US Treasury Market Daily

Supply chain disruptions and the inflation curve

- The Treasury curve bullishly steepened, with front-end yields declining 1-5bp, despite a modest bounce in domestic equities. Curve directionality has shifted over the last few days, with the curve now steepening in rallies
- Given the slower-than-expected resumption of activity in China, we have been asked whether the supply chain disruptions from COVID-19 could push US inflation higher over the near term. However, we find little historical evidence of supply chain disruptions impacting inflation and think the demand side shock is likely to be the more significant factor. Stay neutral on breakevens
- Tomorrow Treasury will auction $32bn 7-year notes. Treasury yields have declined substantially since the last auction and intermediate yields appear rich relative to their drivers. Given current valuations and recent market volatility we think a concession is required in order for this supply to be digested smoothly
- The 2s/10s curve reverses from 9.5-13bp support and probes the 17bp 200-day MA as risky markets stay under pressure and the front end outpaces the rally further out on the curve

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Statistics for various on the run Treasury yields and curve spreads

		Close	1d chg (bp)	WTD chg (bp)	YTD chg (bp)	3m avg	3m low	3m high	3m pctl.
Yields (%)	4wk	1.65	6.1	6.1	17.5	1.55	1.47	1.65	100%
	13wk	1.54	1.7	-1.4	-1.4	1.56	1.52	1.59	35%
	26wk	1.45	0.0	-6.7	-12.9	1.56	1.45	1.62	0%
	52wk	1.30	0.0	-13.4	-28.5	1.52	1.30	1.60	0%
	2y	1.14	-4.6	-19.1	-39.1	1.52	1.14	1.67	0%
	5y	1.13	-2.5	-18.3	-55.0	1.55	1.13	1.75	0%
	10y	1.31	-2.0	-15.9	-59.5	1.73	1.31	1.93	0%
	30y	1.80	-0.6	-11.9	-58.3	2.18	1.80	2.38	0%
Curves (bp)	2s/5s	-1.2	2.1	0.9	-15.9	3.5	-4.8	12.2	21%
	5s/10s	17.7	0.5	2.4	-4.5	18.0	14.3	22.7	41%
	2s/10s	16.6	2.6	3.2	-20.4	21.5	11.1	35.0	23%
	10s/30s	48.7	1.4	4.0	1.2	45.2	42.0	49.4	91%
B/E (bp)	5y	152.4	0.0	-10.3	-16.4	163.4	152.4	172.0	0%
	10y	153.4	0.4	-8.6	-24.1	169.8	153.0	180.3	1%
	30y	162.2	0.4	-6.9	-17.9	175.7	161.8	183.0	2%

Source: J.P. Morgan

See page 8 for analyst certification and important disclosures.

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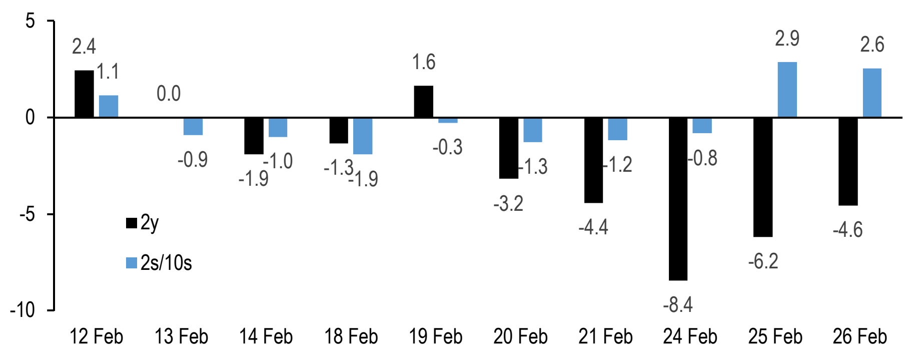
Market views

The Treasury curve bullishly steepened, with front-end yields declining 1-5bp, despite a modest bounce in domestic equities. As we noted yesterday, the shift in curve directionality is intriguing: the curve has steepened in the move to lower yields after flattening in rallies for the bulk of 2020 (**Exhibit 1**). The first leg of the move to lower yields was certainly a traditional flight-to-quality, as intermediate Treasury yields tracked the performance of risk assets and commodity prices globally, and far outpaced their fundamental drivers. However, as the front end has taken leadership in recent days, this could be reflective of one of two dynamics. **First**, it could reflect expectations of more imminent Fed action, as markets are now pricing in two nearly full 25bp eases over the next 6 months.

Second, it could reflect expectations that a fiscal response will accompany a monetary response. Notably, the Hong Kong SAR government announced short-term relief measures, amounting to almost HKD120bn, or about 4.1% of GDP (see *Hong Kong government announces a significant counter-cyclical fiscal package*, Grace Ng, 2/26/20). Moreover, the press suggested the German finance minister was considering a pause in the federal debt break to provide relief for local German municipalities, though this has been in discussion for months, and does not seem related to the COVID-19 outbreak (see *Germany: Scholz's debt brake plan is not about fiscal stimulus*, Greg Fuzesi, 2/26/20). We err toward the former, as the request for additional COVID-19 funding in the US is barely noticeable compared the $1tn deficit that we already project in FY20.

Exhibit 1: Curve directionality has shifted over the last few days, with the curve now steepening in rallies
Daily changes in 2s/10s Treasury curve and 2-year Treasury yields; bp



Source: J.P. Morgan

Supply chain disruptions unlikely to support a flatter breakeven curve

After exhibiting a sharp underperformance versus their drivers to start the week, TIPS breakevens held up better today, ending the day unchanged despite the decline in nominal yields and oil prices. Nonetheless, 5-year breakevens are trading near the low end of their 6-month range and continue to appear roughly 23bp too narrow versus our fair value estimate. Additionally, we have observed an interesting dynamic at the very front of the curve. Given a larger hit to China IP than previously expected, as the pace of work resumption since the end of the factory shutdowns has been slow, we have been asked whether the supply chain disruptions from COVID-

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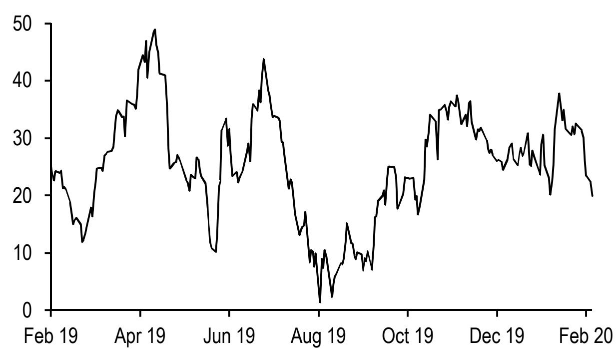
19 could push US inflation higher over the near term. In fact, the flattening of the very front end of the inflation swap curve over the last couple of weeks suggests that investors could be expecting such an effect over the coming months: **Exhibit 2** shows that the 3m1y/2y1y inflation swap curve has flattened by nearly 20bp since its local peak earlier this month. Recall that we observed a similar flattening in this part of the curve in the last couple of years following tariff announcements as markets priced in near-term, temporary price increases (see *TIPS Strategy*, 5/10/19). However, we find little historical evidence of supply chain disruptions impacting inflation and think the demand side shock is likely to be the more significant driver of headline CPI inflation if fears over the outbreak continue to worsen.

We have already seen evidence of disruptions for various US tech companies, including Apple, which earlier this month released revised revenue guidance due to a COVID-19 driven hit to iPhone volumes. Our own equity analysts note that the near-term impact of COVID-19 on the Apple supply chain could be significant, but the hit to volumes is likely to be driven more by the decline in Chinese domestic demand than the operational supply chain constraints (see *Apple Supply Chain*, William Yang, et al, 2/18/20 and *Apple*, Samik Chatterjee, 2/17/20).

Empirically, we find little evidence that supply chain disruptions have had a material impact on subsequent inflation over the past four decades. We proxy supply chain disruptions using the ISM supplier deliveries index, which measures how fast or slow deliveries of materials and services purchased for business are received by companies versus the previous month. We see little correlation between this series and various measures of price inflation, including goods CPI inflation, which should in theory be most directly affected by the disruptions (**Exhibit 3**). The exhibit shows goods CPI inflation versus the 1-year lagged supplier deliveries index—it could be argued that supply chain disruptions should affect prices within a few months and wash out over a year, but we also find that 3-month price changes reflect no sensitivity to the 3-month lagged deliveries index over the period. Moreover, it's worth noting that we haven't yet observed a material weakening in this index as of the latest data.

Exhibit 2: The flattening of the very front end of the inflation swap curve could reflect an expectation of a near-term boost to prices from supply chain disruptions

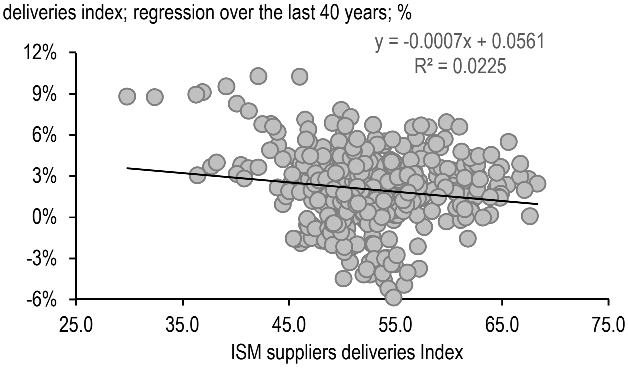
3m1y/2y1y zc inflation swap curve; bp



Source: J.P. Morgan

Exhibit 3: Empirically, we find little evidence that supply chain disruptions have had a material impact on inflation rates over the past four decades

Commodities CPI inflation % oya regressed on 1y lagged value of ISM suppliers deliveries index; regression over the last 40 years; %



Source: ISM, J.P. Morgan

Instead, **we continue to see downside risks to the trajectory of US inflation, particularly if the demand-side weakness in energy prices and dollar strength persist**, which would likely add steepening pressure to the inflation swap and

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breakeven curve from here. On the energy front, there is a strong possibility that an output cut will be announced at the March OPEC+ meeting, which is likely to support a stabilization in Brent prices. Given these dynamics, we remain neutral on the breakeven curve for now.

Seven-year auction preview

Treasury will complete its end-of-month supply process tomorrow with $32bn 7-year notes at 1pm, unchanged in size from last month. The January auction cleared at 1.570%, 0.6bp cheap to pre-auction levels, as end-user demand declined 7.6%-pts to 75.3% (**Exhibit 4**). At a more granular level, investment manager demand increased 1.6%-pts to 62.7%, while foreign demand decreased 11.3%-pts to 9.3%.

Exhibit 4: The January 7-year auction stopped 0.6bp cheap to pre-auction levels as end-user demand weakened

Statistics for 7-year Treasury auctions; units as marked

Date	Yield (%)	Size ($bn)	Tail (bp)	Bid/ cover	Direct (%)	Indirect (%)	End user (%)	Foreign (%)	Inv. mgr (%)
29-Aug	1.489	32	2.3	2.16	16.1	50.2	66.2	8.7	54.9
26-Sep	1.633	32	-0.6	2.49	14.6	65.2	79.8	13.1	64.1
24-Oct	1.657	32	-0.5	2.46	14.5	65.4	79.9	12.8	64.7
26-Nov	1.719	32	0.3	2.44	10.1	69.6	79.7	15.7	61.3
26-Dec	1.835	32	-0.9	2.47	23.4	59.4	82.9	20.6	61.1
28-Jan	1.570	32	0.6	2.37	17.2	58.0	75.3	9.3	62.7
3-aucn avg	1.708	32	0.0	2.43	16.9	62.4	79.3	15.2	61.7
6-aucn avg	1.651	32	0.2	2.40	16.0	61.3	77.3	13.3	61.5

Source: US Treasury, J.P. Morgan

Seven-year yields have declined by 34bp since the last auction and by 27bp just over the past week. Moreover, intermediate Treasuries appear rich after adjusting for market's Fed, inflation, and growth expectations, as well as the share of negative yielding debt in the DM and investor positioning. While outright and relative valuations indicate a concession will be necessary to underwrite this supply smoothly, the uncertain macro backdrop has led to persistent demand for Treasuries, and we do not expect this duration demand to abate over the coming 24 hours. Thus, this auction is likely to be digested without incident.

Technical highlights

Global yields attempt to stabilize near some important chart levels, but still lack enough technical evidence to significantly raise the probability of a lasting trend reversal. Additionally, risky markets remain under pressure and some of the most cyclically sensitive groups continue to underperform. As global equity realized volatility expanded over the past few days, the Treasury curve also saw a notable transition. Up until last week, a bull flattening trend dominated the **2s/10s curve**, taking that market to anticipated support at **9.5-13bp** (**Exhibit 5**). We had thought either the **10-year note** rally would fade near **1.40%** and bull flattening would reverse into a bear steepening trend, or equity weakness on the heels of last week's systematic sell signals could lead to a more pronounced risk-off tone and translate to a bull steepening trend for the Treasury curve. Unfortunately, the COVID-19 outbreak headlines caused the latter and led to a **2s/10s curve** rebound to the **17bp** 200-day MA. Key short-term resistance rests at the **21-23bp** 50-day MA and Feb 4

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rejection of the late-Jan breakdown area. Longer-term range resistance rests at the **35bp** late-2018 through current range highs. We will continue to monitor outright duration and risky market technicals for signs of a trend reversal. If one occurs, we assume some probability of Fed eases will come out of the market and cause near-term curve volatility. However, we suspect that a risky market rebound and yield backup would ultimately lead to a steeper curve.

Exhibit 5: The 2s/10s curve reversed from anticipated support at 9.5-13.5bp and bull steepened to the 17bp 200-day MA. Key short-term resistance rests at 21-23bp

2s/10s curve, daily closes; bp

Source: J.P. Morgan, CQG

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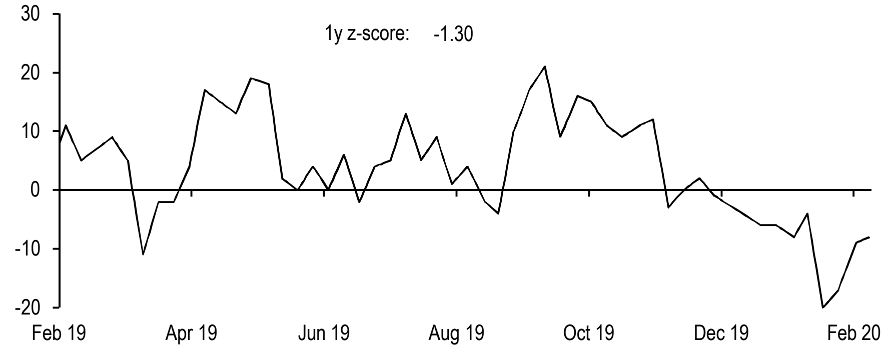
Appendix: Position technicals overview

Exhibit A1: J.P. Morgan Treasury Client Survey

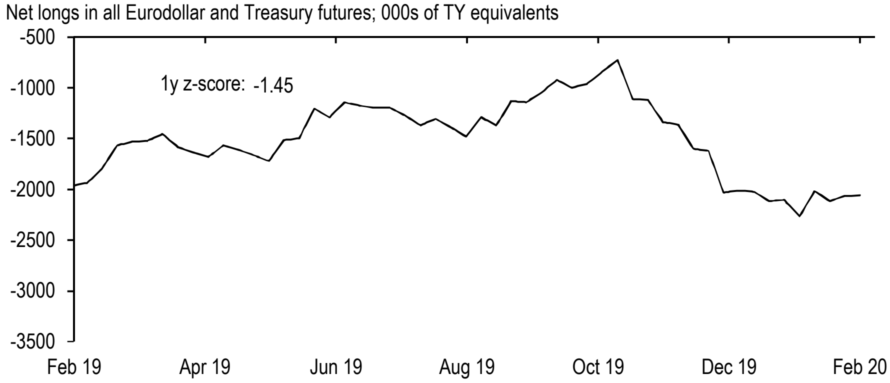
Net longs; %



Source: J.P. Morgan

Exhibit A2: CFTC non-commercial positions

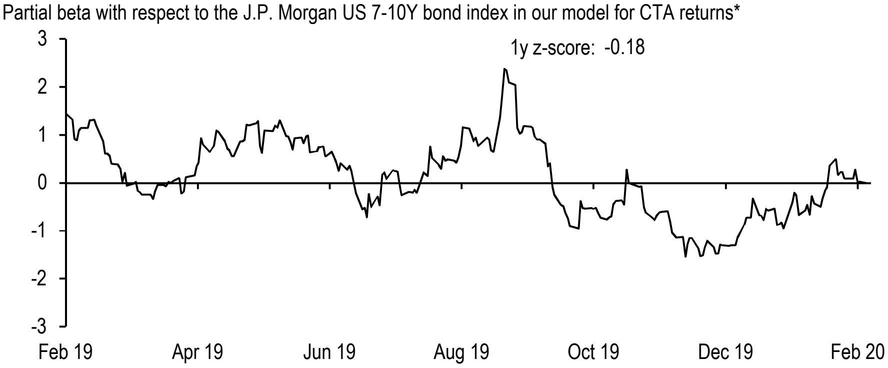
Net longs in all Eurodollar and Treasury futures; 000s of TY equivalents



Source: CFTC

Exhibit A3: CTA exposure to 10-year Treasuries

Partial beta with respect to the J.P. Morgan US 7-10Y bond index in our model for CTA returns*



* Model is a 1-month regression of daily excess returns on the CTA index versus daily excess returns on 1) J.P. Morgan US 7-10Y bond index, 2) J.P. Morgan ex-US Global Bond Index, 3) S&P500 index, 4) J.P. Morgan global cash index, and 5) Goldman Sachs Commodities Index

Source: Bloomberg, SG, J.P. Morgan

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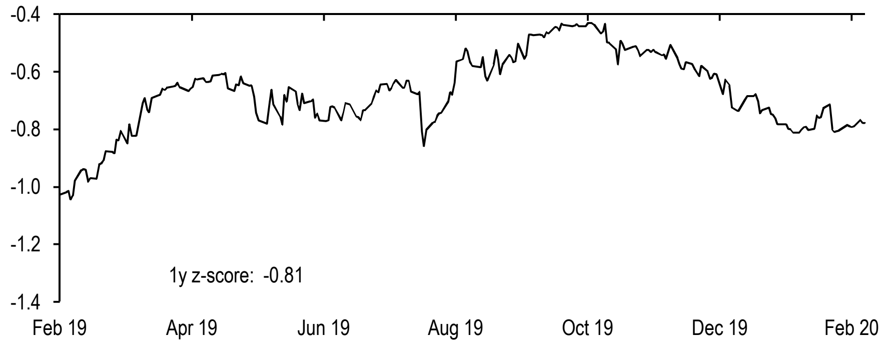
Exhibit A4: Active Core Bond Fund* Managers' exposure to 10-year Treasuries

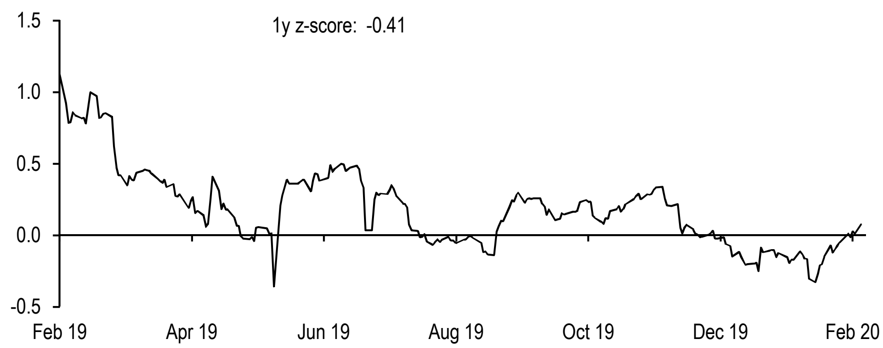
Partial beta with respect to 10-year US Treasury yields in our model for active bond fund excess returns**



* The core bond fund index is comprised of the 20 largest (by assets under management) actively-managed US core bond funds
** Model is a 3-month regression of daily excess returns on the bond fund index versus daily changes in 1) 10-year US Treasury yields, 2) 5s/30s Treasury curve, 3) constant-maturity 5-year CDX.IG spread, 4) MBS Libor option-adjusted spread, and 5) 3Mx10Y swaption volatility; Source: Bloomberg, J.P. Morgan

Exhibit A5: Macro Hedge Fund exposure to 10-year Treasuries

Partial beta with respect to the J.P. Morgan US 7-10Y bond index in our model for macro hedge fund returns*

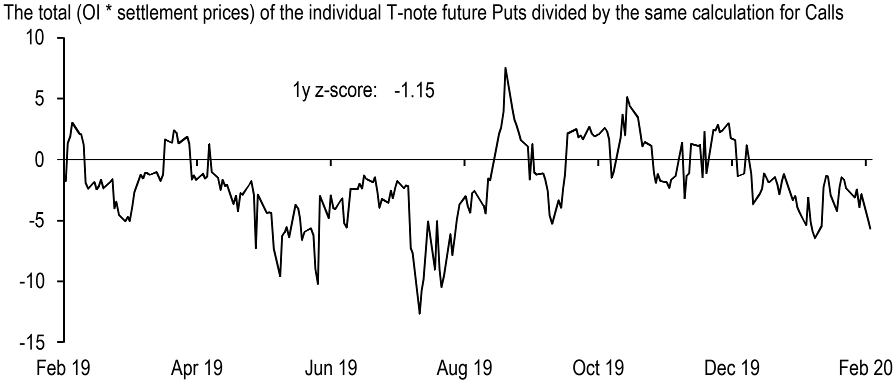


* Model is a six-week regression of daily excess returns on the HFRX Macro/CTA index versus daily excess returns on 1) J.P. Morgan US 7-10Y bond index, 2) J.P. Morgan ex-US Global Bond Index, 3) S&P 500 equity index, 4) MSCI G7 ex-US equity index, 5) J.P. Morgan global cash index, and 6) Goldman Sachs Commodities Index.

Source: Bloomberg, HFR, J.P. Morgan

Exhibit A6: T-note dollar weighed Put/Call ratio

The total (OI * settlement prices) of the individual T-note future Puts divided by the same calculation for Calls



Source: CFTC, Bloomberg, CQG, CME, J.P. Morgan

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