

## Rates Technical Advantage

# Buying the debt news would help golden crosses

### Key takeaways

- US 2y, 5y & 10y golden cross (GC) signals favor buying the dip in USTs for lower yields in July. But still no 30y signal yet.
- If GCs work, debt news bought, NFP <= survey, then long 2y in the 4.53-4.57% gap, 10y near 3.80-3.90%, 5Y and 30Y near 4%.
- Risk: 10Y yield > 3.92-4% would be a channel breakout and may invert GC to death cross pointing yield sideways or higher.

### View: Buying of debt news would help golden crosses

In the first half of May 2023, US 2-, 5- and 10- year treasury charts saw golden cross signals in favor of a summer US treasury rally (lower yields). If they work, it means 2y < 3.99%, 5y < 3.49% and 10y < 3.38% in July 2023. No golden cross signal has occurred yet for the 30y which continues to limit breadth of conviction (see our report [It's choppy out there, but will golden crosses signal summer UST rally? 10 May 2023](#)).

If the golden crosses work and yields are indeed lower this July, then buying the 2y in the 4.53-4.57% as it tests the "bank crisis" gap, 10y near top of channel of 3.80-3.90%, and the 5Y and 30Y near 4% makes technical sense. If US yields break higher instead of rolling over in early June, then death crosses may cancel golden crosses. Then the market is either continuing its choppy ranges or an out-of-consensus selloff follows (Chart 4).

### US 10Y Yield: All eyes on downtrend channel

The 10y saw a golden cross on May 12 ending the session at 3.38%. History tends to suggest yield is lower than this in July. Provided the 10y yield remains in its downward sloping channel (below 3.92-4%) and the 50d SMA of yield remains below the 200d SMA of yield, then the base case is yields return to the low end of their ranges and/or see new lows this summer (Chart 3). If yield breaks above the channel and a death cross follows, then the choppy range this year remains and risk of higher yields will have increased (Chart 4). We recap death cross history in Exhibit 2 and the secular trend since the March 2020 yield low in Chart 4.

US 10Y support (yield resistance): 3.92%, 4%, 4.09%, 4.25%, 4.34%, 4.51%

US 10Y resistance (yield support): 3.63%, 3.5%, 3.29-3.25%, 3%, 2.80%

### US Curve: 2s10s a little oversold, 5s30s some support

In this report we update the daily charts of 2y, 5y, 10y and 30y yield as well as the 2s10s and 5s30s curve. The 2s10s is starting to look oversold near its "bank crisis gap" higher at -87 to -82bps (Chart 6). US 5s30s is supported by the 200d SMA at -2.5bps (Chart 7).

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UST = US treasury

200d = 200 day

SMA = Simple moving average

GC = Golden cross

DC = Death cross

RSI = Relative Strength Index

MACD = Moving average  
convergence divergence

### BofA Global Research Reports

Title: Subtitle	Primary Author	Date Published
<a href="#">Technicals Explained: In 2023 --&gt; Get to know technical strategy</a>	Paul Ciana, CMT	23 January 2023
<a href="#">Quantifying Technicals: Golden cross signals tend to be bullish US treasuries</a>	Paul Ciana, CMT	10 May 2023

## Appendix

### Golden crosses typically bullish USTs 35-50 days later

Golden cross signals favor lower yields typically 35-50 trading days later and sometimes as wide as 20-70 days later. The 5y saw a golden cross on May 8, the 10y on May 12 and 2y on May 15. If they work again, it means 2y < 3.99%, 5y < 3.49% and 10y < 3.38% in July. (Exhibit 1)

### No golden cross yet for the 30-year limits conviction

The higher hit ratios showed for the 2y and 30y. For example, after a golden cross the 2y and 30y rallied (yield went lower) 61-78% of the time 20-45 trading days later. The 5y and 10y tended to see lower yield 45-50 days later but hit ratios weren't as strong as 2y and 30y. With no golden cross following in May for the 30y, conviction in a summer rally (decline in yield) wasn't as high until it happens.

#### Exhibit 1: Golden cross hit ratios for US treasuries

When the golden cross occurred in the past, the 2y and 30y UST tended to rally (yields declined) 61-78% of the time 20-50 days later. The 5y and 10y rallied too, but from 35-50 days with slightly lower hit ratios.

	5d	10d	15d	20d	25d	30d	35d	40d	45d	50d	60d	70d	80d
2Y	61%	43%	57%	65%	65%	61%	65%	65%	78%	52%	61%	65%	61%
5Y	44%	49%	44%	46%	44%	49%	55%	59%	63%	61%	54%	59%	54%
10Y	53%	56%	44%	50%	53%	52%	59%	56%	59%	61%	59%	57%	52%
30Y	63%	77%	61%	68%	65%	61%	65%	68%	68%	71%	58%	68%	61%

Source: BofA Global Research, Bloomberg

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### What if death crosses reverse golden crosses?

Death cross signals (bearish UST price and bullish yield) are less effective signals, according to the past. US 2y sold off (higher yield) 63-67% of the time 50-60 trading days later. The 30y sold off (higher yield) 65% of the time 25 days later (Exhibit 2). However, when the 200d SMA of yield was rising and a death cross signal occurred (50d SMA of yield crossing above the 200d SMA of yield), then 10y, 5y and 2y treasuries had more tendency to selloff (higher yield). This condition was irrelevant for the 30y (Exhibit 3). So if the charts flip from golden crosses to death crosses with the 200d SMA of yield rising, then yields may go higher this summer.

#### Exhibit 2: Death cross hit ratios for US treasuries

When the death cross occurred in the past, the 2y and 30y had modest tendency to selloff (higher yield).

	5d	10d	15d	20d	25d	30d	35d	40d	45d	50d	60d	70d	80d
US 2Y	46%	54%	54%	58%	54%	54%	50%	50%	50%	63%	67%	46%	48%
US 5Y	49%	50%	50%	57%	52%	54%	59%	59%	60%	57%	55%	50%	50%
US 10Y	53%	60%	48%	52%	55%	55%	52%	50%	50%	49%	50%	47%	53%
US 30Y	53%	48%	45%	45%	65%	55%	52%	48%	58%	48%	55%	48%	42%

Source: BofA Global Research, Bloomberg

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#### Exhibit 3: Death cross hit ratios for US treasuries when the 200d SMA of yield was rising

When the death cross occurred and the 200d SMA of yield was rising, 10y, 5y and 2y treasuries tended to sell off (higher yield) more often than all signals. The history of the 30y disagrees.

	5d	10d	15d	20d	25d	30d	35d	40d	45d	50d	60d	70d	80d
US 2Y	45%	64%	64%	64%	64%	55%	45%	55%	55%	73%	73%	64%	55%
US 5Y	50%	56%	56%	61%	61%	65%	59%	67%	67%	67%	67%	61%	61%
US 10Y	41%	59%	59%	47%	59%	65%	65%	59%	65%	65%	76%	63%	75%
US 30Y	31%	29%	36%	29%	57%	43%	36%	29%	36%	29%	43%	36%	29%

Source: BofA Global Research, Bloomberg

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## US 2Y Yield

### Consider buying the “bank crisis” gap at 4.53-4.57%

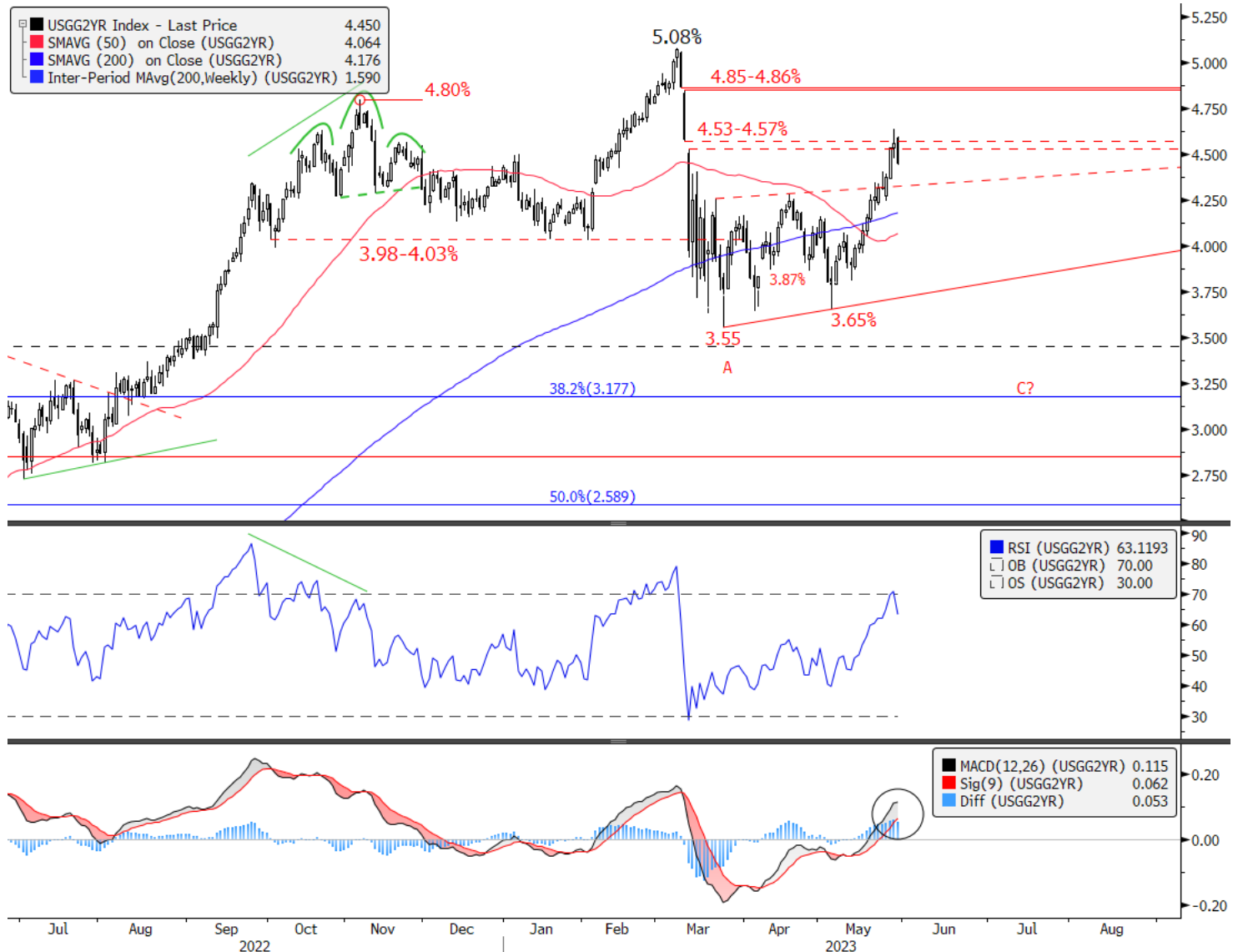
The golden cross signal occurred on May 15 with 2y yield closing at 3.99%. The selloff ending May has met support (yield resistance) at the bank crisis gap of 4.53-4.57%. The markets have started buying at this gap. Should a UST rally (lower yield) continue into June, a death cross should be avoided (50d SMA of yield crossing back above the 200d SMA of yield). The 2y yield could then decline back to its rising trend line at 3.75% and/or break lower in a deeper wave C pattern to about 3.18%.

**2Y Support (yield resistance):** 4.53-4.57%, 4.85-4.86%, 5.00%, 5.08%, 5.26%

**2Y Resistance (yield support):** 4.3%, 4.18%, 4.02%, 3.8%, 3.65%, 3.55%, 3.46%, 3.18

**Chart 1: US 2Y yield – Daily Chart (G680)**

Yield broke out higher and tested the gap at 4.53-4.57%. This gap is being treated as a technical buy point.



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## US 5Y Yield

### Golden cross still bullish 5y UST; ideally yield remains below 4.04%

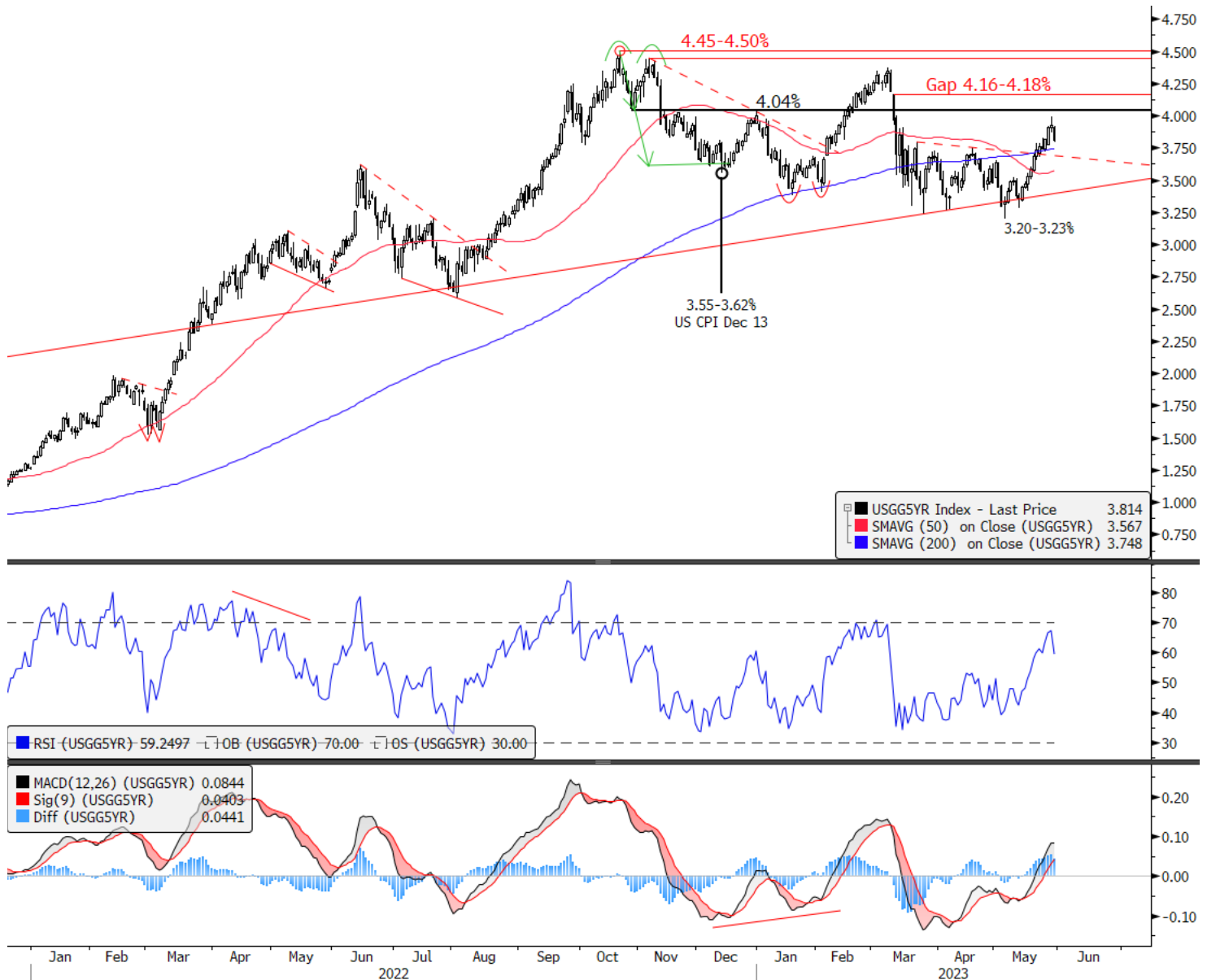
The 5y saw a golden cross on May 8. It finished the session at 3.49%. If the GC works again, the 5y yield should be lower than 3.49% in July. Provided the signal works, the recent selloff could be a buying opportunity. In the past, yield has pivoted lower from 4-4.04% and seems to be starting one now. Above this could cause some longs to stop out, however the gap at 4.16-4.18% created during the bank crisis in March may halt any residual selling. Should the 50d SMA of yield cross back above the 200d SMA of yield, then the golden cross will invert to a death cross and yields may not fall this summer.

**Support (Yield resistance):** 4.00-4.04%, 4.16-4.18%, 4.34%, 4.5%

**Resistance (Yield support):** 3.74%, 3.50%, 3.23-3.20%, 3.13%, 3.00%, 2.80%

#### Chart 2: US 5Y yield – Daily Chart (G682)

Trading range between 3.25-3.80% was broken to the upside for correction of bank crisis. Golden cross still bullish, ideally yield remains below 4-4.04% to be long.



USGG5YR Index (US Generic Govt 5 Yr) RB: US 5yr Daily Daily 19DEC2021-30MAY2023

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Source: BofA Global Research, Bloomberg

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## US 10Y Yield

### Golden cross with declining channel favors buying dips with yield < 3.92-4.00%

The 10y saw a golden cross on May 12 ending the session at 3.38%. History tends to suggest yield is lower than this in July. Provided the 10y yield remains in its downward sloping channel, so below 3.92-4% and the 50d SMA of yield remains below the 200d SMA of yield, then the base case is yield returns to the low end of its range or sees a new low this summer near 3.00%. If yield breaks above the channel and a death cross follows, then the choppy range this year remains and risk of higher yields will have increased.

**US 10Y support (yield resistance):** 3.92%, 4%, 4.09%, 4.25%, 4.34%, 4.51%

**US 10Y resistance (yield support):** 3.63%, 3.5%, 3.29-3.25%, 3%, 2.80%

#### Chart 3: US 10Y yield – Daily Chart (G691)

Golden cross and declining yield channel favor lower yield this summer while 10y yield is below 3.92-4.00%.



USGG10YR Index (US Generic Govt 10 Yr) RB: US 10yr Daily Daily 14MAR2018-30MAY2023

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Source: BofA Global Research, Bloomberg

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## Alternate scenario for 10Y: What if yield breaks out higher from the declining channel and a death cross occurs?

The 10Y yield has been in a declining channel since it reached 4.34% in Oct 2022 and it is still supported by a rising trend line that began at the start of 2022. Should this multi-year uptrend continue in line with the new secular bear market, then 10y yield would need to breakout higher from this declining channel. The top of this weekly channel is at 3.92% ending May. If yield were to break higher, we would probably see the 50d SMA of yield cross back above the 200d SMA of yield switching in favor of higher yield this summer. If these events occur, the next potential higher yield target could be a new yield high for the cycle in the 4.50-4.60% area.

### Chart 4: US 10Y yield – Weekly Chart (G692)

Base case UST rally follows this summer pushing 10Y yield down to its YTD lows if not lower. If the 10Y US yield were to rise above the declining channel line it would signal a continuation of the prior uptrend with a target of 4.50-4.60%. MACD is starting to cross up which is the first signal suggesting such risk should not be completely ignored.



Source: BofA Global Research, Bloomberg

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## US 30Y Yield

### Remain on watch for a golden cross

The US 30y yield chart has not seen a golden cross yet. The 50d SMA of yield remains above the 200d SMA of yield. A rally in USTs (decline in yield) during the next 10 trading sessions is needed to push these averages to cross. While below 4.04% (March yield high) and with the MACD turning down, we think it is reasonable to look forward to a golden cross in the first half of June. Should yield move above 4.04%, our conviction would be reduced.

**US 30Y Support (Yield resistance):** 4.00-4.04%, 4.25%, 4.33%, 4.42%, 4.61%

**US 30Y Resistance (Yield support):** 3.76%, 3.52%, 3.38%, 3.23%, 3%

#### Chart 5: US 30Y yield – Daily Chart (G693)

Still on watch for a golden cross. MACD turning down and reversal near March high of 4-4.04% increases likelihood it happens. However above 4.04% and such a signal will be averted, again.



Source: BofA Global Research, Bloomberg

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## US Curve

### US 2s10s

#### Starting to get an oversold curve near gap support of -82 to -87

A five-wave wedge bottom was confirmed by the market's reaction to the banking crisis in March 2023. Use 2Q23 flattening to enter steeper ideas for 2H23 such as testing of the gap at -82 to -87bps.

**US 2s10s support:** -60, -72, -82, -88, -100, -110

**US 2s10s resistance:** -38, -26, -14, -6, 0

#### Chart 6: US 2s10s – Daily Chart (G696)

Consider bull steepener on test of gap of -82 to -87 bps.



US2Y10 Index (Market Matrix US Sell 2 Year & Buy 10 Year Bond Yield Spread) RB: US 2s10s Daily Daily 22MAR2017-30MAY2023

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Source: BofA Global Research, Bloomberg

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## US 5s30s

### Finding support at 0 to the 200d SMA of -2.5bps

A big double bottom projected a steeper 5s30s curve in 2H23. Potential remains this summer for a move higher back to top of range or about 50-56bps. Ideally the short term sees the curve stabilize at support and remain above the 200d SMA of -2.5bps. RSI isn't oversold yet, which is a near term risk of entering a steepener now.

**Support:** 0, -2.5, -12, -23

**Resistance:** 20, 33, 45, 51, 60, 72

#### Chart 7: US 5s30s – Daily Chart (G697)

Big double bottom pattern favors steeper 5s30s in 2H23.



Source: BofA Global Research, Bloomberg

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# Alpha Trades

## Exhibit 4: Closed trades

Approximately two years of closed technical and/or collaborative cross strategy trades in the alpha, technical advantage and year ahead reports

Report	Trade description	Entry date	Entry level	Spot target 1	Spot target 2	Spot target 3	Stop	Close date	Level closed
FX Technical Advantage	Short GBPUSD	4/25/2023	1.2420	1.2367	1.223	1.216	1.255	4/28/2023	1.255
FX Alpha	Buy 3m USDSEK call spread	1/20/2023	1.4689% USD strikes 10.2466 & 10.70, spot ref 10.2971, vol refs 12.752/13.307)	10.25	10.5	10.7	-	3/7/2023	.82% USD (spot ref 10.7008, vol refs 12.18/11.943)
Rates Technical Advantage	5s30s steepener	2/12/2023	-12	0	10	20	-25	2/24/2023	-25
Rates Technical Advantage	Short US 10Y	1/22/2023	3.48%	3.70%	3.82%	3.90%	3.30%	2/17/2023	3.82%
2023 FICC Technical Views	Short USDCAD via 6m 1.33/1.30 put spread	12/2/2022	65 USD pips (Spot ref: 1.3489, vol: 7.668%/8.035%)	1.33	1.319	1.30	-	2/1/2023	74.53 USD pips (spot ref: 1.33, vol: 6.893% / 7.237%)
EM Alpha	Long USDZAR	1/19/2023	17.23	-	17.46	17.75	17.86	2/1/2023	17.40
Global Rates, FX, EM 2023 Year Ahead	Short 10Y UST	11/20/2022	3.75%	3.60%	4.00%	4.25%	3.40%	1/18/2023	3.40%
FX Technical Advantage	Buy USD/CLP	11/20/2022	925	898	980	1000	865	12/12/2022	865
FX Technical Advantage	Buy DXY dip	9/12/2022	108.33	110.35	112.1	115	105	11/4/2022	110.87
Chart Alpha	Buy USD/ZAR	11/15/2022	17.30	18.00	18.50	-	<16.90	12/1/2022	17.90
Technical Advantage	Sell gold's bounce	10/3/2022	1702.00	1615.00	1560.00	1440.00	1740	11/10/2022	1760
Rates Technical Advantage	Short 10Y > 3.1%	8/31/2022	3.16%	3.38%	3.50%	3.96%	<2.95%	10/11/2022	3.94%
Technical Advantage	Buy USDKRW	6/12/2022	1279.04	1321	1374	1400	1210	10/6/2022	1406
Technical Advantage	Buy USDCLP breakout	6/24/2022	917	920	945	985	872.75	07/15/2022	985.00
Technical Advantage	Sell HG1 breakdown	6/22/2022	394.4	350	335	314	421.9	7/15/2022	323.40
Commodities	Buy crude oil	6/2/2022	116.87	130.3	140	-	111.2	6/17/2022	109.56
Technical Advantage	Buy Euro	5/4/2022	1.0610	1.0800	1.0850	-	-	5/12/2022	1.0470
Chart Alpha	Sell USDCHF	5/4/2022	0.9740	0.9602	0.9525	-	-	5/5/2022	0.9825
Rates Alpha	Buy 10Y UST	4/14/2022	2.83%	3.05%	2.56%	2.40%	2.25%	1/0/1900	3.10%
FX Alpha	Buy AUD/NZD by owning a 6m call spread	1/27/2022	0.7764% (Spot: 1.069, 1.0753 (atmf) and 1.0944	1.0743	1.0817	1.0944	-	4/22/2022	1.2168% AUD
Global Rates, FX, EM Year Ahead	Buy USD/MXN	11/23/2021	20.70	20.50	21.93	22.67	-	3/9/2022	21.25
2022 FICC Technical Advantage	Sell AUD/USD by owning a 3m .69/.65 put spread	12/3/2021	74 USD pips, spot ref: .7020, vol: 10.74%/12.32%	0.718	0.69	0.65	-	3/3/2022	0.00
FX Alpha	Buy USD/JPY	11/23/2021	112.60 (Raised stop loss, spot ref 115)	114.5	117	-	112.6	2/24/2022	115.40
Global Rates, FX, EM Year Ahead	Buy USD/CHF 3m .94/.97 call spread, expiry Feb 21 2022	11/23/2021	Spot ref: .9258, vol ref: 6.839%/6.949% for 0.5359% USD	0.9259	0.94	0.97	-	2/23/2022	0.00
Chart Alpha	Buy EUR/ZAR (Raise stop)	2/4/2022	17.20 (Raise stop to 17.25, spot ref: 17.73)	17.82	18.25	18.5	17.25 (raised from 16.70)	2/10/2022	17.25
Chart Alpha	Buy EUR/ZAR	1/25/2022	17.20	17.82	18.25	18.5	16.7	2/4/2022	17.73
FX Alpha	Buy USD/JPY (Raise stop)	10/1/2021	110.30 (raise stop loss to 110.80, spot ref 113.40)	114.5	117	-	110.3 (Raised from 108)	10/14/2021	110.80
FX Alpha	Buy USD/JPY at 110.25	9/8/2021	110.25 (raise stop to 110.30, spot ref 111.40)	112.2	114.5	-	108	10/1/2021	108.00
FX Alpha	Buy USD/SEK 3m CS 1x2 8.6806 / 8.9303	8/13/2021	0.41%	-	8.93	9.04	-	9/20/2021	0.61%
Chart Alpha	Buy EUR/ZAR	8/26/2021	17.53	18.07	18.61	-	17.00	9/3/2021	17.00
EM Alpha	Buy EUR/ZAR	6/25/2021	16.8	16.88	200d SMA	17.98	17	8/3/2021	17.15

**Exhibit 4: Closed trades**

Approximately two years of closed technical and/or collaborative cross strategy trades in the alpha, technical advantage and year ahead reports

Report	Trade description	Entry date	Entry level	Spot target 1	Spot target 2	Spot target 3	Stop	Close date	Level closed
FX Alpha	Sell GBP/JPY cal spread via long 1m and short 9m	4/6/2021	Initial gain of 1.9982% GBP (spot ref: 155.636)	-	-	-	-	7/2/2021	Initial gain of 1.7644% GBP (Spot ref: 153.30)
FX Alpha	Short EUR/USD via 6m 1.17 put	4/27/2021	0.5082% off spot 1.2083 (6.241% atm)	-	-	-	-	-	0.6001%
FX Alpha	Sell NZD/USD	4/28/2021	0.7200	0.7000	-	-	0.7350	5/13/2021	0.7138
FX Alpha	Short CHF/JPY	4/13/2021	118.514	117.83	116.5	114	120	5/6/2021	120.21
FX Alpha	Buy GBP/USD 1m 1x2 CS 1.3730/1.40	3/30/2021	0.64% (Spot: 1.3715)	1.4	-	-	-	4/19/2021	1.04%
FX Alpha	Sell USD/JPY	3/25/2021	109.13	110.70	106.71	106.00	-	4/15/2021	108.56
Chart Alpha	Buy USD/ZAR	3/4/2021	15.02	15.44	16.00	16.55	14.5	4/9/2021	14.50
EM Alpha	Sell ZAR/RUB	1/21/2021	4.93	4.48	-	-	5.21	3/4/2021	4.9 + Carry

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## Options Risk Statement

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