

Interest Rate Derivatives

The relative rise of the curve factor

- Notwithstanding this week's rise in volatility, the 2-sided risks to the path of policy are steadily moderating and should help sustain declines in jump risk and delivered volatility - we turn bearish on volatility in short expiries
- But a deeper look utilizing our Implied PCA approach suggests that such a decline in volatility will be manifested as a decline in the magnitude of the level factor, while the second principal component remains stable in magnitude. Given the "shape" of the second factor, which points to the curve pivoting around the 5-year sector, volatility on 5-year tails will benefit the least from this stability of the second principal component, and we recommend underweighting 5-year tails versus the wings
- A decline in the numerical significance of the level factor also means yield curves will be less directional with short term rates, since curve directionality is a direct consequence of a level factor that produces synchronized but unequal moves across the curve. This is evident in the decoupling between (say) the 5s/30s curve and 5Y yields. As a result of this shift, we now recommend stopping out of conditional bear flatteners
- One way to mitigate exposure to a waning level factor is to look for "box" trades that pair a forward curve steepener with a spot curve flattener - initiate 2Y forward 1s/10s steepeners paired with a 3M forward equal-risk 3s/15s flattener to earn attractive risk-adjusted carry
- Swaption implied volatility is back to exhibiting lognormal behavior, with vol-rate correlations finally moving past the regional banking crisis and returning to pre-March levels. We recommend taking advantage of this, and adding pay-fixed swap overlays to short volatility positions in 5Y tails, as a way to enhance carry while hedging against higher rates
- We revise our 2-year swap spread fair value model and find that 2-year spreads continue to appear narrow to fair value. We maintain our widening bias, but recommend rolling spread wideners into the mid-2026 sector to also benefit from attractive slide. We turn neutral elsewhere on the spread curve
- We discuss our outlook for Treasury futures calendar spreads as we approach the roll period. We recommend using bpv-weightings in all sectors except the classic bond contract, where a 1:1 weighting suffices. Of note, the wildcard option in the WN contract is worth less this time, thanks to a higher CTD conversion factor and lower post-close vol. This changes the incentive imbalance between longs and shorts going into first notice day, leaving us bullish on the weighted WN calendar spread. Elsewhere, a preponderance of commercial longs is likely to lead to narrowing pressure in the UXY, TY, FV and TU sectors and we are bearish on these weighted calendar spreads

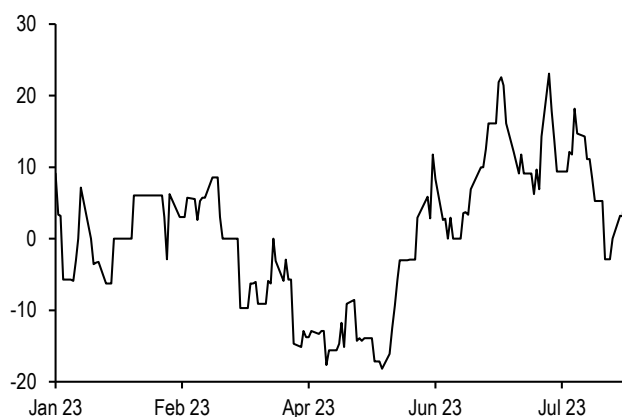
The relative rise of the curve factor

In the two weeks since our last publication, yields are uniformly higher across the curve by 14-22bp, with the largest increases coming in the belly of the curve. To some extent, these moves reflect better economic data - Retail Sales surprised strongly to the upside, for instance, and our economists' EASI index of economic data surprises has risen by over 10 points in the past week (**Figure 1**). Against this positive backdrop, the 1st/5th SOFR futures curve steepened by over 20bp over the past two weeks, largely the result of OIS forwards at 2024 meeting dates pricing in less easing while hiking expectations over the remainder of this year are only modestly higher (**Figure 2**). Given the steepening of the 1st/5th SOFR

futures curve, forward swap yield curves as well as spot curves anchored in the belly are flatter over this period, while the very front end of the curve steepened. Amidst all this, volatility is higher relative to 2-week-ago levels while swap spreads are very modestly narrower (**Figure 3**).

Figure 1: Economic data has surprised to the upside recently

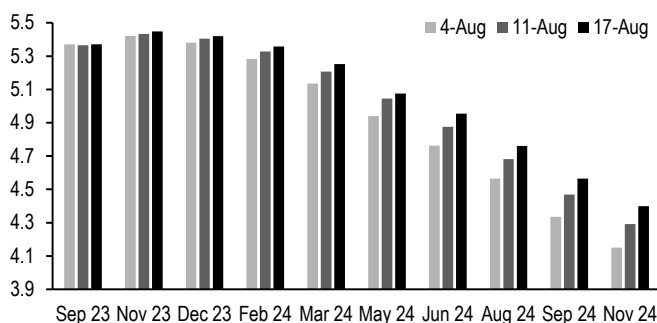
J.P. Morgan Economic Activity Surprise Index (EASI), YTD



Source: J.P. Morgan.

Figure 2: OIS forwards in the latter half of 2024 have repriced higher in recent weeks amid a higher-for-longer outlook for Fed policy

Aug 4th, Aug 11, and Aug 17th levels for the 1-month OIS rate implied by forwards at upcoming FOMC meeting dates; %



Source: J.P. Morgan.

Figure 3: Yields and implieds are higher while swap spreads are modestly narrower over the past two weeks

Statistics for selected US Treasury yields (%), swap spreads (bp) and swaption implied volatilities (bp/day), 8/4/2023 - 8/18/2023

		start	chg	end	min	mean	median	max
UST yields	2Y	4.79	0.14	4.94	4.76	4.87	4.89	4.98
	5Y	4.16	0.22	4.38	4.11	4.27	4.31	4.44
	10Y	4.06	0.19	4.25	4.00	4.15	4.17	4.31
	30Y	4.21	0.16	4.38	4.18	4.28	4.27	4.41
Swap spreads	2Y	-7.8	-0.9	-8.7	-9.6	-8.7	-8.8	-7.6
	5Y	-20.8	0.4	-20.5	-22.1	-21.4	-21.4	-20.5
	10Y	-28.2	1.7	-26.5	-29.6	-28.0	-28.2	-26.5
	30Y	-66.7	-0.6	-67.3	-68.9	-67.8	-67.6	-66.7
Imp. Vol	6Mx2Y	8.8	0.2	9.0	8.2	8.7	8.7	9.0
	6Mx5Y	8.2	0.4	8.6	7.9	8.2	8.2	8.6
	6Mx10Y	7.2	0.4	7.6	7.0	7.3	7.2	7.6
	6Mx30Y	6.2	0.4	6.6	6.2	6.4	6.3	6.7

Source: J.P. Morgan.

Taking a step back, it is important to not lose sight of the fact that 10-year yields are 60bp higher, yield curves are dramatically steeper, volatility on long tails is higher and volatility on 2-year tails is lower since the end of June. Moreover, over this period, the curve has also exhibited zero correlation to front end rates. In the discussion below, we attempt to think through these developments in a unified manner.

We start by examining implied principal components. We outlined a mathematical approach for inferring forward looking principal components using data from the swaptions and the Yield Curve Spread Options markets in [i-PCA: Implied Principal Component Analysis](#), 12/6/23. In **Figure 4**, we present the implied first and second principal components, calculated from data on 6-month expiry options as of various historical dates, each of which is roughly 3 weeks after an FOMC meeting. The last of these dates is of course fairly close to the present. The meaning of these components as presented in the table is that a 1-sigma up-move in the level factor (PC1) is currently expected to produce a 7.8bp move in 2s, a 7bp move in 10s and a 5.2bp move in 30s, for instance. Similarly, a 1-sigma move in the (uncorrelated) curve factor would produce a 3.5bp rise in 2s and a 3.6bp decline in 30s, for instance. We begin by making several observations from this.

First, the implied second principal component appears to be fairly stable. In other words, shifting expectations for Fed policy are all reflected in the magnitude and tenor-profile of the first principal component, while both the magnitude and the profile of the second principal component remains remarkably stable through time. **Second, the implied PC2 has a near-zero loading in the 5Y sector.** This suggests that **idiosyncratic curve factor movements can be thought of as pivots about the belly of the curve in the 5-7 year sector.** **Third, the "size" of 1-sigma moves in PC1 have been steadily declining,** although this trend was interrupted by the events of March. Nonetheless, declines in the size of the level factor are once again underway, notwithstanding this week's rise (which we think is unlikely to be sustained), and we are already somewhat close to YE22 / early '23 levels. **Fourth, even as the overall magnitude of PC1 has evolved, its "shape" or tenor-profile has stayed stable.** For instance, a 1-sigma move has tended to impact the 2Y sector by 1.1 times the impact in the 10Y sector. Here again 2Q23 and the aftermath of the banking crisis is the exception, but that appears to be behind us now.

Figure 4: The evolution of the implied first and second principal components over time.

Implied first and second principal components*, calculated using 6M expiry swaptions and YCSO data, as of historical dates that correspond to 3 weeks after each of the past 8 FOMC meetings, RMS size** and PC1 shape**; bp (except for ratios, which are unitless)

		As of 3 weeks after FOMC meetings							
		Sep-22	Nov-22	Dec-22	Feb-23	Mar-23	May-23	Jun-23	Jul-23
PC1	2Y	9.5	8.5	7.2	7.1	9.3	9.9	9.7	7.8
	5Y	9.7	8.9	7.7	7.6	8.1	8.8	8.8	8.2
	10Y	8.5	7.8	7.0	6.6	6.4	6.9	6.7	7.0
	30Y	6.0	5.7	5.0	4.6	4.0	4.6	4.4	5.2
PC2	2Y	3.9	4.0	3.5	3.2	3.5	3.6	3.5	3.5
	5Y	0.4	0.3	0.6	0.3	-0.3	-0.1	-0.1	0.7
	10Y	-2.4	-2.2	-1.9	-1.8	-2.6	-2.7	-2.6	-2.1
	30Y	-3.5	-3.6	-3.4	-3.0	-3.3	-3.6	-3.4	-3.6
RMS "size"									
PC1		8.6	7.8	6.8	6.6	7.2	7.8	7.7	7.1
PC2		2.9	2.9	2.6	2.4	2.7	2.9	2.8	2.8
PC1 "shape"									
2Y/10Y ratio		1.1	1.1	1.0	1.1	1.4	1.4	1.4	1.1

Source: J.P. Morgan.

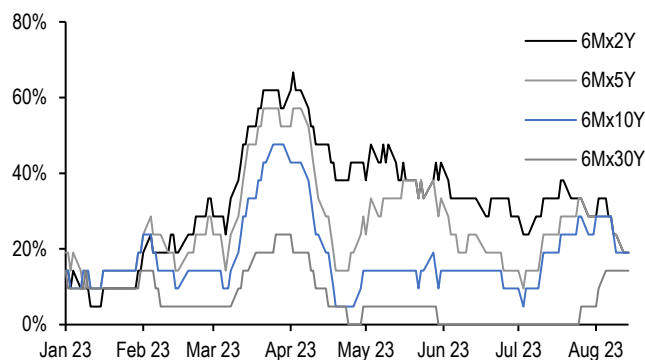
*PC1 and PC2 loadings are calculated as outlined in the i-PCA: Implied Principal Component Analysis paper referenced above

**RMS size is defined as square root of the average of the square of the loadings. PC1 shape is defined as the ratio of the PC1 loadings on the 2Y divided by 10Y

What does all this mean for markets going forward? First, the magnitude of PC1 appears likely to continue to decline going forward. Given that the first principal component accounts for the bulk of overall volatility, **this is directly related to a bearish view on volatility.** As readers may recall, our previously bullish stance on volatility stemmed from the fact that policy risks were heavily 2-sided (with implied probability distributions for short rates pricing in significant weights on easing as well as hiking scenarios, in addition to an on-hold baseline scenario), and that had created a very supportive backdrop for elevated jump risk and delivered volatility. Indeed, this has been the case for much of 2Q23. But more recently, the Fed has been signaling a wait-and-see approach, which has helped to moderate jump risk (Figure 5). **Indeed, jump risk has abated to such an extent that volatility on non-jump days is no longer sufficient for long volatility positions to break even (Figure 6).** Therefore, we now turn bearish on short expiry volatility.

Figure 5: Jump risk has declined to across all tails recently ...

Rolling monthly jump probability* across different tails, YTD; %

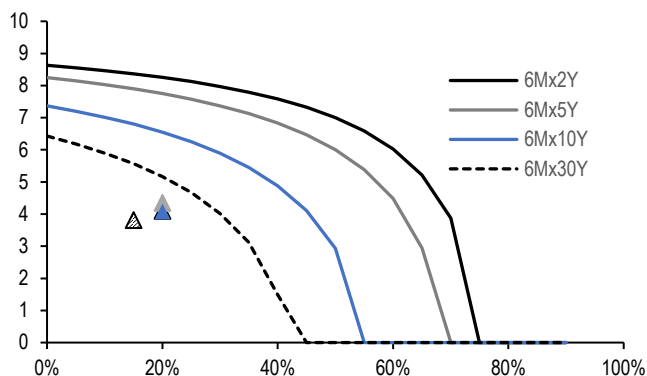


Source: J.P. Morgan.

* A jump is defined as a 1-day change in the ATMF yield larger than 10bp in magnitude

Figure 6: ... and volatility on non-jump days is no longer sufficient for long volatility positions to breakeven

Breakeven daily non-jump-day move* as a function of jump risk probabilities (bp), and scatter plot of current non-jump-day move** vs current jump-risk frequency for selected structures. As of 8/17/2023



Source: J.P. Morgan.

* Breakeven daily move is calculated using the relationship: implied vol squared = average jump size squared * jump probability + average non-jump size squared * (1-jump probability), and solving for the average non-jump size for the current implied volatility level. Jump size is calculated on absolute value of yield changes for all.

** Average non-jump size is calculated over the past month, and is shown at the jump probability from the past month

Moreover, as the magnitude of the level factor shrinks (and as the second principal component becomes a relatively larger driver of volatility), the near-zero loading on the 5Y tenor in PC2 means that **volatility on 5Y tails will likely fall more sharply than volatility on the wings** (given larger loadings on 2- and 30-year tails in PC2). Thus, **we recommend underweighting volatility in 5-year tails versus longer as well as shorter tenors and recommend stopping out of tail switches that overweight volatility in 5-year tails at a loss** (see Trade recommendations).

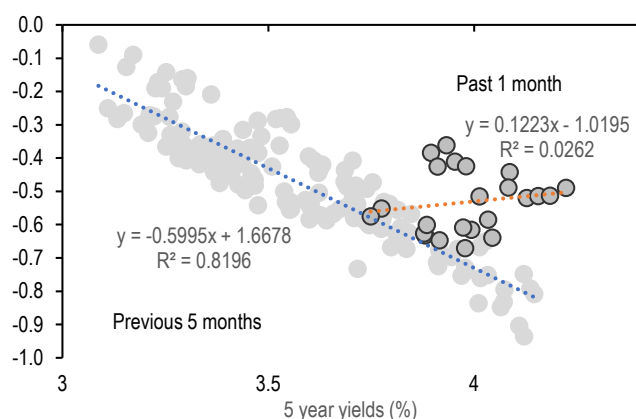
Yet another implication is that **yield curves will likely be less directional with front end yield levels.** This is because yield curve directionality with front end yields stems from the first principal component, which produces large & synchronized but unequal moves in yields of different tenors. The second factor, in contrast is a source of noise since it produces uncorrelated overlays that can be in either direction. As the level factor diminishes in magnitude and the second curve factor does not, yield curves should become less correlated to

front end rates. This is indeed the case recently, in the 5s/30s sector for instance. This curve is typically directional with 5Y yields, but has become almost uncorrelated recently as seen in **Figure 7**. As a result of this, **we now recommend stopping out of conditional bear flatteners at a loss** (see Trade recommendations).

One way to mitigate exposure to a waning level factor in yield curve trades is to look for attractive yield curve box trades that pair a spot curve position with an opposite position in the forward curve. Even as the magnitude of the level factor may itself vary, there tends to be stability in the ratio of its impact on forward versus spot curves. Moreover, our approach to finding such trades is based on a much longer horizon swap yield curve fair value model, that is not reliant on short term correlations. Therefore, **we continue to look for yield curve box trades that might appear attractive.** One such trade is to **initiate 2Y forward 1s/10s swap curve steepeners paired with equal risk in a 3M forward (or near-spot) 3s/15s swap curve flattener.** In the context of our long-run, multi-factor fair value model (see [Interest Rate Derivatives 2023 Mid-Year Outlook](#)), we find the spot 3s/15s curve to be 9bp too steep, while the 2Y forward 1s/10s curve is currently 2bp flat to fair value, making for attractive entry levels. In addition, the beta between weekly changes in the two curves has been very nearly 1 over the past 5 years (**Figure 8**). Moreover, the 3M slide on this package is nearly 7bp, while the standard deviation of quarterly changes in the yield spread corresponding to the box trade has been about 12bp over the past 5 years; thus, the annualized carry-to-risk ratio on this is about 1.1. Therefore, **we recommend this trade** (see Trade recommendations).

Figure 7: The 5s/30s swap curve has lost its directionality with 5Y rates recently, consistent with declining significance of the level factor

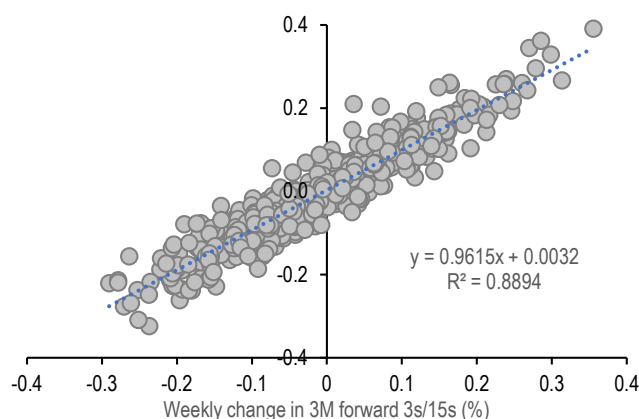
5s/30s spot swap curve (%) versus spot 5-year yields (%), past 6 months; unitless



Source: J.P. Morgan.

Figure 8: The beta between weekly changes in the 2Y forward 1s/10s curve and the 3M forward 3s/15s curve has been nearly one

Weekly changes in the 2Y forward 1s/10s curve versus weekly changes in the 3M forward 3s/15s curve, 10/2018 - 8/2023; unitless



Source: J.P. Morgan.

Lognormality returns

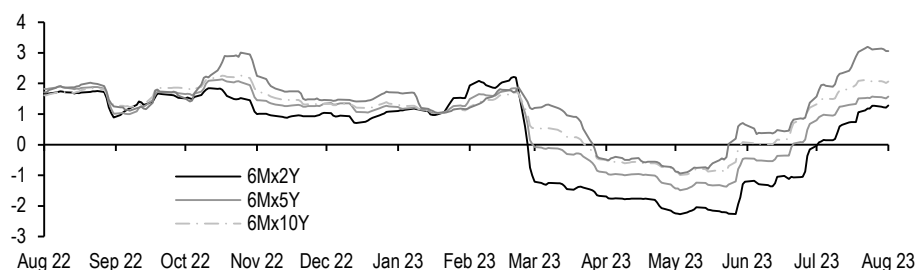
Although we are now bearish on volatility, as discussed above, **the biggest risk to that view is a sustained increase in rates.** As seen in **Figure 1**, implied-vol-versus-ATMF-rate correlations are now back to levels seen before the March regional banking crisis. This suggests that the swaptions market has finally moved past the events of March, and the previously dominant lognormal behavior of yields is re-asserting itself. This presents an opportunity to improve the carry on a bearish-gamma position while also hedging against higher

rates. Against a short volatility position, an investor can add a pay-fixed swap overlay that is suitably sized to offset the vega loss from a rise in bp vols in the event of a rise in yields. Thanks to the fact that short duration positions currently have positive carry, this is carry-enhancing.

Figure 2 tabulates the details associated with the swap overlays, and the overall carry characteristics. Note that the carry in the table includes time decay on the short vol position as well as the carry on the swap, but not any delta hedging costs; those costs will of course detract from overall P/L but are un-knowable *ex ante*. Nevertheless, **we expect such short-duration overlays to enhance the carry while also hedging some of the risk, and we recommend selling volatility on 5-year tails paired with a pay-fixed swap overlay** (see Trade recommendations).

Figure 9: Vol-rate correlations have recovered since the regional banking crisis and are back to pre-crisis levels

Vol-rate beta* for 6Mx2Y, 6Mx5Y, 6Mx10Y and 6Mx30Y, past 1 year; bp/day per 1 % point



Source: J.P. Morgan.

*Defined as rolling 3-month beta of weekly changes in implied volatility to weekly changes in at-the-money-forward yields

Figure 10: Positive vol-rate correlations allow for short straddle positions to be paired with pay-fixed swaps to provide a hedge against higher rates, while also enhancing carry

Characteristics of selected swaption structures, vol-rate betas* (estimated empirically as well as based on a perfect lognormality assumption), swaption notional and swap notional needed to offset the implicit duration risk**, and carry characteristics on the swaption and the equivalent-notional swaps***, 8/17/2023

Structure				Vol-rate beta			Notionals (\$mn)		1M Carry (\$)	
	ATMF	Premium	BP vega	Emp.	Log.	Avg.	Swaption	Swap overlay	Swaption	Swap overlay
1Yx2Y	4.08	217	22.9	0.94	2.34	1.64	-100	-20.0	107,705	18,352
1Yx5Y	3.88	461	54.2	1.51	2.20	1.86	-100	-24.0	199,068	20,733
1Yx10Y	3.87	743	99.1	1.93	1.95	1.94	-100	-24.9	309,901	18,850
1Yx30Y	3.62	1393	215.3	2.37	1.79	2.08	-100	-26.8	555,593	34,312

Source: J.P. Morgan.

*Empirical beta is calculated as the 3-month beta of weekly changes in implied to at-the-money-forwards, using only the data points where the change in yields is positive. Lognormal beta refers to the normal-vol-versus-rate beta needed to hold constant lognormal yield vol, calculated as the yield vol / sqrt(251)

**Equivalent swap notional is calculated by dividing the estimate change in implied volatility for a 1bp move in rates times the vega by the swap pvpbp

***Delta hedge costs will detract from swaption carry, but this is not knowable *ex-ante* and is therefore not included in the table

Swap Spreads

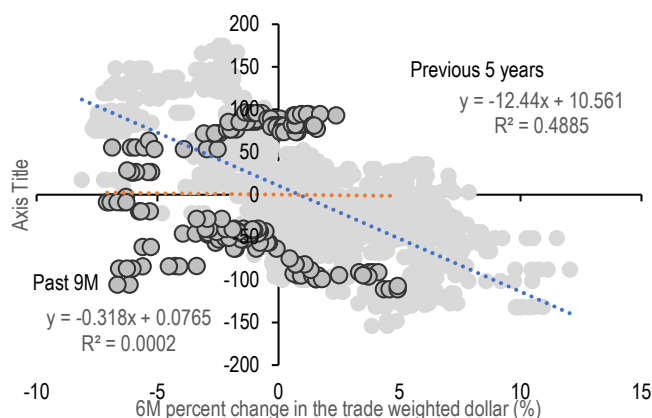
In a period that saw considerable moves in yields and curve, swap spreads remained fairly stable, narrowing only very modestly over the past few weeks (see Figure 3). Across much of the curve except for the front end, swap spreads are close to our fair value estimates; therefore, **we now turn neutral and recommend unwinding spread narrowers** (see Trade recommendations).

One factor in our swap spread models that has been on the move lately is the trade-weighted dollar. **Over the past month, the dollar has risen sharply, by nearly 3%.** Typically, an appreciating dollar leads to reduced foreign demand for USTs (and/or selling of USTs), and is therefore a factor in our swap spread models. For instance, our model coefficients would suggest that the 3% rise in the dollar over the past month would account for 1-2.5bp of narrowing pressure in the 2- to 5-year sector. That said, we are a bit more cautious in drawing such a conclusion right now. While the dollar has historically been a clear driver of foreign demand for USTs, this relationship appears to have weakened somewhat. As seen in **Figure 11**, the rolling 6M change in UST holdings held in custody by the Fed (a proxy high frequency metric for foreign demand) has historically exhibited a strong inverse correlation with dollar strength over the same period, but this relationship has been muted this year. This suggests that the rise in the dollar may not portend the same sort of UST demand weakening that it might have in the past. Perhaps for this reason, **the statistical significance of the dollar as a factor in our swap spread models has indeed been weakening recently.** Separately, our Treasury strategists also dispel the notion that the dollar's rise is a pronounced negative for Treasuries (see [US Treasury Market Daily: Is dollar strength driving weakness in Treasuries?](#), Jay Barry et al., 8/17/2023). All in all, **while we are mindful of the dollar's rise, we do not see this as a negative for spreads in the near term.**

At the front end of the curve, we have had a widening view on swap spreads, largely premised on fair value considerations. Specifically, we had expected 3M Tbills to richen versus swaps, taking 2Y spreads wider with it. But even given current levels of 3M Tbill swap spreads, 2-year spreads appeared too narrow causing us to maintain a widening bias in the sector. Given the stubborn resistance of front end spreads to widening, we revisit our fair value model and make a few tweaks. Chief among them is **narrowing the history used in the model to 2-years, so as to improve coefficient estimation.** In addition, given the reduced history, we also drop Fed purchases of USTs as a factor (since the Fed has not been engaging in QE for three quarters of that period) as well as the dollar (for the reasons noted above). Our modified fair value model is shown in **Figure 12**; while the fair value estimate is lower than before, it remains considerably above current levels. Therefore, **we continue to maintain a swap spread widening view in the front end of the curve.** That said, **we recommend rolling spread wideners into the 3-year sector, to also benefit from attractive slide along the spread curve** (see Trade recommendations).

Figure 11: The relationship between the trade-weighted dollar and the UST holdings in Fed custody have weakened recently

6M change in UST holdings held in custody by the Fed (\$bn) versus 6M percent change in the trade weighted dollar*, Dec 2017 - Current



Source: J.P. Morgan, New York Fed.

* USD NEER (trade-weighted nominal effective exchange rate; USD vs G10 and EM)

Figure 12: Our revised fair value model for 2-year maturity matched swap spreads continues to suggest that front end spreads are narrow to fair value, albeit by a reduced amount

Statistics from regression of 2-year maturity matched SOFR swap spreads versus its drivers*, current value of the drivers, current level of the swap spread (bp) and fair value (bp), 8/17/2023

Factor	Coeff	T-stat	Current
3M SOFR - Tbill (bp)	0.19	9.8	-5.3
1Yx3M OIS (% points)	-10.2	-13.9	4.66
1Yx3M OIS, squared (%^2)	1.83	14.4	21.72
15Mx3M minus 3Mx3M OIS curve, %	2.07	5.9	-1.14
RRP balance (\$bn)	0.0131	12.5	2085
Intercept	-20.2	-11.9	
R-squared	51.40%		
Std. Error	4.1 bp		
2Y swap spread			
	Current		-9.2
	Fair value		-3.9

Source: J.P. Morgan.

* Regression period over Aug 2021 - Aug 2023

Treasury Futures September — December Rollover Outlook Summary

As we approach the period where the majority of Treasury futures positions will need to be rolled forward from September to December expiries, we discuss our outlook for the various Treasury futures calendar spreads. A detailed discussion may be found in our [U.S. Bond Futures Rollover Outlook: September 2023 / December 2023](#), and we include a short summary here.

We begin by noting that all contracts except the US contract have different CTD bonds for the front and back contracts, making equal-weighted calendar spreads directional with yields. Therefore, **we recommend a BPV-weighted hedge ratio when rolling positions forward to mitigate directional exposure**. The only exception to this is the US contract, which has a common CTD between the front and the back contracts and nearly equal BPVs; therefore we recommend a 1:1 hedge ratio. We also note that, similar to the prior roll cycle, carry is negative in all contracts thanks to the elevated level of financing rates. With traditional switch optionality low in most sectors, futures contracts are priced to first delivery date, making early delivery very likely. Therefore, **we recommend investors who would like to avoid delivery to roll their positions ahead of first notice day**.

Figure 13: Net commercial longs are elevated in most contracts

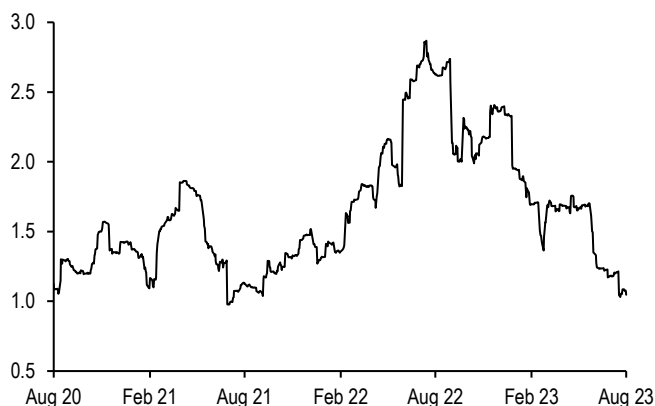
Current levels and 5-year stats for commercial longs minus shorts in various Treasury futures sectors; '000s of contracts, Aug 2018 – Aug 2023

	Current	Average	Min	Max	Std. Dev.	Curr. Z-score
TU	986	240	-91	1051	219	3.4
FV	1210	388	-110	1210	285	2.9
TY	650	307	-184	853	239	1.4
UXY	278	89	-158	307	95	2.0
US	153	75	-63	251	70	1.1
WN	413	274	153	413	55	2.5

Source: Source : CFTC, J.P. Morgan.

Figure 14: Close-to-open realized volatility has declined and is near the bottom of its recent historical range, which points to diminished attractiveness of the wildcard option in the ultra-long bond contract

Rolling 3-month close-to-open volatility*, past three years; bp/day



Source: Source : CME, J.P. Morgan

* Measured as the rolling 3M standard deviation of yield changes from one day's close to the next day's open, inferred from the front WN contract price. Contracts are assumed to be rolled on the first delivery day.

Investor positioning will continue to play an important role in this roll cycle. Commercial net longs are elevated in most contracts (**Figure 13**), and since these investors prefer to avoid delivery and roll their positions early, this preponderance of commercial longs can lead to selling pressure on calendar spreads going into first notice day. This technical imbalance is sufficient to inform our **bearish view on weighted calendar spreads in the TU, FV, TY and UXY sectors** (see Trade recommendations).

Interestingly, in the ultra-long bond contract, the value of the wildcard option (which has historically been large and caused longs to have a much weaker hand during previous rolls) is much lower in this roll cycle. This is due to a somewhat higher conversion factor (and therefore a lower tail) and the fact that close-to-open volatility (which we use as a proxy for post-close intra-day volatility) is much lower (**Figure 14**). These two factors combined make the wildcard option less valuable than in previous roll cycles. However, the WN CTD net basis is too wide in comparison to this reduced wildcard optionality making the calendar spread considerably cheap to fair value. Therefore, **we are bullish on the weighted calendar spread in the WN sector due to basis convergence pressuring the calendar spread wider**, despite commercial net longs being elevated (see Trade recommendations)

Figure 15 summarizes key attributes of the front and back contracts in each sector, and also outlines our views on the calendar spreads.

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Figure 15: We are bearish on the weighted calendar spreads in the TU, FV, TY, and UXY sectors but bullish in the WN sector

Details for various Treasury future contracts including front price, calendar spread (/32nds), hedge ratios, CTD characteristics, view and drivers on each of the calendar spreads.

	Front Price	Calendar Spread (/32nds)	HR*	CTD Front	CTD Back	View	Main drivers
WN	124-09	-1-15.375	948	3-3/8 Nov 48	3 Feb 49	Bullish	Basis convergence
US	119-05	-0-05.625	1000	4-1/2 Aug 39	4-1/2 Aug 39	Neutral	Elevated net commercial longs, basis convergence
UXY	114-02	-0-17.875	961	3-1/2 Feb 33	3-3/8 May 33	Bearish	Elevated net commercial longs
TY	109-20.5	-0-14.625	945	3-3/4 May 30	4 Jul 30	Bearish	Elevated net commercial longs
FV	105-31.5	-0-15.625	936	3-7/8 Nov 27	4 Feb 28	Bearish	Elevated net commercial longs
TU	101-13	-0-13.9375	876	0-1/4 Jun 25	0-1/4 Sep 25	Bearish	Elevated net commercial longs

Source: J.P. Morgan.

*Hedge Ratio: recommended number of Back contracts per 1000 Front contracts. Contract prices and calendar spread levels are based on live market on 8/18/2023

Trading Recommendations

- **Initiate 2Y forward 1s/10s swap curve steepeners paired with equal risk in a 3M forward 3s/15s swap curve flattener**

This yield curve box trade strategy is a way to mitigate exposure to a waning level factor in yield curve trades. In addition, the near-spot 3s/15s curve is 9bp too steep to fair value, while the 2Y forward 1s/10s curve 2bp flat to fair value, making for attractive entry levels. Moreover, the 3M slide on this package is nearly 7bp.

-Receive-fixed in \$250mn notional of a 08/18/25x1Y SOFR swap at a yield of 3.772% (PVBP: \$91.7/bp per mn notional). Pay-fixed in \$31mn notional of a 08/18/25x10Y SOFR swap at a yield of 3.766% (PVBP: \$739.1/bp per mn notional).

-Pay-fixed in \$80mn notional of a 11/18/23x3Y SOFR swap at a yield of 4.336% (PVBP: \$286.6/bp per mn notional). Receive-fixed in \$21mn notional of a 11/18/23x15Y SOFR swap at a yield of 3.94% (PVBP: \$1105.6/bp per mn notional). This trade uses risk weights of 1.0/-1.0/-1.0/1.0 on the 2Yx1Y/2Yx10Y/3Mx3Y/3Mx15Y swaps respectively. This trade is being initiated at a yield spread of 39.0bp.

- **Sell volatility on 5-year tails paired with a pay-fixed swap overlay**

We turn bearish on gamma, and thanks to high vol-rate correlations, recommend pairing short straddle positions with pay fix swaps to protect against increases in yields while also enhancing carry.

-Sell \$100mn notional 1Yx5Y ATMF swaption straddles. (Notification date: 2024-08-19, swap tenor: 5Y, ATMF: 3.82%, strike: 3.82%, spot premium: 459.6bp per notional, forward premium: 484.6bp per notional, bpvol at inception: 8.48bp/day). This trade assumes active delta hedging every business day.

-Pay-fixed in \$24.0mn notional of a 08/18/24x5Y SOFR swap at a yield of 3.824% (PVBP: \$421.8/bp per mn notional).

- **Maintain widening bias towards front end spreads but roll spread wideners into the 3Y sector**

Front end spreads look cheap to fair value but we recommend unwinding our current 2Y spread wideners and rolling the exposure into the 3Y sector to benefit from attractive slide along the spread curve.

-Pay fixed in 4.375% Aug 15 2026 maturity matched SOFR swap spreads. Buy \$100mn notional of the 4.375% Aug 15 2026 (yield: 4.641%, PVBP: \$274.5/bp per mn notional), and pay fixed in \$95.2mn notional of a maturity matched SOFR swap (coupon: 4.493%, PVBP: \$288.4/bp per mn notional) at a swap spread of -14.8bp.

-Unwind pay fixed 4.25% May 31 2025 maturity matched SOFR swap spreads. Unwind longs in \$100mn notional of the 4.25% May 31 2025, versus paying fixed in \$95.8mn notional of a maturity matched SOFR swap initiated at a swap spread of -0.8bp. This trade was initiated on 2023-06-02 and is being unwound at a profit of 1.6 bp (for original trade write up, see Fixed Income Markets Weekly 2023-06-02).

- **Position for narrowing in TU calendar spreads**

Net commercial long open interest in the TU sector is the most elevated it has been in the last decade, well above its average level in recent years. Therefore, we are bearish on the weighted TU calendar spread largely on the back of the potential narrowing pressure from elevated net commercial longs. For more details, see [US Bond Futures Roll-over Outlook: September 2023 / December 2023](#), 8/10/23.

-Sell 876 2-year note contract calendar spreads at -14/32nds and sell an additional 124 TUU3 contracts at 101-13. This trade uses a 1000:876 hedge ratio between front and back contracts, as per the recommendation in the publication referenced above.

- **Position for a widening of the WN calendar spreads**

The wildcard option value has diminished this quarter but the front net basis remains wide, and we expect this basis convergence to pressure the calendar spread wider. For more details, see [US Bond Futures Rollover Outlook: September 2023 / December 2023](#), 8/10/23.

-Buy 948 WN calendar spreads at -1-15.25/32nds and buy an additional 52 WNU3 contracts at 124-10. This trade uses a 1000:948 hedge ratio between front and back contracts, as per the recommendation in the publication referenced above.

- **Stop out of curve trades that positioned for a tactical flattening in the yield curve at a loss**

These trades have underperformed relative to our expectations and we stop out at a loss. -Unwind pay-fixed positions in \$100.0mn notional of a 11/04/23x3Y SOFR swap. Unwind receive-fixed positions in \$67.7mn notional of a 11/04/23x5Y SOFR swap. Unwind 172 long contracts of SFRZ4 initiated @ 96.005. This trade was initiated on 2023-08-04, and is being unwound at a loss of 7.7bp (for original trade write up, see Fixed Income Markets Weekly 2023-08-04).

-Unwind pay-fixed positions in \$100.0mn notional of a 11/04/23x2Y SOFR swap. Unwind receive-fixed positions in \$32.6mn notional of a 11/04/23x7Y SOFR swap. Unwind receive-fixed positions in \$71.0mn notional of a 08/04/24x1Y SOFR swap. This trade used risk weights of -1.0/1.0/0.35 on the 3Mx2Y/3Mx7Y/1Yx1Y swaps respectively. This trade was initiated on 2023-08-04 at a yield spread of -71.5bp, and is being unwound at a loss of 13.9bp (for original trade write up, see Fixed Income Markets Weekly 2023-08-04).

-Unwind pay-fixed positions in \$250.0mn notional of a 01/28/24x1Y SOFR swap. Unwind receive-fixed positions in \$18.0mn notional of a 01/28/24x20Y SOFR swap. Unwind receive-fixed positions in \$154.2mn notional of a 07/28/24x1Y SOFR swap. Unwind receive-fixed positions in \$98.1mn notional of a 10/28/23x6M SOFR swap. This trade used risk weights of -1.0/1.0/0.6/0.2 on the 6Mx1Y/6Mx20Y/1Yx1Y/3Mx6M swaps respectively. This trade was initiated on 2023-07-28 at a yield spread of -223.7bp, and is being unwound at a loss of 35.7bp (for original trade write up, see Fixed Income Markets Weekly 2023-07-28).

-Unwind pay-fixed positions in \$100.0mn notional of a 07/14/25x1Y SOFR swap. Unwind receive-fixed positions in \$8.1mn notional of a 10/14/23x15Y SOFR swap. Unwind receive-fixed positions in \$58.0mn notional of a 07/14/25x1Y SOFR swap. Unwind pay-fixed positions in \$14.8mn notional of a 01/14/24x6M SOFR swap. This trade used risk weights of -1.0/1.0/0.58/-0.08 on the 2Yx1Y/3Mx15Y/2Yx1Y/6Mx6M swaps respectively. This trade was initiated on 2023-07-14 at a yield spread of -167.5bp, and is being unwound at a loss of 26.3bp (for original trade write up, see Fixed Income Markets Weekly 2023-07-14)

- **Unwind conditional exposure to a flatter 1s/10s swap yield curve in a selloff using 3M expiry receiver swaptions at a loss**

Yield curves have become less directional with front end yields, and we stop out of conditional bear flatteners at a loss

-Unwind longs in \$500mn notional 3Mx1Y payer swaptions (strike at inception: 5.2031%, implied vol at inception: 6.71bp/day). Unwind shorts in \$12mn notional 3Mx10Y payer swaptions (strike at inception: 3.6546%, implied vol at inception: 6.52bp/day). This trade is being unwound at a loss of -6.2bp since inception (for original trade write up, see Fixed Income Markets Weekly 2023-07-28).

- **Unwind overweighting volatility in 5Y tails versus 15Y tails using 9M expiry swaptions at a loss**

5Y tails are likely to underperform versus longer tails going forward as the near-zero

loading on PC2 loading suggests, and we stop out of trades that overweight 5-year tails at a loss

-Unwind longs in \$203mn notional 9Mx5Y ATMF swaption straddles (strike at inception: 3.6552%, implied vol at inception: 7.87bp/day). This trade assumed active delta hedging every business day. Unwind shorts in \$100mn notional 9Mx15Y ATMF swaption straddles (strike at inception: 3.5431%, implied vol at inception: 6.2bp/day). This trade assumed active delta hedging every business day. This trade is being unwound at a loss of 7.9abp since inception (for original trade write up, see Fixed Income Markets Weekly 2023-07-28).

-This package was designed to be theta-neutral at inception.

- **Unwind exposure to 10Y swap spread narrowers at a profit**

Across much of the curve except for the front end, swap spreads are close to our fair value estimates; therefore, we now turn neutral and recommend unwinding spread narrowers.

-Unwind receive fixed positions in 3.375% May 15 2033 maturity matched SOFR swap spreads. Unwind short \$100mn notional of the 3.375% May 15 2033, versus receiving fixed in \$96.7mn notional of a maturity matched SOFR swap at a profit of 1.1bp (for original trade write up, see Fixed Income Markets Weekly 2023-07-28).

- **Stay short 6Mx30Y straddles versus long 97% of the vega risk in 6Mx10Y straddles and short 12% of the risk in 6Mx2Y swaption straddles**

-Stay short \$114mn notional 6Mx2Y ATMF swaption straddles. (strike: 4.204%, spot premium: 145.7bp per notional, forward premium: 149.7bp per notional, bpvol at inception: 8.8bp/day). Stay long \$213mn notional 6Mx10Y ATMF swaption straddles. (Strike: 3.674%, bpvol at inception: 7.19bp/day). Stay short \$100mn notional 6Mx30Y ATMF swaption straddles. (Strike: 3.479%, bpvol at inception: 6.11bp/day). This trade assumes active delta hedging every business day. P/L on this trade since inception: -1.6abp (for original trade write up, see Fixed Income Markets Weekly 2023-08-04).

- **Stay short 9M expiry single-look YCSO straddles on the 5s/30s curve, versus 35% vega-weighted longs in 9Mx2Y swaption straddles**

-Maintain shorts in \$1bn notional 9M expiry one-look straddles on the 5s/30s curve (CMS adjusted ATMF and strike at inception: -13.7bp, implied curve vol at inception: 5.65bp/day). Maintain longs in \$175mn notional 9Mx2Y ATMF swaption straddles (strike at inception: 3.585%, implied vol at inception: 9.95bp/day). This trade assumes active delta hedging every business day on both legs of the trade. P/L on this trade since inception: -4abp (for original trade write up, see Fixed Income Markets Weekly 2023-06-02).

- **Maintain bullish vega exposure in the 10Yx10Y sector**

- Maintain longs in \$100mn notional 10Yx10Y ATMF swaption straddles (strike at inception: 3.041%, implied vol at inception: 4.94bp/day). This trade assumes active delta hedging every business day. P/L on this trade since inception: 2.1abp (for original trade write up, see Fixed Income Markets Weekly 2023-03-17).

Closed trades over the past 12 months

P/L reported in bp of yield for swap spread, yield curve and misc. trades, and in annualized bp of volatility for option trades, unless otherwise specified

Note: trades reflect Thursday COB levels, and unwinds reflect Friday COB levels

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North America Fixed Income
 Strategy
 Interest Rate Derivatives
 18 August 2023

J.P.Morgan

Trade	Entry	Exit	P/L
Spreads and basis			
Conditional bull 5Y spread wideners	7/8/2022	8/26/2022	0.0
Swap spread wideners in the 10Y sector	7/15/2022	8/26/2022	1.0
Conditional bull spread wideners via TYU2 calls	7/15/2022	8/26/2022	0.0
3Y spread wideners	6/10/2022	9/1/2022	7.7
3Y spread wideners using 2.625% Apr 2025	8/19/2022	9/9/2022	3.1
TU22 invoice spread narrowers	8/19/2022	9/16/2022	(5.0)
3Y spread wideners, via old 5-year notes in the Jul 2025 sector	9/9/2022	9/16/2022	7.2
Spread wideners in the 30Y sector, hedged with a weighted short in S&P500 E-mini futures	7/29/2022	10/14/2022	(11.7)
Position for wider spreads in the 3Y sector	9/23/2022	10/14/2022	2.0
Position for wider spreads in the belly	9/23/2022	10/14/2022	(3.2)
Position for wider spreads in the 3Y sector, using 0.5% Feb 28 2026	10/28/2022	11/4/2022	3.3
5Y wideners	1/6/2023	1/20/2023	3.6
5Y invoice spread wideners	1/6/2023	1/20/2023	4.3
3Y swap wideners	12/16/2022	2/3/2023	3.5
3Y wideners, using old 5's bonds	2/3/2023	2/24/2023	7.2
100:70 weighted 20s/30s swap spread curve steepeners	1/27/2023	2/24/2023	1.2
30-year swap spread wideners paired with a short in Yen futures	2/24/2023	3/10/2023	(5.3)
Swap spread narrowers in the 5Y sector	3/3/2023	3/10/2023	3.7
Initiate FV / US Invoice spread curve steepeners via FVM3 and USM3, paired with a 20% risk-weighted short in USM3	3/3/2023	3/10/2023	0.2
2s/3s swap spread curve flatteners coupled with a 10% risk-weighted 2s/3s Treasury curve flattener	1/20/2023	4/14/2023	(7.0)
USM3 invoice spread wideners, paired with 10% short in the USM3	3/17/2023	4/28/2023	2.0
2Y swap spread wideners, paired with buying 7% risk in SFRM3	3/31/2023	5/5/2023	(7.5)
2s/5s swap spread curve flattener	4/14/2023	5/5/2023	(10.0)
USM3 invoice spread wideners in a rally	3/17/2023	5/5/2023	1.2
7Y spread narrowers	4/21/2023	6/2/2023	(1.4)
TY invoice spread narrowers by selling TYM3 and receiving fixed in a forward starting swap	4/21/2023	6/2/2023	(0.4)
10Y spread narrower	5/12/2023	6/2/2023	(5.7)
4s/5s swap spread curve flatteners	6/2/2023	7/14/2023	4.0
Initiate 0.45:1 risk weighted 2s/3s swap spread curve flatteners paired with a 20% beta-weighted M5/M6 SOFR futures steepener	5/19/2023	7/28/2023	(8.2)
10Y spread widener	7/14/2023	7/28/2023	0.7
2Y spread widener	6/2/2023	8/18/2023	1.6
10Y spread narrower	7/28/2023	8/18/2023	1.1

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North America Fixed Income Strategy

18 August 2023

J.P.Morgan

Duration and curve	Entry	Exit	P/L
Conditional 2s/7s bear steepener	05/20/22	08/26/22	(36.1)
Conditional bear belly cheapening 5s/10s/30s	08/05/22	09/09/22	6.1
2Y forward 2s/15s flatteners, paired with a 100% risk weighted 3M forward 2s/30s swap curve steepener and a 20% risk-weighted short in the 6Mx3M sector	08/26/22	09/09/22	3.5
2Y forward 7s/15s steepener vs 3M forward 7s/30s flattener	08/05/22	09/23/22	0.9
2Y forward 10s/15s steepener vs 3M fwd 10s/30s flattener	08/05/22	09/23/22	(1.4)
2Y forward 3s/10s flatteners paired with 3M forward 7s/15s steepeners (80% risk weighted)	09/09/22	09/23/22	8.2
Shorts in the belly of the H3/U3/H4 3M SOFR futures butterfly (32:82.5 weighted risk)	09/30/22	10/14/22	4.0
Position for a steeper 3M forward 7s/30s curve, paired with 2Y forward 2s/15s swap curve flatteners	09/30/22	10/21/22	(7.5)
3M 2s/30s steepener vs 2Y 2s/10s flattener (72:100 risk weighted)	10/14/22	10/21/22	7.8
Position for a flatter 2Y forward 2s/7s curve, paired with a 3M forward 5s/15s swap curve steepener	09/23/22	11/04/22	(4.4)
Sell the belly of the M3/Z3/M4 3M SOFR futures butterfly (-0.55:1-0.55 risk weighted)	08/26/22	11/28/22	8.3
2Y forward 2s/5s swap curve flatteners, paired with equal risk 3M forward 2s/5s swap curve steepeners	11/10/22	11/28/22	(28.2)
Weighted 10s/30s flattener in a selloff	11/10/22	11/28/22	5.6
1Yx1Y / 3Mx7Y flatteners paired with 0.7 risk in 3M forward 2s/10s steepeners	11/10/22	02/03/23	4.0
5Yx5Y / 1Yx15Y forward swap curve steepeners	01/27/23	02/10/23	3.7
Sell the belly of the Z3/M4/Z4 3M SOFR futures butterfly 24:80 weight	01/27/23	02/10/23	5.4
1Yx2Y / 2Yx3Y flatteners, paired with 15% risk in receive-fixed 1Yx1Y	02/03/23	02/15/23	8.5
1Yx2Y / 2Yx3Y flatteners, paired with 15% risk in receive-fixed 1Yx1Y, using SOFR futures	02/03/23	02/15/23	10.5
1Yx1Y / 3Mx3Y swap curve flatteners paired with 20% risk in 3Mx18M / 1Yx2Y swap curve flatteners	02/15/23	02/24/23	10.2
27Mx3M / 18Mx1Y steepeners, paired with 10% risk in receive-fixed 1Yx1Y	02/15/23	03/13/23	(12.7)
Sell the belly of the U3/M4/H5 3M SOFR futures butterfly (-0.33:1-0.77 risk weighted)	02/24/23	03/13/23	(29.4)
Conditional exposure to a steeper 1s/5s swap yield curve in a rally using 3M expiry receiver swaptions	02/24/23	03/13/23	59.3
2Y6Mx10Y / 2Y6Mx30Y swap curve steepeners with a 10% risk-weighted long in the 9Mx3M sector and a 25% risk-weighted short in the 21Mx3M sector	03/03/23	03/13/23	6.0
U3/Z3 SOFR futures steepeners (90:100 risk weighted) hedged with a 20% risk-weighted long in U5 SOFR futures	03/10/23	03/13/23	(2.3)
15Mx3M / 2Yx1Y swap curve flatteners paired with 30% risk longs in 3Mx2Y rates	04/14/23	04/28/23	5.2
3Mx7Y receive fixed swaps, paired with 42% risk in 1Yx1Y and 42% risk in 3Mx5Y payer swaps	03/31/23	05/05/23	(10.6)
Pay in the belly of a 35:55 weighted 3Yx1Y / 5Yx5Y / 3Mx15Y swap yield butterfly	04/14/23	05/05/23	(13.0)
2Yx5Y / 2Yx10Y swap curve steepeners paired with 3Mx2Y/3Mx10Y swap curve flatteners (1:1 risk weighted)	04/14/23	05/05/23	(10.3)
6M forward 5s/10s flattener, hedged with long in rates	05/05/23	06/02/23	4.5
Position for a flatter 70:100 weighted 5s/20s swap curve in a selloff	05/19/23	06/02/23	6.2
Sell the belly of a H4/M4/U4 SOFR futures butterfly	04/28/23	06/09/23	0.7
Initiate 3M forward 3s/7s flatteners, paired with 35% long in 3Mx5Y to hedge against further steepening in a rally	06/02/23	06/09/23	3.4
Initiate conditional 3s/7s flatteners in a selloff constructed with 3M expiry payer swaptions and financed by selling 20% of the forward DV01 risk in 3Mx5Y payer swaptions	06/02/23	06/09/23	2.7
Initiate 6M forward 10s/30s flatteners, paired with 25% long in 6Mx2Y	05/12/23	07/07/23	1.5
Position for a cheaper 47:55 weighted 7s/10s/20s swap butterfly in a selloff	05/19/23	07/07/23	2.6
Initiate conditional 10s/30s flattener in a selloff constructed with 3M expiry payer swaptions, financed by selling 17% of the forward DV01 risk in 3Mx3Y payer swaptions to make the package premium neutral	06/02/23	07/07/23	5.7
Conditional richening of the belly of a 1s/5s/20s swap butterfly in a rally using 6M expiry receiver swaptions	01/20/23	07/14/23	0.1
Initiate 2Y forward 5s/30s steepeners hedged with a 15% weighted long in U3 3M SOFR futures and a 35% weighted short in U4 3M SOFR futures	07/07/23	07/14/23	12.2
Initiate 10s/15s swap curve flatteners hedged with a 15% risk-weighted long in the 7Y sector	06/09/23	08/04/23	(6.8)
Initiate UXY / US treasury futures curve flatteners hedged with a 15% risk-weighted long in the TY sector	06/09/23	08/04/23	(28.0)
2Yx1Y / 3Mx15Y flattener, plus 58% long in 2Yx1Y and 8% short in 6Mx6M	07/14/23	08/18/23	(26.3)
Initiate 6M fwd 1s/20s flatteners paired with 20% risk weighted longs in 3Mx6M and 60% risk-weighted longs in Reds	07/28/23	08/18/23	(35.7)
Initiate conditional exposure to a flatter 1s/10s swap yield curve in a selloff using 3M expiry receiver swaptions	07/28/23	08/18/23	(6.2)
Initiate 3M forward 2s/7s swap curve flatteners hedged with a 35% risk weighted long in the 1Yx1Y sector	08/04/23	08/18/23	(13.9)
Initiate 3M forward 3s/5s flattener hedged with a 15% risk weighted long in the 5th 3M SOFR futures contract	08/04/23	08/18/23	(7.7)

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North America Fixed Income
Strategy
Interest Rate Derivatives
18 August 2023

J.P.Morgan

Options	Entry	Exit	P/L
Long gamma in 10Y tails	07/15/22	08/26/22	6.8
Buy 6Mx2Y A+25 payer swaptions hedged with a receive fixed swap	08/19/22	09/01/22	(18.8)
Long 3Mx10Y straddles vs 3Mx30Y straddles	08/19/22	09/09/22	3.4
Short \$1b 6M expiry one-look straddles on the 2s/10s curve vs long 6Mx2Y swaption straddles	08/26/22	09/30/22	(16.5)
Overweight 5Y tails vs 3Y tails in 3M expiries	09/23/22	10/14/22	9.9
Short 3yx10y straddles	06/03/22	10/21/22	(34.9)
Buy the 3M/6M expiry swaption calendar spread on 10 year tails	08/05/22	10/21/22	(15.8)
Overweight 3Mx5Y vs 3Mx15Y	10/14/22	12/09/22	(6.8)
Long 6mx2y straddles, delta hedging lognormal deltas	12/16/22	01/06/23	(8.3)
Sell 1Y expiry single look straddles on the 2s/10s swap curve	01/06/23	01/20/23	10.2
Long 6mx2y straddles	01/06/23	02/03/23	(8.0)
Sell 1Yx10Y straddles, paired with pay-fixed swap hedge	02/03/23	03/10/23	(18.5)
Overweight 6Mx30Y straddles with a long duration overlay	02/24/23	03/10/23	18.7
Long 6Mx30Y straddles versus selling vega-neutral 1Yx30Y straddles	04/14/23	05/05/23	3.2
Sell 6Mx30Y swaption straddles on a delta hedged basis coupled with a weighted short in S&P 500 futures	04/28/23	06/02/23	(1.0)
Buy 6Mx10Y swaption straddles versus selling 6Mx30Y straddles (using a notional weighting of 2:1)	04/28/23	06/02/23	2.3
Long 6Mx30Y swaption straddles versus selling a theta-neutral amount of 6Mx5Y swaption straddles	05/19/23	06/02/23	(9.9)
Buy 3Yx5Y swaption straddles versus selling a vega-neutral amount of 1Yx5Y swaption straddles	05/12/23	06/09/23	1.6
Sell 1Yx1Y swaption straddles versus buying a vega-neutral amount of 3Yx2Y swaption straddles	05/19/23	06/09/23	0.7
Buy 6Mx5Y swaption straddles, versus weighted longs in S&P futures	06/09/23	07/07/23	12.8
Sell 1Yx10Y 50bp OTM receiver swaptions versus buying 50bp OTM payer swaptions	04/21/23	07/07/23	1.1
Buy 6Mx30Y swaption straddles versus selling a vega-neutral amount of 1Yx30Y swaption straddles	06/02/23	08/04/23	(2.7)
Overweight 6Mx10Y swaption straddles versus vega-neutral amount of 1Yx10Y swaption straddles	07/07/23	08/04/23	1.0
Sell 5Yx10Y straddles vs 9Mx30Y straddles	07/14/23	08/04/23	5.9
Overweight volatility in 5Y tails versus 15Y tails using 9M expiry swaptions	07/28/23	08/18/23	(7.9)
Others	Entry	Exit	P/L
WN calendar spreads narrowers	8/19/2022	8/26/2022	(0.5)
TN calendar spreads narrowers	8/19/2022	8/26/2022	(0.3)
TU calendar spread wideners	8/19/2022	8/26/2022	(2.3)
WN calendar spreads narrowers	2/10/2023	2/22/2023	0.0
US calendar spread wideners	2/10/2023	2/22/2023	1.0
Long USM3 basis	3/17/2023	5/19/2023	0.7
Long UXYM3 basis	3/31/2023	5/19/2023	0.7
Total number of trades			109
Number of winners			65
Hit rate			60%

Recent Weeklies	
04-Aug-23	Everything everywhere all at once
28-Jul-23	Bar-Fed-Heimer
14-Jul-23	Banks to face a higher Barr
7-Jul-23	Cruel Summer
9-Jun-23	Smoke on the water, fire in the sky
2-Jun-23	Hike, skip and jump
19-May-23	Zeno's paradox
17-May-23	US Treasury Market Daily: So you're saying there's a chance?
12-May-23	On the brink
5-May-23	Treasury's Tax Extension Denied
28-Apr-23	Treasury Gets a Tax Extension
21-Apr-23	Debt and Taxes
14-Apr-23	Banking on Earnings
31-Mar-23	The central bank is more central and more bank
24-Mar-23	Fear is now the first principal component
17-Mar-23	Clear Air Turbulence
13-Mar-23	Crossing the Rubicon
10-Mar-23	Powell springs forward, banks fall back
03-Mar-23	Blasts from the distant past
24-Feb-23	Through the looking glass
22-Feb-23	US Treasury Market Daily: Unwind inflation swap longs and calendar spread positions
15-Feb-23	US Treasury Market Daily: 30-year TIPS auction preview; roll estimates; November TIC update
10-Feb-23	Return of Vol-demort
03-Feb-23	Irresistible force meets immovable object
27-Jan-23	War and PCE
20-Jan-23	DISP-pleasure
6-Jan-23	An atmospheric river runs through it
16-Dec-22	Don't fight the Fed
9-Dec-22	It's the most illiquid time of the year
10-Nov-22	One swallow does not a summer make
04-Nov-22	Symmetric rate hikes on both sides of the pond
14-Oct-22	DEC-elation - coming soon from a central bank near you
21-Oct-22	Bear Attack
14-Oct-22	Lognormal reshuffle
30-Sep-22	Globally convergent inflation confronts diverging policy
23-Sep-22	Central banks and the frumious inflation bandersnatch
16-Sep-22	Zugzwang
09-Sep-22	Perpetual Deuce
01-Sep-22	US Treasury Market Daily: De-risking
26-Aug-22	Seeking Rational Inattention
19-Aug-22	Hiking in Yellowstone

Annual Outlooks	
23-Jun-23	Interest Rate Derivatives: 2023 Mid-Year Outlook
22-Nov-22	Interest Rate Derivatives 2023 Outlook: From tiger's roar to rabbit's foot
Recent Special Topic Pieces	
1-Jun-23	Open the floodgates
11-May-23	US bond futures rollover outlook: June 2023 / September 2023
09-Feb-23	US bond futures rollover outlook March 2023 / June 2023
06-Dec-22	i-PCA: Implied Principal Component Analysis
09-Nov-22	US bond futures rollover outlook: December 2022 / March 2023
15-Aug-22	US bond futures rollover outlook: September 2022 / December 2022

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