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Interest Rate Derivatives

Frozen

- Intermediate maturity swap spreads have been grinding narrower, but remain wide to fair value and are not yet priced to the end of QE. Remain positioned for narrower maturity matched swap spreads in the belly of the curve
- On a relative basis, 7-year spreads look too narrow relative to the term structure of swap spreads - initiate 7s/10s maturity matched swap spread curve flatteners
- Initiate exposure to a steeper 10s/30s swap spread curve
- We discuss bank balance sheet trends in 4Q21, and the outlook for the remainder of 2022 as we head towards Fed balance sheet normalization. We look for Reserves to decline further, RRP to remain elevated, bank balance sheets to remain leverage constrained, and for deposit growth and bank UST demand to moderate
- Maintain bearish gamma positions for a while longer, as market depth should continue to trend higher, and as markets move past the FOMC meeting. For longer expiry volatility, vega supply remains a headwind - remain neutral

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See page 13 for analyst certification and important disclosures.

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Frozen

Although Libor swap spreads have drifted narrower recently, SOFR swap spreads have remained rather stable in the two weeks since our last publication, seemingly frozen in place like much of the East Coast. For instance, maturity matched SOFR swap spreads are narrower by a mere 0.6bp and 1.3bp, respectively, in the 2- and 3-year sectors of the curve. Further out on the curve, SOFR swap spreads are all about 0.5bp wider (**Exhibit 1**).

Looking ahead, we remain biased towards narrower SOFR swap spreads in in the intermediate sector. Maturity matched swap spreads in the 10-year sector, for instance, have been steadily converging towards levels indicated by our fair value framework (which accounts for Fed purchases, rate hike expectations, HG issuance and bank demand for USTs). But as seen in **Exhibit 2**, swap spreads in the sector remain reasonably wide to fair value. This alone would support a narrowing bias in the weeks ahead, but it doesn't yet account for the outlook for the independent factors in our framework. Fed purchases, for instance, are steadily headed towards zero, and even negative, as balance sheet normalization becomes reality and gross coupon issuance to the market starts to rise eventually. Similarly, bank demand for USTs, while no doubt at strong levels, is also poised to steadily weaken as we discuss later in this piece. Lastly, the seasonals around High Grade issuance (a sizeable fraction of which tends to get swapped) is also favorable, as such issuance is likely to rise in coming weeks as we move past earnings season. Thus, we remain biased towards narrower swap spreads in the intermediate sector of the curve and recommend maintaining narrowers in the 10-year sector.

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Exhibit 1: Statistics regarding SOFR and Libor maturity matched swap spreads in various tenors over the past two weeks

Key statistics for maturity matched SOFR and 3-month Libor swap spreads across different tenors; bp

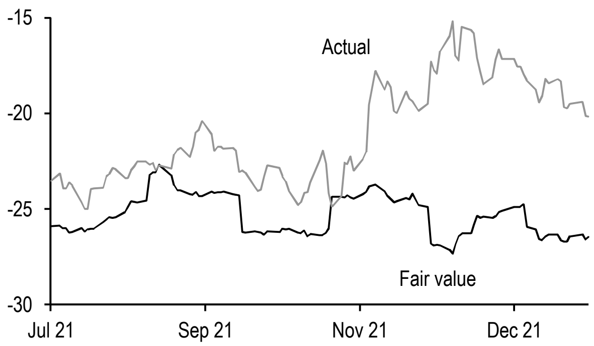
		Start	Chg	End	Min	Mean	Median	Max
SOFR	2Y	-2.2	-0.6	-2.8	-3.3	-2.7	-2.7	-2.1
	3Y	-4.8	-1.3	-6.0	-7.0	-6.1	-6.3	-4.8
	5Y	-15.7	0.0	-15.8	-17.1	-16.2	-16.2	-15.3
	7Y	-23.2	0.5	-22.7	-23.9	-23.2	-23.2	-22.4
	10Y	-20.6	0.4	-20.2	-21.2	-20.7	-20.7	-19.9
	30Y	-44.9	0.2	-44.7	-46.1	-44.8	-44.8	-42.8
LIBOR	2Y	19.1	-3.3	15.7	15.2	17.2	17.2	19.1
	3Y	18.7	-3.1	15.6	15.1	16.5	16.1	18.7
	5Y	9.4	-1.1	8.4	7.7	8.5	8.4	9.8
	7Y	2.7	-0.2	2.5	1.4	2.4	2.2	3.5
	10Y	6.0	-0.2	5.8	4.7	5.6	5.6	6.7
	30Y	-17.5	0.0	-17.6	-19.1	-17.5	-17.5	-15.3

Data over the period 1/7/2022 - 1/21/2022

Source: JPMorgan.

Exhibit 2: 10-year SOFR spreads have been drifting narrower but still remain wide relative to fair value

10-year matched maturity SOFR swap spread, fair value* versus actual; bp

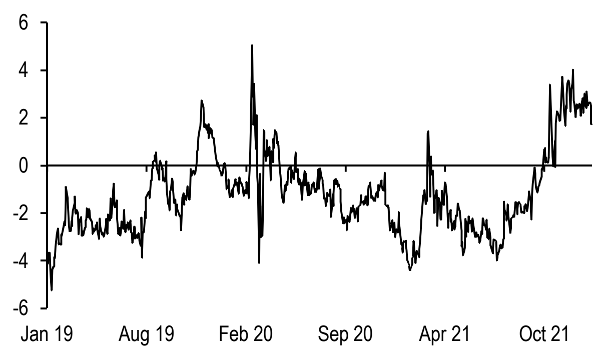


* Fair value estimate calculated as 2.44*1Y forward 1M OIS rate (%), plus 0.18 * monthly Fed purchases of USTs ($bn 10s) - 0.06 * monthly HG issuance ($bn, 3M moving average) + 0.02 * Bank UST demand (estimated as 0.122*annual change in systemwide bank deposits, $bn).

Source: JPMorgan, Federal Reserve H.4, FRED

Exhibit 3: The 7s/10s swap spread curve is currently near its highs of recent years, and appears to have begun normalizing recently

10-year minus 7-year maturity matched SOFR swap spread differential, bp



Source: JPMorgan

On a relative basis, the 7-year sector appears considerably narrow relative to the overall term structure of swap spreads, causing **the 7s/10s spread curve to appear steep** relative to history (**Exhibit 3**). This has now begun to correct itself, and **we believe the time is right to position for a correction in this spread curve**. Therefore, we now recommend positioning for a flatter 7s/10s maturity matched SOFR swap spread curve (see Trade recommendations).

At the long end of the curve, we continue to look for narrower spread levels overall as Fed demand vanishes, but with the 10s/30s spread curve likely biased steeper. A key driver behind this is the likely ongoing strength of demand for long end assets from the pension community. Recent data in this regard lends support to our expectation. Milliman's data for December 2021 shows the funded ratio of the 100 largest DB pension funds rose 2.2%-pts in December, to 99.6% (**Exhibit 4**). Funded

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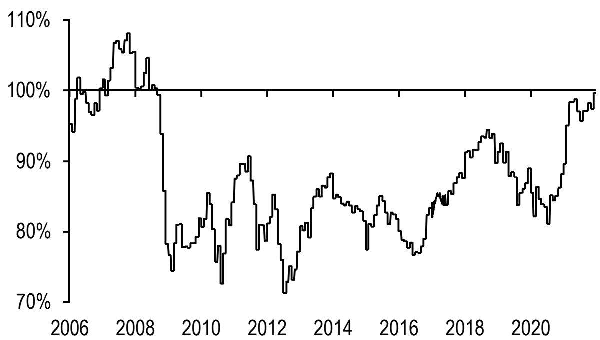
ratios likely will remain near these levels currently despite the pullback in equities in January, as we estimate that the beneficial impact of rising rates has likely offset the negative impact of falling equities. With pension funds' funding gap close to flat, the economics of LDI has become more favorable, and these funds are more likely to shift asset allocations to include more long-end fixed income assets, rather than seek duration via synthetic alternatives such as derivatives or STRIPS.

Exhibit 4: The Milliman index shows the top 100 DB pension funds are nearing surplus territory, for the first time since the financial crisis

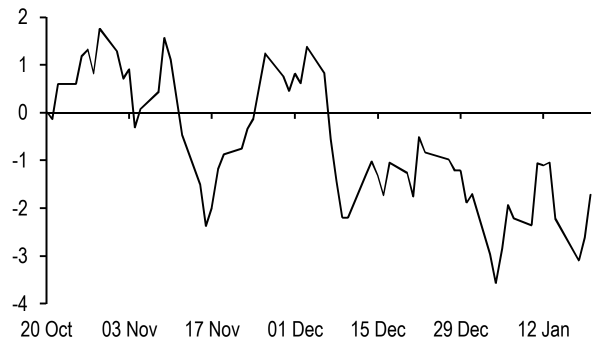
Milliman 100 Pension Fund Index funded ratio; %



Source: Milliman

Exhibit 5: 30-year maturity matched SOFR swap spreads are modestly narrow to fair value

30-year maturity matched SOFR swap spread minus fair value*, bp



* Fair value calculated as -10.42*on-the-run 10s/30s curve (%) - 0.07*aggregate duration of Variable Annuities ($bn 20-year equivalents) + 0.02*aggregate Pension Surplus ($bn) - 0.01*Fed purchases of USTs (measured in $bn 10-year equivalents) + 10-year matched maturity SOFR swap spread (bp) -12.1

Source: JPMorgan

Therefore, with long end spreads modestly narrow to fair value (**Exhibit 5**), **we now recommend adding exposure to a steeper 10s/30s swap spread curve** (see Trade recommendations).

Bank balance sheets

The last quarter in the year saw significant shifts in the liability-composition of QE. The Fed bought $450bn of assets in 4Q21, but Reserves actually fell slightly, by about $100bn, while RRP balances grew by $600bn. The plateauing of reserves in 4Q21 has had noticeable effects on the banking system, which are likely to impact the evolution of bank balance sheets and their demand for assets in the months ahead as well. We look at recent earnings statements and disclosures to discuss some of these impacts.

The peaking of Reserves is a significant development for the banking system. Indeed, thanks to the stabilization of Reserves, deposit growth slowed sharply in 4Q21. For the 8 GSIB banks that we track, deposits grew a mere 2% in 4Q21, versus over 35% in the 7 prior quarters. This is pretty much also in line with the 2% growth of all commercial bank deposits in 4Q21 (**Exhibit 6**).

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Exhibit 6: Thanks to the stabilization in Reserves, deposit growth slowed down in 4Q21 from the heady pace of prior quarters

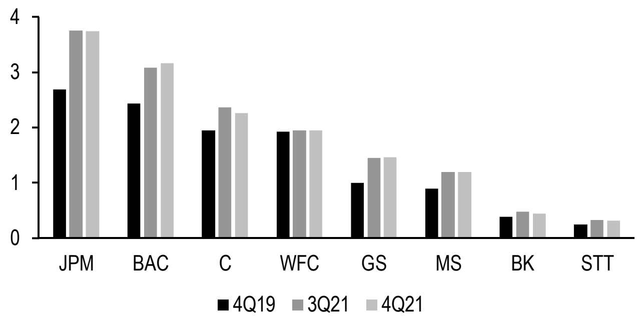
GSIB and system wide deposit balances; $tn and the percentage change in the shown periods

	4Q19	3Q21	4Q21
Total Deposits - GSIBs	6.2	8.5	8.6
Total Deposits - system wide	13.3	17.6	18.0
% change in deposits - GSIBs		36%	2%
% change in deposits - system wide		32%	2%

Source: 4Q21 JPM, BAC, C, WFC, GS, MS, BK, STT Financial disclosures, FFIEC, FRED

Exhibit 7: Bank balance sheets have started to stabilize in 4Q21

Total assets on balance sheet for the GSIB banks, $tn



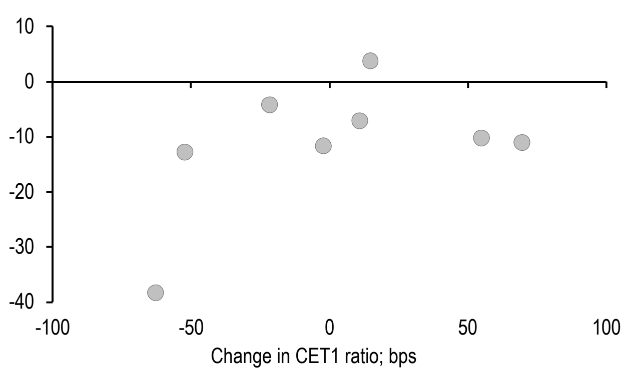
Source: 4Q21 JPM, BAC, C, WFC, GS, MS, BK, STT Financial disclosures, FFIEC

Since much of the recent bank balance sheet growth has been driven by QE-related deposit creation, balance sheets are stabilizing as well. Bank balance sheet assets were much closer to flat in the last quarter, relative to the prior pandemic era growth (see **Exhibit 7**).

Although bank balance sheets are stabilizing, they remain at elevated levels and leverage likely remains binding. One way to see this is to look at 3Q21 to 4Q21 changes in CET1 ratios (as a % of RWA) versus changes in the SLR (which measures Tier 1 capital as a percentage of total leverage assets). As seen in **Exhibit 8**, SLR has declined almost uniformly across these GSIB banks, with no correlation to changes in CET1 ratios. This suggests that leverage remains binding for the system. For the few banks that saw significant declines in CET1 ratios, this is perhaps not the case, but leverage considerations are likely to remain significant for the banking system as a whole.

Exhibit 8: Leverage continues to be a binding constraint for the banks as the decline in SLR is not correlated to changes in the CET1 ratio

Changes in SLR [y-axis] versus changes in CET1 ratio (standardized) [x-axis], 4Q21 to 3Q21; ratio bps



Source: 4Q21 JPM, BAC, C, WFC, GS, MS, BK, STT Financial disclosures, FFIEC

Exhibit 9: Securities growth in the pandemic era has largely come in HTM books, but 4Q21 saw a stabilization in HTM portfolios and more growth in AFS

Breakdown of the investment portfolio by HTM and AFS, in $tn

($tn)	Investment Securities (HTM)	% change	Investment Securities (AFS)	% change
4Q19	0.6		1.4	
3Q21	1.7	169%	1.3	-3%
4Q21	1.7	2%	1.4	6%

Source: 4Q21 JPM, BAC, C, WFC, GS*, MS*, BK, STT Financial disclosures, FFIEC

*For the banks that did not disclose a breakdown of their HTM and AFS portfolio, it was assumed to be flat to prior quarter

Turning to the asset side of bank balance sheets, it is well known that loan growth has been small in comparison to deposits. System wide loan growth has been 7% since Dec-19, at a time when balance sheets have grown 30% or more.

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Therefore, banks have been forced to add securities to address a growing asset-liability mismatch during much of the pandemic. Unsurprisingly, much of that growth has been in HTM, rather than AFS, to better manage accounting asymmetries and AOCI volatility (**Exhibit 9**). But as also seen in this exhibit, HTM portfolios remained flat in 4Q21, while AFS securities are growing modestly. **This suggests that banks may be close to home on their structural ALM-driven securities demand**. To be sure, there is still a big gap between cumulative growth in loans and securities, and deposit growth. But 4Q21 data suggests **banks are less likely to be captive buyers of assets, and are likely positioning for a world of slowing deposit growth and stabilizing balance sheets, and for more opportunistic demand for securities in AFS as the Fed hikes rates and shrinks the balance sheet**.

Looking ahead, Reserves are likely to trend lower as the Fed ceases asset purchases and even begins reducing its balance sheet, and as the TGA reaches its stable operating level. An updated version of our forecast for Fed's balance sheet liabilities, that takes Fed balance sheet normalization into account, is shown in **Exhibit 10**. This outlook suggests that Reserves will likely continue to shrink, deposit growth will likely moderate further to a below-trend pace, and bank balance sheets will likely remain stable or even trend modestly lower. Thus, **banks will likely see diminishing urgency in their demand for assets as ALM-dictates become less pressing, and will likely remain value-conscious buyers with the ability to add considerable USTs at cheaper asset-swap levels**.

Exhibit 10: Projected values for key Fed balance sheet liability items, and commercial bank deposits

Projected evolution of Fed assets, Reserves, TGA, RRP balances, and commercial bank deposits in 2022; $bn

Mid Month	Fed B/S Assets	Reserves	TGA	RRP	Commercial bank deposits
Dec-21	8763	4251	105	1856	18008
Jan-22	8825	3932	490	1842	17887
Feb-22	8885	3805	650	1869	17881
Mar-22	8915	3725	750	1880	17903
Apr-22	8915	3725	750	1880	17973
May-22	8915	3725	750	1880	18043
Jun-22	8915	3725	750	1880	18113
Jul-22	8915	3725	750	1880	18183
Aug-22	8908	3721	750	1876	18250
Sep-22	8893	3713	750	1868	18316
Oct-22	8870	3702	750	1857	18379
Nov-22	8833	3683	750	1838	18438
Dec-22	8779	3657	750	1812	18492

Source: JPMorgan, FRED, Federal Reserve H.4

Options

Swaption implied volatility is uniformly higher over the past weeks, with short tails outperforming the most. For instance, 6Mx2Y and 6Mx10Y implied volatility rose by 0.25bp/day and by 0.1bp/day respectively, in the two weeks since our last publication. Realized volatility remains moderately elevated, at about 4.3-4.5bp/day in the 5-and-longer maturity sectors of the curve.

The outperformance of volatility overall, and short tails in particular, has been decidedly punitive to our current themes in the options markets, which involve outright short gamma positions and underweights in short tails on a relative basis. Notwithstanding this recent underperformance, we continue to view these as the right themes going forward, at least tactically. For one, the rebound in market, which we

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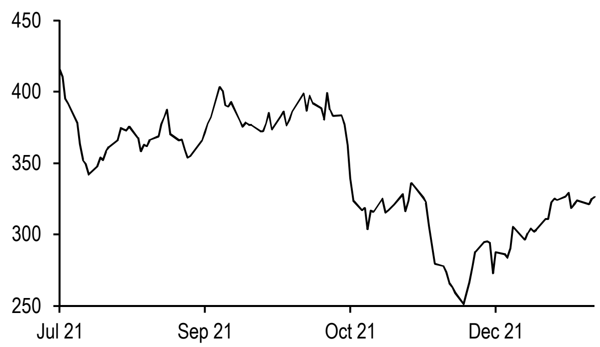
expected to occur after year end, is indeed underway, but at a slower pace (**Exhibit 11**). As this rebound continues in coming weeks, it will likely help to dampen realized volatility. In addition, we are almost at next week's FOMC meeting, and we expect the diminishing of event risk to dampen volatility somewhat as we move past the meeting. Moreover, we expect the meeting itself to not delivery any surprises to the market (see FOMC preview, Michael Feroli, 1/22/22). **Therefore, we recommend maintaining our short gamma positions and relative value themes for a while longer.**

Exhibit 11: As expected, market depth has been improving after year end, albeit at a slower pace

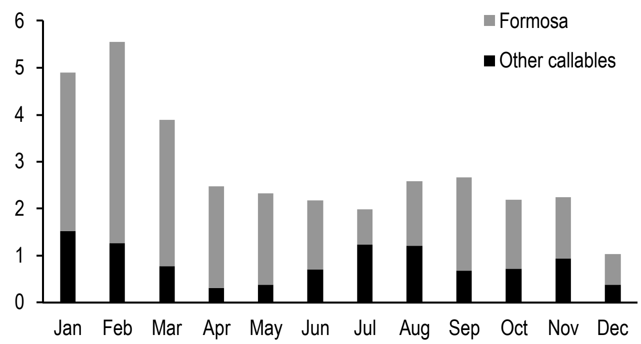
Duration weighted market depth; $mn



* Market depth is the 5-day moving average of the size of the top 3 bids and offers by queue position, averaged between 8:30 - 10:30am daily. Duration weighted market depth refers to the weighted sum of market depth in 2s, 5s, 10s and 30s, using weights of 0.25, 0.5, 1 and 2.
Source: BrokerTec, JPMorgan

Exhibit 12: Callable issuance tends to be strong in the first two months of the new year

Average issuace of Formosa and non-Formosa bonds by month, 2017-2021; $bn 10-year duration equivalents

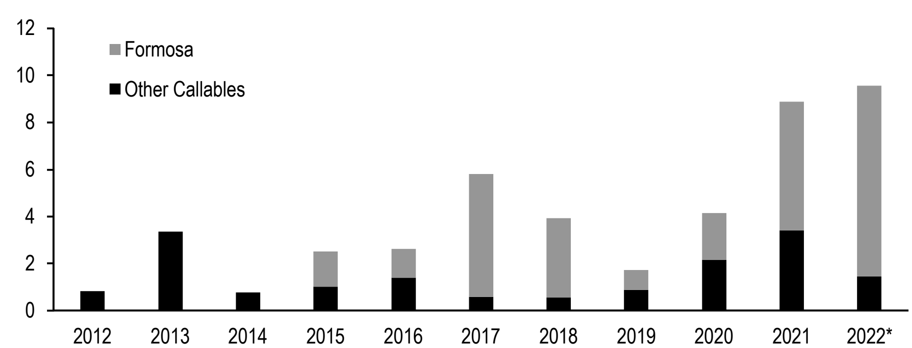


Source: JPMorgan, Bloomberg Finance L.P.

In longer expiries, vega supply continues to be a near term headwind for long vega positions. As seen in **Exhibit 12**, intra-year seasonals point to strong Formosa and other callable issuance in the next six to 8 weeks. Moreover, evidence so far this year suggests that 2022 is likely to be a particularly strong year for such issuance (**Exhibit 13**). However, once the vega supply wave abates, longer expiry implieds should likely rise on the back of an active Fed and higher rates, as we discussed in our Outlook for 2022 (see Interest rate derivatives outlook). Therefore, our game plan in this sector remains one of patience for now, with a bias towards opportunistically initiating long vega positions on the back of any supply-driven cheapening of implieds.

Exhibit 13: We are on pace for a particularly strong month of Formosa issuance

Average issuace of callable bond in January; $bn 10-year duration equivalents



*2022 includes a scaling factor to pro-rate for the entire month
Source: JPMorgan, Bloomberg Finance L.P.

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Trading recommendations

- **Position for a flatter 7s/10s maturity matched swap spread curve**
  The 7s/10s spread curve appears steep relative to history, but has begun to correct itself and should flatten in the near term.
  - Buy $100mn of the 1.5% Nov 2028 (yield 1.701%, pvbp $639/bp per mn notional) and pay fixed in $97mn notional of a 11/30/2028 SOFR swap (fixed coupon of 1.476%, pvbp $659/bp) at a maturity matched swap spread of -22.5bp. Sell $75.0mn of 1.625% May 2031 (yield 1.725%, pvbp $852/bp per mn notional) and receive fixed in $72.9mn of a 5/15/2031 SOFR swap (fixed coupon 1.534%, pvbp $877/bp) at a maturity matched swap spread of -19.1bp. This trade is expected to be profitable if the spread curve flattens to below 3.4bp.

- **Position for a steeper 10s/30s maturity matched swap spread curve**
  We expect the demand for long end assets for the from the pension community to persist. Given this, with 10Y spreads being wide to fair value, and with long end spreads being modestly narrow to fair value, we expect the 10s/30s curve to steepen.
  - Sell $100mn of 1.625% May 2031 (yield 1.725%, pvbp $852/bp per mn notional) and receive fixed in $97.2mn of 5/15/2031 SOFR swap (fixed coupon 1.534%, pvbp $877/bp) at a maturity matched swap spread of -19.1bp. Buy $39.0mn of the 2.0% Aug 2051 (yield 2.063%, pvbp $2186/bp per mn notional) and pay fixed $36.1mn notional of a 8/15/2051 SOFR swap (fixed coupon 1.619%, pvbp $2361/bp) at a maturity matched swap spread of -44.4bp. This trade is expected to be profitable if the spread curve steepens beyond -25.3bp.

- **Maintain front end SOFR swap spread narrowers, but switch the Treasury leg into the 0.125% Feb '24s**
  - Sell $100mn of the 0.125% Feb '24s versus receiving fixed in $97.2mn notion of a 2/15/2024 SOFR swap at a matched maturity swap spread of -1.4bp (Fixed Income Markets Weekly 1/8/22, P/L on this trade since inception 0.0bp).

- **Stay underweight gamma on 2-year tails versus longer tails**
  - Sell $200mn notional 3Mx2Y swaption straddles (notification 3/17/2022, swap start 3/21/2022, maturity 3/21/2024, ATMF and strike 1.037%, premium 57.5bp of notional, implied volatility 4.65bp/day) versus buying $50mn notional of 3Mx7Y straddles (notification 3/17/2022, swap start 3/21/2022, maturity 3/21/2029, ATMF and strike 1.4172%, premium 210bp of notional, implied volatility 5.0bp/day). (Fixed Income Markets Weekly 12/17/21, P/L on this trade since inception -7.9abp).

- **Stay short gamma exposure via selling 6Mx5Y swaption straddles**
  - Sell $100mn notional 6Mx5Y swaption straddles (notification 6/10/2022, swap start 6/14/22, maturity 6/14/27, ATMF and strike 1.5079%, premium 213.6bp, implied volatility 4.95bp/day). We recommend delta-hedging this trade every two weeks, given the underlying premise of the trade (Fixed Income Markets Weekly 12/10/21, P/L since inception -4.6abp).

- **Stay positioned for narrower intermediate maturity SOFR swap spreads**
  - Sell $100mn notional of the 1.375% Nov '31s versus receiving fixed in $96.8mn notional of a 11/15/2031 maturity swap versus SOFR, to initiate a spread narrowing position at -17.8bp (Fixed Income Markets Weekly 12/10/21, P/L since inception 2.4bp).

- **Stay overweight gamma on 10-year tails versus 2-year tails**

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- Buy $20mn notional 6Mx10Y swaption straddles (notification 5/12/2022, swap start 5/16/2022, maturity 5/16/2032, ATMF and strike 1.73%, premium 432.4bp of notional, implied volatility 5.2bp/day) versus selling $100mn notional of 6Mx2Y straddles (notification 5/12/2022, swap start 5/16/2022, maturity 5/16/2024, ATMF and strike 1.11%, premium 85.6bp of notional, implied volatility 4.85bp/day). This trade is constructed to be approximately theta and gamma neutral under parallel moves, requires active delta hedging, and is designed to position for higher relative volatility of 10-year tails as well as a cheapening in 2-year implied volatility (Fixed Income Markets Weekly 11/12/21, P/L since inception 3.6abp).

- **Stay positioned for a steeper 5s/30s curve in a rally**
- Buy $100mn notional 3Mx5Y receiver swaptions (notification 2/14/2022, swap start 2/16/2022, swap maturity 2/16/2027, strike and ATMF 1.4186%, premium 82.6bp of notional, implied volatility 5.36bp/day), versus selling $20.3mn notional 3Mx30Y receiver swaptions (notification 2/14/2022, swap start 2/16/2022, swap maturity 2/16/2052, strike and ATMF 1.797%, premium 406bp of notional, implied volatility 5.35bp/day). This trade is approximately premium neutral, forward bpv neutral, and benefits if the 5s/30s swap curve is steeper than 37.8bp in a rally at expiry (Fixed Income Markets Weekly 11/12/21, P/L since inception -3.2bp).

- **Stay positioned for a cheapening of the belly of a 2s/7s/15s weighted swap butterfly in a selloff via payer swaptions**
- Sell $152mn notional 3Mx2Y payer swaptions (notification 1/24/2022, swap start 1/26/2022, swap maturity 1/26/2024, ATMF and strike 0.7963%, premium 23.2bp, implied vol 3.7bp/day), and sell 33.5mn notional 3Mx15Y payer swaptions (notification 1/24/2022, swap start 1/26/2022, swap maturity 1/26/2037, ATMF and strike 1.856%, premium 206.5bp, implied vol 4.9bp/day), versus buying $100smn notional of a 3Mx7Y payer swaption (notification 1/24/2022, swap start 1/26/2022, swap maturity 1/26/2029, ATMF and strike 1.5687%, premium 104bp, implied vol 4.9 bp/day). This trade is premium neutral at inception, and benefits if the 45/100/67.5 weighted butterfly spread widens beyond -4bp at option expiry (Fixed Income Markets Weekly 10/22/21, P/L since inception -4.2bp).

- **Stay long 1Yx2Y 1s/3s basis**
- Stay long $250k per bp of 1Yx2Y 1s/3s basis at @ 9.1 bp (Fixed Income Markets Weekly 8/20/21, P/L since inception 1.2bp).

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

Trade	Entry	Exit	P/L
Spreads and basis			
Received 1Yx1Y CAD vs USD IRS	9/25/2020	1/22/2021	5.5
Sell current 2s versus double old 7s versus matched-maturity SOFR	1/8/2021	2/18/2021	2.2
Pay 5Y CAD/USD cross currency basis	1/20/2021	2/26/2021	6.4
Sell 2s versus matched Libor swaps	2/19/2021	6/4/2021	3.2
Stay long 20-year matched maturity swap spreads	4/23/2021	7/30/2021	(2.1)
Receive 6Mx1Y JPY/USD cross-currency	3/26/2021	9/17/2021	(13.3)
Long 2Yx1Y 1s/3s basis	9/16/2019	9/17/2021	(6.8)

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Receive 7-year matched maturity SOFR spreads	8/20/2021	10/15/2021	2.6
Long 2Yx3Y 6s/FF-OIS	10/23/2020	10/22/2021	(6.0)
Position for wider swap spreads in the 7-year sector	10/29/2021	11/5/2021	3.9
Position for a flattening of the TY / US invoice spread curve	10/29/2021	11/5/2021	1.6
Buy Dec Ultralong bond contracts versus paying fixed in a forward starting swap	9/17/2021	11/12/2021	4.0
Short 959 UXY calendar spreads and unwind short 41 UXYZ1 contracts	11/12/2021	11/29/2021	2.5
Short ultra-long bond contract calendar spread	11/12/2021	11/29/2021	3.0
Position for wider swap spreads in a selloff via TYZ puts and matched expiry payer swaptions	10/15/2021	12/10/2021	2.3
Short Dec Ultra-long bond contract CTD basis positions ahead of contract expiry	9/17/2021	12/10/2021	(3.5)
Sell USZ1 versus a forward starting swap as an efficient way of positioning for long end yield curve steepening	10/1/2021	12/17/2021	(5.0)
Stay positioned for narrower swap spreads in the intermediate sector	11/5/2021	12/17/2021	2.0
Position for narrower front-end maturity SOFR swap spreads	12/17/2021	1/7/2022	3.0

Source: J.P. Morgan

Closed trades over the past 12 months (continued)

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

Duration and curve	Entry	Exit	P/L
Short 30s versus 20s on ASW	01/08/21	09/10/21	(5.4)
Position for a steeper 10s/30s maturity matched swap spread curve	09/10/21	10/01/21	0.2
Sell FFG2	08/06/21	10/15/21	0.0
Sell EDZ1	06/18/21	10/29/21	1.5
Initiate 35Yx5Y vs 25Yx5Y swap curve steepeners	01/08/21	01/07/22	(12.1)
Options relative value	**Entry**	**Exit**	**P/L**
Sell 2Yx30Y vs 5Yx30Y ATMF vega-neutral straddles	06/05/20	03/05/21	3.0
Buy the outstrikes of a 3Mx5Y 1x2 receiver spread	03/26/21	06/30/21	(5.8)
Stay long 10Yx10Y USD vs EUR ATMF vega-neutral straddles	06/04/21	08/06/21	1.4
Stay long 10Yx30Y vs 3Yx10Y ATMF vega-neutral straddles	06/04/21	08/06/21	1.7
Stay long USD vs AUD 1Yx5Y ATMF straddles	06/11/21	08/06/21	3.4
Short 3Mx10Y delta-neutral straddles	08/20/21	09/10/21	9.0
Long gamma position in the 6Mx10Y sector	09/17/21	10/01/21	2.5
Overweight gamma on 5-year tails versus 2-year tails	10/29/21	11/05/21	5.2
Position for a rise in longer expiry implied volatility versus shorter expiry implieds	10/01/21	01/07/22	(10.8)
Total number of trades			**33**
Number of winners			**22**
Hit rate			**67%**

Source: J.P. Morgan

Note: new trades and unwinds reflect Friday COB levels unless otherwise stated and all others reflect Friday COB levels

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Recent Weeklies	
8-Jan-21	Weekly: Wingardium Leviosa
17-Dec-21	Weekly: Touching the corona
10-Dec-21	Weekly: FOMiCron
12-Nov-21	Weekly: Bond auction tail wags the dog
5-Nov-21	Weekly: November rain
29-Oct-21	Weekly: Illiquidity – Trick no Treat
22-Oct-21	Weekly: Pumpkin Spice
15-Oct-21	Weekly: Action Replay
1-Oct-21	Weekly: Waiting for a raise
17-Sep-21	Weekly: Taper - yes, tantrum - no
17-Sep-21	Weekly: The (dot) plot thickens
10-Sep-21	Weekly: The beat goes on
27-Aug-21	Weekly: Gauging the risks around year-end
20-Aug-21	Weekly: Summer will end soon enough
6-Aug-21	Weekly: Hedging the return of term premium
30-Jul-21	Weekly: Stand by me
16-Jul-21	Weekly: Pay no attention to that convexity behind the curtain
9-Jul-21	Weekly: This could be the start of something big…?
25-Jun-21	Weekly: Just keep swimming
18-Jun-21	Weekly: All good things
11-Jun-21	Weekly: Rolling lockdowns coastal fever
4-Jun-21	Weekly: Keep calm and stay long
21-May-21	Weekly: Load-bearing wall
14-May-21	Weekly: Arpeggi
7-May-21	Weekly: Look BSBY
30-Apr-21	Weekly: Canadian split
23-Apr-21	Weekly: Where is bank issuance-related receiving headed?
16-Apr-21	Weekly: Revisiting demographic duration demand
9-Apr-21	Weekly: The more the merrier
26-Mar-21	Weekly: An orderly process
19-Mar-21	Weekly: Ask again later
12-Mar-21	Weekly: Spread focus turns squarely to SLR
5-Mar-21	Weekly: Vol-au-vent
26-Feb-21	Weekly: ¯_(ツ)_/¯:
19-Feb-21	Weekly: Troll 2s
05-Feb-21	Weekly: Buy in case of reflation
29-Jan-21	Weekly: Check for seasoning
22-Jan-21	Weekly: Maple syrup event
Annual Outlooks	
23-Nov-21	Interest Rate Derivatives 2022 Outlook: Skating away on the thin ice of a new year
Recent Special Topic Pieces	
10-Nov-21	US Treasury Futures Rollover Outlook: December 2021/March 2022
13-Aug-21	US Treasury Futures Rollover Outlook: September 2021/December 2021
6-Aug-21	The medium-term outlook for Fed funds
5-Aug-21	Minimally invasive retail CBDCs
3-Aug-21	Combating the unique threat posed by ransomware
22-Jul-21	The financial stability risks of stablecoins
16-Jul-21	Also sprach the Fed
9-Jul-21	Many worlds: A Monte Carlo approach to benchmarking the long-run diversification benefits of bonds

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8-Jul-21	The Bitcoinization of El Salvador
30-Jun-21	Incorporating ESG into automated fixed income portfolios
18-Jun-21	You tell me that it's evolution
11-Jun-21	Crypto capital rules arrive
11-Jun-21	The bitcoinization of El Salvador
28-May-21	Cross-margining and financial stability
24-May-21	Dissecting the crypto crash
18-May-21	US Treasury Futures Rollover Outlook: June 2021/September 2021
29-Apr-21	BoC tapering and CAD cross currency basis
27-Apr-21	Benchmarking duration demand from target-date funds
27-Apr-21	Why is ETH outperforming?
21-Apr-21	Tubthumping
16-Apr-21	End of the waterfall
16-Apr-21	Revisiting demographic duration demand in the long end
09-Apr-21	Why is the Bitcoin futures curve so steep?
09-Apr-21	How inelastic is bitcoin mining?
31-Mar-21	Can SOFR trade well through RRP?
24-Mar-21	The rising tide: balance sheet cost, foreign private demand, and the FX basis
15-Mar-21	What are the FX swap implications of SLR carve outs?
11-Mar-21	Still Waiting on SLR
02-Mar-21	Reflation: The cause of and solution to AUD basis problems
24-Feb-21	Where has thou been, then, Libor
23-Feb-21	Four o'clock tick tock
17-Feb-21	Taper Tantrum, Part Deux
16-Feb-21	US Treasury Futures Rollover Outlook
16-Feb-21	A mortgage extends in a forest
04-Feb-21	How important are bank-level SLR carve-outs to swap spreads?
29-Jan-21	Trust exercises
25-Jan-21	Only as strong as the foundation

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