

US Rates Watch

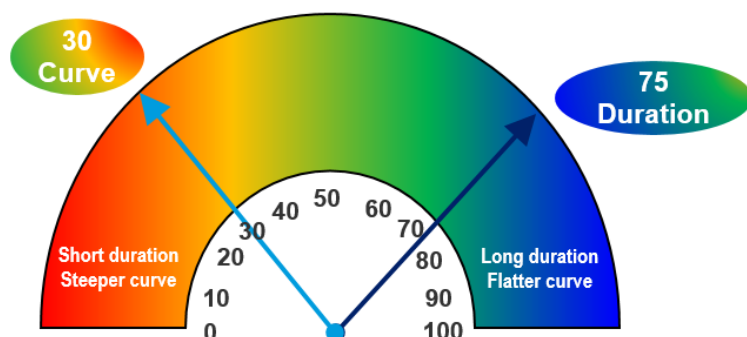
Positioning suggests room for curve flattening to continue

Front end and belly positioning most vulnerable

Our positioning indicators continue to suggest that out of the money longs remain in the front end and belly which, if challenged, could drive a further inversion of the yield curve. Despite the recent selloff, CFTC data as of Tuesday indicates that asset managers continued to add to UST exposure with leveraged funds taking the other side. US fixed income inflows are continuing to moderate, but this may be short lived given July seasonals which suggest future inflows.

Exhibit 1: Curve-o-meter

Positioning points to a bias for rates to selloff and curve to flatten



Source: BofA Global Research, Note: dials show 5y percentiles for the average non-commercial ex leverage funds & proxy of futures positioning for duration and the average of CTA betas and our proxy for futures positioning for the curve.

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Out of the money longs bias curve flatter

The futures positioning proxy (for construction details see our report: [Gauging positioning in Treasury Futures](#)) continues to show a bias for rates to sell off, most notably at the front end and belly (Exhibit 12). Positioning at the back end is generally cleaner suggesting that the curve is also prone to flatten further (Exhibit 11). On the week through Thursday, open interest increased with equal shorts/ longs created with the most activity in TU, FV, and TY.

03 July 2023

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CFTC = Commodity Futures Trading Commission

COB = close of business

CTA= Commodity trading advisor

ED= Eurodollars

FV = Treasury 5Y contract

ITM=in the money

MoF= ministry of finance

OTM= out of the money

PPTS = percentage points

QT= quantitative tightening

SFR = SOFR futures contract

TGA= Treasury General Account

TIC=Treasury International Capital

TR FI funds = Total return fixed income funds

TU = Treasury 2Y futures contract

TY = Treasury 10Y contract

US = Treasury 20Y contract

UST= Treasury security

UXY = Treasury ultra 10Y contract

WN = Treasury 30Y contract

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Timestamp: 03 July 2023 05:00AM EDT

CFTC shows asset managers add to longs

Asset manager positioning hit new levels of historic longs alongside a pickup in leveraged fund shorts (Exhibit 7). New asset manager longs were concentrated in US and SFR futures. Speculative positioning excluding leveraged funds also showed a pickup in longs as well. This suggests that conviction in duration remains relatively pronounced in the real money community.

Momentum following strategies should be adding shorts

Non-reportable positioning suggests CTAs have reduced their long positioning only slightly and their UST positioning was little changed on the week (Exhibit 8). However, our cross over momentum indicator continued to drift shorter (Exhibit 13). While CTAs may not have fully re-positioned given that non-reportable positioning is still modestly long, our top-own CTA model (for details see our report, [CTA impact on rates market](#)) reflects a modest add to shorts on the week (Exhibit 15).

Primary dealer cash holdings increase at long end

Primary dealer balance sheets for the week ending June 21 saw cash position decline modestly across the curve except for the back end (Exhibit 35). Futures positions were largely lower across all points on the curve. Since the banking risk events, dealer cash positions are higher across most points, while futures positions are lower at the back end (Exhibit 36).

Modest foreign buying on the week

Foreign buying was limited on the week. Japanese investors' holdings were roughly flat (Exhibit 24). Custodial holdings reflected about \$4bn of buying from central banks (Exhibit 25). Despite 10y UST yield at some of the highest levels since the banking risk events in March, on an FX hedged basis USTs continue to offer unfavorable carry for foreign investors (Exhibit 17).

UST fund inflows continue to cool

Inflows to US fixed income funds continued to cool the week of June 28th, with the largest outflows from corporate funds. US Gov funds also saw a significantly slower pace of inflows vs what has been observed over the past few months (Exhibit 28).

However, strong July risk-off seasonals suggest that we could see inflows pickup. As discussed in our [Bond market seasonality report](#), investors tend to de-risk over the quieter summer months and re-risk in the fall. The de-risking behavior corresponds to fixed income flow activity; EPFR monthly flow data shows fixed income inflows 70% of the time in July & consistent outflows in the fall since 2007.

US total return fixed income fund AUM-weighted performance modestly beat the benchmark on the week. Outperformance was led by funds that have generally been performing well over the last month—likely funds that have been more cautious about adding to duration and curve steepener expressions.

Exhibit 2: On deck next week

Calendar of upcoming events

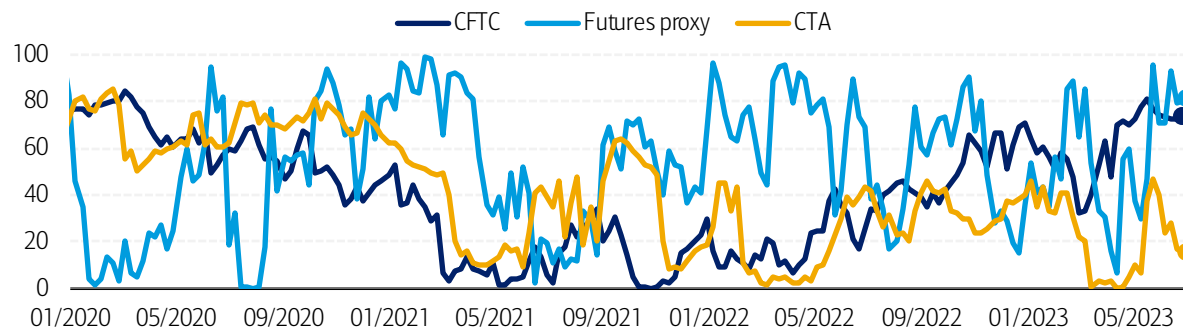
	US Data			Fed Speaker / Event	Treasury Auction			Treasury Settlements	
	Series	BofA	BB Consensus		Security	Amount (\$bn)	Prior Δ	Security	Amount
M, Jul 3	S&P Global US manufacturing PMI	-			13 week bills	65	0		
	Construction Spending (mom)	0.50%	0.40%		26 week bills	58	0		
	ISM Manufacturing	46.5	47		42-day bills	50	0		
	Total Vehicle Sales	15.6M	15.3M						
Tu, Jul 4									
W, Jul 5	Factory Orders	-	0.60%	FOMC Meeting Minutes for the June 14th meeting	17 week bills	NA		Bills	176
	FOMC Meeting Minutes			Fed's Williams speaks at Central Bank Research Association at the NY Fed					
Th, Jul 6	MBA Mortgage Applications	-	-		4 week bills	NA		Bills	173
	ADP Employment	220k	220k		8 week bills	NA			
	Initial Jobless Claims	245k	-	Fed's Logan speaks on policy changes for central banks at Central Bank Research Association at the NY Fed					
	Trade Balance								
	S&P Global US services PMI	-\$68.5b	-\$68.6b						
	ISM Services	-	-						
	JOLTS Job Openings	51	51.1						
F, Jul 7	Change in Nonfarm Payrolls	-	-						
	Private Payrolls	250k	213k						
	Unemployment Rate	220k	195k						
	Average Hourly Earnings mom	3.60%	3.60%						
	Average Weekly Hours	0.30%	0.30%						
		34.3	34.3						

Source: BofA Global Research, Bloomberg, US Treasury

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Positioning indicators**Exhibit 3: 5y percentile of 10 equivalent duration positioning (percentile: higher = longer)**

Futures positioning proxy shows bias for rates to sell off, CFTC data adjusted for LFs is long, top down CTA model is lagged and shows historic shorts that have likely already been covered



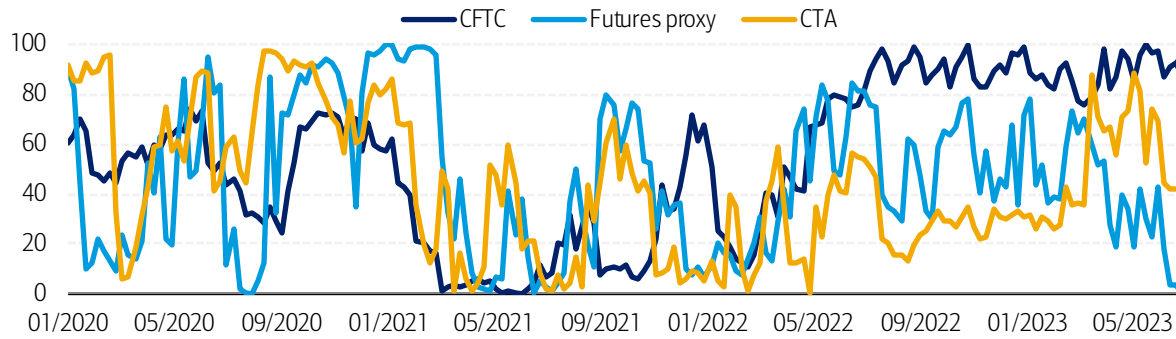
Source: BofA Global Research

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Exhibit 4: 5y percentile of curve positioning (percentile: higher = longer back-end relative to front end)

Indicators generally point mixed curve positioning, but futures positioning proxy shows bias for curve flattening

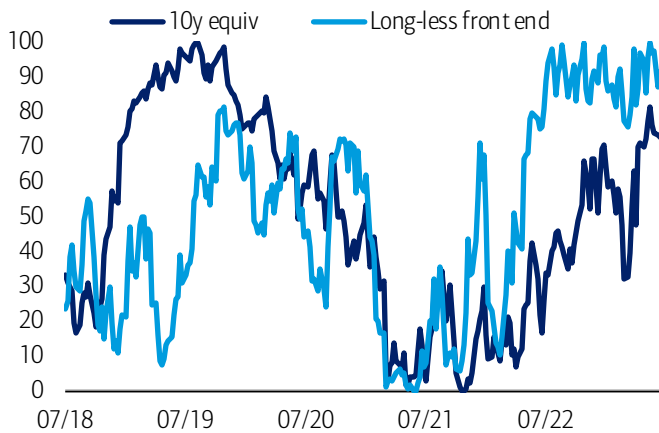


Source: BofA Global Research

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Exhibit 5: 5y percentile of non-commercial ex LF positioning

Positioning is historically long and largely concentrated at the back-end

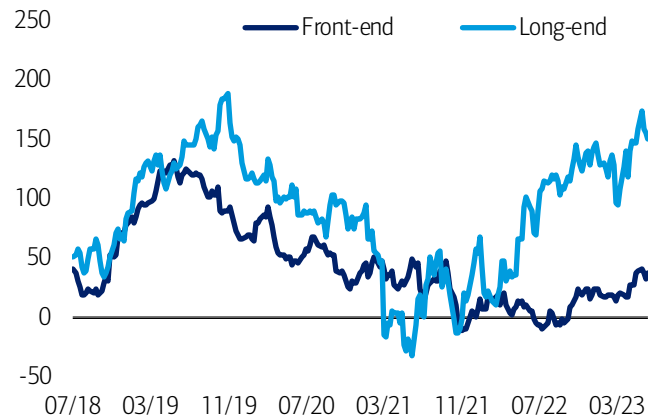


Source: BofA Global Research, Bloomberg

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Exhibit 6: Non-commercial ex leveraged fund positioning (\$bn, 10y equivalent)

Longs are more concentrated in the back-end

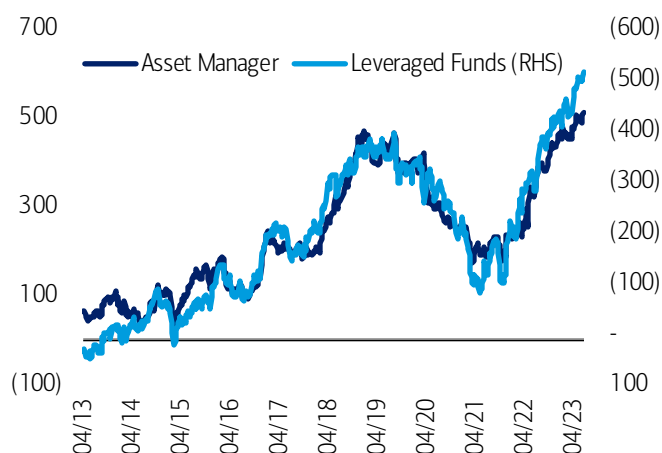


Source: BofA Global Research, Bloomberg

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Exhibit 7: Asset manager and leveraged fund positioning (10y equivalent, \$bn)

Asset manager longs correspond with leveraged fund shorts

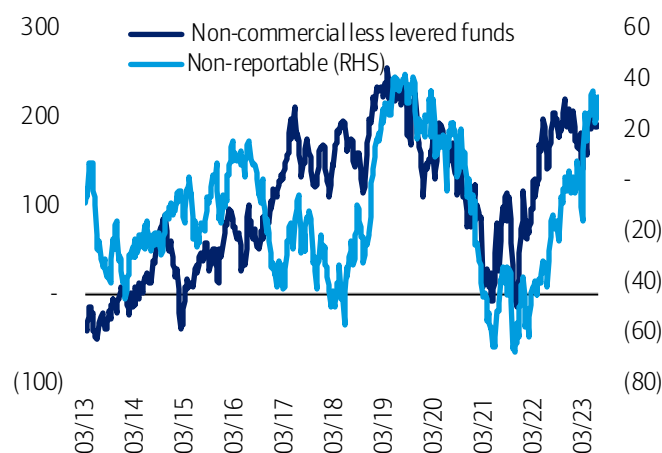


Source: BofA Global Research, Bloomberg

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Exhibit 8: Non-commercial ex LFs and non-reportable positioning (10y equivalent, \$bn)

Directional positions trend together



Source: BofA Global Research, Bloomberg

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Exhibit 9: 10y rate change for given percentile of non-commercial ex-Leveraged fund positioning (higher percentile = longer)

Positioning is a momentum signal: longer positioning is usually followed by stronger 10y performance

	0	1w	4w	8w	12w	16w
0 to 10	10	1	-1	0	1	2
10 to 20	20	0	3	3	3	3
20 to 30	30	2	2	2	1	2
30 to 40	40	5	4	3	3	4
40 to 50	50	2	3	3	3	3
50 to 60	60	-1	-1	-1	0	0
60 to 70	70	0	0	0	0	0
70 to 80	80	-2	-4	-4	-5	-6
80 to 90	90	-3	-2	-3	-3	-5
90 to 100	100	-2	-2	-2	-2	-2

Source: BofA Global Research, Bloomberg, average performance calculated over last 5y

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Exhibit 10: 10y rate change for given percentile of leveraged fund positioning (higher percentile = longer)

Positioning is contrarian signal: shorter positioning is usually followed by stronger 10y performance

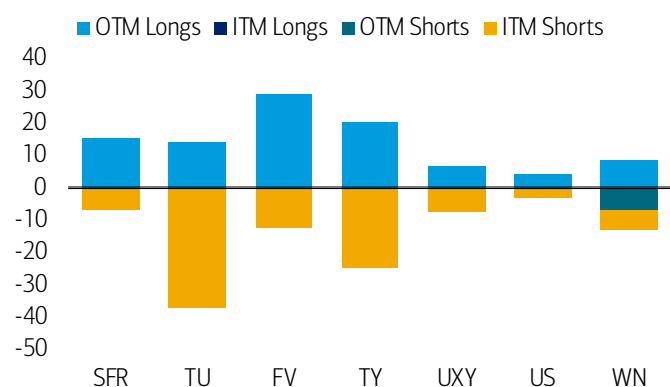
	0	1w	4w	8w	12w	16w
0 to 10	10	0	1	0	0	0
10 to 20	20	1	-4	-2	-2	-3
20 to 30	30	-7	-3	-4	-4	-5
30 to 40	40	-1	-2	-3	-3	-3
40 to 50	50	3	3	2	1	1
50 to 60	60	2	1	0	0	0
60 to 70	70	2	2	2	3	4
70 to 80	80	4	4	4	3	4
80 to 90	90	2	4	4	4	5
90 to 100	100	-1	-2	-1	0	0

Source: BofA Global Research, Bloomberg, average performance calculated over last 5y

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Exhibit 11: Proxies for futures positioning

Longs OTM across contracts, shorts are largely ITM but mixed in WN

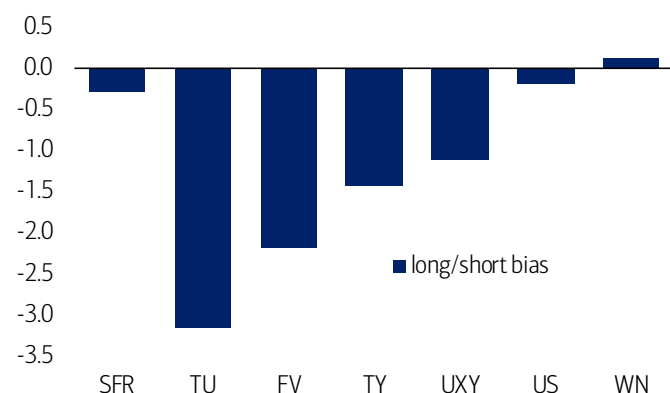


Source: BofA Global Research, Bloomberg

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Exhibit 12: Analysis of proxies for futures positioning

Bias for rates to sell off particularly at the front-end

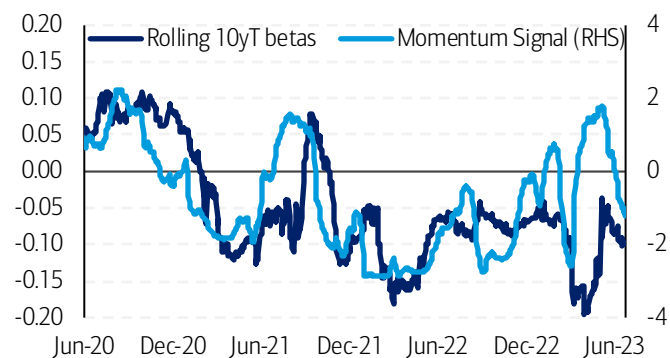


Source: BofA Global Research, Bloomberg. Note: reflects average positioning of futures stack over last 5 days

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Exhibit 13: CTA positioning in 10yT

CTA added shorts as momentum signal dropped

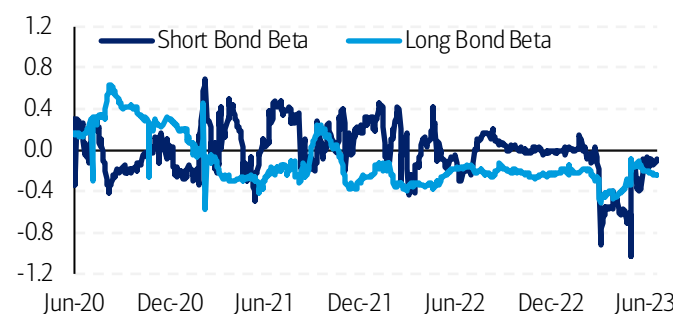


Source: BofA Global Research

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Exhibit 14: CTA positioning in longer duration and shorter duration bonds

Top-down model suggests CTAs added shorts in long duration bonds

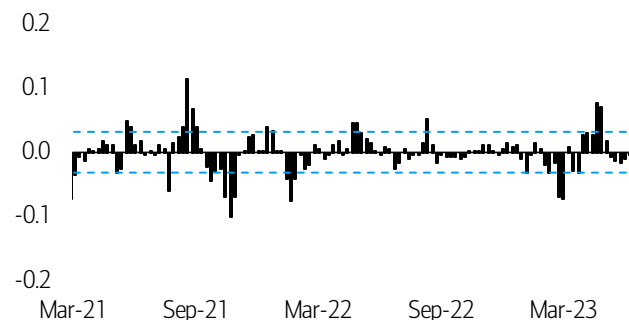


Source: BofA Global Research

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Exhibit 15: Changes in CTA 10yT beta

Change in 10yT beta has declined for several weeks consistently

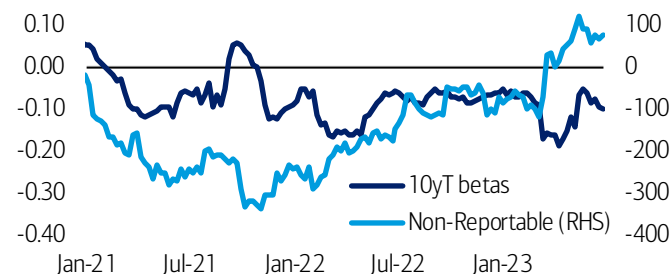


Source: BofA Global Research

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Exhibit 16: CTA 10y TSY beta and non-reportable positions

Strong divergence between non-reportable position and top-down model, which tends to be lagged



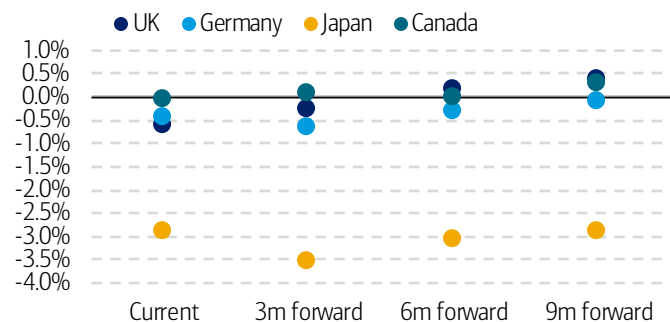
Source: BofA Global Research, Bloomberg

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FX hedged pickup and foreign flows

Exhibit 17: FX hedged pickup of TSYs vs local alternatives implied by forwards

Market pricing does not reflect attractive environment for FX hedged carry trades in TSYs currently but forwards suggest improvement



Source: BofA Global Research, Bloomberg. Note: pickup vs 10y local alternative except Japan which is relative to 20y JGB using 3m forward FX hedge

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Exhibit 18: 10Y UST pickup to 20Y JGB, with 3m fx hedge (bps)

10y TSY now offer very negative hedged pickup vs 20yJGBs

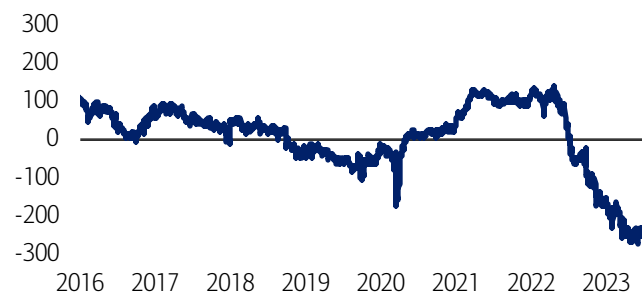


Source: BofA Global Research, Bloomberg

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Exhibit 19: 10Y UST pickup to 10Y JGB, with 3m fx hedge (bps)

10y TSY now offer very negative hedged pickup vs 10yJGBs

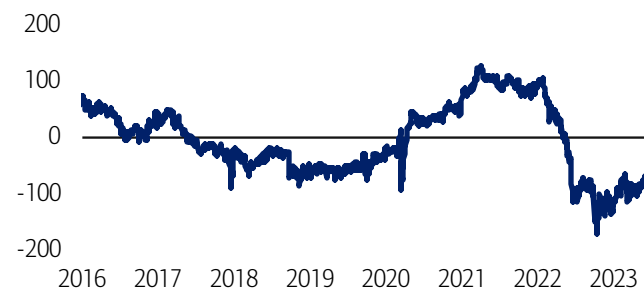


Source: BofA Global Research, Bloomberg

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Exhibit 20: 10Y UST pickup to 10Y Bund, with 3m fx hedge (bps)

10y TSY offers negative pickup vs 10y Bund

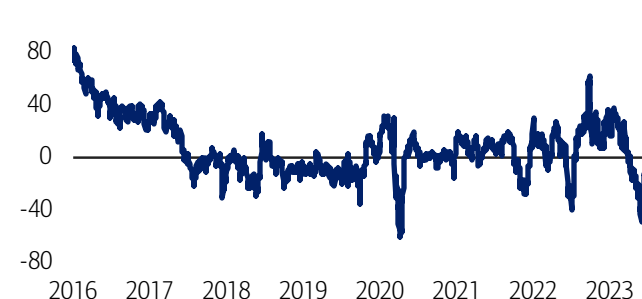


Source: BofA Global Research, Bloomberg

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Exhibit 21: 10Y UST pickup to 10Y CAD govie, with 3m fx hedge (bps)

10y TSY erased previous modest hedged pickup to 10y CAD gov bond

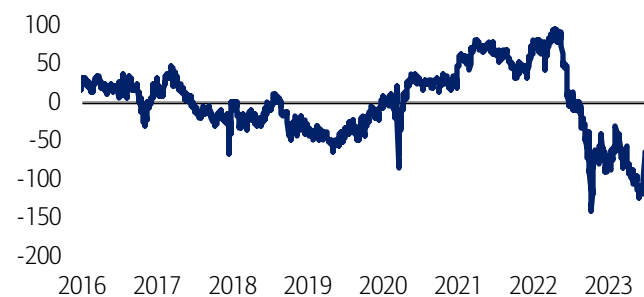


Source: BofA Global Research, Bloomberg

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Exhibit 22: 10Y UST pickup to 10Y Gilt, with 3m fx hedge (bps)

10y TSY offers negative pickup vs 10y Gilt but shows improvement recently



Source: BofA Global Research, Bloomberg

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Exhibit 23: 3m rolling JPY currency hedge

From the perspective of Japanese investor, pickup has been unattractive except vs the EU periphery

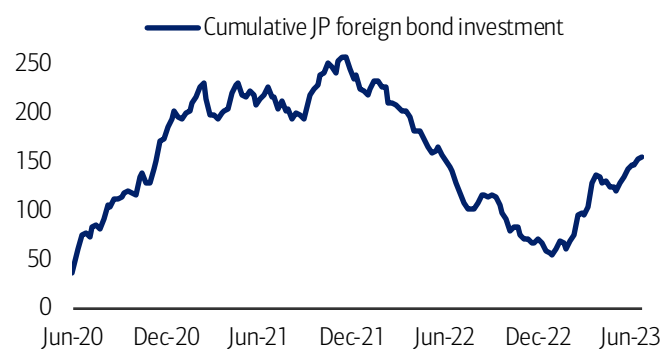
	6/29/2023		As of 1 wk ago		As of 1 mo ago		As of 1 yr ago	
	Pickup to 10y JGB	Pickup to 20Y JGB	Pickup to 10y JGB	Pickup to 20Y JGB	Pickup to 10y JGB	Pickup to 20Y JGB	Pickup to 10y JGB	Pickup to 20Y JGB
10y UST	-2.30%	-2.88%	-2.35%	-2.96%	-2.49%	-3.10%	0.16%	-0.52%
10y GER	-1.86%	-2.44%	-1.88%	-2.48%	-1.80%	-2.42%	1.29%	0.61%
10y FRA	-1.33%	-1.91%	-1.36%	-1.96%	-1.26%	-1.87%	1.84%	1.16%
10y BEL	-1.20%	-1.78%	-1.23%	-1.83%	-1.13%	-1.74%	1.93%	1.25%
10y ITA	-0.19%	-0.77%	-0.27%	-0.87%	-0.06%	-0.67%	3.17%	2.49%
10y SPA	-0.87%	-1.45%	-0.93%	-1.53%	-0.81%	-1.42%	2.36%	1.68%
10y UK	-1.68%	-2.26%	-1.67%	-2.28%	-1.42%	-2.03%	0.16%	-0.52%
10y CAN	-2.23%	-2.81%	-2.21%	-2.82%	-2.12%	-2.74%	0.42%	-0.26%

Source: BofA Global Research, Bloomberg

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Exhibit 24: Japan investment in foreign bonds, cumulative weekly (\$bn)

Long & medium term bonds (\$bn) holdings picked up on the week

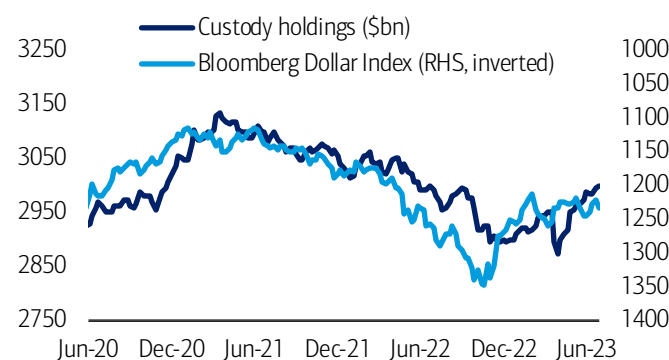


Source: BofA Global Research, Bloomberg

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Exhibit 25: Weekly UST custody holdings, foreign official (\$bn)

Custody holdings have recovered drop around banking risk events in March and picked up on the week

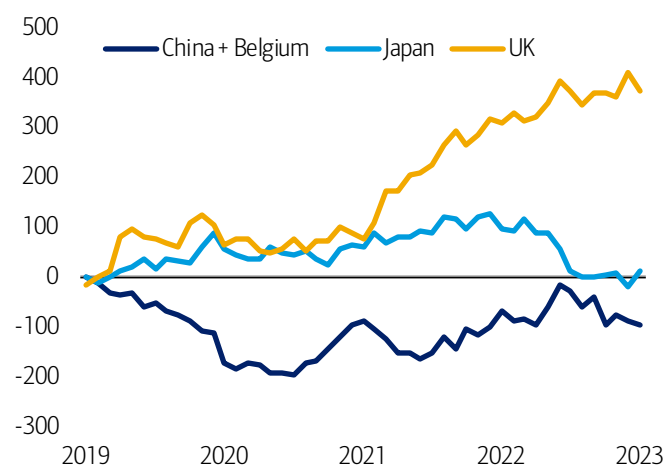


Source: BofA Global Research, NY Fed

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Exhibit 26: Cumulative change in UST holdings by region since 2019

Japan holdings have declined since 2022 while UK holdings grown

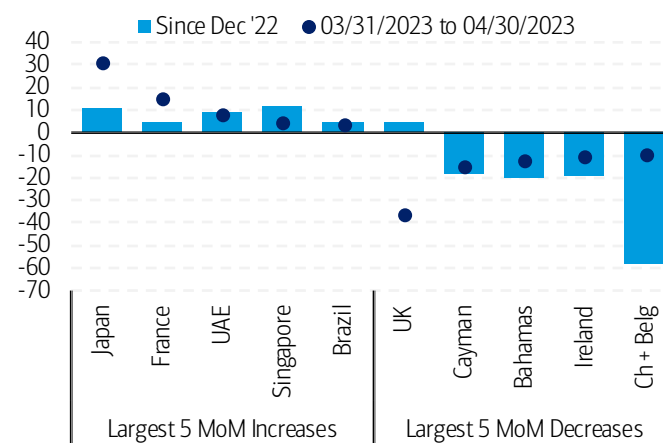


Source: BofA Global Research, TIC, Note: adjusted for level of rates

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Exhibit 27: Largest MoM changes in foreign TSY holdings (\$bn)

Japan was largest buyer, UK largest seller in April



Source: BofA Global Research, TIC, Note: adjusted for level of rates

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Fund flows and returns

Exhibit 28: US fixed income fund flows (\$million)

US FI funds saw inflows, driven by mixed allocation funds

	6/28/2023	Rolling 4w average	Rolling 8w average	Rolling 12w average	Rolling 52w average
Gov: short	61	333	227	222	1,117
Gov: intermediate	390	321	492	367	533
Gov: long	473	1,002	1,577	1,344	1,196
Corp: IG	(742)	331	572	253	426
Corp:HY	(425)	563	(111)	103	(144)
Corp: all quality	32	42	38	34	10
MBS	443	597	397	321	44
Inflation	(174)	(366)	(440)	(404)	(539)
Muni	47	448	97	(26)	(425)
Mixed allocation	2,228	2,580	2,689	2,642	592
All USFI	1,847	5,306	4,834	4,223	2,254

Source: BofA Global Research, EPFR

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Exhibit 29: Total return FI fund performance vs benchmark

Over the last week, AUM weighted fund performance modestly outperformed benchmark

	AUM (\$Bn)	6/29/2023	Vs. Agg	Last 4w	Vs. Agg
Vanguard Total Bond Market II Index Fund	248	-0.26%	0.00%	-0.92%	-0.02%
Vanguard Total Bond Market Index Fund	203	-0.15%	0.10%	-0.81%	0.09%
PIMCO Income fund	122	-0.17%	0.08%	0.37%	1.27%
The Bond Fund of America	78	-0.28%	-0.02%	-1.20%	-0.29%
MetWest Total Return Bond Fund	62	-0.36%	-0.10%	-1.09%	-0.19%
PIMCO Total Return Fund	55	-0.28%	-0.02%	-0.87%	0.04%
Dodge & Cox Income Fund	56	-0.08%	0.17%	-0.24%	0.66%
PGIM Total Return Bond Fund	41	-0.08%	0.17%	-0.42%	0.48%
BlackRock Strategic Income Opportunities Fund	36	-0.02%	0.24%	0.14%	1.05%
Baird Aggregate Bond Fund	39	-0.15%	0.11%	-0.76%	0.14%
JPMorgan Core Bond Fund	39	-0.22%	0.03%	-0.90%	0.00%
DoubleLine Total Return Bond Fund	34	-0.23%	0.03%	-1.01%	-0.11%
Fidelity Series Investment Grade Bond Fund	34	-0.22%	0.03%	-0.61%	0.30%
Fidelity Total Bond Fund	31	-0.13%	0.12%	-0.22%	0.68%
Western Asset Core Plus Bond Portfolio	25	0.08%	0.34%	-0.11%	0.79%
Baird Core Plus Bond Fund	24	-0.12%	0.14%	-0.62%	0.29%
John Hancock Bond Fund	22	-0.14%	0.11%	-0.56%	0.34%
TIAA-CREF Bond Index Fund	21	-0.15%	0.10%	-0.82%	0.08%
BlackRock Total Return Fund	18	-0.32%	-0.06%	-0.87%	0.04%
JPMorgan Core Plus Bond Fund	17	-0.11%	0.14%	-0.81%	0.10%
Bridge Builder Core Bond Fund	16	-0.26%	-0.01%	-0.82%	0.08%
T Rowe Price New Income Fund	16	-0.17%	0.08%	-1.18%	-0.28%
Western Asset Core Bond Fund	15	-0.21%	0.05%	-0.93%	-0.02%
CREF Bond Market Account	11	-0.16%	0.09%	-0.70%	0.20%
Fidelity Investment Grade Bond Fund	9	-0.21%	0.04%	-0.72%	0.19%
DoubleLine Core Fixed Income Fund	7	-0.22%	0.04%	-0.64%	0.26%
TCW Total Return Bond Fund	3	-0.24%	0.01%	-1.21%	-0.31%
Janus Henderson Flexible Bond Fund	3	-0.25%	0.01%	-1.17%	-0.26%
Weighted avg	1282	-0.19%	0.06%	-0.67%	0.24%
Agg		-0.26%		-0.90%	
10y return		-0.44%		-2.43%	

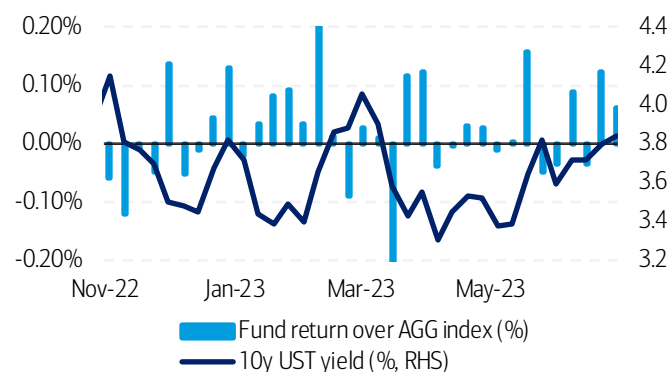
Source: BofA Global Research, Bloomberg. Note: Excess returns are fund total returns over Bloomberg Barclays Agg Index

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Exhibit 30: Total return funds, excess return vs. 10y rate

Weekly asset-weighted total returns for total return funds. Funds return modestly outperformed benchmark on the week

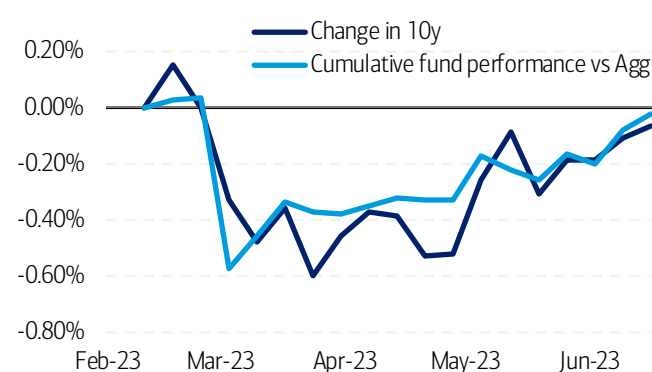


Source: BofA Global Research, Bloomberg. Note: Excess returns are fund total returns over Bloomberg Barclays Agg index

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Exhibit 31: Cumulative return of TR FI funds over benchmark vs 10yT

Funds have modestly outperformed since start of the year



Source: BofA Global Research, Bloomberg. Note: Excess returns are fund total returns over Bloomberg Barclays AGG index

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Exhibit 32: Total return funds' published UST allocations vs benchmark from Q3 and Q4 '22

Funds remained underweight USTs in Q1 and overall increased underweight vs end of '22

		AUM (\$bn)	Q4 '22 (%)	Q1 '23 (%)	Change (PPTS)
VTBIX	Vanguard Total Bond Market II Index Fund	248.0	1.6	2.4	0.8
VBMFX	Vanguard Total Bond Market Index Fund	202.7	1.2	1.7	0.5
PIMIX	PIMCO Income fund	121.9	-37.7	-43.4	-5.7
ABNDX	The Bond Fund of America	77.8	-9.7	-11.3	-1.6
MWTIX	MetWest Total Return Bond Fund	61.8	-17.4	-16.5	0.9
DODIX	Dodge & Cox Income Fund	56.4	-31.2	-28.1	3.1
PTTRX	PIMCO Total Return Fund	55.0	-15.2	-15.4	-0.2
PDBAX	PGIM Total Return Bond Fund	41.1	-33.8	-33.7	0.1
BAGIX	Baird Aggregate Bond Fund	39.1	-17.7	-16.9	0.8
PGBOX	JPMorgan Core Bond Fund	39.1	-7.3	-5.0	2.3
BSIIX	BlackRock Strategic Income Opportunities Fund	35.5	-14.6	-17.3	-2.7
DBLTX	DoubleLine Total Return Bond Fund	33.6	-32.4	-32.7	-0.3
FSIGX	Fidelity Series Investment Grade Bond Fund	33.6	-10.4	-7.5	3.0
FTBFX	Fidelity Total Bond Fund	30.7	-18.3	-12.0	6.3
WACPX	Western Asset Core Plus Bond Portfolio	24.6	-29.1	-33.7	-4.6
BCOIX	Baird Core Plus Bond Fund	24.3	-20.0	-18.5	1.4
JHBIX	John Hancock Bond Fund	21.6	-26.1	-22.8	3.3
TBIIX	TIAA-CREF Bond Index Fund	20.6	0.9	0.8	-0.1
MAHQX	BlackRock Total Return Fund	17.9	21.3	-13.7	-35.0
ONIAx	JPMorgan Core Plus Bond Fund	17.3	-7.6	-5.1	2.5
BBTBX	Bridge Builder Core Bond Fund	16.3	-22.6	-22.1	0.5
PRCIX	T Rowe Price New Income Fund	16.0	-11.2	-16.2	-4.9
WATFX	Western Asset Core Bond Fund	15.1	-23.6	-30.7	-7.1
QCBMIX	CREF Bond Market Account	10.8	-22.3	-21.1	1.2
FBNDX	Fidelity Investment Grade Bond Fund	8.7	-8.6	-5.7	2.9
DBLFX	DoubleLine Core Fixed Income Fund	7.0	-20.3	-16.9	3.4
JFLEX	Janus Henderson Flexible Bond Fund	2.9	-9.5	-11.3	-1.8
TGLMX	TCW Total Return Bond Fund	2.8	-40.6	-38.5	2.1
AUM weighted		1282.4	-12.7	-13.2	-0.5

Source: BofA Global Research, funds' publicly available reports

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Bank balance sheets

Exhibit 33: Changes to bank balance sheet assets (\$bn)

Domestic bank assets decline driven by cash

		Current	1w change	Rolling 4w avg wkly chg	Rolling 8w avg wkly chg	Rolling 12w avg wkly chg	Rolling 52w avg wkly chg
All (\$bn, NSA)	Total Assets	22848	-92	-12	0	-21	5
	Cash	3265	-92	-15	7	-18	2
	UST & Agency	1515	-8	0	-5	-3	-4
	MBS	2596	8	-2	-4	-1	-6
	Loans and Leases	12112	16	6	1	5	13
	Other	3360	-15	0	1	-3	-1
Large Domestic (\$bn, NSA)	Total Assets	13327	-73	-11	-7	-21	-2
	Cash	1531	-76	-11	5	-14	1
	UST & Agency	1111	-2	0	-5	-3	-4
	MBS	1955	9	-1	-3	-1	-2
	Loans and Leases	6748	8	0	-3	-1	4
	Other	1982	-12	1	-1	-1	-1
Small Domestic (\$bn, NSA)	Total Assets	6492	-2	5	5	5	3
	Cash	453	-1	2	1	-3	-1
	UST & Agency	292	-3	-1	-1	0	0
	MBS	614	-1	-2	-1	0	-3
	Loans and leases	4342	6	7	6	8	8
	Other	792	-2	-1	0	-1	0
All Domestic (\$bn, NSA)	Total Assets	19819	-75	-5	-2	-16	1
	Cash	1984	-77	-8	6	-17	0
	UST & Agency	1403	-6	0	-5	-4	-4
	MBS	2569	8	-3	-4	-1	-5
	Loans and leases	11090	14	6	3	8	12
	Other	2774	-14	0	-1	-2	-1
Foreign (\$bn, NSA)	Total Assets	3029	-17	-7	1	-5	4
	Cash	1281	-15	-7	1	-2	2
	UST & Agency	112	-3	1	1	0	0
	MBS	27	0	0	0	0	0
	Loans and leases	1023	2	-1	-2	-3	1
	Other	586	-2	0	1	-1	1

Source: BofA Global Research, Federal Reserve, Bloomberg

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Exhibit 34: Select bank balance sheet liabilities (\$bn, NSA)

Domestic bank balance sheets decrease driven by deposits

		Current	1w change	Rolling 4w avg wkly chg	Rolling 8w avg wkly chg	Rolling 12w avg wkly chg	Rolling 52w avg wkly chg
Deposits (\$bn, NSA)	All	17197	-63	21	12	-14	-14
	Domestic	15929	-65	16	9	-16	-14
	Large Domestic	10759	-52	6	3	-17	-11
	Small Domestic	5170	-13	11	6	0	-3
	Foreign	1267	2	4	2	2	0
Other borrowing (\$bn, NSA)	All	2398	-6	-24	-5	2	13
	Domestic	1371	-13	-27	-17	-7	12
	Large Domestic	873	-12	-19	-13	-7	7
	Small Domestic	498	-1	-8	-4	-1	5
	Foreign	1027	7	3	12	9	2

Source: BofA Global Research, Federal Reserve, Bloomberg

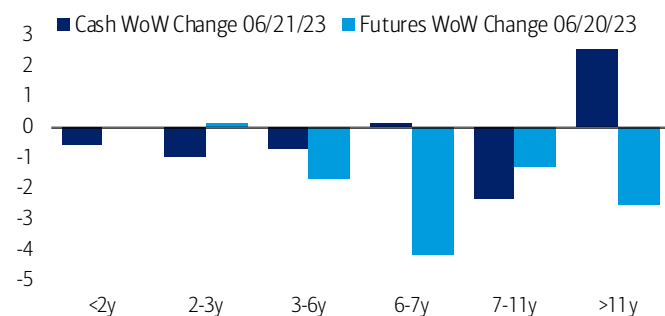
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Primary dealer balance sheet

Exhibit 35: Dealers WoW change in positions

10y equivalent, \$bn, cash increased in back-end & futures positions decreased in belly & back-end

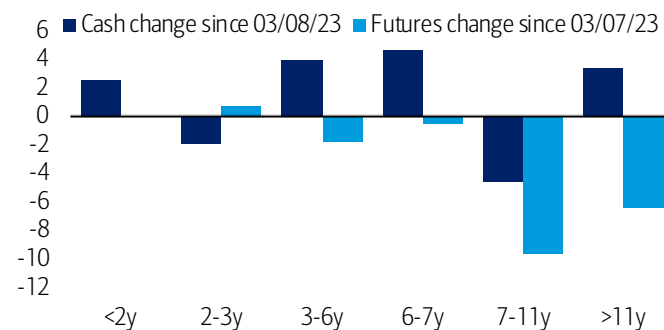


Source: BofA Global Research, NY Fed, CFTC

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Exhibit 36: Dealers change in positions since bank risk events

10y equivalent, \$bn, cash positions decreased in back-end

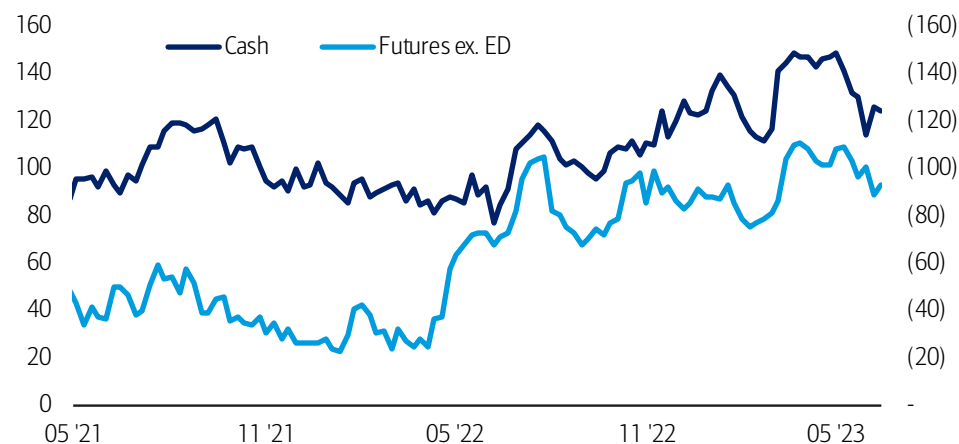


Source: BofA Global Research, NY Fed, CFTC

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Exhibit 37: Dealers total sector positions

10y equivalent, \$bn, cash longs leveled & futures shorts picked up on the week



Source: BofA Global Research, NY Fed, CFTC

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