

Treasuries

Whiplash

- Treasury yields retraced to their lowest levels since March, supported by benign inflation data, renewed political risk in Europe, and a dovish BoJ
- We think Treasury yields are likely to remain rangebound through the summer. On one hand, this week's data should allay fears that inflation is reaccelerating, and leaves the door firmly open to lower rates later this year. However, the Fed is in no rush to ease, and if the first cut is indeed months away, it will be challenging for yields to decline further over the near term
- Though the environment supports carry trading, risk adjusted-carry is pretty low and the 5-year sector is trading near the richest levels on the fly YTD: take profits on 3s/5s/7s belly-richening butterflies
- With yields at multi-month lows, OAT/bund spreads priced for a more negative outcome, and next week's retail sales likely to show a healthy bounce, we turn tactically bearish in the 5-year sector
- Add 100:98 weighted 4.75% Feb 37s / 4.5% Aug 39s steepeners for relative value
- We expand our analysis of CFTC data and consider the evolution of open interest concentration as a metric for measuring crowding in futures positions...
- ...We find the top 4 investors share of FV and UXY contracts offers a meaningful and consistent near term contrarian signal, where yields usually rise following periods of larger-than-usual concentration

Market views

Treasury yields plunged 17-24bp over the last week, more than reversing last week's move, supported by a round of benign May inflation data, a splash of risk aversion, and dovish developments from the BoJ. The big shock came from CPI, as the core index rose 0.16% in May (consensus: 0.3%), the softest reading since August 2021, taking the oya series down from 3.6% to 3.4%. Within the details, the supercore series was flat on the month, driven by weakness in auto insurance and airfares (see [May CPI to put a spring in Powell's step](#), Michael Feroli, 6/12/24). Alongside the benign PPI reading and declining ex-fuel import prices in May, and we think core PCE rose 0.14% in May, the weakest monthly reading since October 2023, taking the series to 2.6% oya (see [US: May import prices surprised lower](#), 6/14/24). Meanwhile, initial claims surprised to the upside, rising 13k to 242k for the week ending June 8 (consensus: 225k), the highest level since August 2023, but our economists caution this could reflect residual noise following the Memorial Day holiday (see [US: Job-less claims jump 13,000 post Memorial Day](#), Murat Tasci, 6/13/24).

Internationally, political uncertainty was on the rise in Europe after Le Pen's National Rally (RN) scored strong results in the European parliamentary elections and President Macron called a lower house election for later this month. This decision was a surprise and OAT/bund spreads moved to their widest levels since 2017 following the results, as investors de-risked over concerns on what a move to the right could mean for the fiscal picture in France. Meanwhile, the BoJ surprised to the dovish side: it announced a policy of reducing its balance sheet, but postponed the decision on the details of the QT process until the July meeting. We now see rising risks for the BoJ to delay rate hikes until September unless additional weakness of the yen puts more pressure on the BoJ (see [BoJ set QT, but postponed a decision on the details](#), Ayako Fujita, 6/14/24). Against this backdrop, this week's Treas-

sury auctions were met with a strong reception: the longer duration auctions both stopped rich relative to pre-auction levels, with strong increases in end-user demand as well (**Figure 1**). Given these developments, intermediate Treasury yields have now declined to their lowest levels since the beginning of April (**Figure 2**).

Figure 1: This week's long-duration auctions stopped rich relative to pre-auction levels, supported by strong end-user demand...

Statistics for this week's Treasury auctions; units as indicated

		3s	10s	30s
Auction tail (bp)	Jun	1.2	-1.8	-1.4
	May	0.0	1.1	-0.6
	Prev 3M avg	0.3	1.7	-0.6
End-user (%)	Jun	80.0	88.4	86.3
	May	85.1	84.3	84.6
	Prev 3M avg	83.8	81.1	84.5
Bid-to-cover	Jun	2.43	2.67	2.49
	May	2.63	2.49	2.41
	Prev 3M avg	2.58	2.45	2.42

Source: J.P. Morgan

Figure 2: ...and alongside benign inflation data, helped Treasury yields fall to their lowest levels since early-April

10-year Treasury yields; %



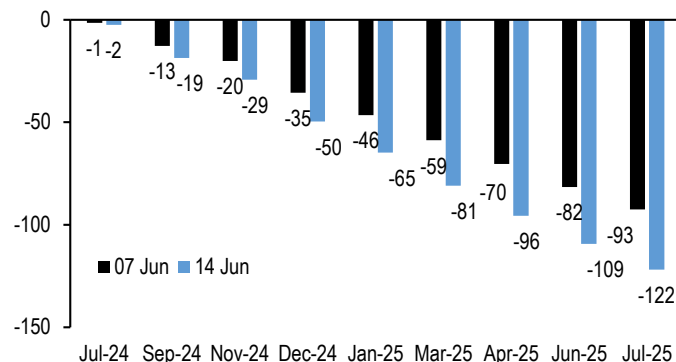
Source: J.P. Morgan

As we look ahead, we think Treasury yields are likely to remain rangebound through the summer. On one hand, this week's data should allay fears that inflation is reaccelerating, and leaves the door firmly open to lower rates later this year. To the extent that yields tend to decline and the curve tends to steepen, even in shallower easing cycles, this should support room for bullish steepening in 2H24. However, the message from the FOMC indicated that it's in no rush to ease: the median 2024 dot showed one cut, from three in March, and 15 of 19 participants now see one or two cuts this year. This was partially offset by projections for the out years, which project another four cuts in both 2025 and 2026, both up from three in March (see [FOMC guesses at fewer cuts in '24](#), Michael Feroli, 6/12/24). Furthermore, Chair Powell's Q&A was not nearly as dovish as we've seen in other recent press conferences, remarking a number of times he needs greater confidence before lowering rates. Thus, if form holds, consistent with other more shallow easing cycles, we may not get satisfaction from more structurally bullish trades until later this summer (see [Treasuries, US Fixed Income Markets Weekly](#), 6/7/24).

This should prevent yields from moving materially lower over the near term, especially as OIS forwards are now pricing in 50bp of cuts this year (**Figure 3**). Moreover, longer out the curve, valuations no longer appear cheap: 10-year Treasuries appear fairly valued after adjusting for market-based Fed policy, inflation, and growth expectations for the first time in 3 months (**Figure 4**). Certainly, Treasuries can trade rich relative to their fundamental drivers, though it's notable that they have not traded rich on this basis since the regional banking crisis last year. This should put a floor on yields at levels higher than we observed late last year when the "immaculate disinflation" narrative drove markets to price upwards of 150bp of easing over a 12 month period. This month's inflation data are certainly a positive development, but as we noted earlier this week, airfares and motor vehicle insurance alone accounted for more than half of the step down in supercore CPI between April and May, and we would be careful to extrapolate too much of the weakness in the May print (see [US Treasury Market Daily](#), 6/12/24).

Figure 3: Money markets are pricing in 50bp of easing over 2H24...

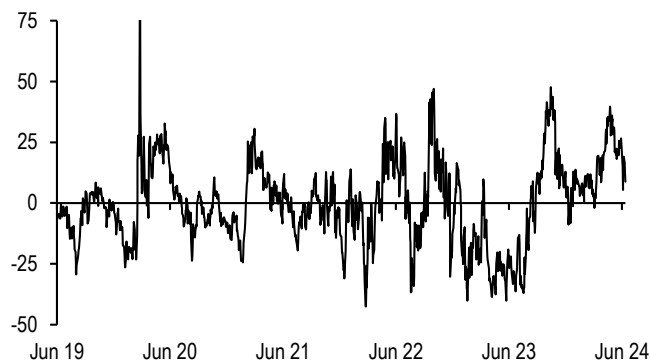
Cumulative easing priced by FOMC meeting as priced by OIS forward rates; bp



Source: J.P. Morgan

Figure 4: ...and Treasuries appear fairly valued for the first time in 3 months

Residual of J.P. Morgan 10-year Treasury fair value model*; bp



Source: J.P. Morgan, Federal Reserve, US Treasury

** Regression of 10-year Treasury yields on 5Yx5Y seasonally-adjusted TIPS breakevens (%), 3m3m OIS rates (%), Fed policy guidance (months), J.P. Morgan US Forecast Revision Index (%), and SOMA share of outstanding marketable US Treasury debt, excluding T-bills (%). Regression over the last 5-years. R-squared = 98.3%, SE = 17.1bp

Rangebound, lower volatility markets make the case for carry trading, but as we've highlighted recently, risk-adjusted carry has declined sharply in recent months, and means investors need confidence volatility has significant room to decline to support these trades. The 20-year sector is emblematic of this dynamic, as much of its outperformance through the spring was supported by declining volatility (see [Treasuries, US Fixed Income Markets Weekly, 5/31/24](#)). We also observe this dynamic in a range of butterflies. As a reminder, 3-months ago, we recommended 3s/5s/7s belly richening butterflies for carry, with a relative value overlay (see [Treasuries, US Fixed Income Markets Weekly, 3/15/24](#)). These butterflies have outperformed in recent months, and the 5-year sector is now trading near the richest levels on the fly year-to-date, limiting the room for further belly outperformance (**Figure 5**). **Against this backdrop, we recommend taking profits on 3s/5s/7s belly-richening butterflies (see Trade recommendations).**

Figure 5: Low-risk, positive carry butterflies have outperformed in recent months and are now closer to fairly valued

50:50 weighted Treasury butterflies over the last 3 months, with statistics from 3-month regression on level and curve, and 3-month carry and roll;

Butterfly	Level	R^2	Beta to t5	Residual	Z-score	3m C+R
2s/3s/5s	-3.2	37.3%	0.04	-0.5	-0.6	-0.1
2s/3s/7s	-2.2	53.8%	0.06	-0.2	-0.3	-1.4
2s/5s/10s	-22.3	91.7%	0.14	-0.1	-0.1	4.1
2s/5s/30s	-29.2	86.7%	0.21	0.3	0.2	2.9
2s/10s/30s	-30.5	87.0%	0.12	0.7	0.7	7.5
3s/5s/10s	-9.2	79.8%	0.07	0.3	0.5	0.9
3s/5s/7s	-8.9	69.1%	0.05	0.7	1.4	2.0
3s/10s/30s	-17.4	72.9%	0.05	0.8	1.1	4.4
3s/5s/30s	-16.1	88.1%	0.14	0.6	0.8	-0.3
5s/7s/10s	-1.2	20.6%	0.01	-0.9	-1.5	0.3
5s/10s/30s	-7.5	32.0%	0.02	0.5	1.0	1.1
10s/20s/30s	18.5	14.0%	-0.01	2.0	1.9	1.3

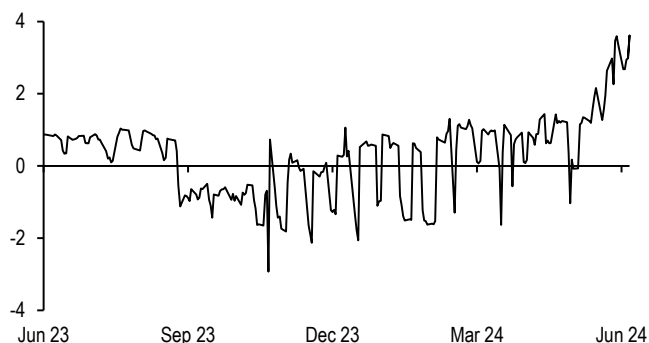
Source: J.P. Morgan

Over the near term, we think the risks to the Treasury market are actually skewed bearishly. Internationally, our colleagues in European rates strategy think the the French story is more idiosyncratic than systemic in nature for the time being, with limited region-wide macro implications. They think the sharp widening in OAT/bund spreads is only justified if RN wins and takes a confrontational fiscal approach: this is less plausible in their minds and they believe this week's widening was excessive (see [Euro Cash](#), *Global Fixed Income Markets Weekly*, 6/14/24). Returning close to home, we forecast retail sales rose 0.4% in May (consensus: 0.3%) with the important control series rising 0.5% over the month (consensus: 0.3%, see *Economics*). This forecast appears to be supported by strength in our Chase consumer card data, which point to a 0.7% rise in the control measure on the month (see [Daily consumer spending tracker](#), Dan Weitzenfeld, 6/12/24). Combined, with yields sitting at the lowest levels in nearly 3 months, the data developments looking more positive next week, and the French political uncertainty unlikely to have broader macro implications, we recommend turning tactically bearish on Treasuries. **Along the curve, the 5-year sector is trading near the richest levels on the fly YTD (Figure 5). Accordingly, we recommend tactical shorts in 5-year Treasuries, and will keep a close eye on developments in Europe (see Trade recommendations).**

Turning to relative value, we see opportunities in the 2036-38 sector, as these securities have underperformed significantly relative to our par curve over the last 4 weeks. In particular, we like to fade the cheapening in 4.75% Feb-37s (**Figure 6**). Separately, we note that 4.5% Aug-39s, the CTD into USM4, have outperformed recently, but this security will drop out of the US deliverable basket next week, and likely has room to cheapen. Further, as **Figure 7** shows, the Feb-37/ Aug-39 appear 6.9bp too flat relative to the shape of 10s/20s. Against this backdrop, **we recommend 100:98 weighted 4.75% Feb 37s / 4.5% Aug 39s steepeners (see Trade recommendations).**

Figure 6: 4.75% Feb 37s have underperformed significantly in recent weeks

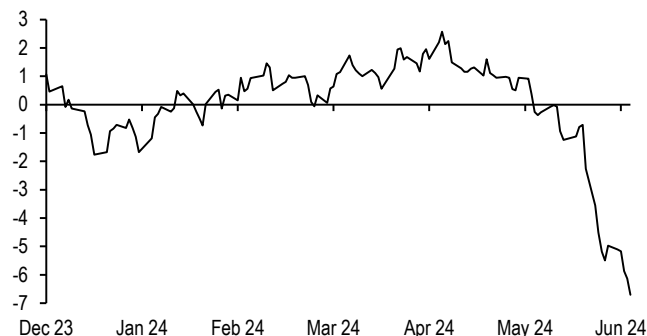
1-year z-score of 4.75% Feb-37 yield error;



Source: J.P. Morgan

Figure 7: Feb-37s / Aug-39s appear too flat relative to the shape of the 10s/20s Treasury curve

Residual of 4.75% Feb 37s / 4.5% Aug 39s curve regressed on 10s/20s Treasury curve; bp



Source: J.P. Morgan

R-squared: 34.9%; S.E. 1.8bp

Can open interest concentration in futures contracts indicate crowded positioning?

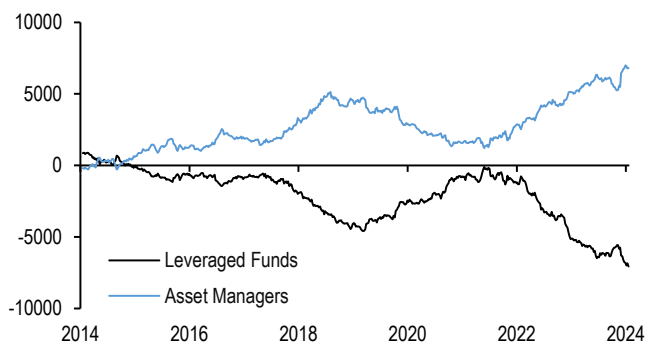
The CFTC's weekly Commitment of Traders release remains one of our preferred measures of investor positioning, alongside our weekly Treasury Client Survey, as well as empirical measures of positioning across actively-managed bond funds, macro hedge funds, and CTAs (see *Appendix*). Historically, we have used the sum of speculative positioning across the Treasury futures complex to discern shifts in speculative positioning in rates over time,

but this series has shown a net short for the better part of the last decade, and has only grown over the last year even after the Fed has gone on hold, indicating this structural short. The growth of levered shorts is largely equal to the opposite of the growth in net longs in futures contracts from the asset manager community (**Figure 8**).

This is well known by market participants, but work done by the TBAC earlier this year showed the structural asset allocation preference of active fixed-income managers and associated demand for Treasury futures likely richens valuations compared to underlying cash Treasuries. The richness of futures creates a premium that can be captured in long Treasury cash/futures basis trades, by hedge funds. Accordingly, we can conclude that much of the buildup of speculative short positioning in Treasury futures in recent years can be more attributed to basis positioning than duration positioning. Fortunately, CFTC also offers other data on the concentration of open interest, which we can use to divine the concentration of positioning in Treasury futures at any given time, and give us potential insight into the direction of travel in Treasury yields over multiweek horizons.

Figure 8: Speculative positioning in rates is structurally short and can be attributed to basis trades, rather than duration positioning

Net longs across Treasury futures*; thousands of contracts



Source: CFTC
*across TU, FV, TY, UXY, US, and WN

Figure 9: The 4 largest traders represent a disproportionately large share of UXY longs and WN shorts

Net open interest of top 4 and top 8 firms as a share of total net interest (%) and 1-year z-scores, as of 6/4/2024;

Contract	Longs				Shorts			
	Top 4 net		Top 8 net		Top 4 net		Top 8 net	
TU	17%	-1.8	24%	-1.8	25%	-1.7	36%	-1.8
FV	20%	-0.8	28%	-0.8	21%	-1.9	34%	-0.8
TY	20%	-0.8	27%	-1.1	20%	0.8	28%	-0.4
UXY	26%	-1.8	37%	-1.8	18%	-1.8	27%	-1.4
US	22%	-0.3	37%	0.6	25%	1.7	35%	1.7
WN	21%	0.3	33%	-0.4	32%	-0.5	42%	-0.7

Source: CFTC

Hence, we expand our analysis of CFTC data and consider the evolution of open interest concentration as a metric for measuring crowding in futures positions: **Figure 9** presents the top 4 and top 8 investor shares of net longs and shorts across Treasury future contracts, alongside their respective 1-year z-scores. It's important to make a few observations as it relates to utilizing this data in order to predict near-term rates moves. **First**, as discussed above, asset managers show a net long bias in futures over time and are more likely to use futures to express duration views. The opposite is true for leveraged funds, which are persistently net short futures, likely reflecting Treasury basis positions. Hence, **the concentration of net longs offers a more relevant contrarian trading signal than that of net shorts**. Relatedly, we note that the top 4 share of net longs has generally been more volatile and less concentrated than that of net shorts (**Figure 10**).

Second, intuitively, this concentration measure offers an asymmetric trading signal. Indeed, net longs that are highly concentrated amongst just a few investors might suggest a higher risk that a shift in those positions could support a near-term move to higher yields. On the other hand, when concentration drops below historical averages, that's consistent with more breadth in positioning, that is less at risk of a near-term unwind. **Accordingly, we focus on large deviations to the upside on the share of net longs held by the largest traders**.

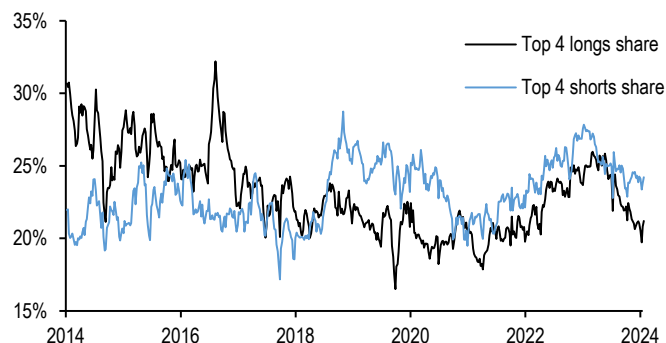
Third, the four largest investors typically account for disproportionately larger shares of FV and UXY contracts on the long side, and WN contracts on the short side. Currently, as Figure

9 also shows, the top 4 net long shares of UXY and WN open interest remain larger those of other contracts, while the top 4 net longs share FV OI is more in line with other contracts. More broadly, **at this point, the concentration of net longs does not appear elevated in any of the contracts in the Treasury futures complex, so therefore we wouldn't expect significant moves in yields over the near term based off concentrated futures positioning.**

More broadly, we don't see significant net short position concentration across futures contracts, with the exception of the US contract, which suggests basis positioning may be significantly larger than at any point over the last year. Further, while the US contract shows greater concentration of OI relative to 1-year averages, it's notable that WN concentration remains significantly higher.

Figure 10: Over the last 5 years, we have tended to notice greater concentration in shorts in futures contracts than longs

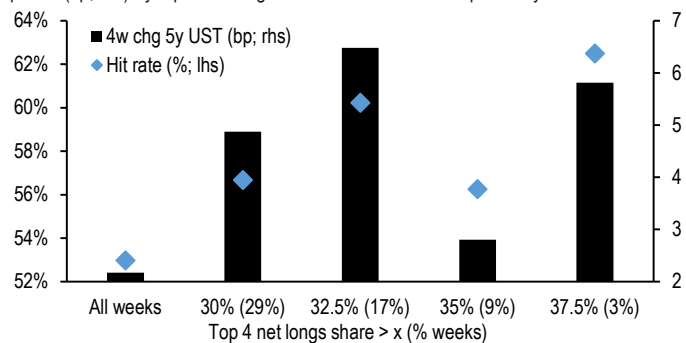
Top 4 net long and short shares* of total open interest across all Treasury future contracts; %



Source: CFTC *
Average across TU, FV, TY, UXY, US, and WN contracts in TY equivalents

Figure 11: Large concentrations of FV longs usually precede moves to higher yields...

Hit rate* (%) (lhs) and average change in 5-year Treasury yields in the following 4-week period (bp; rhs) by top 4 net longs share of FV OI over the past 10 years



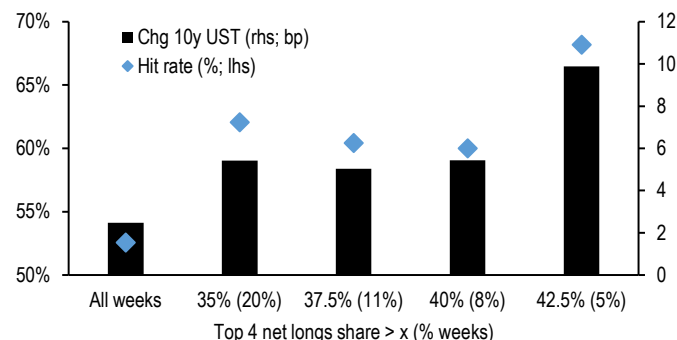
Source: CFTC, J.P. Morgan
*Hit rate defined as % of instances when 5-year Treasury yields rose in the 4 weeks following a given top 4 net longs share of FV OI

Interestingly, we find that when open interest on the long side is disproportionately concentrated amongst a small group of investors, this can offer a signal on the near-term direction of yields. Starting with FVs, on average over the last decade, **when the share of open interest held by the 4 largest investors rises above 30% (29% of observations), 5-year Treasury yields proceed to rise 4.9bp in the following 4-weeks (Figure 11).** This result compares with an average 2.2bp rise over rolling 4-week periods over the last decade. As the figure also shows, these results are somewhat consistent, with hit rates between 56% and 63% depending on the concentration threshold, versus 53% for all observations over the last decade. Interestingly, these results are even more robust over the last five years. During this shorter period, the top 4 net longs share rose above 30% in only 15% of instances, with a 56% hit rate; more interestingly, in the 6% of instances when the top 4 share rose above 32.5%, 5-year interest rates always proceeded to move higher in the near term. Turning to UXYs, we find similar results, with larger concentrations of open interest also preceding upward moves in 10-year yields in the following 4 weeks (Figure 12). On average, **10-year yields rose by 5.4bp in the 4-week period following a greater than 35% concentration of open interest in the 4 largest investors (20% of all observations over the last decade),** with hit rates between 60% and 68% for the different thresholds presented. This result compares with an average 2.5bp rise, and a 53% hit rate for all observations since the launch of the contract in 2016. Further, we'd also note these results remain relevant if we instead focus on the share of open interest held by the top 8 net longs.

Away from FVs and UXYs, we do not find consistent results across other Treasury futures contracts: **Figure 13** summarizes the hit rates, or percentages of instances when Treasury yields rose over subsequent 4-week periods, for each bucket of top 4 net longs share of open interest. In particular, TY and both long-end contracts (US and WN) show counterintuitive results, as hit rates drop for higher top 4 net long shares of OI. In the case of TYs, we think this result is explained by a structurally lower concentration since the introduction of the UXY contract in 2016, suggesting some larger end users have shifted their duration position out the curve over the period. Turning to US and WN, the top 4 net long shares of OI in these contracts are both less volatile and structurally lower over time, so we're not surprised they don't offer a good near-term trading signals. Overall, **we find meaningful and consistent results for FVs and UXYs, but not in the other Treasury futures contracts. We think investors should consider key concentration thresholds of the top 4 investors, such as 30% of open interest in the case of FV and 35% in the case of UXY as near term trading signals for considering setting Treasury shorts.**

Figure 12: ...We find similar results for large concentrations of UXY OI

Hit rate* (%; lhs) and average change in 10-year Treasury yields in the following 4-week period (bp; rhs) by top 4 net longs share of UXY OI since March 2016



Source: : CFTC, J.P. Morgan

*Hit rate defined as % of instances when 10-year Treasury yields rose in the 4 weeks following a given top 4 net longs share of UXY

Figure 13: The concentration of net longs does not provide a useful signal in other contracts

Hit rates* for different Treasury contracts and top 4 net longs share of OI over the last 10-years; %

TU	Share > (% time)	All weeks	22.5% (34%)	25% (19%)	27.5% (8%)	30% (3%)
	Hit rate	61%	60%	66%	64%	53%
FV	Share > (% time)	All weeks	30% (29%)	32.5% (17%)	35% (9%)	37.5% (3%)
	Hit rate	53%	57%	60%	56%	63%
TY	Share > (% time)	All weeks	27.5% (26%)	30% (17%)	32.5% (12%)	35% (6%)
	Hit rate	50%	45%	43%	38%	33%
UXY**	Share > (% time)	All weeks	35% (20%)	37.5% (11%)	40% (8%)	42.5% (5%)
	Hit rate	53%	62%	60%	60%	68%
US	Share > (% time)	All weeks	20% (61%)	22.5% (29%)	25% (15%)	27.5% (6%)
	Hit rate	62%	45%	50%	46%	54%
WN	Share > (% time)	All weeks	20% (64%)	21.5% (42%)	23% (20%)	24.5% (7%)
	Hit rate	62%	45%	42%	39%	31%

Source: CFTC, J.P. Morgan

*Hit rates defined as % of instances when Treasury yields rose in the 4-weeks following a given top 4 net longs share of OI (TU and 2-year Treasury yields, FV and 5-year Treasury yields, TY and 7-year Treasury yields, UXY and 10-year Treasury yields, US and 20-year Treasury yields, WN and 30-year Treasury yields) **since March 2016

Trade recommendations

- **Initiate 5-year duration shorts**

- Sell 100% risk, or \$50mn notional of T 4.5% May-29s (yield: 4.227%; bpv: \$446/mn)
- Yield is 4.227%. One-month weighted carry is 2.1bp and roll is 0bp

- **Initiate 100:98 weighted 4.75% Feb 37s / 4.5% Aug 39s steepeners**

- Buy 100% risk, or \$25mn notional of T 4.75% Feb-37s (yield: 4.165%; bpv: \$1010/mn)
- Sell 98% risk, or \$22mn notional of T 4.5% Aug-39s (yield: 4.272%; bpv: \$1125/mn)
- Weighted spread is -2.1bp. One-month weighted carry is -0.2bp and roll is 0bp

- **Unwind 50:50 weighted 3s/5s/7s belly-richening butterflies**

- Unwind short 50% risk, or \$45mn notional of T 4.25% Mar-27s
- Unwind long 100% risk, or \$56.3mn notional of T 4.25% Feb-29s
- Unwind short 50% risk, or \$20.9mn notional of T 4.25% Feb-31s
- (*US Fixed Income Markets Weekly*, 3/15/24: P/L since inception: 2.1bp)

- **Maintain 5s/30s steepeners**

- Stay long 100% risk, or \$112mn notional of T 4.875% Oct-28s
- 100% risk, or \$29.9mn notional of T 4.75% Nov-53s
- (*US Treasury Market Daily*, 11/22/23: P/L since inception: -15.1bp)

- **Maintain 75%/6% weighted 5s/10s/30s belly-cheapening butterflies**

- Stay long 75% risk, or \$43mn notional of T 4.625% Sep-28s
- Stay short 100% risk, or \$33.3mn notional of T 3.875% Aug-33s
- Stay long 6% risk, or \$1mn notional of T 4.125% Aug-53s
- (*US Fixed Income Markets Weekly*, 9/29/23: P/L since inception: -10.1bp)

Figure 14: Closed trades in last 12 months

P/L reported in bp of yield unless otherwise indicated

TRADE	ENTRY	EXIT	P/L
Duration			
5-year duration longs	05/19/23	06/29/23	-45.8
5-year duration longs	08/04/23	09/08/23	-27.6
5-year duration longs	10/03/23	11/02/23	14.9
7-year duration shorts	11/03/23	11/22/23	-7.9
30-year duration shorts	12/15/23	01/04/24	10.9
5-year duration longs	01/19/24	02/01/24	25.3
5-year duration longs	02/09/24	03/07/24	3.3
Equi-notional 2s/5s flatteners	05/31/24	06/06/24	16.0
Curve			
10s/30s steepener	12/16/22	09/29/23	3.0
10s/30s steepener	11/03/23	11/22/23	-7.3
2s/5s flatteners	12/08/24	05/17/24	6.0
Relative value			
100:95 weighted Nov-43s/May-48s flatteners	04/28/23	06/15/23	3.8
52:59 10s/20s/30s belly-cheapening butterflies	07/07/23	07/14/23	4.0
97:100 weighted Aug-32s/Aug-33s steepeners	06/09/23	08/03/23	1.6
100:96 weighted 3.5% Feb-39 / 3.75% Nov-43 flatteners	07/28/23	08/16/23	3.2
2.75% Aug-32/ 3.5% Feb-39 steepeners	01/10/24	01/26/24	5.2
20s/ old 30s flatteners	02/15/24	05/10/24	-2.6
100:97 weighted 3.75% Apr-26/ 4.625% Sep-26 flatteners	04/12/24	05/17/24	2.2
100:95 weighted 4% Feb-28 / 4% Feb-30 steepeners	02/23/24	05/31/24	-6.6
50:50 weighted 3s/5s/7s belly-richening butterflies	03/15/24	06/14/24	2.1
Number of positive trades			14
Number of negative trades			6
Hit rate			70%
Aggregate P/L			3.7

Source: J.P. Morgan

Jay Barry ^{AC} (1-212) 834-4951
john.f.barry@jpmorgan.com
J.P. Morgan Securities LLC
Phoebe White (1-212) 834-3092
phoebe.a.white@jpmorgan.com
J.P. Morgan Securities LLC

Afonso Borges (1-212) 834-4349
afonso.borges@jpmorgan.com
J.P. Morgan Securities LLC
Liam L Wash (1-212) 834-5230
liam.wash@jpmchase.com
J.P. Morgan Securities LLC

North America Fixed Income
Strategy
Treasuries
14 June 2024

J.P.Morgan

Analyst Certification: The Research Analyst(s) denoted by an “AC” on the cover of this report certifies (or, where multiple Research Analysts are primarily responsible for this report, the Research Analyst denoted by an “AC” on the cover or within the document individually certifies, with respect to each security or issuer that the Research Analyst covers in this research) that: (1) all of the views expressed in this report accurately reflect the Research Analyst’s personal views about any and all of the subject securities or issuers; and (2) no part of any of the Research Analyst’s compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the Research Analyst(s) in this report. For all Korea-based Research Analysts listed on the front cover, if applicable, they also certify, as per KOFIA requirements, that the Research Analyst’s analysis was made in good faith and that the views reflect the Research Analyst’s own opinion, without undue influence or intervention.

All authors named within this report are Research Analysts who produce independent research unless otherwise specified. In Europe, Sector Specialists (Sales and Trading) may be shown on this report as contacts but are not authors of the report or part of the Research Department.

Important Disclosures

Company-Specific Disclosures: Important disclosures, including price charts and credit opinion history tables, are available for compendium reports and all J.P. Morgan–covered companies, and certain non-covered companies, by visiting <https://www.jpmm.com/research/disclosures>, calling 1-800-477-0406, or e-mailing research.disclosure.inquiries@jpmorgan.com with your request.

A history of J.P. Morgan investment recommendations disseminated during the preceding 12 months can be accessed on the Research & Commentary page of <http://www.jpmorganmarkets.com> where you can also search by analyst name, sector or financial instrument.

Analysts' Compensation: The research analysts responsible for the preparation of this report receive compensation based upon various factors, including the quality and accuracy of research, client feedback, competitive factors, and overall firm revenues.

Other Disclosures

J.P. Morgan is a marketing name for investment banking businesses of JPMorgan Chase & Co. and its subsidiaries and affiliates worldwide.

UK MIFID FICC research unbundling exemption: UK clients should refer to [UK MIFID Research Unbundling exemption](#) for details of J.P. Morgan’s implementation of the FICC research exemption and guidance on relevant FICC research categorisation.

Any long form nomenclature for references to China; Hong Kong; Taiwan; and Macau within this research material are Mainland China; Hong Kong SAR (China); Taiwan (China); and Macau SAR (China).

J.P. Morgan Research may, from time to time, write on issuers or securities targeted by economic or financial sanctions imposed or administered by the governmental authorities of the U.S., EU, UK or other relevant jurisdictions (Sanctioned Securities). Nothing in this report is intended to be read or construed as encouraging, facilitating, promoting or otherwise approving investment or dealing in such Sanctioned Securities. Clients should be aware of their own legal and compliance obligations when making investment decisions.

Any digital or crypto assets discussed in this research report are subject to a rapidly changing regulatory landscape. For relevant regulatory advisories on crypto assets, including bitcoin and ether, please see <https://www.jpmorgan.com/disclosures/cryptoasset-disclosure>.

The author(s) of this research report may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so.

Exchange-Traded Funds (ETFs): J.P. Morgan Securities LLC (“JPMS”) acts as authorized participant for substantially all U.S.-listed ETFs. To the extent that any ETFs are mentioned in this report, JPMS may earn commissions and transaction-based compensation in connection with the distribution of those ETF shares and may earn fees for performing other trade-related services, such as securities lending to short sellers of the ETF shares. JPMS may also perform services for the ETFs themselves, including acting as a broker or dealer to the ETFs. In addition, affiliates of JPMS may perform services for the ETFs, including trust, custodial, administration, lending, index calculation and/or maintenance and other services.

Options and Futures related research: If the information contained herein regards options- or futures-related research, such information is available only to persons who have received the proper options or futures risk disclosure documents. Please contact your J.P. Morgan Representative or visit <https://www.theocc.com/components/docs/riskstoc.pdf> for a copy of the Option Clearing Corporation’s Characteristics and Risks of Standardized Options or http://www.finra.org/sites/default/files/Security_Futures_Risk_Disclosure_Statement_2018.pdf for a copy of the Security Futures Risk Disclosure Statement.

Changes to Interbank Offered Rates (IBORs) and other benchmark rates: Certain interest rate benchmarks are, or may in the future become, subject to ongoing international, national and other regulatory guidance, reform and proposals for reform. For more information, please consult: https://www.jpmorgan.com/global/disclosures/interbank_offered_rates

Private Bank Clients: Where you are receiving research as a client of the private banking businesses offered by JPMorgan Chase & Co. and its subsidiaries (“J.P. Morgan Private Bank”), research is provided to you by J.P. Morgan Private Bank and not by any other division of J.P. Morgan,

Jay Barry ^{AC} (1-212) 834-4951
john.f.barry@jpmorgan.com
J.P. Morgan Securities LLC
Phoebe White (1-212) 834-3092
phoebe.a.white@jpmorgan.com
J.P. Morgan Securities LLC

Afonso Borges (1-212) 834-4349
afonso.borges@jpmorgan.com
J.P. Morgan Securities LLC
Liam L Wash (1-212) 834-5230
liam.wash@jpmchase.com
J.P. Morgan Securities LLC

North America Fixed Income
Strategy

14 June 2024

J.P.Morgan

including, but not limited to, the J.P. Morgan Corporate and Investment Bank and its Global Research division.

Legal entity responsible for the production and distribution of research: The legal entity identified below the name of the Reg AC Research Analyst who authored this material is the legal entity responsible for the production of this research. Where multiple Reg AC Research Analysts authored this material with different legal entities identified below their names, these legal entities are jointly responsible for the production of this research. Research Analysts from various J.P. Morgan affiliates may have contributed to the production of this material but may not be licensed to carry out regulated activities in your jurisdiction (and do not hold themselves out as being able to do so). Unless otherwise stated below, this material has been distributed by the legal entity responsible for production. If you have any queries, please contact the relevant Research Analyst in your jurisdiction or the entity in your jurisdiction that has distributed this research material.

Legal Entities Disclosures and Country-/Region-Specific Disclosures:

Argentina: JPMorgan Chase Bank N.A Sucursal Buenos Aires is regulated by Banco Central de la República Argentina ("BCRA"- Central Bank of Argentina) and Comisión Nacional de Valores ("CNV"- Argentinian Securities Commission - ALYC y AN Integral N°51). **Australia:** J.P. Morgan Securities Australia Limited ("JPMSAL") (ABN 61 003 245 234/AFS Licence No: 238066) is regulated by the Australian Securities and Investments Commission and is a Market Participant of ASX Limited, a Clearing and Settlement Participant of ASX Clear Pty Limited and a Clearing Participant of ASX Clear (Futures) Pty Limited. This material is issued and distributed in Australia by or on behalf of JPMSAL only to "wholesale clients" (as defined in section 761G of the Corporations Act 2001). A list of all financial products covered can be found by visiting <https://www.jpmm.com/research/disclosures>. J.P. Morgan seeks to cover companies of relevance to the domestic and international investor base across all Global Industry Classification Standard (GICS) sectors, as well as across a range of market capitalisation sizes. If applicable, in the course of conducting public side due diligence on the subject company(ies), the Research Analyst team may at times perform such diligence through corporate engagements such as site visits, discussions with company representatives, management presentations, etc. Research issued by JPMSAL has been prepared in accordance with J.P. Morgan Australia's Research Independence Policy which can be found at the following link: [J.P. Morgan Australia - Research Independence Policy](#). **Brazil:** Banco J.P. Morgan S.A. is regulated by the Comissão de Valores Mobiliários (CVM) and by the Central Bank of Brazil. Ombudsman J.P. Morgan: 0800-7700847 / 0800-7700810 (For Hearing Impaired) / ouvidoria.jp.morgan@jpmorgan.com. **Canada:** J.P. Morgan Securities Canada Inc. is a registered investment dealer, regulated by the Canadian Investment Regulatory Organization and the Ontario Securities Commission and is the participating member on Canadian exchanges. This material is distributed in Canada by or on behalf of J.P.Morgan Securities Canada Inc. **Chile:** Inversiones J.P. Morgan Limitada is an unregulated entity incorporated in Chile. **China:** J.P. Morgan Securities (China) Company Limited has been approved by CSRC to conduct the securities investment consultancy business. **Dubai International Financial Centre (DIFC):** JPMorgan Chase Bank, N.A., Dubai Branch is regulated by the Dubai Financial Services Authority (DFSA) and its registered address is Dubai International Financial Centre - The Gate, West Wing, Level 3 and 9 PO Box 506551, Dubai, UAE. This material has been distributed by JP Morgan Chase Bank, N.A., Dubai Branch to persons regarded as professional clients or market counterparties as defined under the DFSA rules. **European Economic Area (EEA):** Unless specified to the contrary, research is distributed in the EEA by J.P. Morgan SE ("JPM SE"), which is authorised as a credit institution by the Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin) and jointly supervised by the BaFin, the German Central Bank (Deutsche Bundesbank) and the European Central Bank (ECB). JPM SE is a company headquartered in Frankfurt with registered address at TaunusTurm, Taunustor 1, Frankfurt am Main, 60310, Germany. The material has been distributed in the EEA to persons regarded as professional investors (or equivalent) pursuant to Art. 4 para. 1 no. 10 and Annex II of MiFID II and its respective implementation in their home jurisdictions ("EEA professional investors"). This material must not be acted on or relied on by persons who are not EEA professional investors. Any investment or investment activity to which this material relates is only available to EEA relevant persons and will be engaged in only with EEA relevant persons. **Hong Kong:** J.P. Morgan Securities (Asia Pacific) Limited (CE number AAJ321) is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission in Hong Kong, and J.P. Morgan Broking (Hong Kong) Limited (CE number AAB027) is regulated by the Securities and Futures Commission in Hong Kong. JP Morgan Chase Bank, N.A., Hong Kong Branch (CE Number AAL996) is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission, is organized under the laws of the United States with limited liability. Where the distribution of this material is a regulated activity in Hong Kong, the material is distributed in Hong Kong by or through J.P. Morgan Securities (Asia Pacific) Limited and/or J.P. Morgan Broking (Hong Kong) Limited. **India:** J.P. Morgan India Private Limited (Corporate Identity Number - U67120MH1992FTC068724), having its registered office at J.P. Morgan Tower, Off. C.S.T. Road, Kalina, Santacruz - East, Mumbai - 400098, is registered with the Securities and Exchange Board of India (SEBI) as a 'Research Analyst' having registration number INH000001873. J.P. Morgan India Private Limited is also registered with SEBI as a member of the National Stock Exchange of India Limited and the Bombay Stock Exchange Limited (SEBI Registration Number - INZ000239730) and as a Merchant Banker (SEBI Registration Number - MB/INM000002970). Telephone: 91-22-6157 3000, Facsimile: 91-22-6157 3990 and Website: <http://www.jpmipl.com>. JPMorgan Chase Bank, N.A. - Mumbai Branch is licensed by the Reserve Bank of India (RBI) (Licence No. 53/ Licence No. BY.4/94; SEBI - IN/CUS/014/ CDSL : IN-DP-CDSL-444-2008/ IN-DP-NSDL-285-2008/ INBI00000984/ INE231311239) as a Scheduled Commercial Bank in India, which is its primary license allowing it to carry on Banking business in India and other activities, which a Bank branch in India are permitted to undertake. For non-local research material, this material is not distributed in India by J.P. Morgan India Private Limited. Compliance Officer: Spurthi Gadamsetty; spurthi.gadamsetty@jpmchase.com; +912261573225. Grievance Officer: Ramprasadh K, jpmipl.research.feedback@jpmorgan.com; +912261573000.

Investment in securities market are subject to market risks. Read all the related documents carefully before investing. Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

Indonesia: PT J.P. Morgan Sekuritas Indonesia is a member of the Indonesia Stock Exchange and is registered and supervised by the Otoritas Jasa Keuangan (OJK). **Korea:** J.P. Morgan Securities (Far East) Limited, Seoul Branch, is a member of the Korea Exchange (KRX). JPMorgan

Jay Barry ^{AC} (1-212) 834-4951
john.f.barry@jpmorgan.com
J.P. Morgan Securities LLC
Phoebe White (1-212) 834-3092
phoebe.a.white@jpmorgan.com
J.P. Morgan Securities LLC

Afonso Borges (1-212) 834-4349
afonso.borges@jpmorgan.com
J.P. Morgan Securities LLC
Liam L Wash (1-212) 834-5230
liam.wash@jpmchase.com
J.P. Morgan Securities LLC

North America Fixed Income
Strategy
Treasuries
14 June 2024

J.P.Morgan

Chase Bank, N.A., Seoul Branch, is licensed as a branch office of foreign bank (JPMorgan Chase Bank, N.A.) in Korea. Both entities are regulated by the Financial Services Commission (FSC) and the Financial Supervisory Service (FSS). For non-macro research material, the material is distributed in Korea by or through J.P. Morgan Securities (Far East) Limited, Seoul Branch. **Japan:** JPMorgan Securities Japan Co., Ltd. and JPMorgan Chase Bank, N.A., Tokyo Branch are regulated by the Financial Services Agency in Japan. **Malaysia:** This material is issued and distributed in Malaysia by JPMorgan Securities (Malaysia) Sdn Bhd (18146-X), which is a Participating Organization of Bursa Malaysia Berhad and holds a Capital Markets Services License issued by the Securities Commission in Malaysia. **Mexico:** J.P. Morgan Casa de Bolsa, S.A. de C.V. and J.P. Morgan Grupo Financiero are members of the Mexican Stock Exchange and are authorized to act as a broker dealer by the National Banking and Securities Exchange Commission. **New Zealand:** This material is issued and distributed by JPMSAL in New Zealand only to "wholesale clients" (as defined in the Financial Markets Conduct Act 2013). JPMSAL is registered as a Financial Service Provider under the Financial Service providers (Registration and Dispute Resolution) Act of 2008. **Philippines:** J.P. Morgan Securities Philippines Inc. is a Trading Participant of the Philippine Stock Exchange and a member of the Securities Clearing Corporation of the Philippines and the Securities Investor Protection Fund. It is regulated by the Securities and Exchange Commission. **Singapore:** This material is issued and distributed in Singapore by or through J.P. Morgan Securities Singapore Private Limited (JPSS) [MCI (P) 030/08/2023 and Co. Reg. No.: 199405335R], which is a member of the Singapore Exchange Securities Trading Limited, and/or JPMorgan Chase Bank, N.A., Singapore branch (JPMCB Singapore), both of which are regulated by the Monetary Authority of Singapore. This material is issued and distributed in Singapore only to accredited investors, expert investors and institutional investors, as defined in Section 4A of the Securities and Futures Act, Cap. 289 (SFA). This material is not intended to be issued or distributed to any retail investors or any other investors that do not fall into the classes of "accredited investors," "expert investors" or "institutional investors," as defined under Section 4A of the SFA. Recipients of this material in Singapore are to contact JPSS or JPMCB Singapore in respect of any matters arising from, or in connection with, the material. **South Africa:** J.P. Morgan Equities South Africa Proprietary Limited and JPMorgan Chase Bank, N.A., Johannesburg Branch are members of the Johannesburg Securities Exchange and are regulated by the Financial Services Conduct Authority (FSCA). **Taiwan:** J.P. Morgan Securities (Taiwan) Limited is a participant of the Taiwan Stock Exchange (company-type) and regulated by the Taiwan Securities and Futures Bureau. Material relating to equity securities is issued and distributed in Taiwan by J.P. Morgan Securities (Taiwan) Limited, subject to the license scope and the applicable laws and the regulations in Taiwan. According to Paragraph 2, Article 7-1 of Operational Regulations Governing Securities Firms Recommending Trades in Securities to Customers (as amended or supplemented) and/or other applicable laws or regulations, please note that the recipient of this material is not permitted to engage in any activities in connection with the material that may give rise to conflicts of interests, unless otherwise disclosed in the "Important Disclosures" in this material. **Thailand:** This material is issued and distributed in Thailand by JPMorgan Securities (Thailand) Ltd., which is a member of the Stock Exchange of Thailand and is regulated by the Ministry of Finance and the Securities and Exchange Commission, and its registered address is 3rd Floor, 20 North Sathorn Road, Silom, Bangkok, Bangkok 10500. **UK:** Unless specified to the contrary, research is distributed in the UK by J.P. Morgan Securities plc ("JPMS plc") which is a member of the London Stock Exchange and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. JPMS plc is registered in England & Wales No. 2711006, Registered Office 25 Bank Street, London, E14 5JP. This material is directed in the UK only to: (a) persons having professional experience in matters relating to investments falling within article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) (Order) 2005 ("the FPO"); (b) persons outlined in article 49 of the FPO (high net worth companies, unincorporated associations or partnerships, the trustees of high value trusts, etc.); or (c) any persons to whom this communication may otherwise lawfully be made; all such persons being referred to as "UK relevant persons". This material must not be acted on or relied on by persons who are not UK relevant persons. Any investment or investment activity to which this material relates is only available to UK relevant persons and will be engaged in only with UK relevant persons. Research issued by JPMS plc has been prepared in accordance with JPMS plc's policy for prevention and avoidance of conflicts of interest related to the production of Research which can be found at the following link: [J.P. Morgan EMEA - Research Independence Policy](#). U.S.: J.P. Morgan Securities LLC ("JPMS") is a member of the NYSE, FINRA, SIPC, and the NFA. JPMorgan Chase Bank, N.A. is a member of the FDIC. Material published by non-U.S. affiliates is distributed in the U.S. by JPMS who accepts responsibility for its content.

General: Additional information is available upon request. The information in this material has been obtained from sources believed to be reliable. While all reasonable care has been taken to ensure that the facts stated in this material are accurate and that the forecasts, opinions and expectations contained herein are fair and reasonable, JPMorgan Chase & Co. or its affiliates and/or subsidiaries (collectively J.P. Morgan) make no representations or warranties whatsoever to the completeness or accuracy of the material provided, except with respect to any disclosures relative to J.P. Morgan and the Research Analyst's involvement with the issuer that is the subject of the material. Accordingly, no reliance should be placed on the accuracy, fairness or completeness of the information contained in this material. There may be certain discrepancies with data and/or limited content in this material as a result of calculations, adjustments, translations to different languages, and/or local regulatory restrictions, as applicable. These discrepancies should not impact the overall investment analysis, views and/or recommendations of the subject company(ies) that may be discussed in the material. J.P. Morgan accepts no liability whatsoever for any loss arising from any use of this material or its contents, and neither J.P. Morgan nor any of its respective directors, officers or employees, shall be in any way responsible for the contents hereof, apart from the liabilities and responsibilities that may be imposed on them by the relevant regulatory authority in the jurisdiction in question, or the regulatory regime thereunder. Opinions, forecasts or projections contained in this material represent J.P. Morgan's current opinions or judgment as of the date of the material only and are therefore subject to change without notice. Periodic updates may be provided on companies/industries based on company-specific developments or announcements, market conditions or any other publicly available information. There can be no assurance that future results or events will be consistent with any such opinions, forecasts or projections, which represent only one possible outcome. Furthermore, such opinions, forecasts or projections are subject to certain risks, uncertainties and assumptions that have not been verified, and future actual results or events could differ materially. The value of, or income from, any investments referred to in this material may fluctuate and/or be affected by changes in exchange rates. All pricing is indicative as of the close of market for the securities discussed, unless otherwise stated. Past performance is not indicative of future results. Accordingly, investors may

Jay Barry ^{AC} (1-212) 834-4951
john.f.barry@jpmorgan.com
J.P. Morgan Securities LLC
Phoebe White (1-212) 834-3092
phoebe.a.white@jpmorgan.com
J.P. Morgan Securities LLC

Afonso Borges (1-212) 834-4349
afonso.borges@jpmorgan.com
J.P. Morgan Securities LLC
Liam L Wash (1-212) 834-5230
liam.wash@jpmchase.com
J.P. Morgan Securities LLC

North America Fixed Income
Strategy

14 June 2024

J.P.Morgan

receive back less than originally invested. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. The opinions and recommendations herein do not take into account individual client circumstances, objectives, or needs and are not intended as recommendations of particular securities, financial instruments or strategies to particular clients. This material may include views on structured securities, options, futures and other derivatives. These are complex instruments, may involve a high degree of risk and may be appropriate investments only for sophisticated investors who are capable of understanding and assuming the risks involved. The recipients of this material must make their own independent decisions regarding any securities or financial instruments mentioned herein and should seek advice from such independent financial, legal, tax or other adviser as they deem necessary. J.P. Morgan may trade as a principal on the basis of the Research Analysts' views and research, and it may also engage in transactions for its own account or for its clients' accounts in a manner inconsistent with the views taken in this material, and J.P. Morgan is under no obligation to ensure that such other communication is brought to the attention of any recipient of this material. Others within J.P. Morgan, including Strategists, Sales staff and other Research Analysts, may take views that are inconsistent with those taken in this material. Employees of J.P. Morgan not involved in the preparation of this material may have investments in the securities (or derivatives of such securities) mentioned in this material and may trade them in ways different from those discussed in this material. This material is not an advertisement for or marketing of any issuer, its products or services, or its securities in any jurisdiction.

Confidentiality and Security Notice: This transmission may contain information that is privileged, confidential, legally privileged, and/or exempt from disclosure under applicable law. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or use of the information contained herein (including any reliance thereon) is STRICTLY PROHIBITED. Although this transmission and any attachments are believed to be free of any virus or other defect that might affect any computer system into which it is received and opened, it is the responsibility of the recipient to ensure that it is virus free and no responsibility is accepted by JPMorgan Chase & Co., its subsidiaries and affiliates, as applicable, for any loss or damage arising in any way from its use. If you received this transmission in error, please immediately contact the sender and destroy the material in its entirety, whether in electronic or hard copy format. This message is subject to electronic monitoring: <https://www.jpmorgan.com/disclosures/email>

MSCI: Certain information herein ("Information") is reproduced by permission of MSCI Inc., its affiliates and information providers ("MSCI") ©2024. No reproduction or dissemination of the Information is permitted without an appropriate license. MSCI MAKES NO EXPRESS OR IMPLIED WARRANTIES (INCLUDING MERCHANTABILITY OR FITNESS) AS TO THE INFORMATION AND DISCLAIMS ALL LIABILITY TO THE EXTENT PERMITTED BY LAW. No Information constitutes investment advice, except for any applicable Information from MSCI ESG Research. Subject also to [msci.com/disclaimer](https://www.msci.com/disclaimer)

Sustainalytics: Certain information, data, analyses and opinions contained herein are reproduced by permission of Sustainalytics and: (1) includes the proprietary information of Sustainalytics; (2) may not be copied or redistributed except as specifically authorized; (3) do not constitute investment advice nor an endorsement of any product or project; (4) are provided solely for informational purposes; and (5) are not warranted to be complete, accurate or timely. Sustainalytics is not responsible for any trading decisions, damages or other losses related to it or its use. The use of the data is subject to conditions available at <https://www.sustainalytics.com/legal-disclaimers>. ©2024 Sustainalytics. All Rights Reserved.

"Other Disclosures" last revised April 06, 2024.

Copyright 2024 JPMorgan Chase & Co. All rights reserved. This material or any portion hereof may not be reprinted, sold or redistributed without the written consent of J.P. Morgan. It is strictly prohibited to use or share without prior written consent from J.P. Morgan any research material received from J.P. Morgan or an authorized third-party ("J.P. Morgan Data") in any third-party artificial intelligence ("AI") systems or models when such J.P. Morgan Data is accessible by a third-party. It is permissible to use J.P. Morgan Data for internal business purposes only in an AI system or model that protects the confidentiality of J.P. Morgan Data so as to prevent any and all access to or use of such J.P. Morgan Data by any third-party.

Completed 14 Jun 2024 05:39 PM EDT

Disseminated 14 Jun 2024 05:40 PM EDT