



**Economic Perspectives**

# ***US Treasury Notes***

***The return of the term premium***

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## *Expect a little bull consolidation in the short run*

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- US 10Y yields are likely to remain within their 35-year tramlines over the next 12 months.
- However, the rise in uncertainty over inflation expectations and the high unemployment rate could lift the term premium in the coming months.
- This should continue to steepen the 2Y10Y yield curve; is it going to be the ‘bear steepener’ that usually precedes an economic downturn?
- The US 10Y could drift another 50bps or so higher in the near to medium term.

## Context: US 10Y yield in its secular downward trend

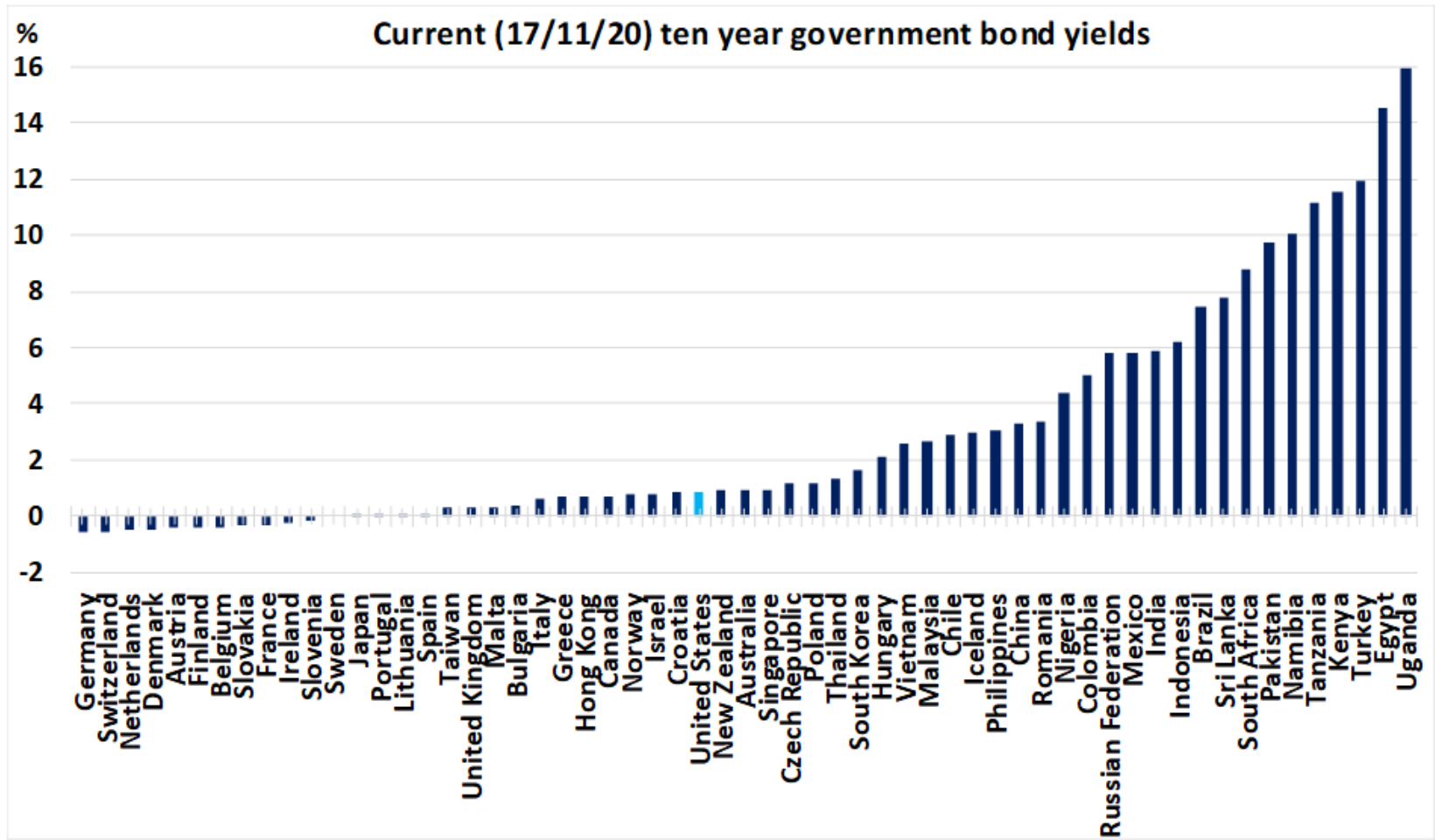
- The 10Y yield has struggled to break through its LT downward trending resistance.



Date Source: Eikon Reuters

## Context: US remains in the middle ranks by 10y yield

- Pricing between Croatia and New Zealand.

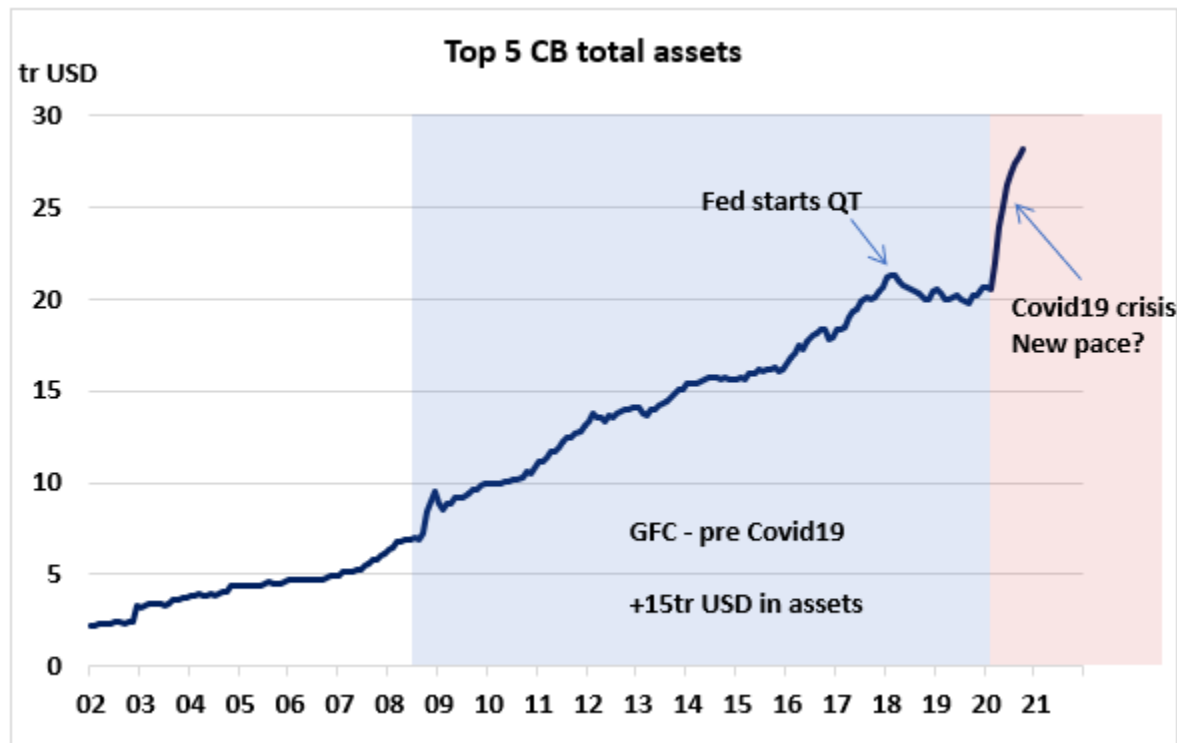


Date Source: Eikon Reuters



# Covid-19: the global central bank response

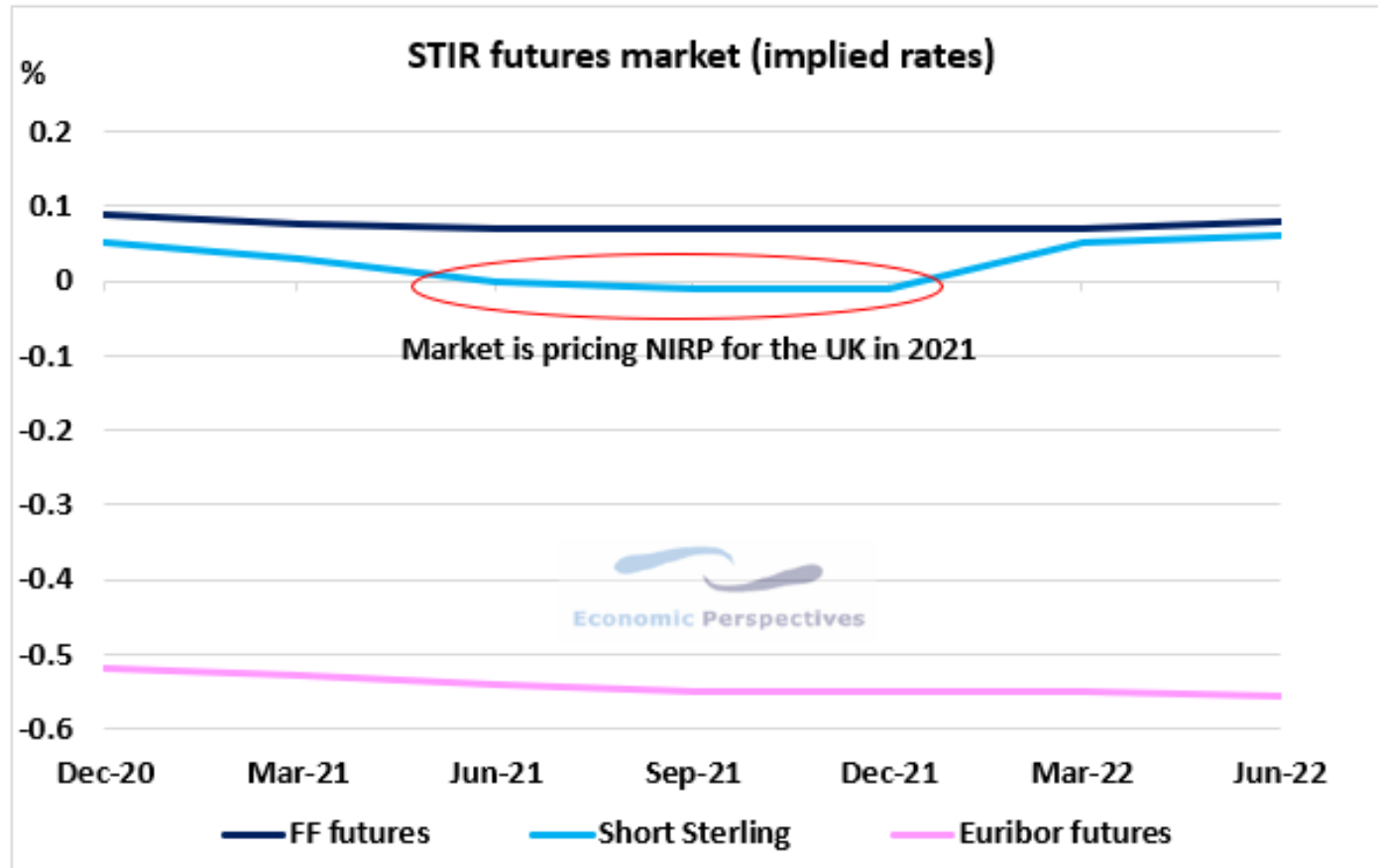
- In order to avoid a deflationary depression, central banks have been injecting titanic amounts of liquidity in the system; the top 5 central banks' balance sheet assets have grown over 7tr USD this year and are expected to continue to increase this winter amid new lockdowns.
- The Fed has run the most aggressive monetary plan as its balance sheet is up by nearly 4tr USD since its low in Q4 2019, expected to increase to 10tr USD by 2021.



Date Source: Eikon Reuters, EP calculations

# US monetary policy stance: Funds rate steady in 2021

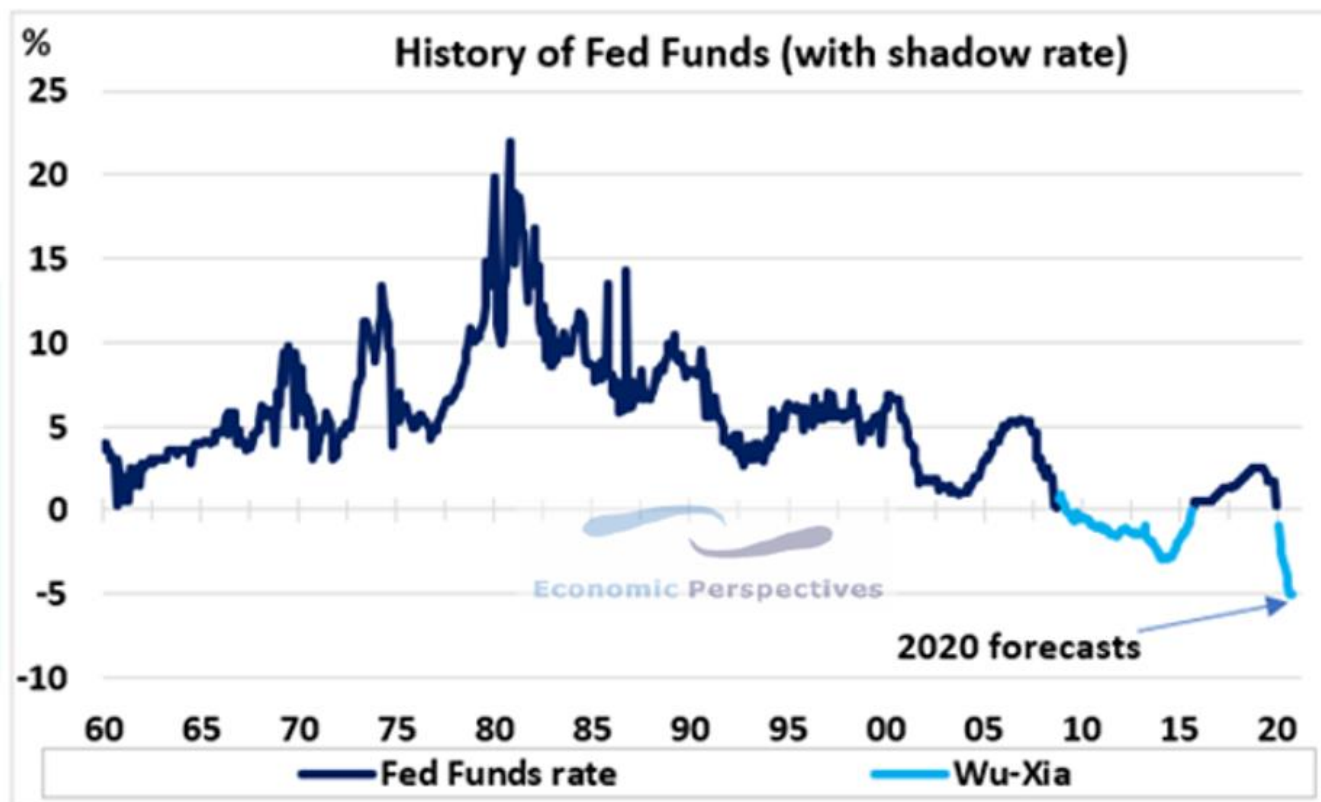
- For the moment, NIRP policy for UK only according to the futures market.



Data source: Eikon Reuter

## US monetary policy stance: shadow Fed Funds rate

- The Wu-Xia shadow rate is expected to plunge to -5 percent by the end of this year amid strong purchases from the Fed.
- Academic research has found that \$1 trillion of UST purchases is roughly equivalent to a 1% cut in the benchmark rate.

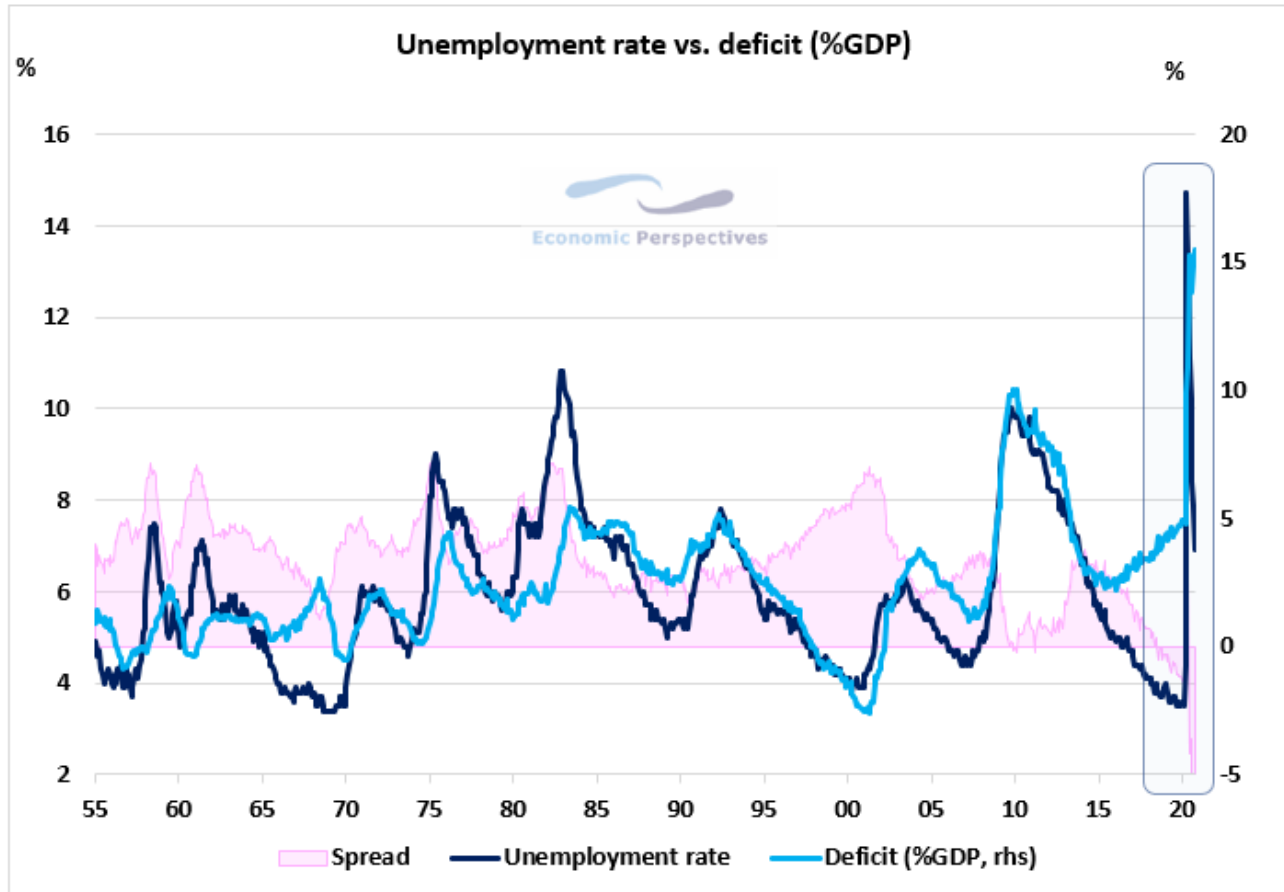


Data source: Eikon Reuters, Wu-Xia (2015)



# US deficits and unemployment rate

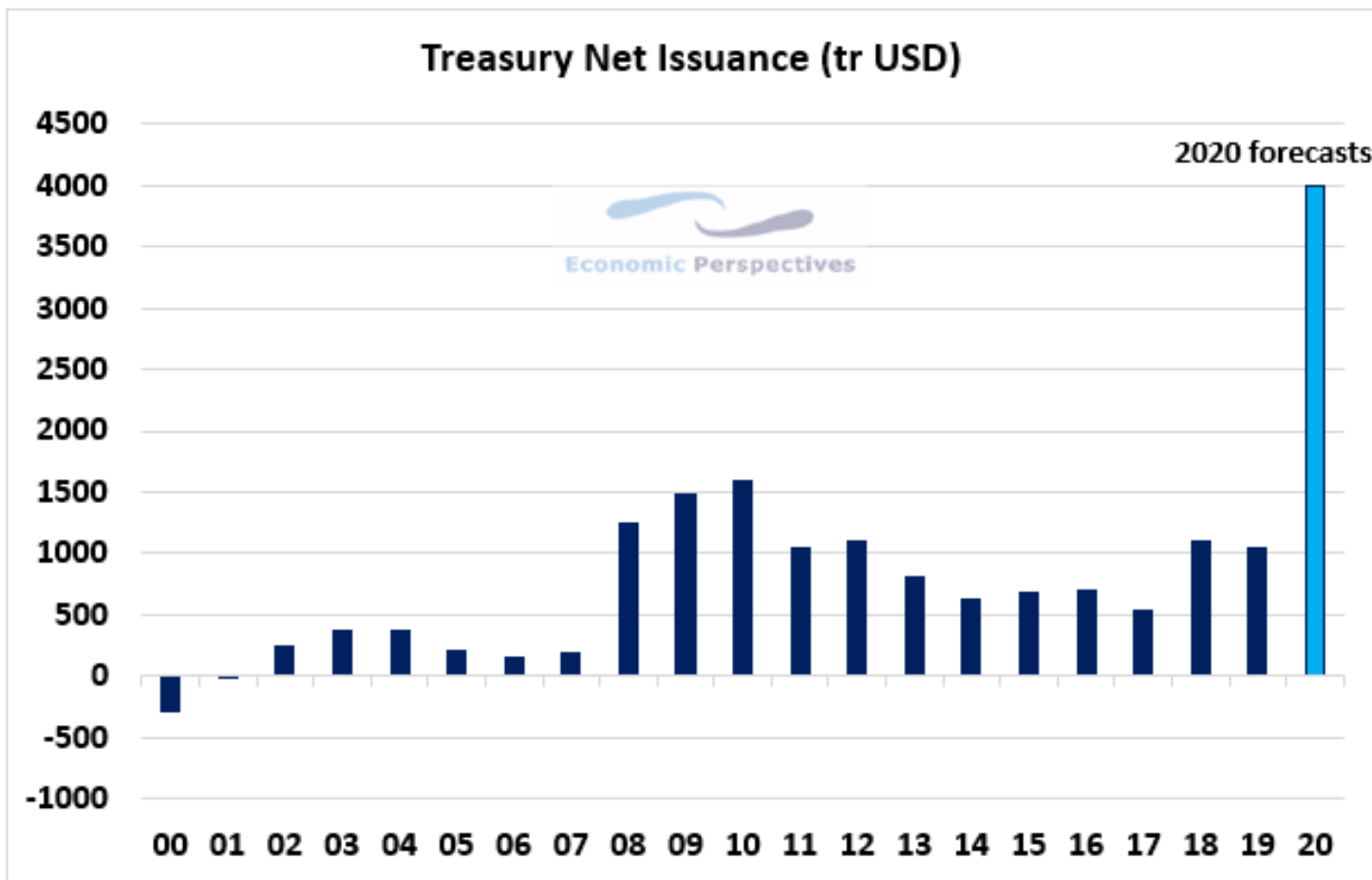
- Following Trump's Tax Cuts and Jobs Acts, the US government was already running large deficits prior the Covid19 crisis despite an unemployment rate standing at a 50-year low.
- Government deficits to remain elevated as long as social distancing and travel restrictions remain.



Data Source: Eikon Reuters

## US Treasury net issuance

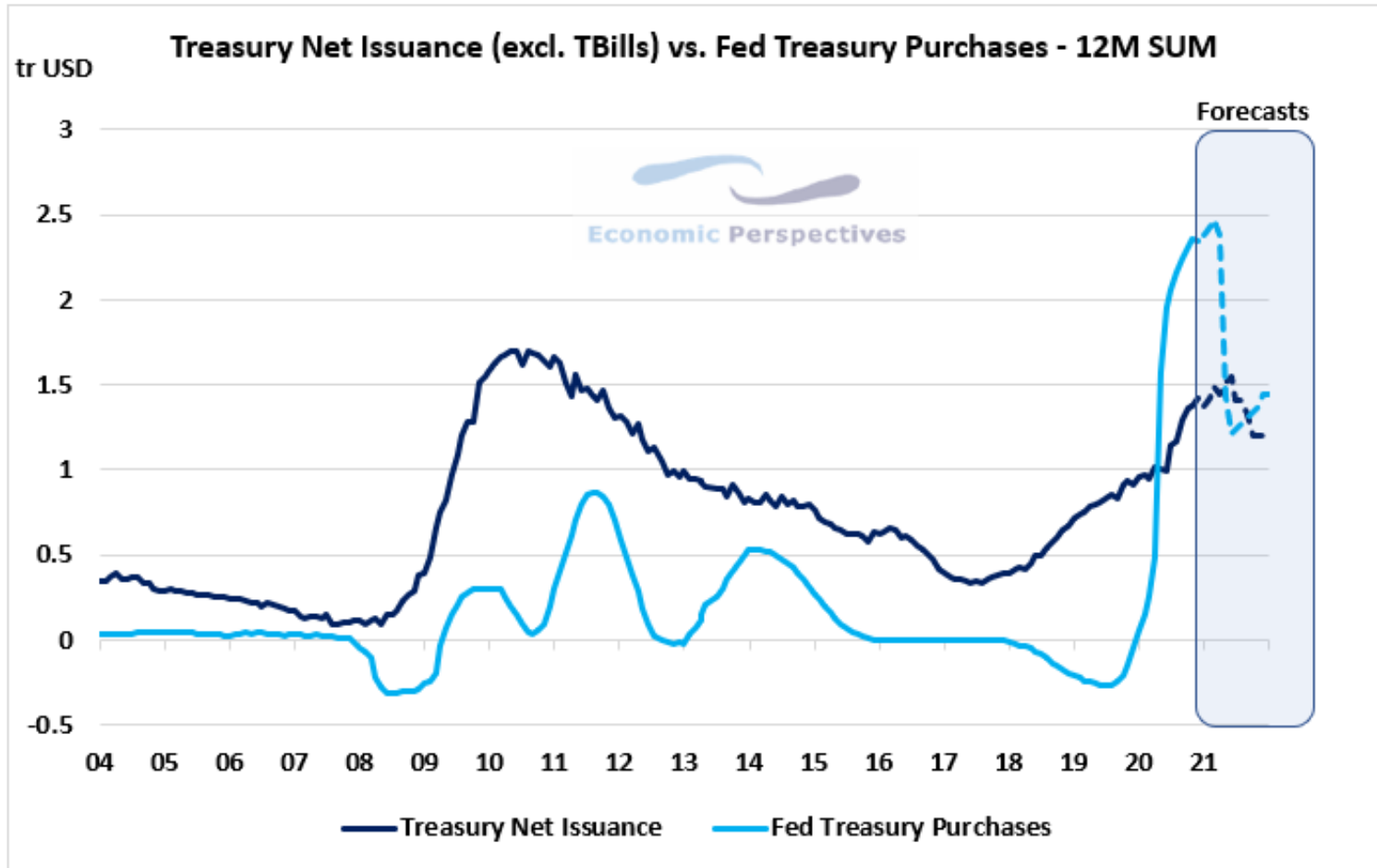
- The US Treasury is expected to issue nearly US\$4tr of primary debt this year, following two years of US\$1tr+ budget deficits.



Data Source: SIFMA, EP

# Treasury net issuance (excl. T-Bills) vs. Fed purchases

- The 12-month sum in Fed Treasury purchases has surpassed the Treasury net issuance (bonds and notes) for the first time.



Data Source: FRED, SIFMA, EP

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## *Determinants of US 10y yield and yield curve slope*

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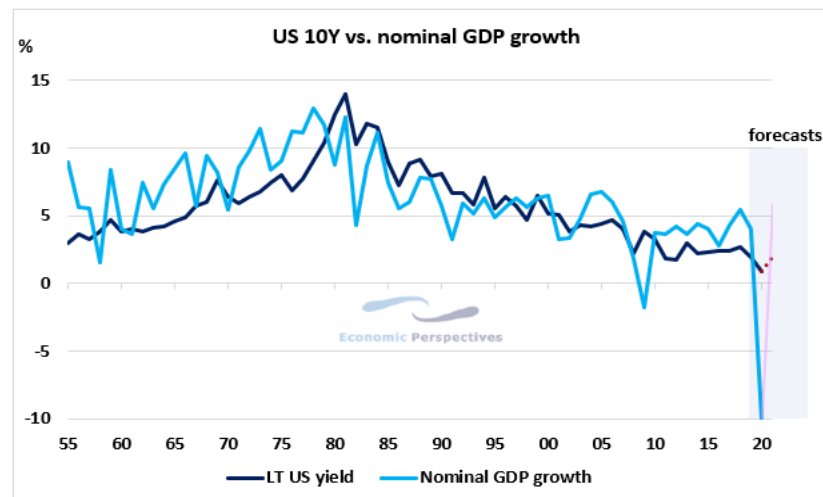
- a. Nominal GDP growth
- b. Fed asset purchases
- c. Economic Policy Uncertainty index
- d. Demand for offshore repo

## a. US 10Y yield vs. nominal GDP growth

- We saw that in the past 65 years, US long-term yields have co-moved strongly with the nominal GDP growth.
- Running a simple OLS regression of long-term yields on two deterministic variables – lagged nominal GDP growth and lagged long-term yields – we have the following expression:

$$LT\_Yields_t = \alpha + \beta_1 LT\_Yields_{t-1} + \beta_2 Nominal_{t-1} + e_t$$

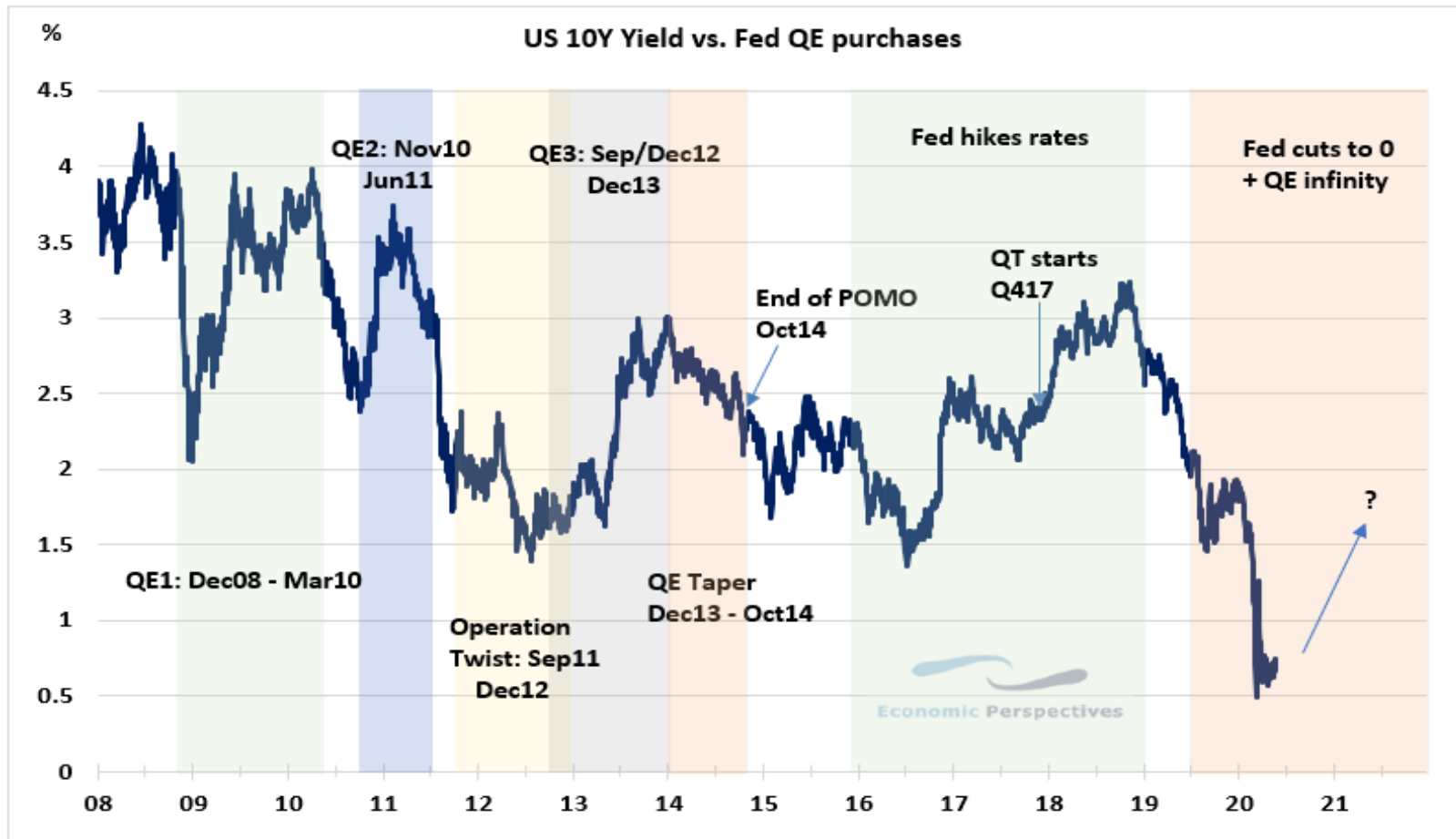
- Both the coefficients are statistically and economically significant at 1-percent level.
- The expected rebound in nominal GDP growth, around 6% in 2021, combined with rising pressure on inflation expectations, is consistent with a 10Y yield of 1.9% next year.



Date Source: Eikon Reuters

## b. US 10Y yield vs. QE episodes

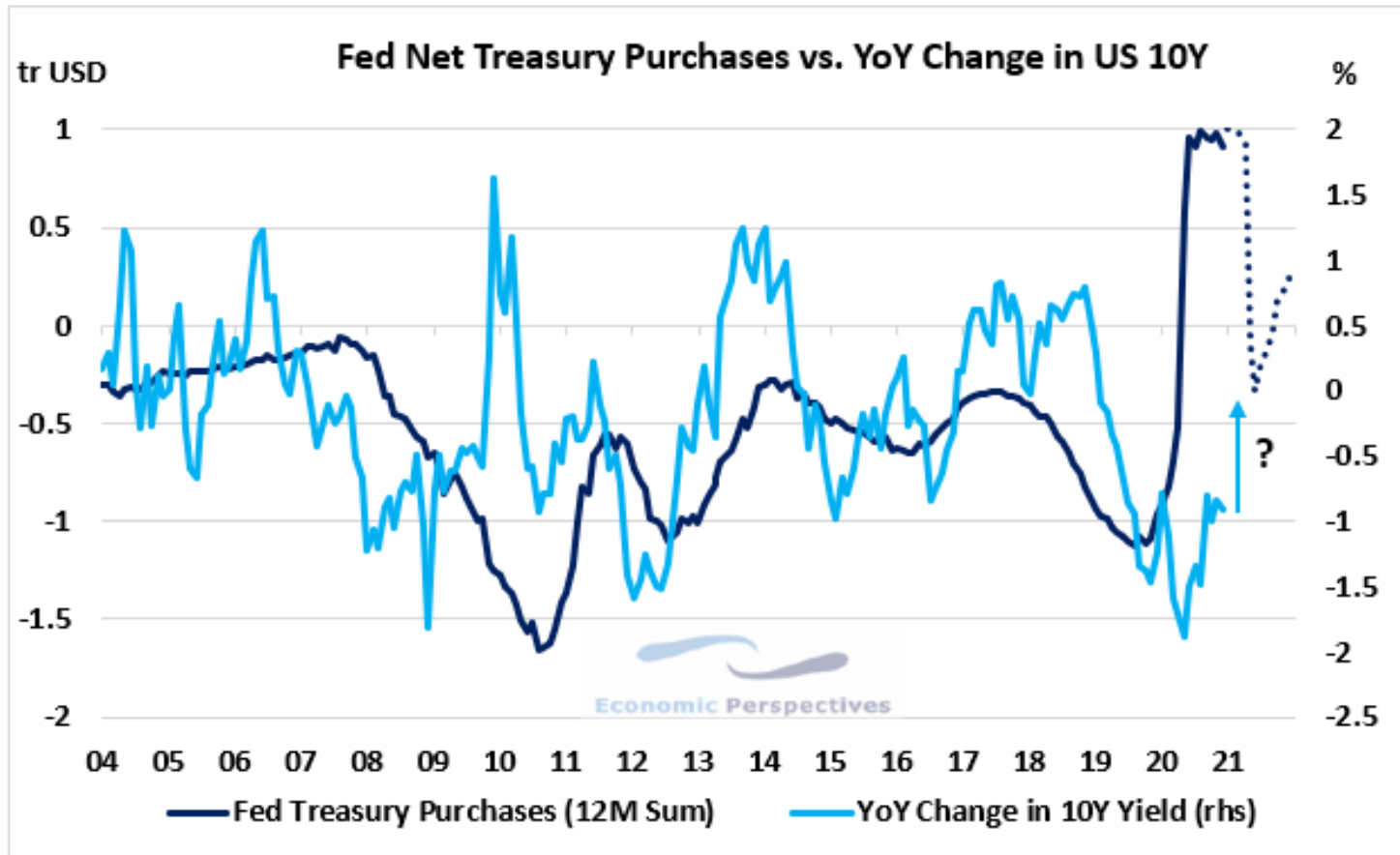
- Interestingly, periods of aggressive QE have usually coincided with an increase in the 10Y yield, while QE tapering / no-QE periods have led to lower yields.



Date Source: Eikon Reuters, EP

## b. US 10Y yield change (yoy) vs annual Fed net purchases

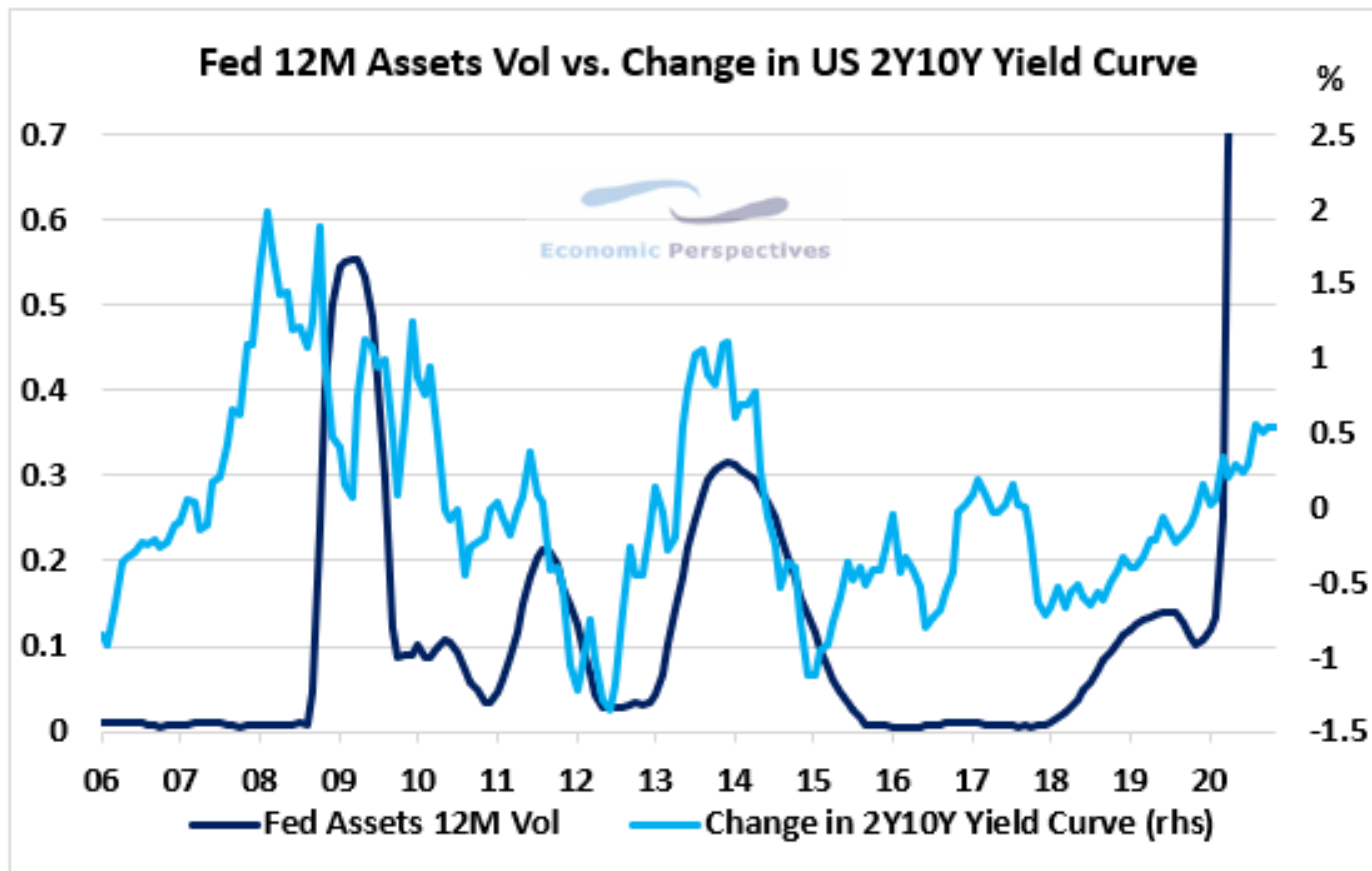
- Interestingly, the US 10Y yield tends to rise when the annual pace of Fed purchases is stronger than the 12-month sum in Treasury's net issuance.



Data Source: FRED, SIFMA, EP

## ***b. Fed assets 12M vol vs. change in the 2Y10Y yield curve***

- When the annual volatility in Fed purchases rises, the 2Y10Y tends to steepen. Will the aggressive plan lead to further steepening?

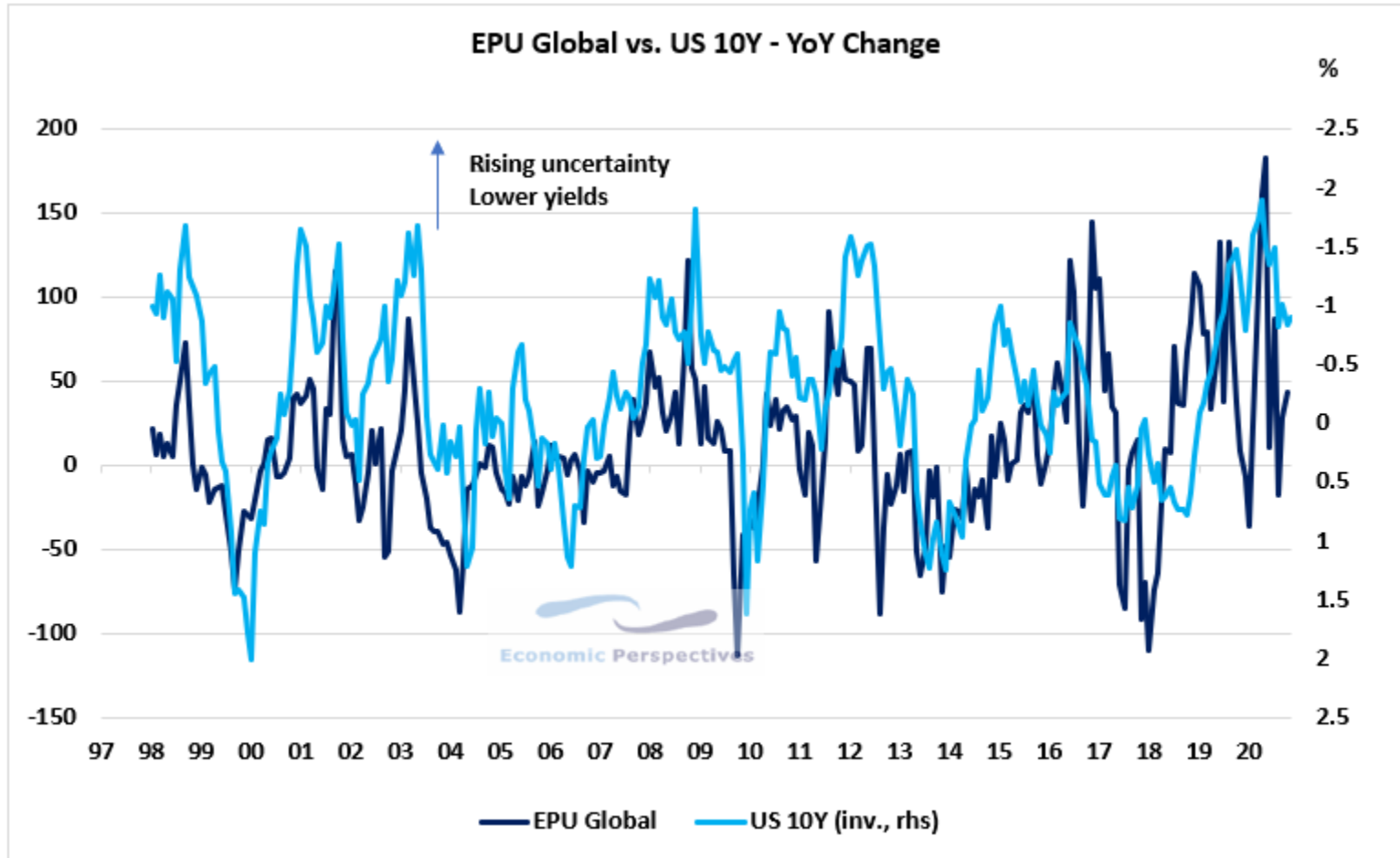


Data Source: Eikon Reuter, EP calculations



## c. US 10Y yield vs. Uncertainty

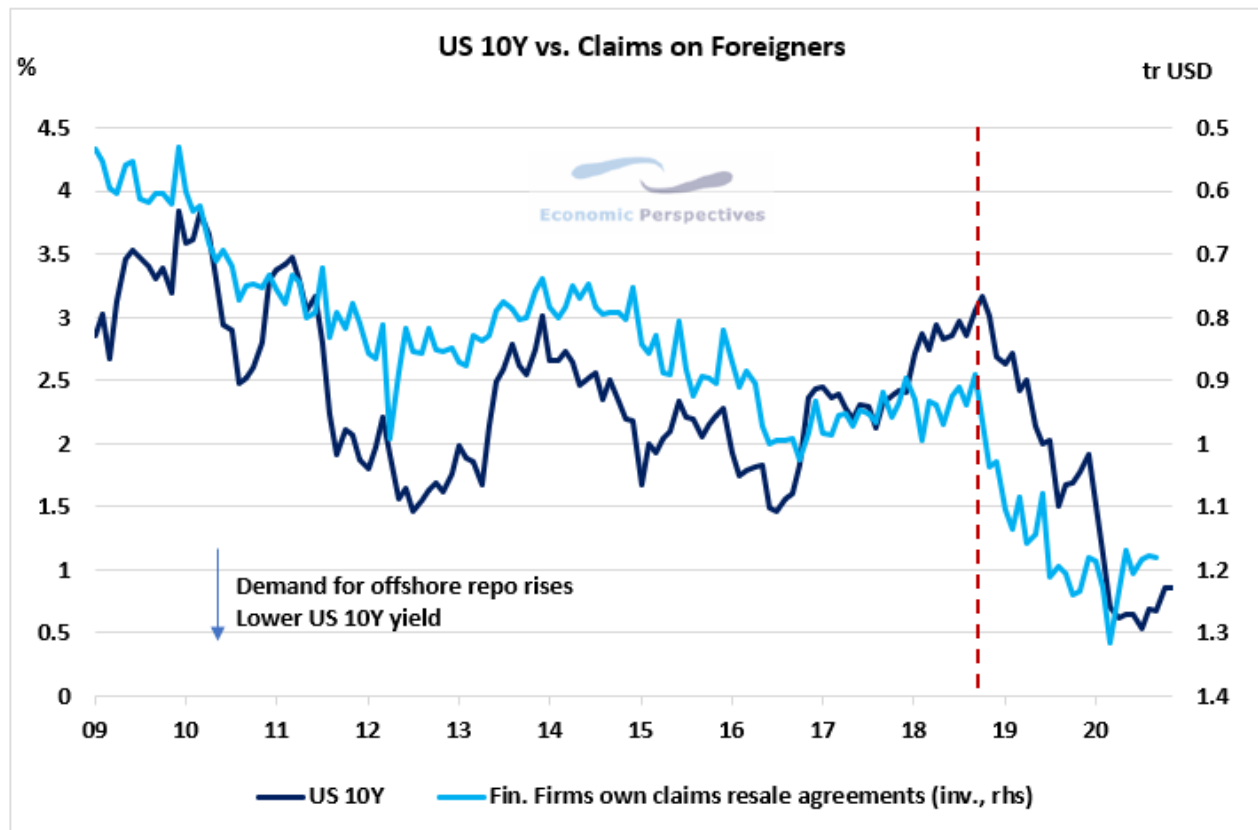
- Higher uncertainty (EPU index) usually leads to lower yield.



Data Source: Eikon Reuters, Baker et al. (2016)

## d. US 10Y yield vs. Claims on Foreigners

- US 10Y yield has co-move strongly with the US banks claims (resale agreements); US yields tend to be lower when demand for offshore repo rises.
- Is this coming from a collateral issue?

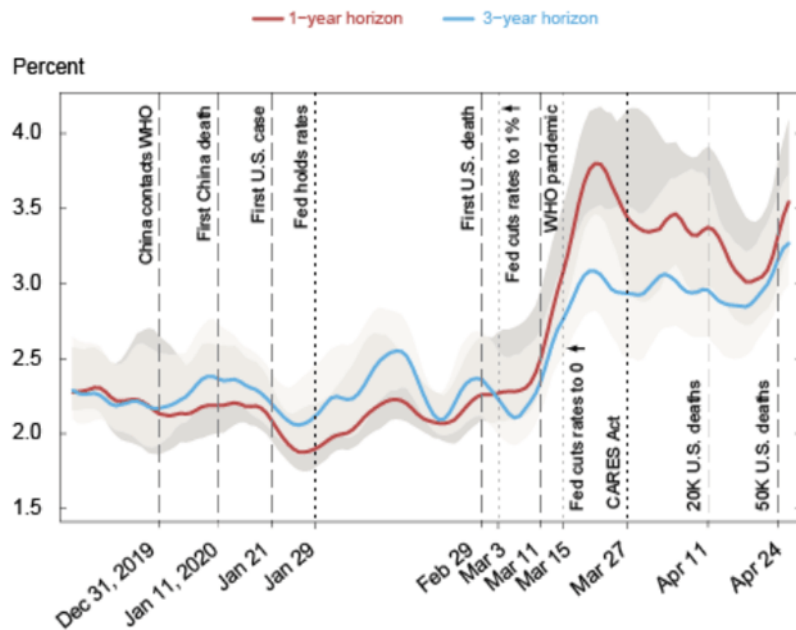


Date Source: Eikon Reuters, TIC

# Uncertainty over inflation expectations is rising

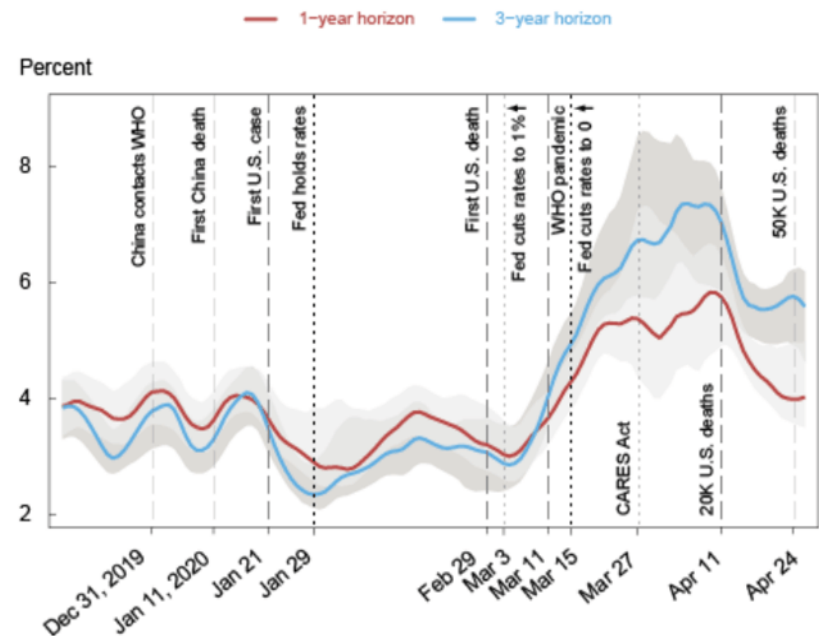
- Uncertainty and ambiguity (i.e. disagreements) over inflation expectations have been rising in the past two months.
- The probability of a sudden rise in inflation expectations within the next 12 months is not negligible.
- This would also be negative for the term premium.

Inflation Uncertainty Has Increased Sharply With the Onset of COVID-19



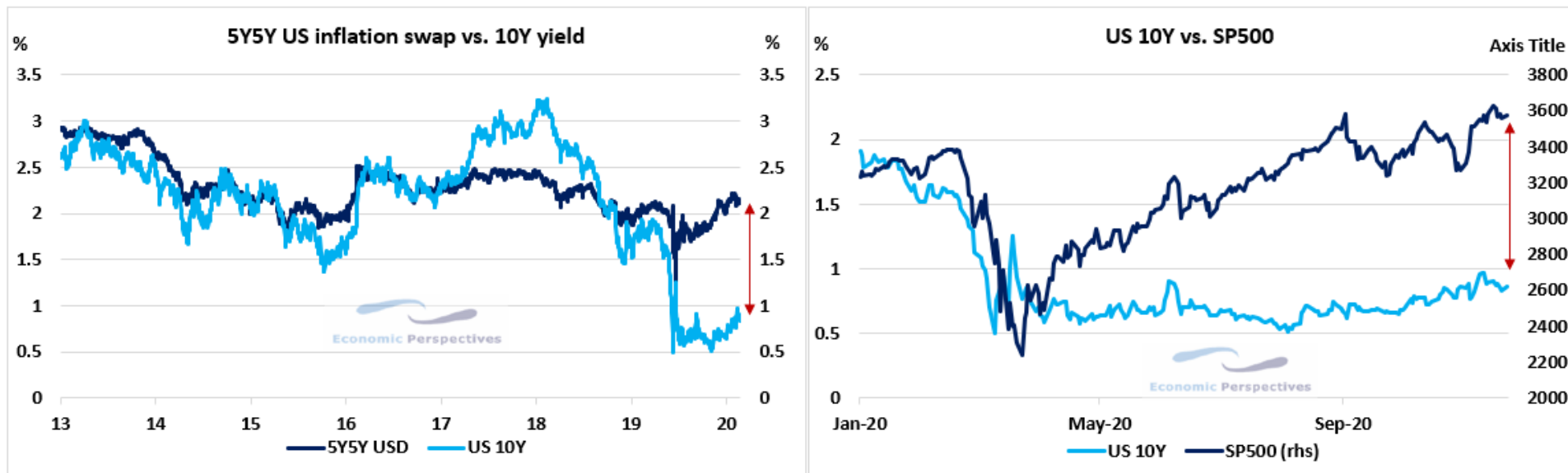
Source: NY Fed

Disagreement in Inflation Expectations across Respondents Has Risen since the Emergence of the COVID-19 Pandemic



# US 5Y5Y inflation swap

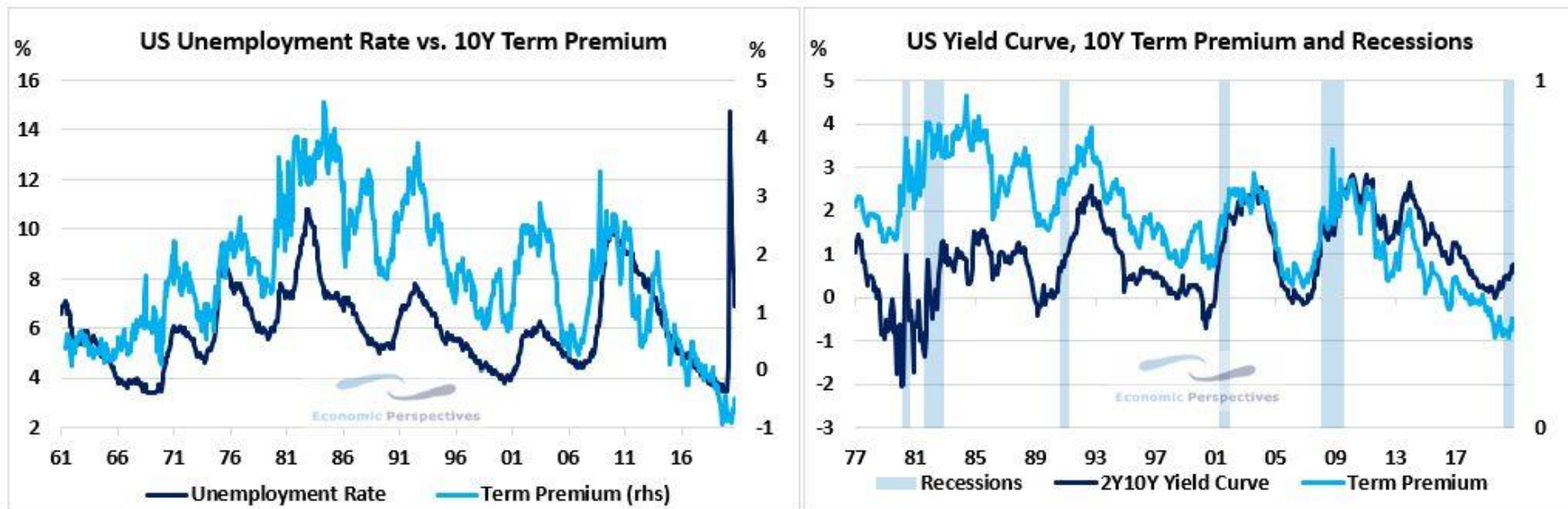
- After its recent recovery, the 5Y5Y inflation swap is currently pricing in a much higher yield.
- In addition, the fiscal expansion combined with the vaccine news could generate another significant rally for risky assets; will the 10Y follow the path of US equities (i.e. higher yields)?



Date Source: Eikon Reuters

# Mind the rise in the term premium

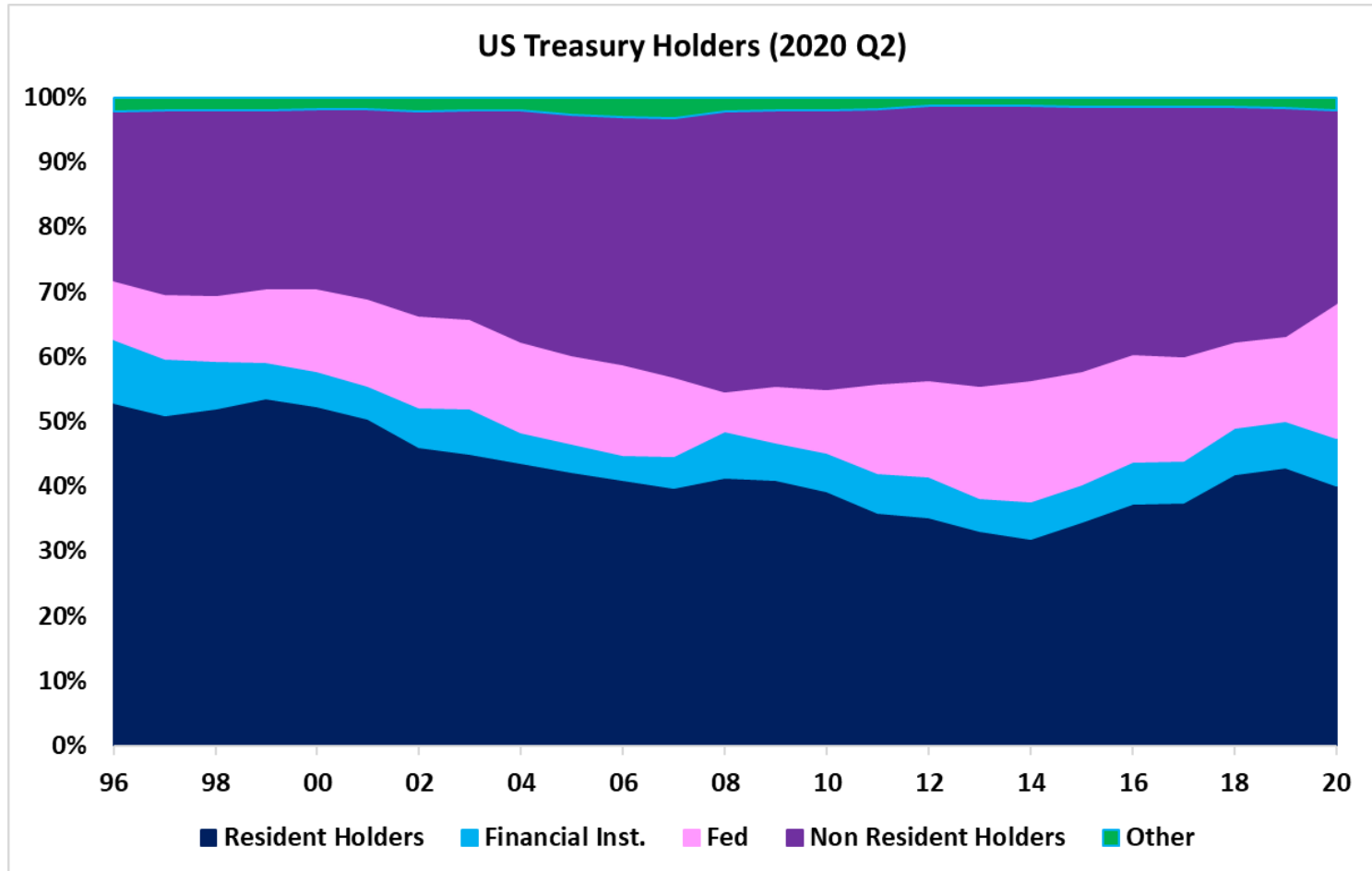
- The term premium is a counter-cyclical variable that tends to rise when the uncertainty over inflation expectations and the economic outlook increases.
- Strong co-movement between the 10Y term premium and US unemployment rate in the past 60 years.
- Higher term premium would imply a steepening yield curve.



Data Source: Eikon Reuter, Adrian et al. (2013)

# Major holders of US Treasuries

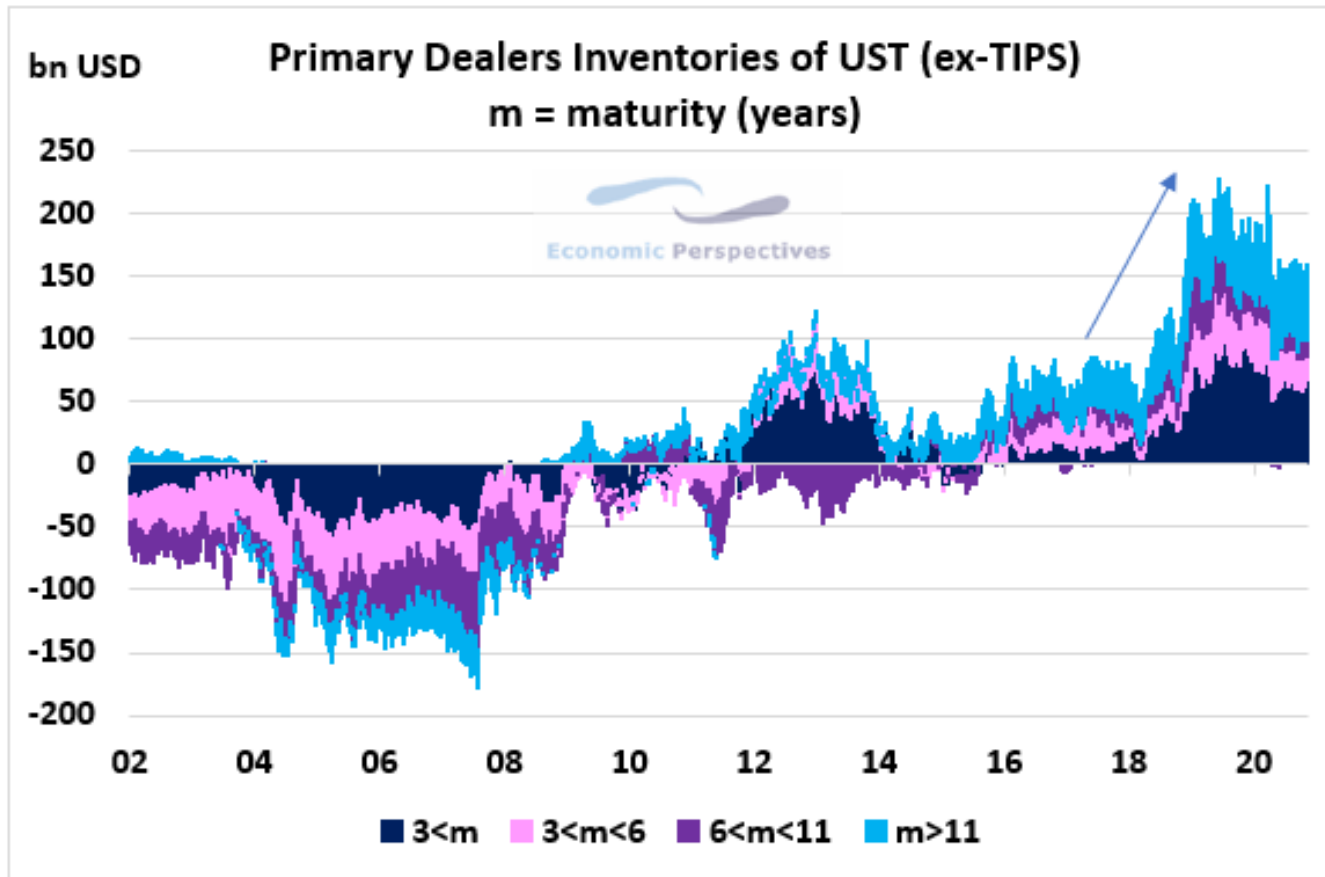
- Non resident holders (foreign investors) still hold 35% of the US Treasury marketable securities.
- These buyers are price-sensitive and would tend to sell if inflationary pressures increased.



Data Source: SIFMA

# Primary Dealers holdings of US Treasuries: why so high?

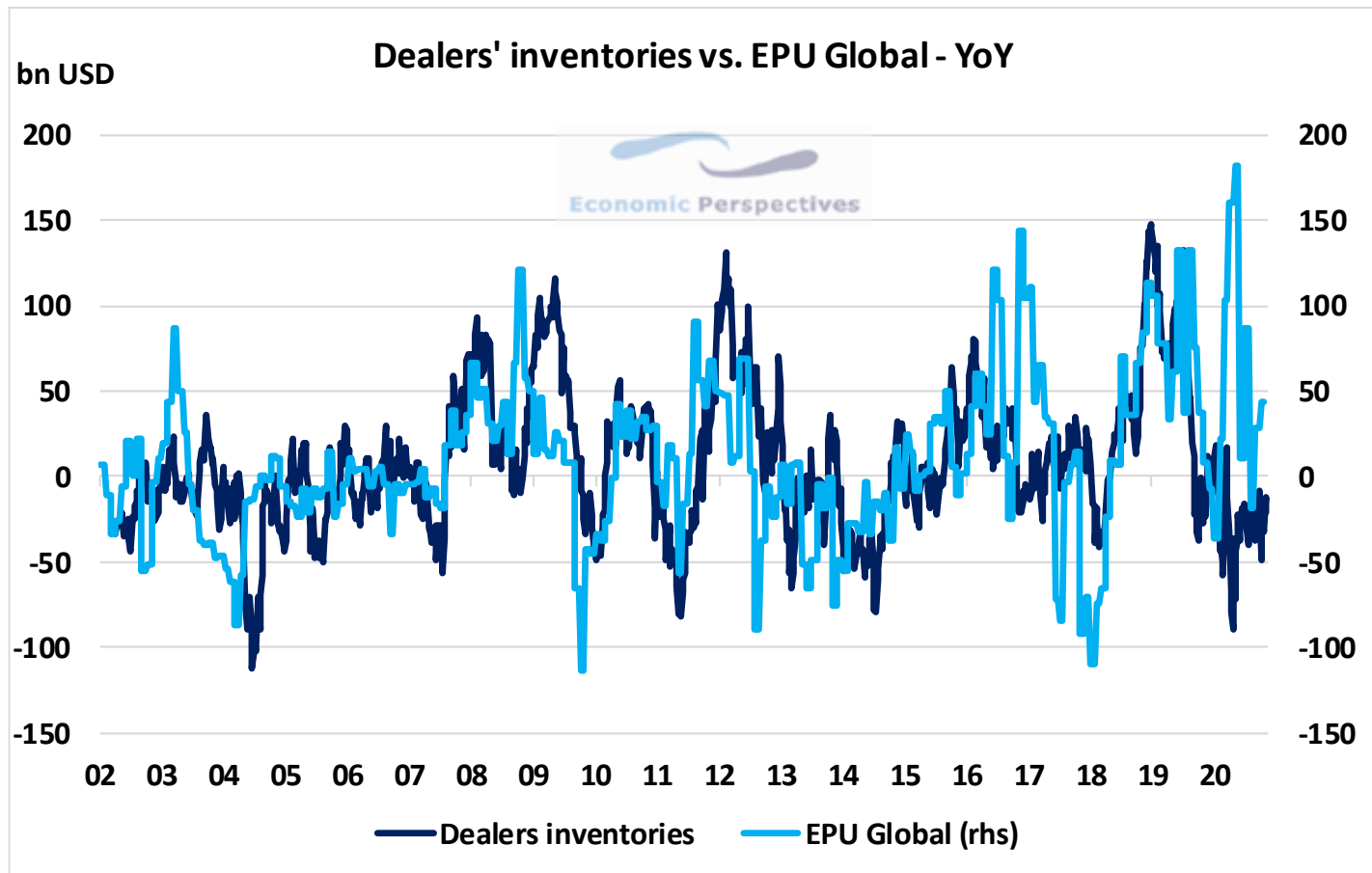
- Are PD's holding USTs for fear of a liquidity/ counterparty crisis?
- Or are PD's warehousing a stack of USTs that they have yet to distribute?



Data Source: NY Fed

# Dealers inventories vs. uncertainty

- Dealers tend to accumulate inventories in periods of high uncertainty.
- Most recent data suggests that both have subsided.



Data Source: Baker et al. (2016), NY Fed



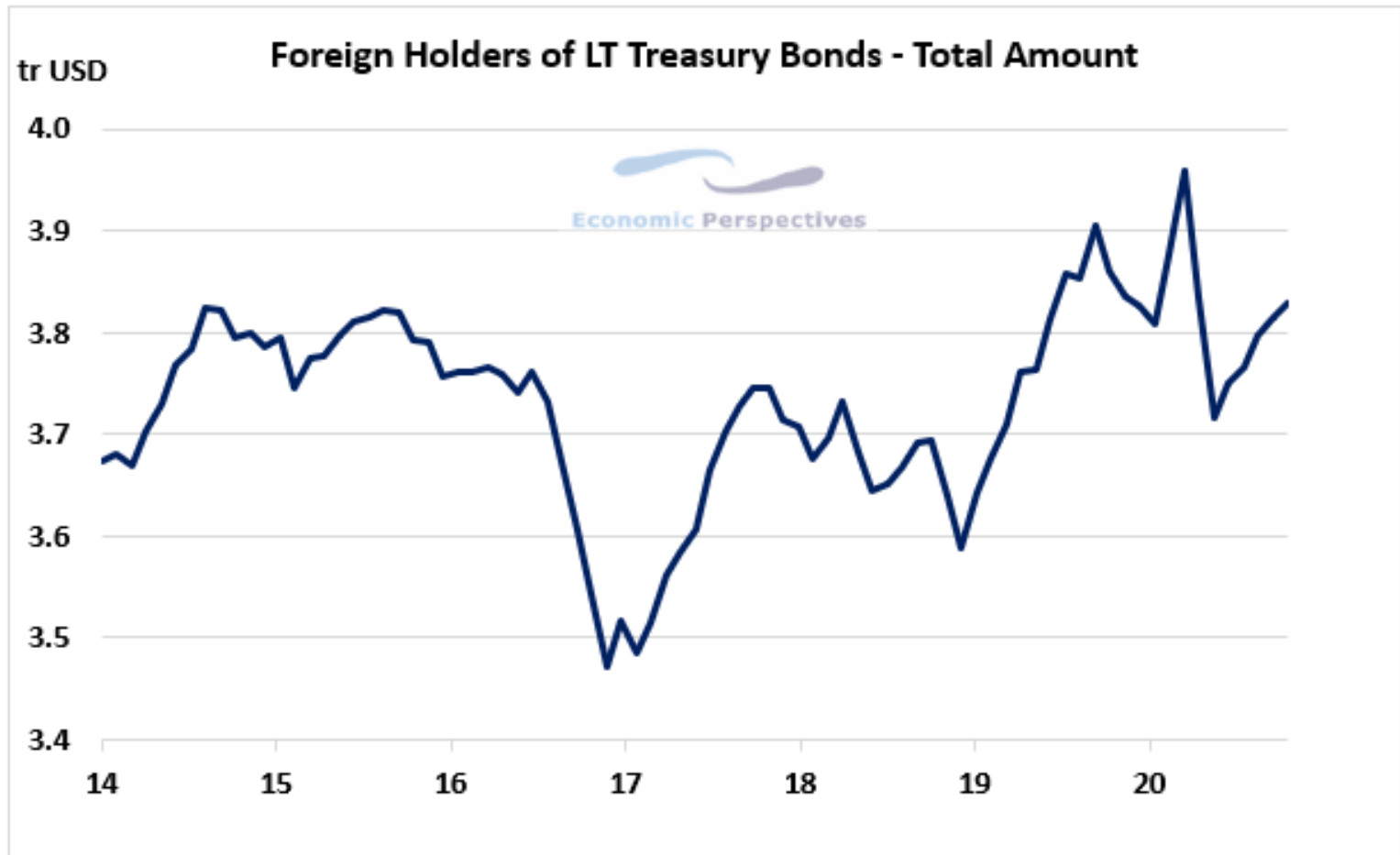
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## *International demand for USTs*

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- a. Stock of foreign holdings
- b. Monthly changes in foreign holdings
- c. Ease of financing
- d. Hedging costs
- e. Speculative positioning

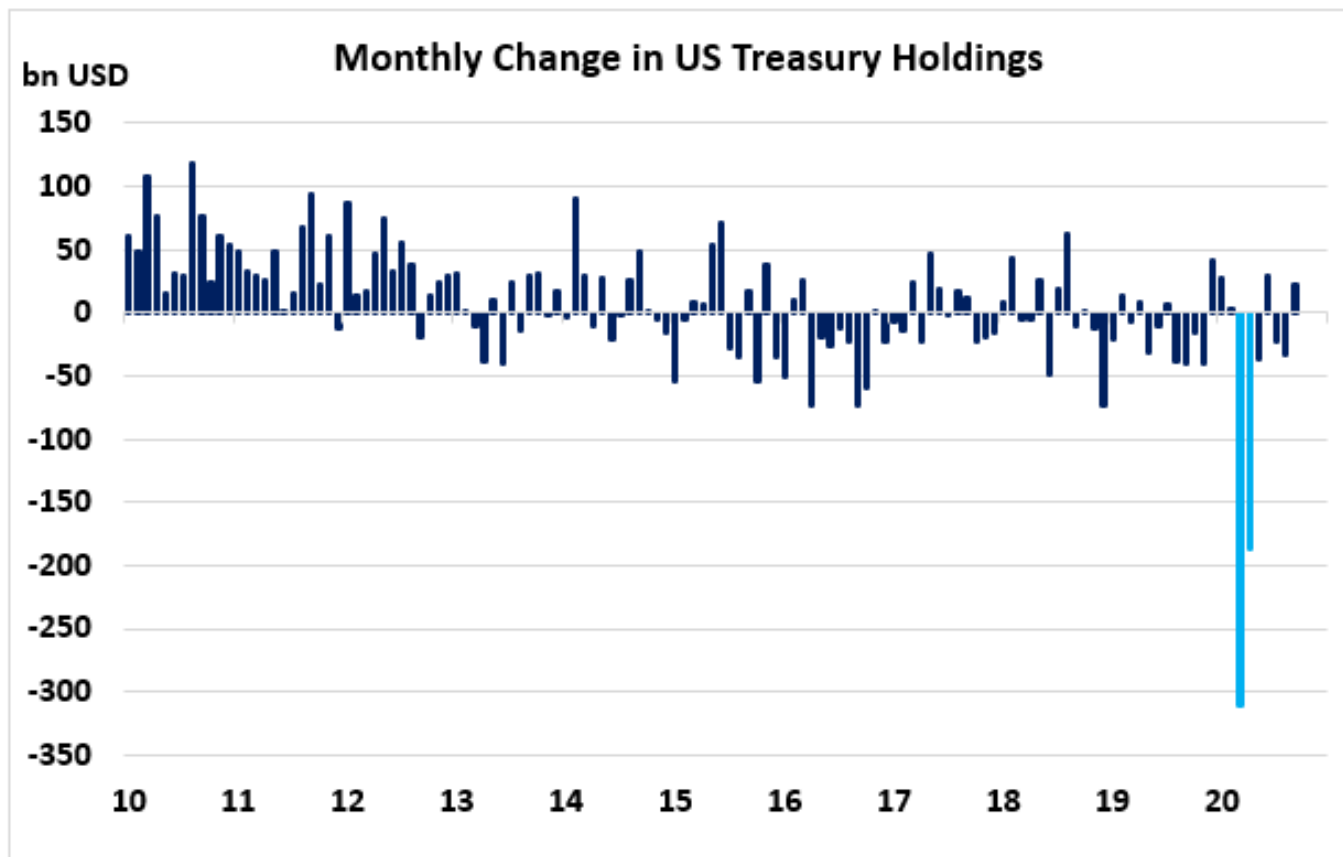
## a. Foreign holdings of US Treasury Bonds



Data source: Bloomberg

## *b. Changes in foreign ownership of UST*

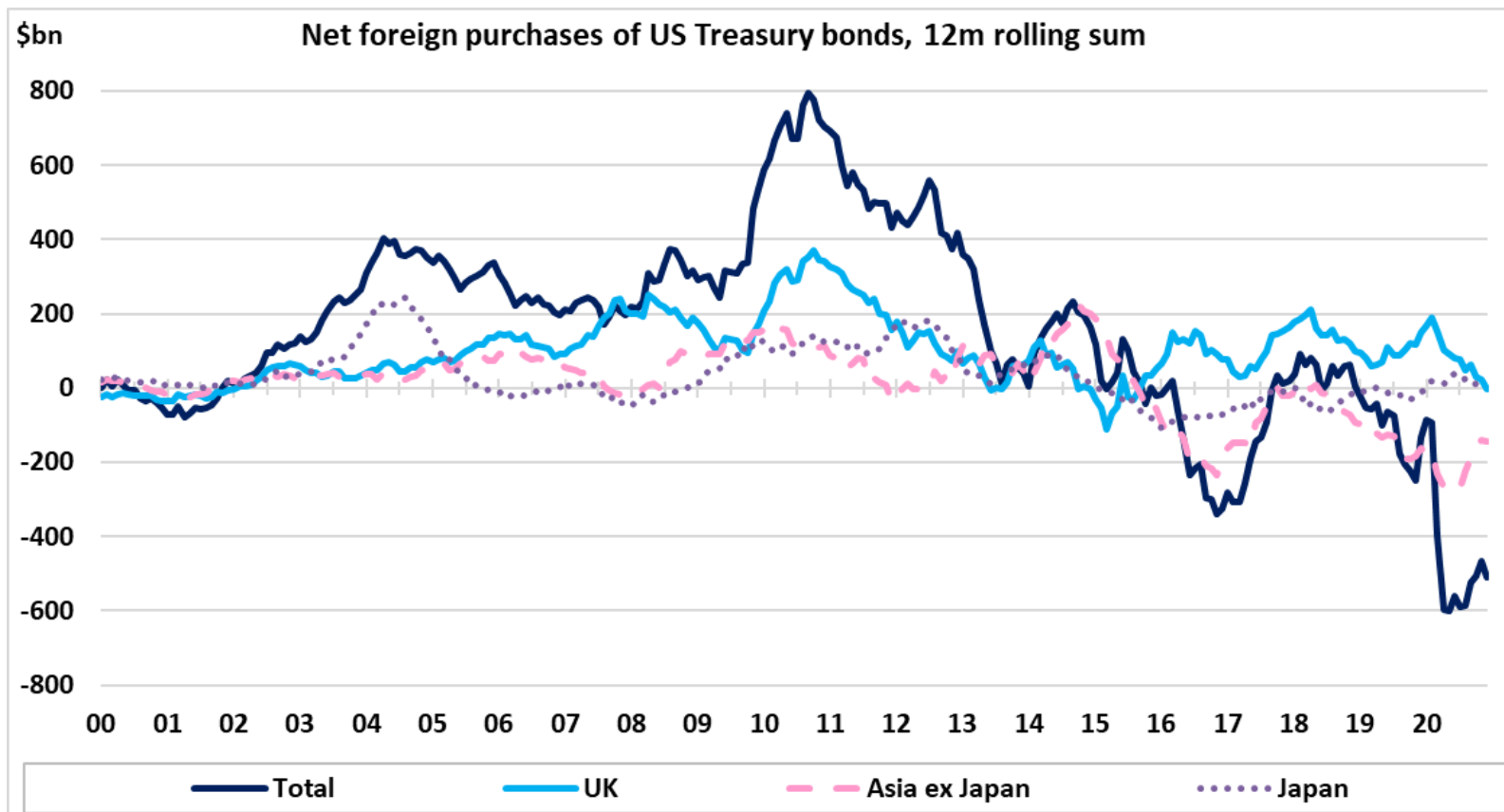
- Foreign ownership of US debt fell by a gigantic US\$300bn in March during the peak of the equity panic.
- ‘De-dollarization’ or liquidation?



Data source: TIC data

## b. Structural de-dollarization in Asia (ex Japan)

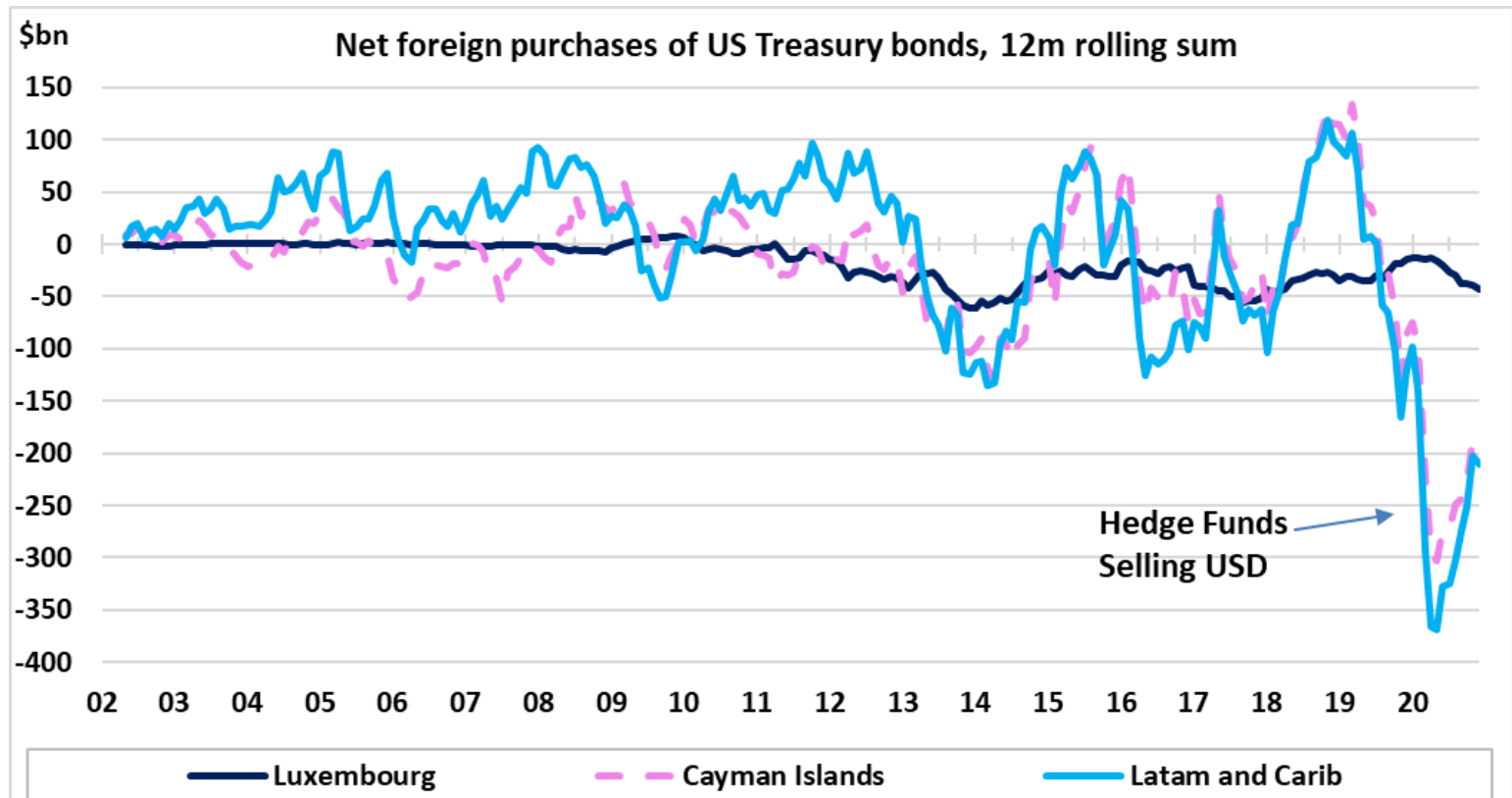
- If we calculate the 12M rolling sum, foreign investors sold US\$400bn of US Treasuries with Asia ex-Japan decreasing their Treasury holdings by over US\$230bn.



Data source: TIC, EP calculations

## b. Overlay of offshore hedge fund activity

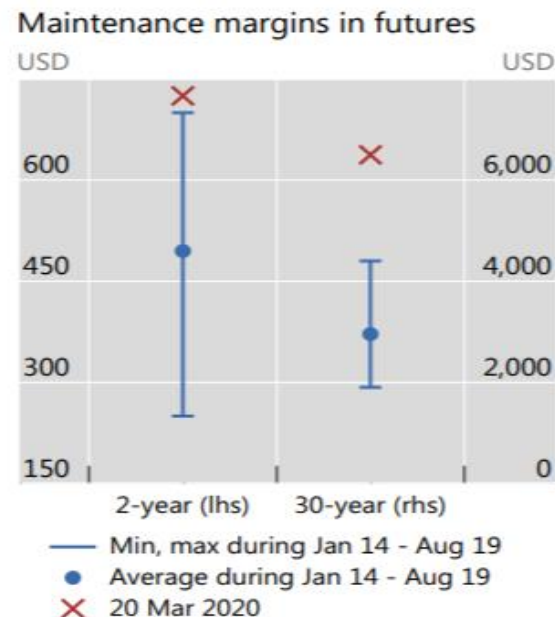
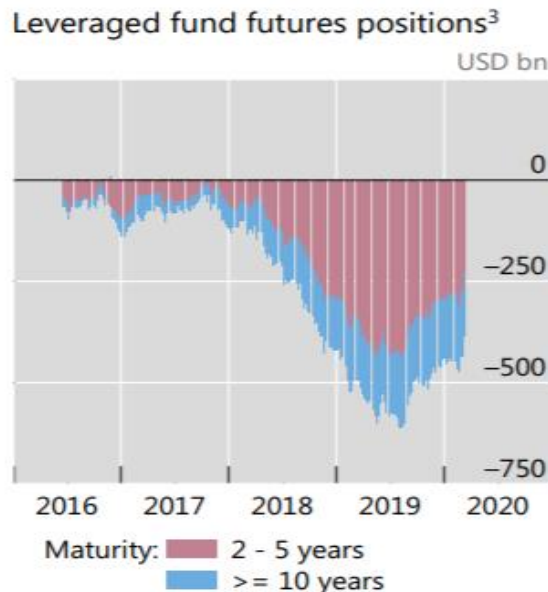
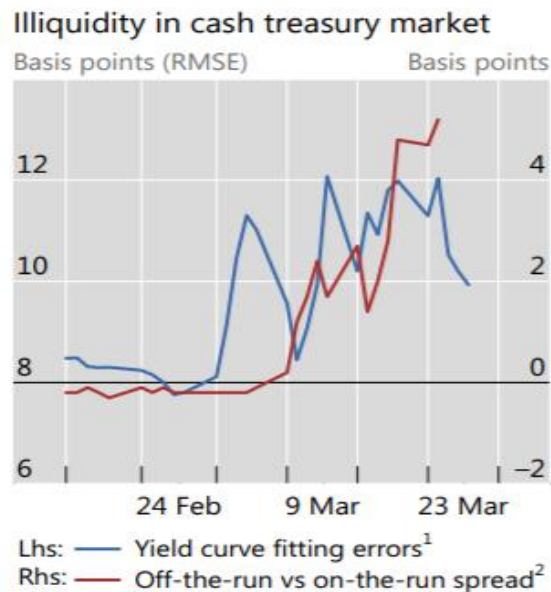
- Cayman Islands, which is the principal custody holder of global investors, sold US\$118bn of US Treasuries in March, for a total of US\$200bn in the past 12 months.
- Liquidation of hedge funds' relative value strategies.



Data source: TIC, EP calculations

## b. Relative value strategies suffered badly in March

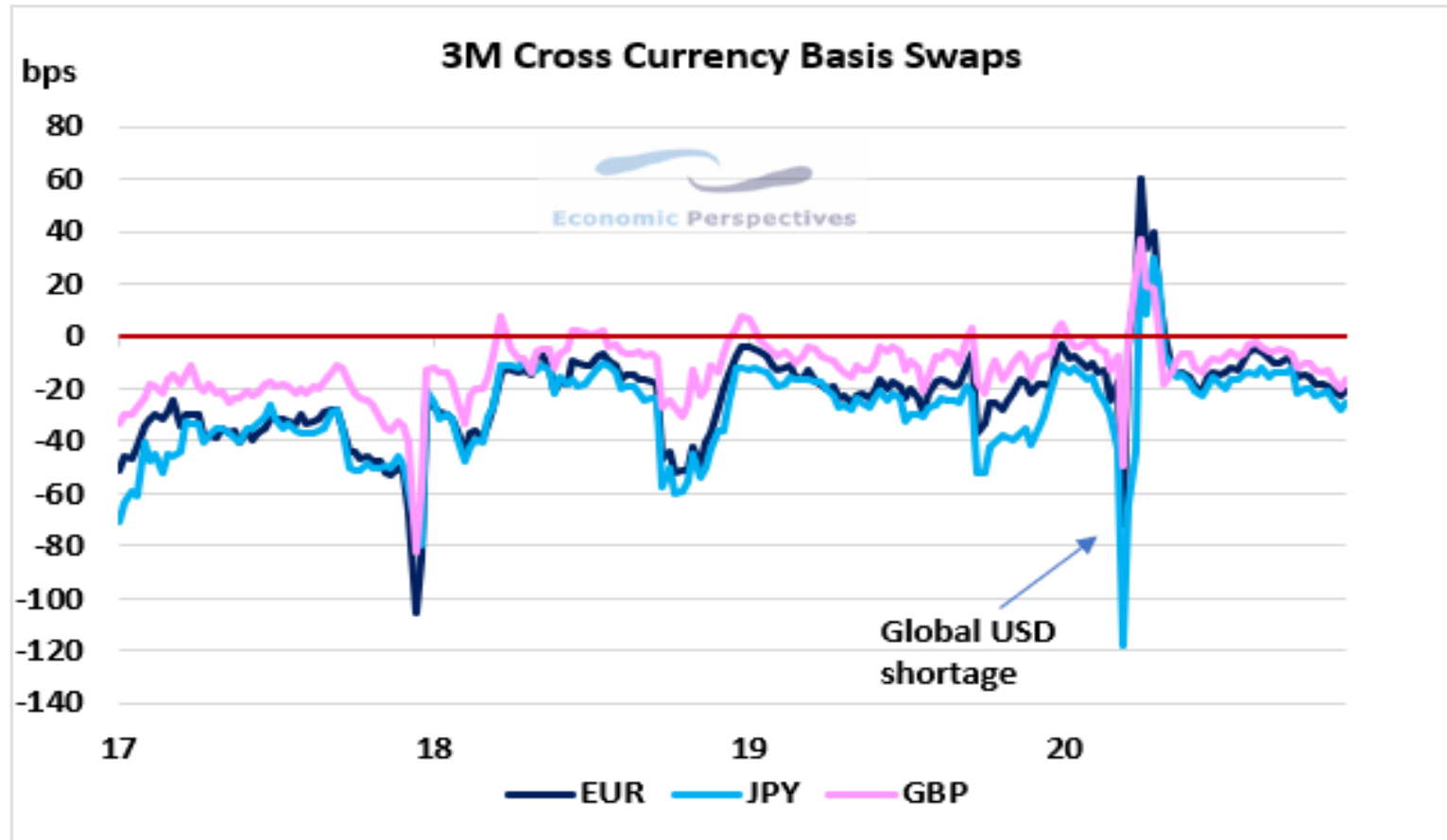
- Hedge funds that employed 'relative value' strategies took large long positions in US Treasuries using leverage through repos, combined with a derivatives transaction (selling the corresponding futures contract).
- However, the sudden explosion in volatility amid the global selling panic led to a significant rise in margins and a deterioration in the liquidity in futures markets.



Source: BIS

## c. USD scarcity concerns have eased

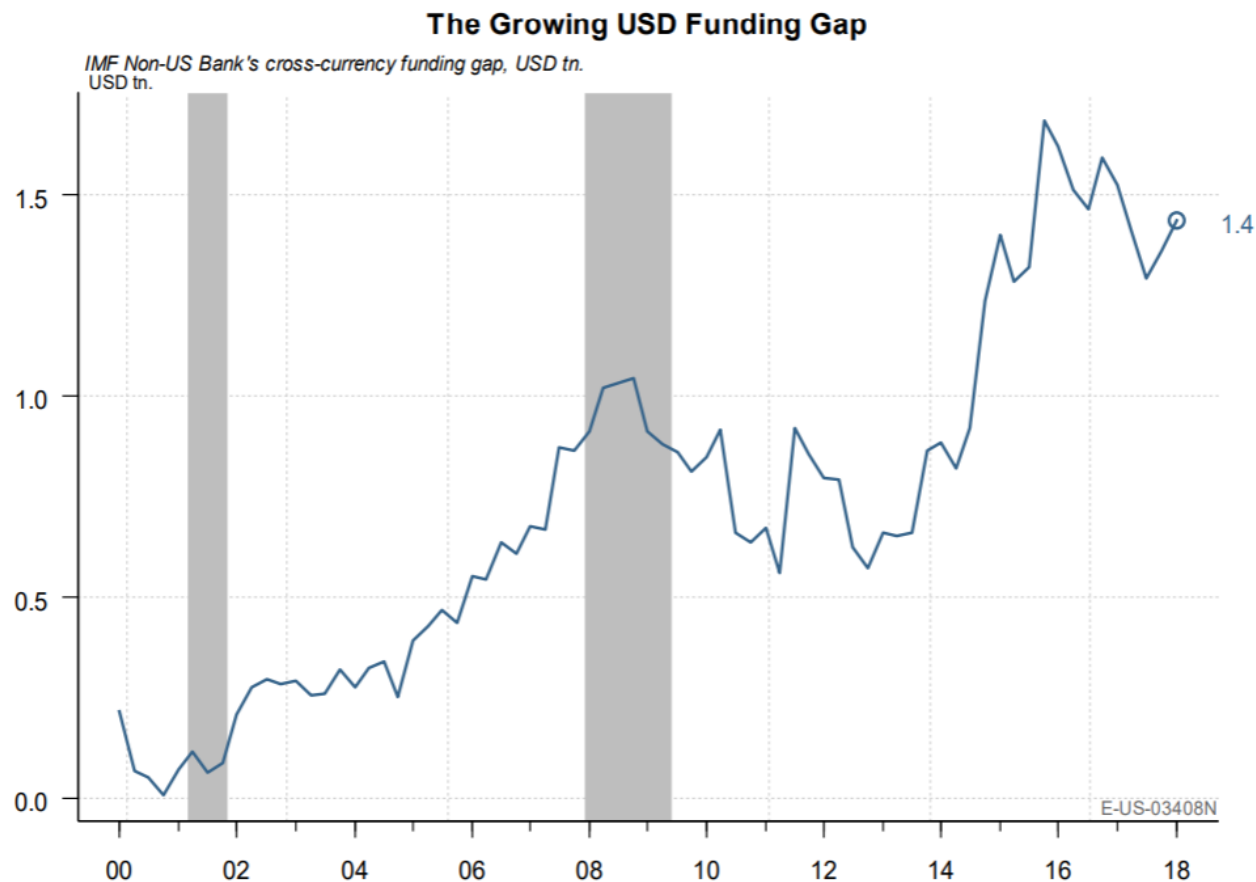
- The Fed's swap lines in addition to the liquidity injections have eased investors concerns over a global USD scarcity.



Data Source: Eikon Reuters

## c. The USD funding gap continues to rise

- Growing demand from foreign institutions to borrow US Dollars so they can pay for US Treasuries.

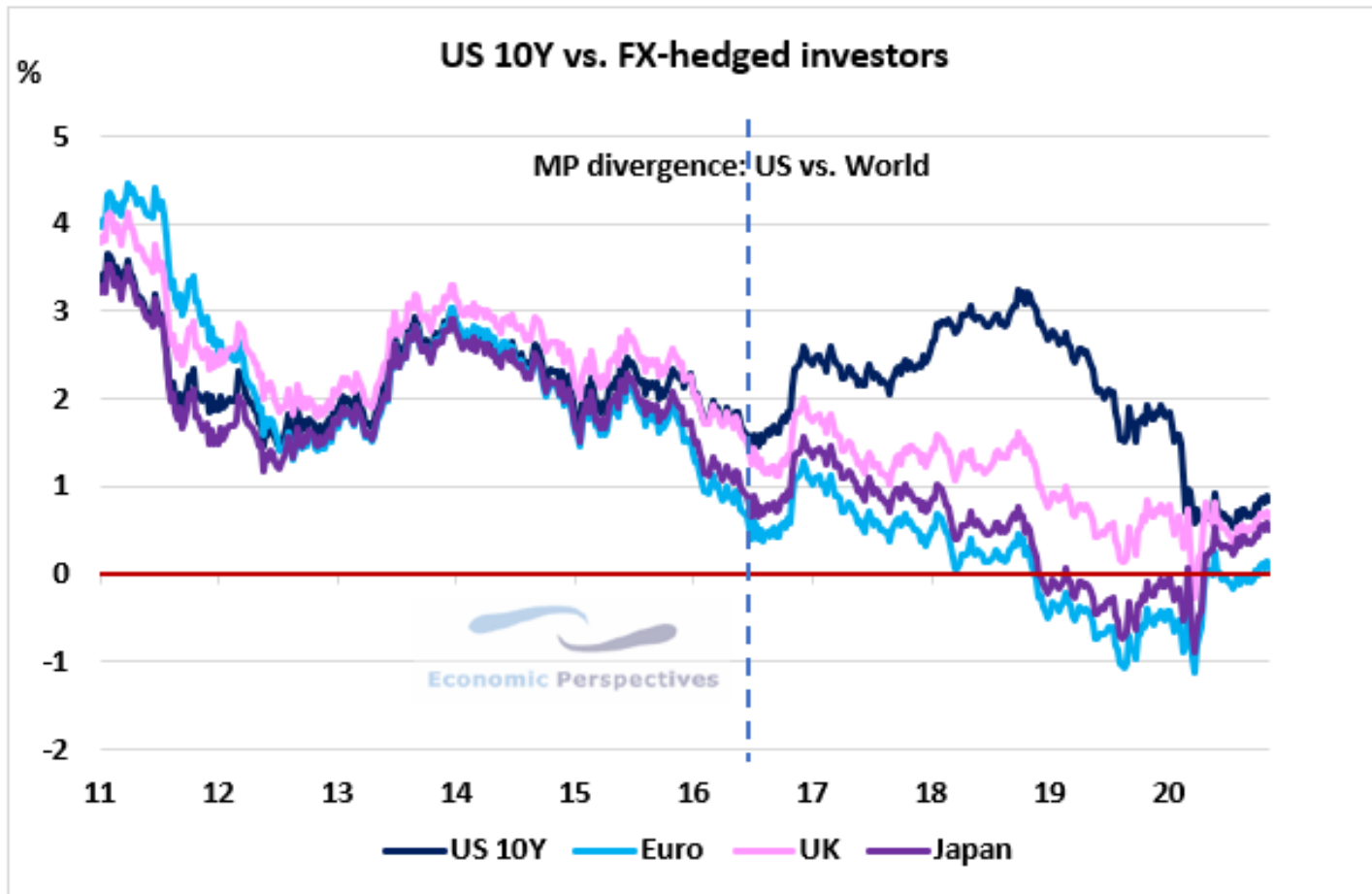


Source: IMF, Pavilion



## *d. Hedging costs for foreign investors have plummeted*

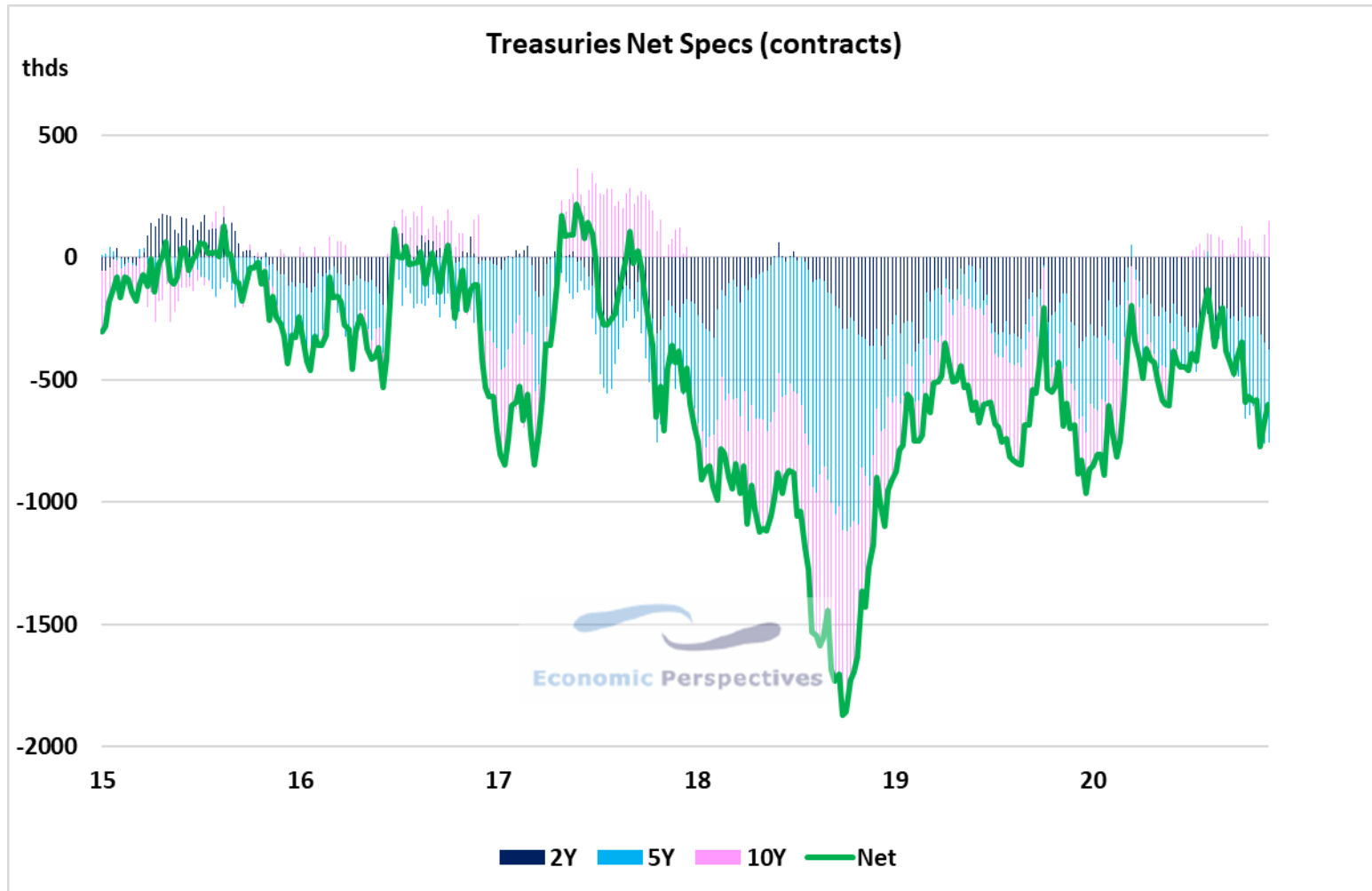
- Hedging costs for international investors have collapsed as the Fed has cut rates to 0 percent.



Data source: Eikon Reuters, FRED, EP calculations

## e. Aggregate short specs on US Treasuries

- 10Y Treasury bears seem to have capitulated according to the CFTC market.



Data Source: Eikon Reuters, CFTC

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## *Conclusions*

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- Covid-related policy uncertainty and repeated interventions are likely to remain a depressing force on short-term yields.
- But several forces are combining to drive US 10Y yields higher: elevated unemployment, rising inflation uncertainty and rebounding nominal GDP.
- As the term premium is reinstated, the 2Y10Y yield curve has scope to steepen by a further 50bps.
- Expect non-resident UST holders to be increasingly sensitive to the emergence of US inflationary pressures.



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