	0.9459	0.9204
CAD	1.330	1.330	1.320	1.310
CNY	7.1000	7.0700	7.0500	7.1200
AUD	0.6700	0.6800	0.6900	0.7000
EUR/CHF	1.0700	1.0600	1.0500	1.0400
Brent	66.50	63.40	62.60	56.60

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Source : All Charts Macrobond unless otherwise stated

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