

Fixed Income Research & Macro Strategy (FIRMS) – 22nd September 2021

Macro data dog not wagging FX market tail

US macro data, including measures of US inflation, non-farm employment, retail sales, manufacturing output, ISM PMIs and consumer confidence indices, have been far less volatile since the peak in global risk aversion in March-April 2020 when the first national lockdowns decimated global growth.

However, volatility in most of these monthly metrics remains high relative to history. This is particularly true for core CPI-inflation, non-farm employment, consumer confidence and the ISM non-manufacturing PMI.

Yet volatility and directionality in US Treasury yields, including at the short-end of the curve, and in particular the Dollar has been modest in recent months.

The Dollar NEER has oscillated in a range of just 1.7% for the past 11 weeks and within that range daily volatility has been very low. Moreover daily volatility in most major currencies has fallen further in the past month, with only a few notable exceptions.

Volatility in the S&P 500 has recently picked up but remains broadly in line with the past 12 months and has arguably been spurred by the Evergrande saga rather than by US (or global) macro data releases. Finally volatility and directionality in Brent crude oil prices have also been far more limited in recent weeks.

That is of course not to say that US macro data have not mattered and will not matter going forward. They have and they will. At the very least macro data are a key input into Federal Reserve monetary policy which in turn has a strong bearing on US and global financial markets, as evidenced by markets' reactions to the Fed's 16th June policy.

However, our analysis suggests that financial markets have become somewhat more detached from US macro data releases, even when these have materially deviated from consensus forecasts. At the very least their direct impact on US equity and interest rate markets and global FX and commodity markets has been modest in recent months.

I will be discussing my currency views and forecasts at the (virtual) Global Independent Research Conference on Wednesday 13th October. Click [here](#) for further details.

Financial markets more detached from still volatile US macro data

Volatility in US macro data has fallen sharply since the peak in global risk aversion in March-April 2020 when the first national lockdowns decimated global economic growth. Volatility in monthly measures of US inflation, non-farm employment, retail sales, manufacturing output, ISM PMIs and consumer confidence indices – as measured by the four-month Standard Deviation (SD) – is materially lower than 18 months ago according to our estimates.

However, volatility in most of these monthly metrics remains high relative to history. This is particularly true for core CPI-inflation, non-farm employment, consumer confidence and the ISM non-manufacturing PMI. And yet volatility and directionality in US Treasury yields, including at the short-end of the curve, and in particular the US Dollar has been modest in recent months.

The US Dollar Nominal Effective Exchange Rate (NEER) has oscillated in a narrow range of just 1.7% for the past 11 weeks and within that range daily volatility has been very low. Moreover daily volatility in most major currencies has fallen further in the past month, with only a few notable exceptions. Volatility in the S&P 500 has picked up in recent days but remains broadly in line with the past 12 months and has arguably been spurred by the Evergrande saga (and the spike in European gas prices) rather than by US (or for that matter global) macro data releases in our view. Finally volatility and directionality in Brent crude oil prices have also been far more limited in the past month.

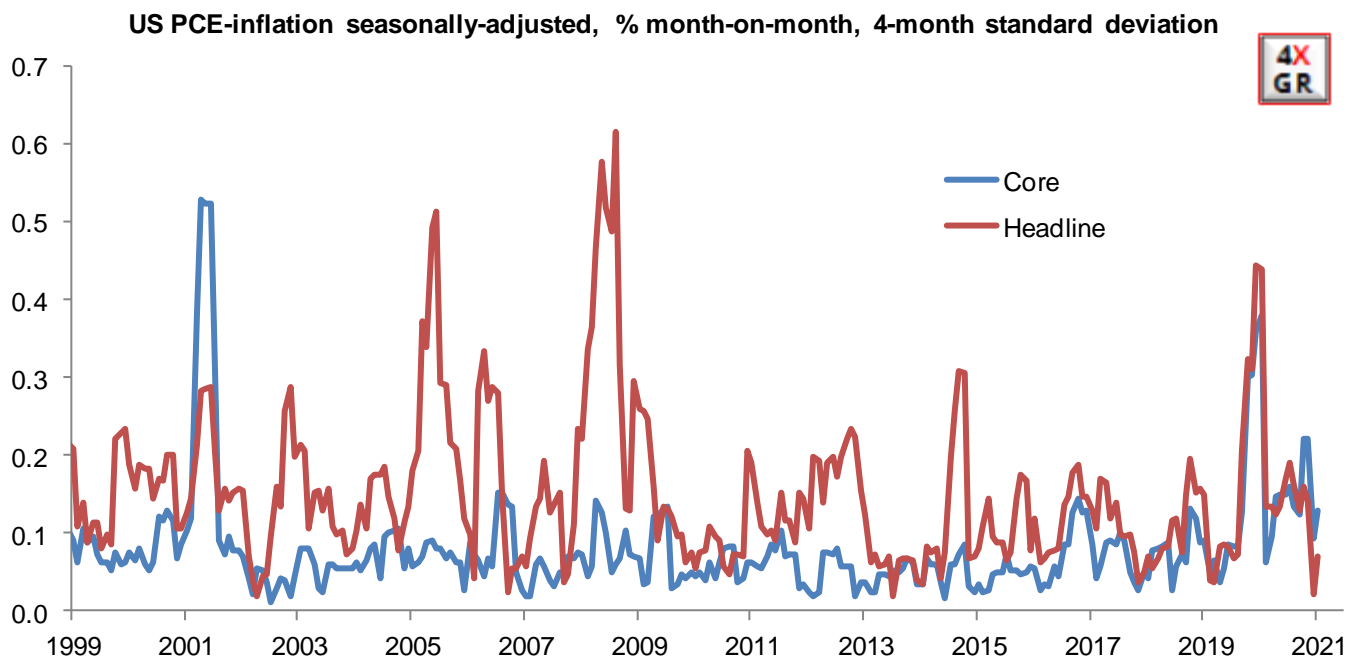
That is of course not to say that US macro data have not mattered and will not matter going forward. They have and they will. At the very least macro data are a key input into Federal Reserve monetary policy (and specifically when it will start tapering its monthly asset purchases) which in turn has a strong bearing on US and global financial markets – as evidenced by markets' reactions to the Federal Reserve's 16th June policy meeting and Chairperson Powell's Jackson Hole [speech](#) on 27th August (see [Fed: Same game, different rules](#), 22nd June 2021 and [Powell Put in play but greater challenges ahead](#), 1st September 2021).

However, our analysis suggests that financial markets have become somewhat more detached from US macro data releases, even when these have materially deviated from consensus forecasts. At the very least their direct impact on US equity and interest rate markets and global FX and commodity markets has been modest in recent months.

Volatility in most US inflation measures still high, particularly for core CPI-inflation

Volatility in monthly Personal Consumption Expenditure (PCE) inflation has fallen sharply since March-April 2020 (see Figure 1) and remains well below volatility in CPI-inflation (see Figure 2). In particular volatility in headline PCE-inflation has been very low, with the month-on-month percentage change stuck in a narrow 0.41-0.57% range in April-July according to our estimates.

Figure 1: Somewhat counter-intuitively volatility in core PCE-inflation higher than in headline PCE-inflation

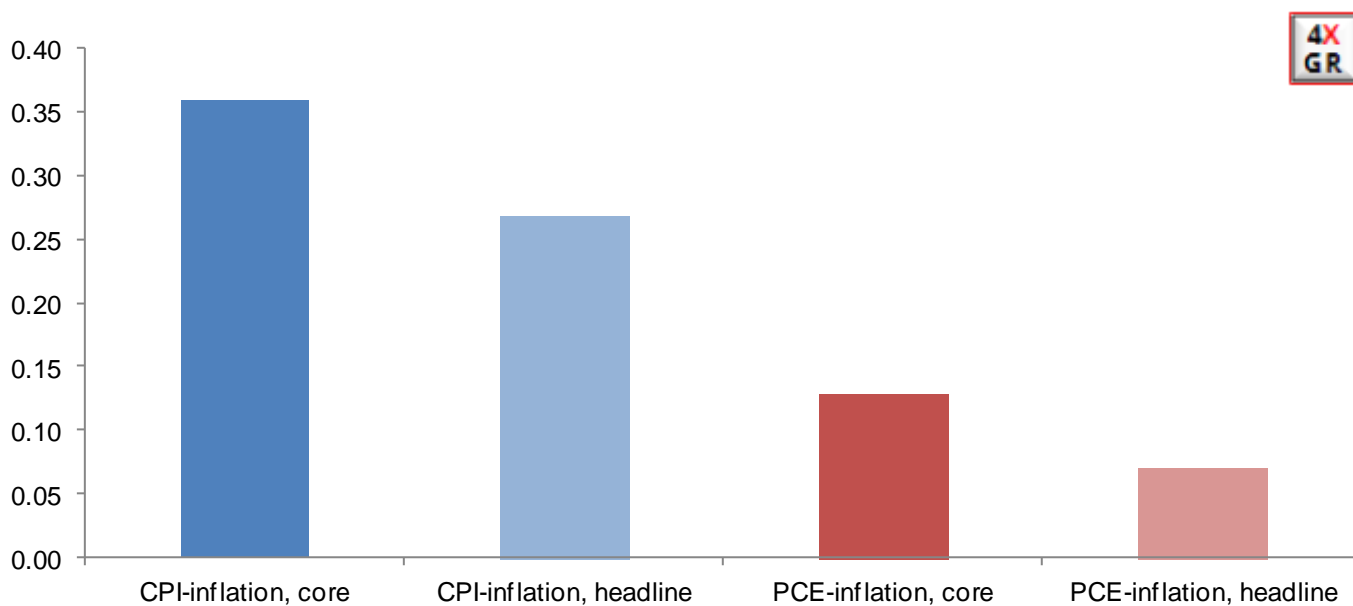


Source: 4X Global Research, US Bureau of Economic Analysis

Note: Last data points are for July 2021.

Figure 2: Core CPI-inflation has remained very volatile relative to other US measures of inflation

Seasonally-adjusted measures of US inflation, % month-on-month, 4-month standard deviation (latest data point)*



Source: 4X Global Research, US Bureau of Economic Analysis, US Bureau of Labour Statistics

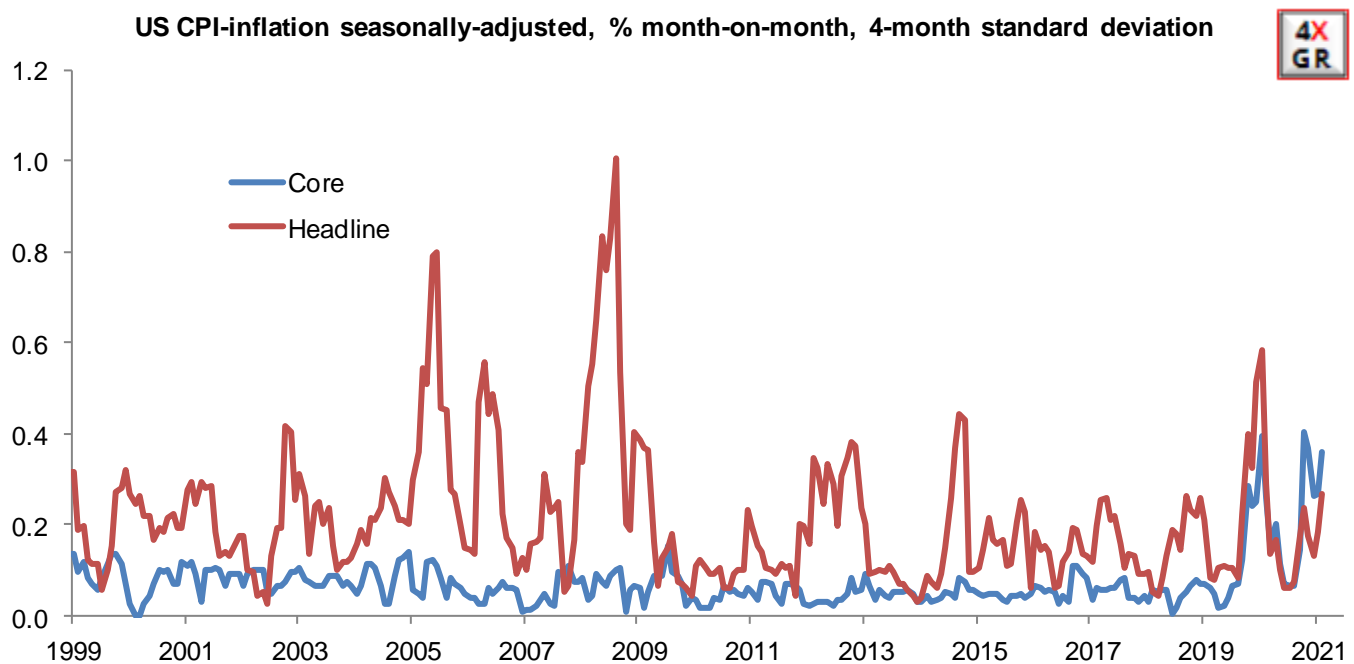
Note: *Last data points for CPI-inflation are for August 2021 and for PCE-inflation are for July 2021.

However, core PCE-inflation – the Federal Reserve’s preferred measure of inflation – has remained volatile by historical standards (the month-on-month percentage change ranged from 0.34% to 0.63% in April-July) and somewhat surprisingly has been almost twice as volatile as headline PCE-inflation. This implies that US prices of items other than food and energy have been more volatile – which is arguably counter-intuitive as core measures of inflation are designed to be less volatile (and give a sense of underlying inflation) by stripping out typically volatile food and energy prices over which policy-makers arguably have less control.

Volatility in monthly headline CPI-inflation was also much lower in May-August than 18 month ago and broadly in line with its pre-pandemic history (see Figure 3). However, it has picked up in the past couple of months. Even more notably volatility in core CPI-inflation has risen sharply this year and is now broadly the same as it was during the peak of the pandemic in March-April 2020 (the month-on-month percentage change ranged from 0.10% to 0.88% in May-August 2021). As has been the case for PCE-inflation, volatility in core CPI-inflation has been higher than in headline CPI-inflation (see Figures 2 & 3).

Core CPI-inflation slowed to 0.1% mom in August from 0.3% mom in July. This was well below the consensus forecast of 0.3% mom but this surprise should perhaps not have come as a surprise. With core CPI-inflation proving so volatile the odds of analysts’ forecasts being way off are arguably higher. This may in turn explain, in our view, why financial markets’ reaction to the release on 14th September of lower-than-expected core (and headline) CPI-inflation for August was modest.

Figure 3: Core CPI-inflation has been as volatile as it was during peak pandemic



Source: 4X Global Research, US Bureau of Labour Statistics

Note: Last data points are for August 2021.

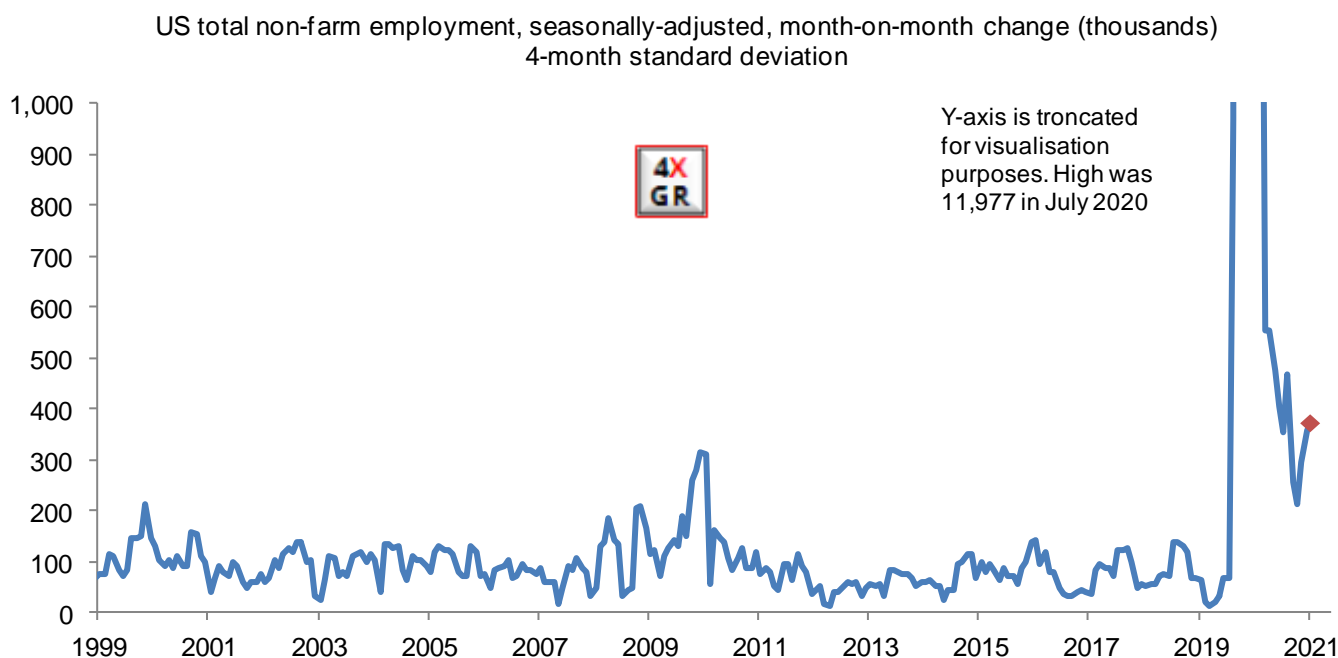
Volatility in US employment well above pre-pandemic levels...even before August surprise

Volatility in the monthly change in total (non-farm) employment surged last spring-summer as employment collapsed in March-April 2020 before rebounding strongly in May-August 2020 (see Figure 4). Volatility then greatly subsided, although there have been a number of peaks (non-farm payrolls exceeded 1.05 million in July 2021) and troughs (employment contracted by 306,000 in December 2020) and therefore volatility remained high by pre-pandemic standards.

Moreover, employment rose by only 235,000 in August, the second lowest print so far this year and well below the June-July average of just over one million and the consensus forecast of 750,000. As a result the 4-month SD in the monthly change in non-farm payrolls (measured in thousands) rose to 372 in August – still well above the 2010-2019 average of about 84 according to our calculations.

The bottom line is that forecasting non-farm payrolls remains challenging, which we attribute at least in part to the particularities of the US labour market at present – namely strong demand as corporates re-assess their staffing requirements but constrained or at least “lumpy” labour supply (this gulf between labour demand and labour supply is arguably even more acute in the United Kingdom with job vacancies now topping one million for the first time ever).

Figure 4: US labour market still subject to the vagaries of strong demand but lumpy supply

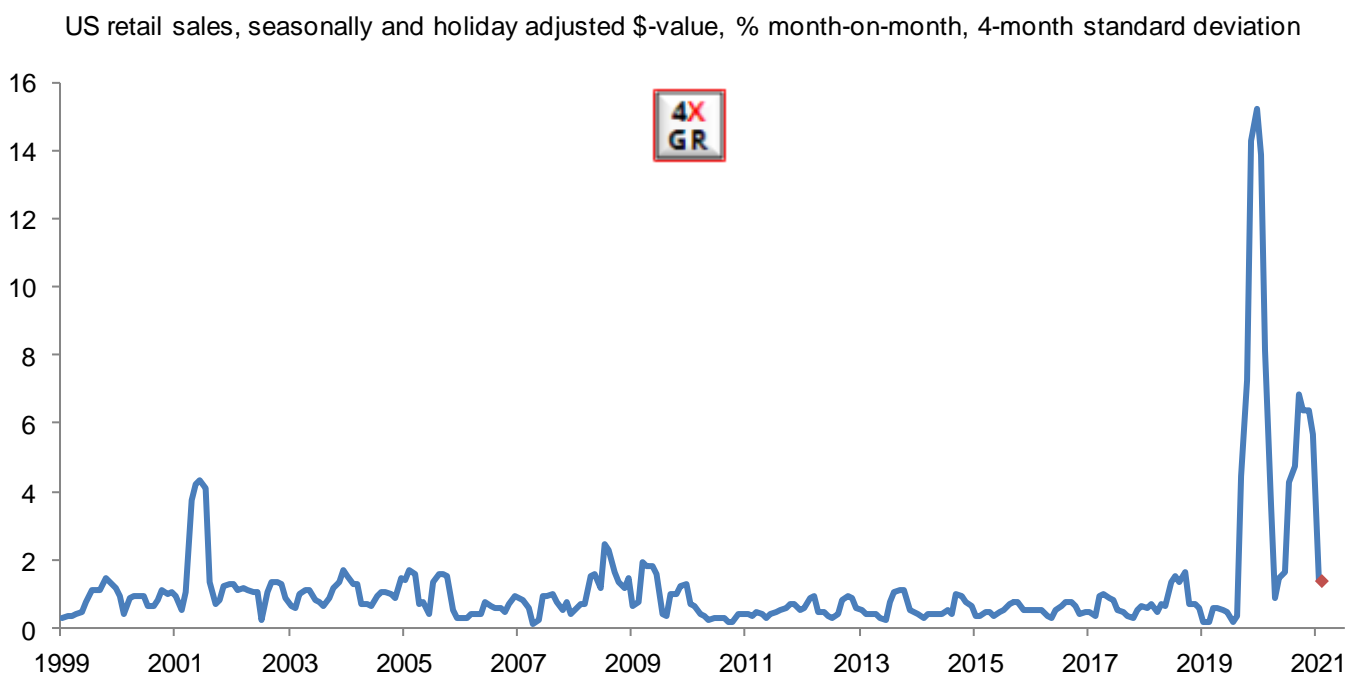


Source: 4X Global Research, US Bureau of Labour Statistics

Retail sales growth has stabilised but still more volatile than in 2010-2019

Volatility in monthly US retail sales growth peaked in Q2 2020 and again spiked in Q1 2021, with retail sales growth surging in January (+7.6% mom) and March (+11.3% mom) largely because of pent-up demand and US households receiving government cheques as part of its \$900bn fiscal stimulus package (see Figure 5). Volatility in monthly retail sales growth has since eased again, with the latter oscillating between -1.8% mom and +0.9% mom in April-August. However, the 4-month SD in August (1.4) was still above the 2010-2019 average of 0.6.

Figure 5: Volatility in retail sales growth has dropped markedly but still high relative to history

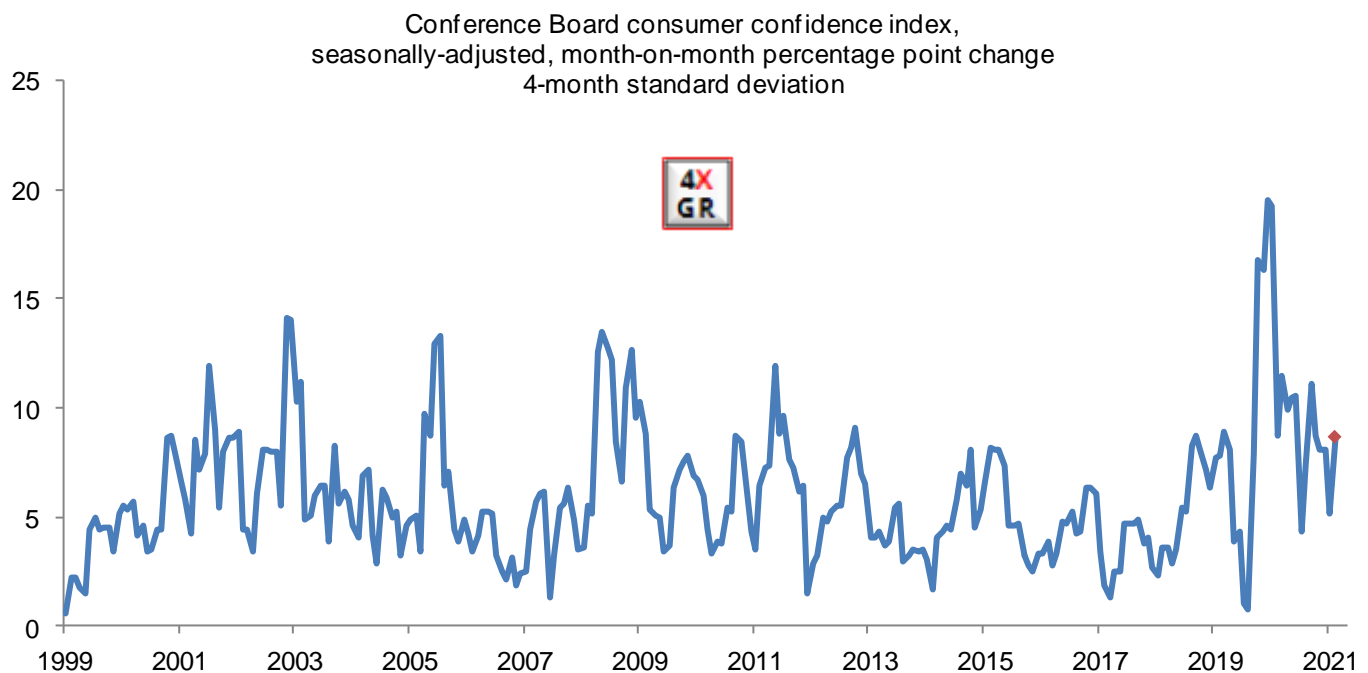


Source: 4X Global Research, US Census Bureau

US consumer confidence remains fickle, perhaps unsurprisingly

One reason in our view why US retail sales growth volatility has remained reasonably high by historical standards is that US consumer confidence, a key driver of household consumption according to our analysis, has remained fickle (see [The key quartet: US income, confidence, net worth and consumption](#), 18th October 2019). As Figure 6 shows, volatility in the monthly Conference Board consumer confidence index has remained at the very top-end of its 2011-2019 range. This is perhaps unsurprising given the still uncertain Covid-19, US policy and economic growth backdrop.

Figure 6: Fickle US consumer confidence may partly explain still volatile retail sales growth



Source: 4X Global Research, US Conference Board

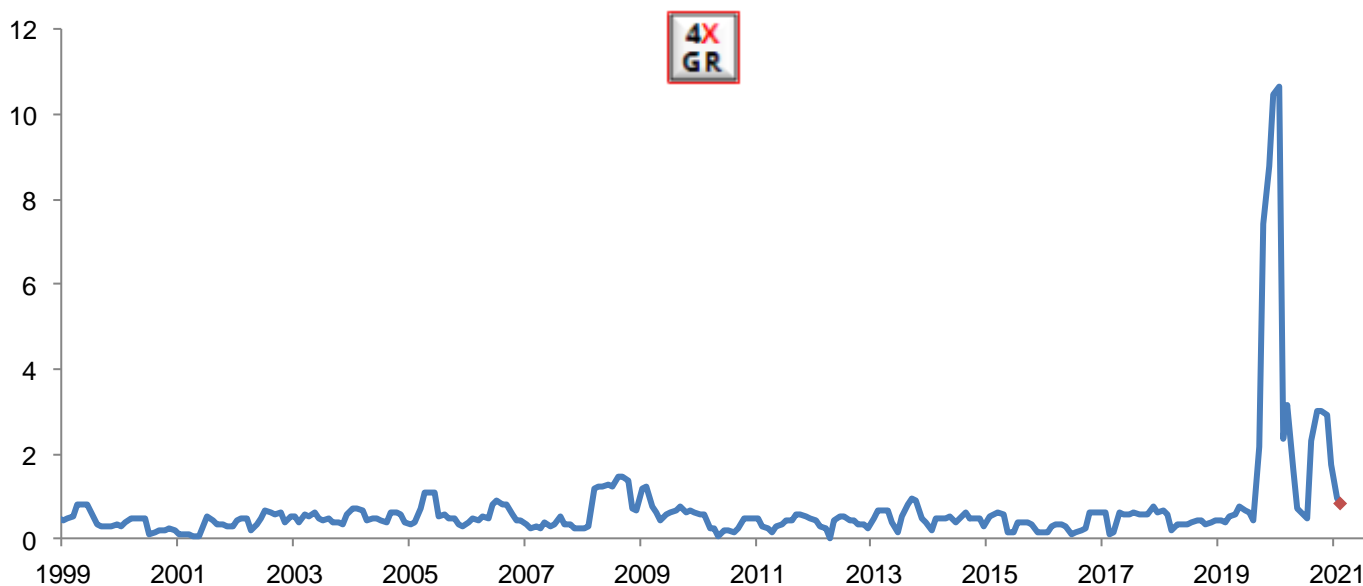
Economic activity in key US service sector has remained capricious albeit at high levels

Volatility in month-on-month manufacturing output growth has fallen sharply, with monthly growth oscillating between -0.3% and +1.6% mom in April-August, although the 4-month SD in August (0.8) was still higher than in 2010-2019 (0.4) – see Figure 7. Volatility in the monthly ISM manufacturing PMI has also collapsed, with the 4-month SD in the monthly percentage point change in August (0.8) well below its pre-pandemic long-term average (1.8) – see Figure 8. The US manufacturing sector has found its feet, even if growth (+2% between March and August) has remained unimpressive.

Conversely, monthly economic activity in the key US service sector has remained capricious albeit at high levels. The ISM non-manufacturing PMI averaged 62.5 in May-August versus 60.3 in the manufacturing sector. However volatility in the monthly ISM non-manufacturing PMI has remained elevated by historical standards, with the 4-month SD in the monthly percentage point change in August (3.6) above its 2010-2019 average of 2.1 according to our calculations (see Figure 8). These data suggests that the US service sector is still more sensitive to changes in the Covid-19 and broader economic landscape than the manufacturing sector.

Figure 7: US manufacturing sector has found its feet even if growth has remained unimpressive

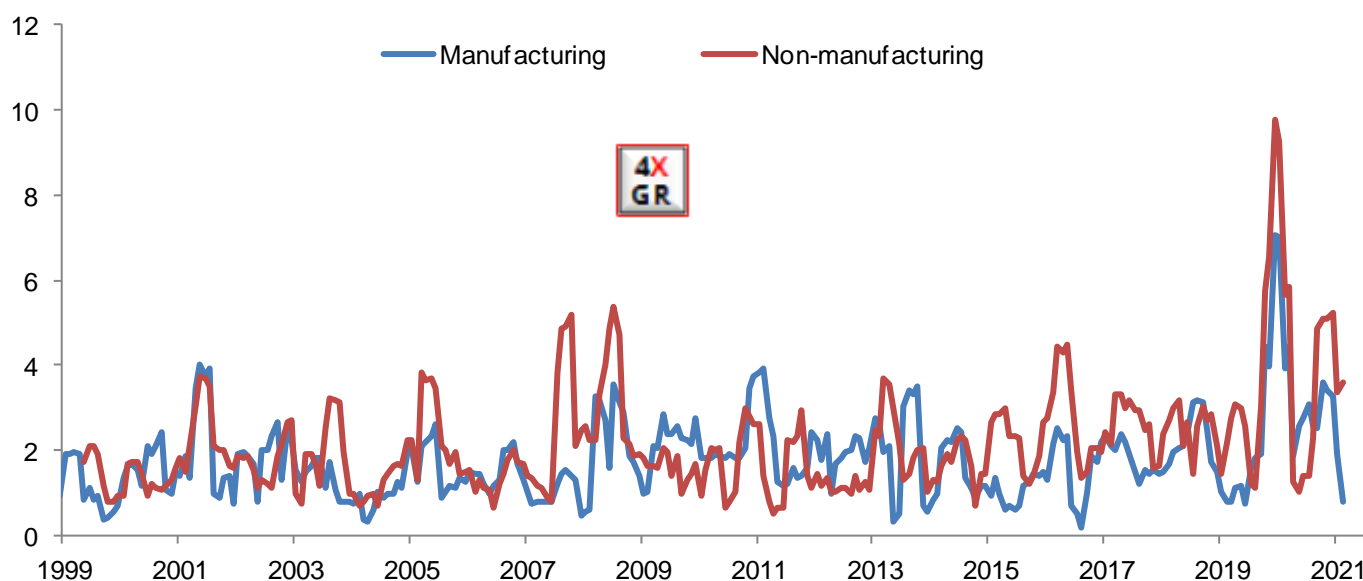
US manufacturing output, seasonally adjusted, % month-on-month, 4-month standard deviation



Source: 4X Global Research, Federal Reserve

Figure 8: Economic activity in service sector far more volatile than in manufacturing, albeit at higher levels

US ISM Purchasing Managers Indices (PMIs), monthly percentage point change, 4-month standard deviation



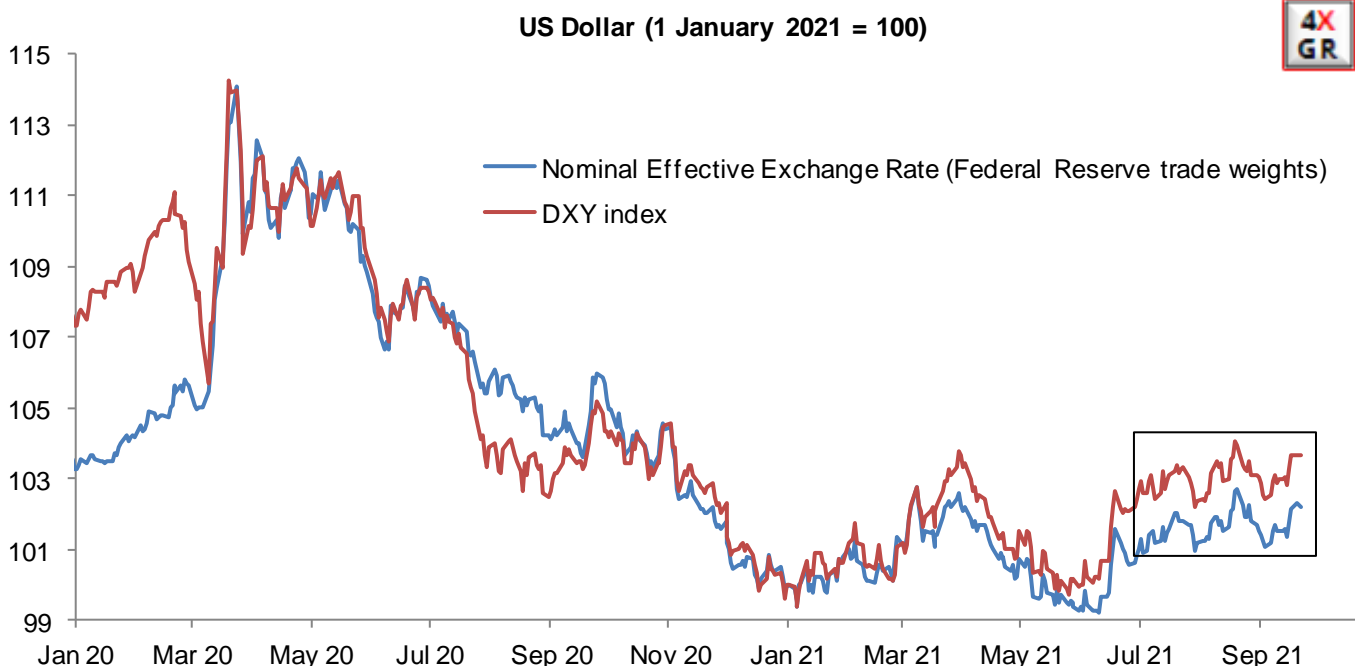
Source: 4X Global Research, Institute for Supply Management

So volatility in most US monthly macro metrics remains high relative to history. This is particularly true for core CPI-inflation, non-farm employment, consumer confidence and the ISM non-manufacturing PMI. And yet volatility in US financial markets has been modest in recent months.

US Dollar showing little volatility in narrow range, volatility in major currencies subdued

The US Dollar NEER has oscillated in a narrow range of just 1.7% for the past 11 weeks according to our estimates (see Figure 9) and within that range daily NEER volatility has been reasonably low (see Figure 10) both in absolute and relative terms.

Figure 9: US Dollar has treaded water in the past couple of months

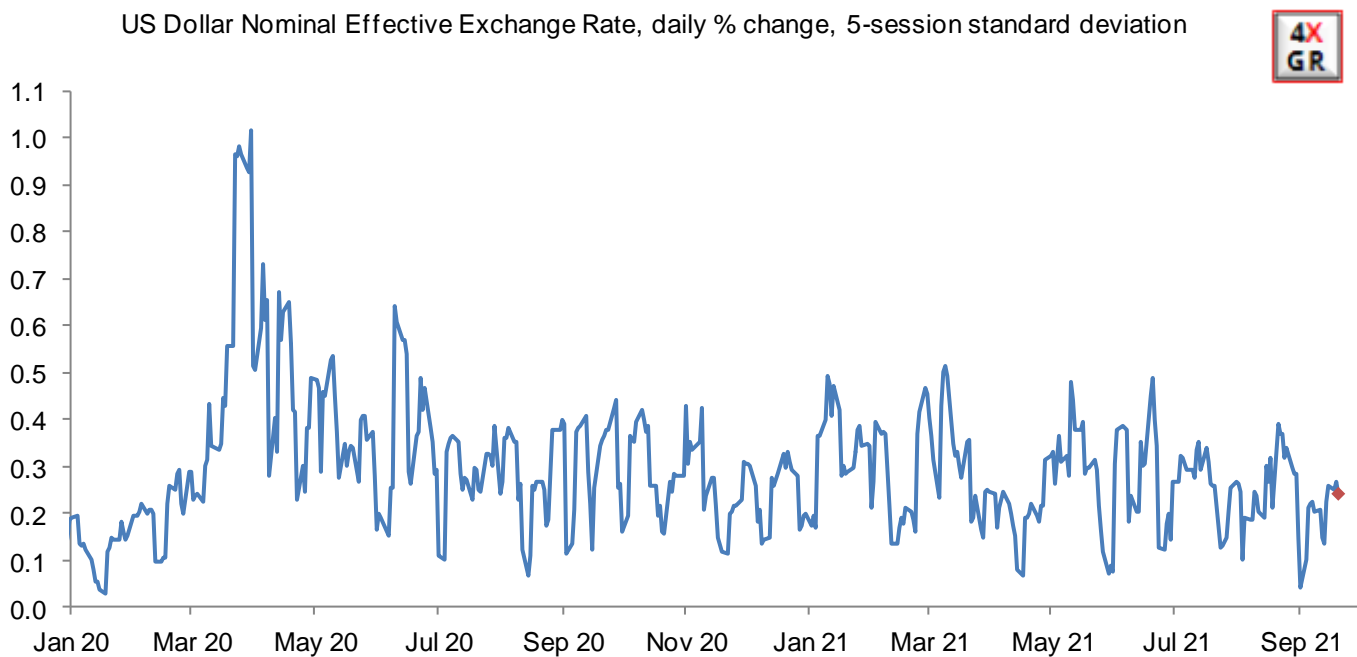


Source: 4X Global Research, Federal Reserve, investing.com

Note: Latest data point is for 22nd September 2021 at time of writing.

The bottom line is that US Dollar has done little since the Federal Reserve's 16th June policy meeting, despite a number of US macro data surprises, question marks about the outlook for US growth and inflation, key monetary and fiscal policy announcements (including Fed Chairperson Powell's Jackson Hole [speech](#) and progress on President Biden's \$1trn infrastructure bill) not to mention changes in US vaccination and international travel policies and significant geopolitical uncertainty.

Figure 10: Daily volatility in Dollar NEER low, as has been the case for the past 12 months



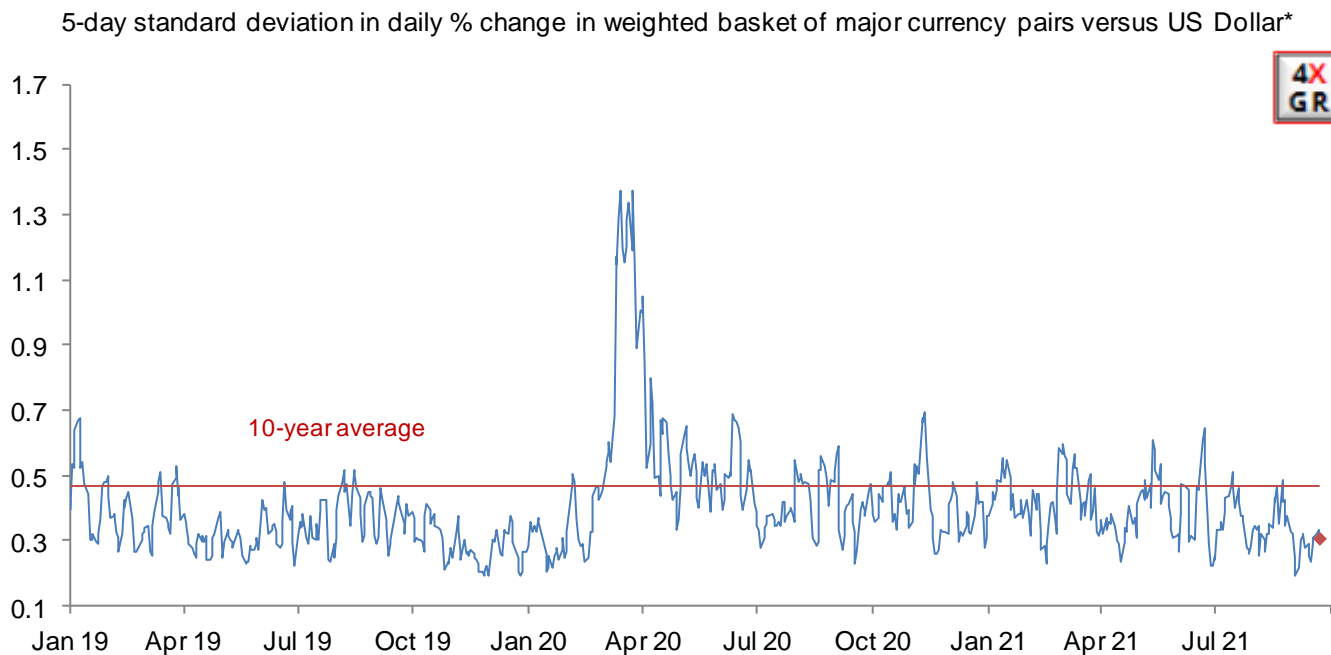
Source: 4X Global Research, Federal Reserve, investing.com

Note: Latest data point is for 22nd September 2021 at time of writing.

Moreover, global FX volatility has remained very low, both in absolute terms and compared to history, a point we had already made in [Low global FX vol: Maturity or complacency?](#) (12th August 2021).

We estimate that realised volatility in a turnover-weighted basket of 32 major currency pairs against the US Dollar – measured by the 5-day Standard Deviation in the daily percentage change in the spot (closing) price – was about 0.30 on 22nd September (see Figure 11). While global FX volatility has risen slightly in the past fortnight, it is still below its level one month ago (0.35 SD) and well below its 10-year average (0.47 SD). Notably global FX volatility is at a similar level as it was in the run-up to the 16th June Federal Reserve policy meeting and the release of a more hawkish FOMC “[dot-chart](#)” (see [Fed: Same game, different rules](#), 22nd June 2021).

Figure 11: Global FX volatility still well below its 10-year average



Source: 4X Global Research, BIS, investing.com

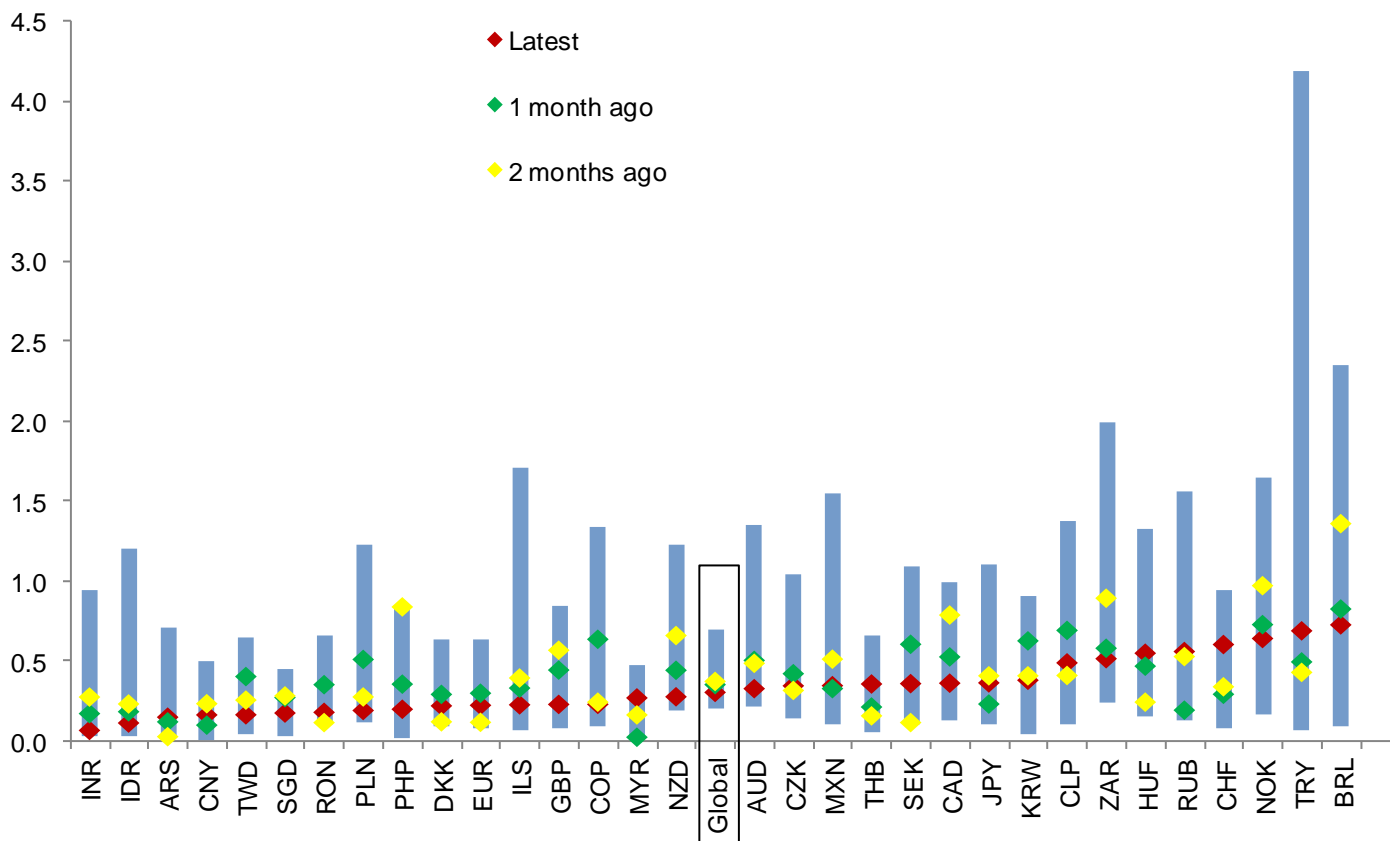
Note: * Spot/closing price. Basket weighted by currency-pair turnover in 2019; currency pairs versus US Dollar are AUD, CAD, CHF, DKK, EUR, GBP, JPY, NOK, NZD, SEK, ARS, BRL, CLP, COP, MXN, CZK, HUF, PLN, RON, RUB, ZAR, TRY, ILS, CNY, IDR, INR, KRW, MYR, PHP, SGD, TWD and THB. Latest data point is for 22nd September 2021 at time of writing.

Turning to individual Dollar currency pairs, volatility in only the Malaysian Ringgit, the high-yielding Russian Rouble and Turkish Lira and the safe-haven Swiss Franc has recently been materially higher than a month ago (see Figure 12). However, volatility in all these currencies has remained well below their 12-month highs.

Figure 12: Volatility in most major currencies lower than a month ago



5-day standard deviation in daily % change versus US Dollar (spot/closing price), past 12 months



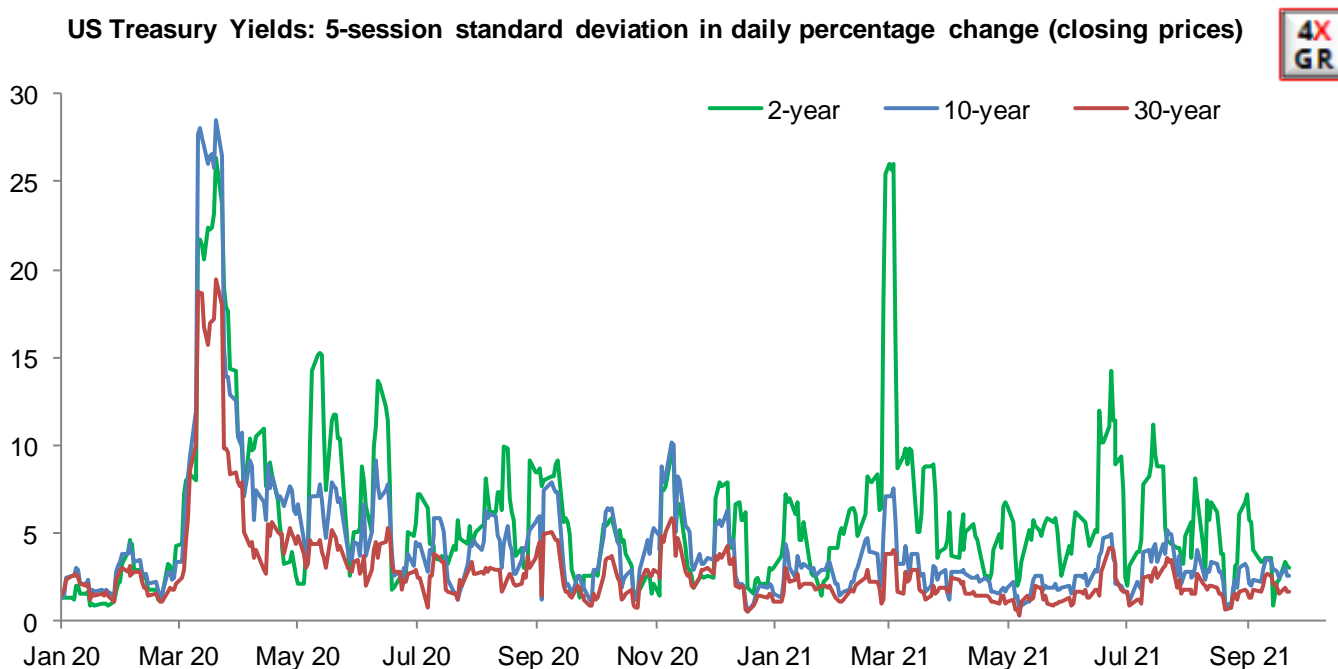
Source: 4X Global Research, BIS, investing.com

Note: Global is basket weighted by currency-pair turnover in 2019; currency pairs versus US Dollar are AUD, CAD, CHF, DKK, EUR, GBP, JPY, NOK, NZD, SEK, ARS, BRL, CLP, COP, MXN, CZK, HUF, PLN, RON, RUB, ZAR, TRY, ILS, CNY, IDR, INR, KRW, MYR, PHP, SGD, TWD and THB. Latest data point is for 22nd September 2021 at time of writing.

US Treasury yields showing little exuberance, even at the short-end

Volatility in US Treasury yields jumped in the wake of the Federal Reserve's policy meeting on 16th June, particularly at the short-end of the curve, but has since been modest (see Figure 13)

Figure 13: Volatility in US Treasury yields spiked in June but since then has been far more tempered

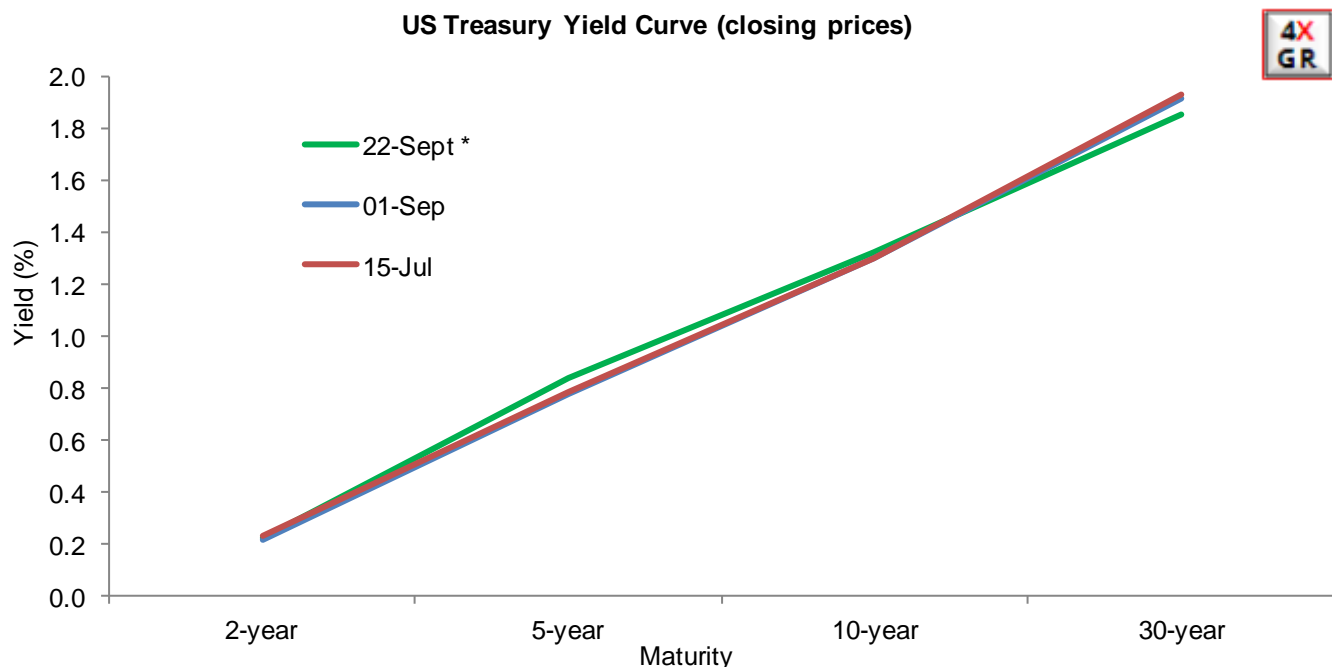


Source: 4X Global Research, [investing.com](https://www.investing.com)

Note: Latest data points are for 22nd September 2021 at time of writing.

In level terms the shape of the US Treasury yield curve has ultimately not changed a great deal since mid-July, let alone in the past three weeks (see Figure 14).

Figure 14: Shape of US Treasury yield curve subject of much debate, despite lack of tangible change



Source: 4X Global Research, [investing.com](https://www.investing.com)

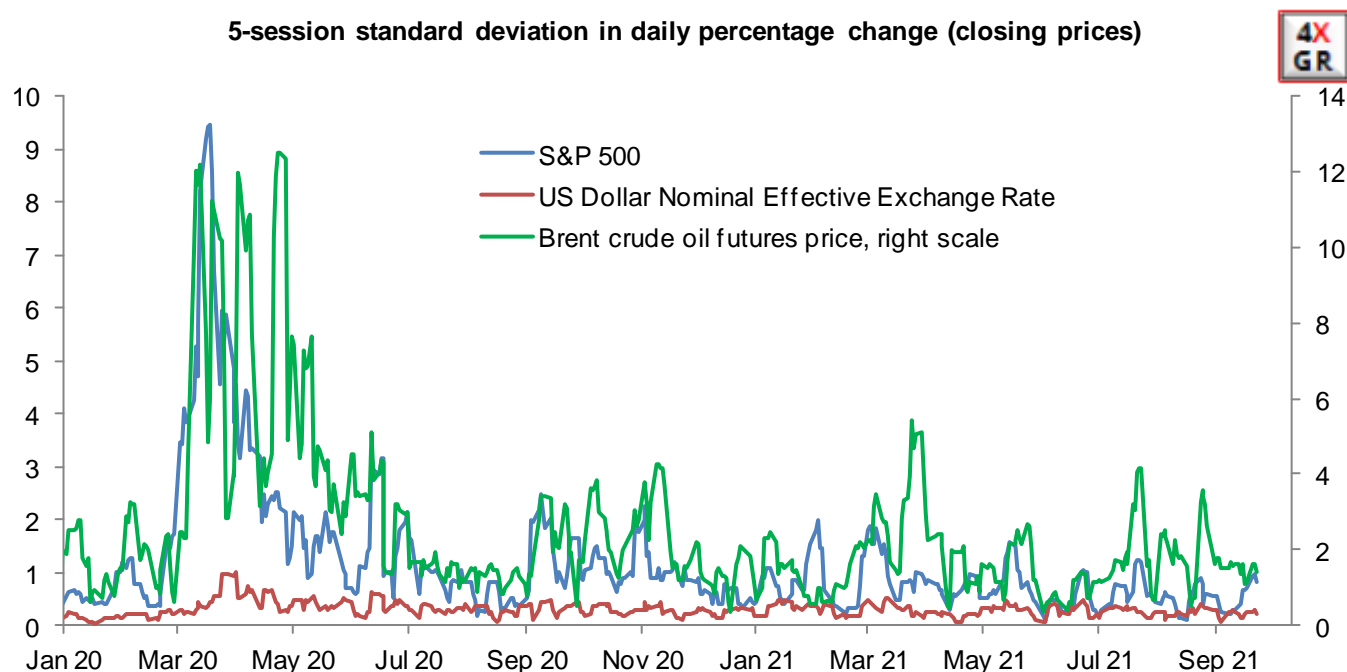
Note: *At time of writing.

S&P 500 has been choppy but Evergrande (rather than US data) the major culprit

Volatility in the S&P 500 has picked up in recent days but remains broadly in line with the past 12 months (see Figure 15). Moreover, volatility in the US equity index has arguably been spurred by concerns over the future of highly-indebted Chinese property developer Evergrande and the implications for the domestic banking and property sectors and the broader Chinese economy, rather than by US (or for that matter global) macro data releases in our view.

Finally the price of Brent crude oil has also been far less volatile in the past month (see Figure 15) and in level terms traded in a reasonably narrow range of 2.5% since mid-September.

Figure 15: Even volatility in Brent crude oil prices has come down



Source: 4X Global Research, Federal Reserve, investing.com

Note: Latest data points are for 22nd September 2021 at time of writing.

That is of course not to say that US macro data have not mattered and will not matter going forward. They have and they will. At the very least macro data are a key input into Federal Reserve monetary policy (and specifically when it will start tapering its monthly asset purchases) which in turn has a strong bearing on US and global financial markets – as evidenced by markets’ reactions to the Federal Reserve’s 16th June policy meeting and Chairperson Powell’s Jackson Hole [speech](#) on (see [Fed: Same game, different rules](#), 22nd June 2021 and [Powell Put in play but greater challenges ahead](#), 1st September 2021).

However, our analysis does suggest that financial markets have become somewhat more detached from US macro data releases, even when these have materially deviated from consensus forecasts. At the very least their direct impact on US equity and interest rate markets and global FX and commodity markets has been modest in recent months.



DISCLAIMER & DISCLOSURE STATEMENT

THIS MATERIAL IS: (I) FOR YOUR PRIVATE INFORMATION, AND WE ARE NOT SOLICITING ANY ACTION BASED UPON IT; (II) NOT TO BE CONSTRUED AS AN OFFER OR A SOLICITATION OF AN OFFER TO BUY OR SELL ANY SECURITY IN ANY JURISDICTION WHERE SUCH OFFER OR SOLICITATION WOULD BE ILLEGAL; AND (III) BASED UPON INFORMATION THAT WE CONSIDER RELIABLE.

4X GLOBAL RESEARCH DOES NOT WARRANT OR REPRESENT THAT THE PUBLICATION IS ACCURATE, COMPLETE, RELIABLE, FIT FOR ANY PARTICULAR PURPOSE OR MERCHANTABLE AND DOES NOT ACCEPT LIABILITY FOR ANY ACT (OR DECISION NOT TO ACT) RESULTING FROM THE USE OF THIS PUBLICATION AND RELATED DATA. TO THE MAXIMUM EXTENT PERMISSIBLE ALL WARRANTIES AND OTHER ASSURANCES BY 4X GLOBAL RESEARCH ARE HEREBY EXCLUDED AND 4X GLOBAL RESEARCH SHALL HAVE NO LIABILITY FOR THE USE, MISUSE, OR DISTRIBUTION OF THIS INFORMATION.

The analysis and information presented in this report (Report) by 4X Global Research Ltd (4X Global Research), an independent research company registered in the UK, is offered for subscriber interest only. The content is intended for investment professionals only, and is not to be viewed or used by individual investors in any regulatory jurisdiction. By accessing this Report you confirm that you meet these criteria.

This Report is not to be used or considered as a recommendation to buy, hold or sell any securities or other financial instruments and does not constitute an investment recommendation or investment advice. The information contained in this Report has been compiled by 4X Global Research from various public and industry sources that we believe to be reliable; no representation or warranty, expressed or implied is made by 4X Global Research, its affiliates or any other person as to the accuracy or completeness of the information. 4X Global Research is not responsible for any errors in or omissions to such information, or for any consequences that may result from the use of such information. Such information is provided with the expectation that it will be read as part of a wider investment analysis and this Report should not be relied upon on a stand-alone basis. Past performance should not be taken as an indication or guarantee of future performance; we make no representation or warranty regarding future performance. The opinions expressed in this Report reflect the judgment of 4X Global Research as of the date hereof and are subject to change without notice.

This Report is not, and should not be construed as, an offer or the solicitation of an offer to buy or sell any securities. The offer and sale of securities are regulated generally in various jurisdictions, particularly the manner in which securities may be offered and sold to residents of a particular country or jurisdiction. Securities referenced in this Report may not be eligible for sale in some jurisdictions. To the fullest extent provided by law, neither 4X Global Research nor any of its affiliates, nor any other person accepts any liability whatsoever for any direct or consequential loss, including without limitation, or lost profits arising from any use of this Report or the information contained herein.

No director, officer or employee of 4X Global Research is on the board of directors of any company referenced herein and no one at any such referenced company is on the board of directors of 4X Global Research. 4X Global Research does not invest in any securities although it is possible that one or more of 4X Global Research's directors, officers, employees or consultants may at times be invested in the securities referenced.

4X Global Research is not authorized or regulated in the United Kingdom by the Financial Conduct Authority (FCA) or by any other regulator in any jurisdiction for the provision of investment advice. Specific professional financial and investment advice should be sought from your stockbroker, bank manager, solicitor, accountant or other independent professional adviser authorized pursuant to the Financial Services and Markets Act 2000 if you are resident in the United Kingdom or, if not, another appropriately qualified independent financial adviser who specializes in advising on the acquisition of shares and other securities before any investment is undertaken.

This Report, including the text and graphics, is subject to copyright protection under English law and, through international treaties, other countries. No part of the contents or materials available in this Report may be reproduced, licensed, sold, hired, published, transmitted, modified, adapted, publicly displayed, broadcast or otherwise made available in any way without 4X Global Research's prior written permission. All rights reserved. This document is produced using open sources believed to be reliable. However, their accuracy and completeness cannot be guaranteed. The statements and opinions herein were formed after due and careful consideration for use as information for the purposes of investment. The opinions contained herein are subject to change without notice. The use of any information contained in this document shall be at the sole discretion and risk of the user. Investors should consider this report as only a single factor in making their investment decision and, as such, the report should not be viewed as identifying or suggesting all risks, direct or indirect, that may be associated with any investment decision.

No liability whatsoever is accepted for any loss arising whether directly or indirectly as a result of the recipient acting on such information or opinion or estimates. 4X Global Research employees may have or take positions in the markets and securities mentioned in this document. The stated price of any securities mentioned herein is not a representation that any transaction can be effected at this price. Investing in securities may entail certain risks. The securities referred to are not suitable for all investors and should not be relied upon in substitution for the exercise of independent judgment. This material is not directed at you if 4X Global Research is prohibited or restricted by any legislation or regulation in any jurisdiction from making it available to you. 4X Global Research and its analysts are remunerated for providing independent investment research to financial institutions, corporations, and governments.

DISCLOSURE: This Report is not to be copied, forwarded or otherwise disseminated to non-subscribers in electronic or physical form without prior consent.