

US Rates Watch

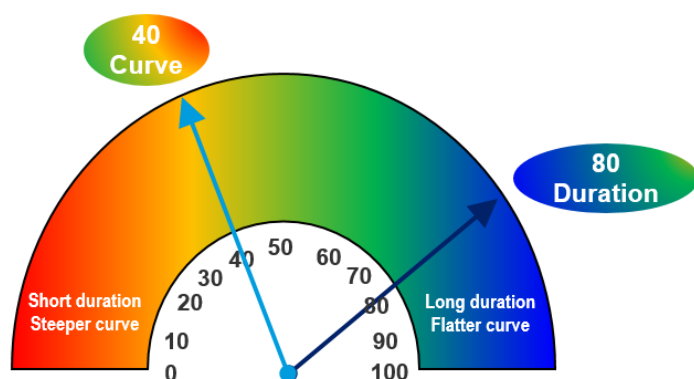
Longs intact despite new shorts, uptick in Japanese bid

Longs intact while new shorts added

Our positioning indicators suggest that while shorts may have been added alongside last week's price action, longs have yet to be fully covered and are largely out of the money. CFTC data indicates that asset managers are at record 5y longs, while leveraged funds taking the other side are at record shorts. Price action since the start of the month has not yet confirmed the July seasonal rally, but fixed income inflows modestly picked up on the week. Recent MoF data shows strong demand from Japanese investors for foreign bonds, suggesting that the pain trade is higher rates from their perspective as well.

Exhibit 1: Curve-o-meter

Positioning points to a bias for rates to sell off



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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Shorts added, longs not fully covered

Open interest in UST futures increased on the week, with more shorts created than longs destroyed across most tenors. TU, FV and TY saw the largest amount of shorts created while SFR saw the most longs closed. According to the futures positioning proxy (for construction details see: Gauging positioning in Treasury Futures, [9 May 2019](#)) shorts are now more dominant in TU and TY (Exhibit 11), however, the net OTM position remains long and continues to bias rates higher without a flip in momentum (Exhibit 12). Compared to last week, the indicator now points to more potential for OTM longs to be covered at the back end.

Trading ideas and investment strategies discussed herein may give rise to significant risk and are not suitable for all investors. Investors should have experience in relevant markets and the financial resources to absorb any losses arising from applying these ideas or strategies.

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Abbreviations:

UST= Treasury security

CTA= Commodity trading advisor

OTM= out of the money

ITM=in the money

ED= Eurodollars

TIC=Treasury International Capital

QT= quantitative tightening

MoF= Ministry of Finance

COB= close of business

SFR= SOFR futures contract

TU= Treasury 2Y futures contract

FV= Treasury 5Y contract

TY= Treasury 10Y contract

UXY= Treasury ultra 10Y contract

US = Treasury 20Y contract

WN = Treasury 30Y contract

TGA= Treasury General Account

TR FI funds = Total return fixed income funds

PPTS = percentage points

CFTC shows asset managers at new historical longs

Asset manager positioning again hit new levels of historical longs alongside a pickup in leveraged fund shorts (Exhibit 7). New asset manager longs were concentrated further out the curve, predominantly in WN and UXY. Speculative positioning excluding leveraged funds saw some modest long covering in FV. CFTC data continues to suggest that conviction in duration remains relatively pronounced in the real money community.

Momentum suggests larger add to shorts

Our cross-over momentum indicator continues to point shorter (Exhibit 13). Non-reportable positioning and our top-down model (for details see: CTA impact on rates market, [18 August 2020](#)) both show moderation in longs in recent weeks but reflect different levels of overall positioning (Exhibit 16). Neither, however, shows the extent of an add to shorts implied by the momentum indicator. CTAs therefore may have more catching up to do or be less inclined to chase this trend.

Strong Japanese bid for foreign bonds

Japanese investors increased foreign bond holdings by \$9bn on the week (Exhibit 24) and have not stopped buying since mid-May. Buying may be driven by banks expressing a duration view, as FX hedging costs remain prohibitive to hedged carry trades (Exhibit 17). The strong recent bid may also suggest that the pain trade is higher in global rates from the perspective of Japanese investors. Custodial holdings were roughly flat on the week (Exhibit 25), indicating more muted demand from the official sector.

Fund inflows pick up alongside July seasonals

Inflows to US fixed income funds picked up the week of July 5th, primarily driven by mixed allocation funds. Short- and long-term UST funds also saw inflows modestly above the pace observed in prior weeks (Exhibit 28).

While directionally rates remain higher since the start of the month, the pickup in inflows may be driven by July risk-off seasonals. As discussed in Bond market seasonality, [6 June 2022](#), 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 and consistent outflows in the fall since 2007.

US total return fixed income fund AUM (asset under management)-weighted performance modestly beat the benchmark alongside an increase in rates on the week. Outperformance was led by funds that have been performing well over the last month—likely funds that have been more cautious about adding to duration and curve steepener expressions.

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 in the belly & back end. Since the banking risk events, dealer long cash positions and short futures positions are larger across the curve (Exhibit 36).

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 10				Fed's Barr (voter) Speaks on Bank Supervision and Capital Rules	13 week bills	65			
				Fed's Daly to Discuss Inflation, Banking	26 week bills	58			
				Fed's Mester Speaks on Economic and Policy Outlook					
				Fed's Bostic Speaks on US, Atlanta Economies					
Tu, Jul 11				No major events	52 week bills	38		Bills	45
					42-day bills	50			
					3 year notes	40			
W, Jul 12	Consumer Price Index (yoy)	3.10%	3.00%	Fed's Barkin Speaks on Inflation	9-year 10-month notes	32			
	CPI Ex Food & Energy (yoy)	5.00%	5.00%	Fed's Kashkari (voter) Discusses Monetary Policy, Banking Solvency					
	Consumer Price Index (mom)	0.30%	0.20%	Fed's Bostic Speaks at Atlanta Fed Payments Forum					
	CPI Ex Food & Energy (mom)	0.30%	0.30%	Federal Reserve Releases Beige Book					
				Fed's Mester Speaks on FedNow					
Th, Jul 13	Initial Jobless Claims	245k	-	No major events	29-year 10-month bonds	18		Bills	22
	Producer Price Index (mom)	0.10%	0.20%						
	PPI Ex Food & Energy (mom)	0.00%	0.20%						
	PPI Ex Food, Energy, Trade (mom)	0.10%	0.10%						
F, Jul 14	Import Price Index (mom)	-0.10%	0.10%	No major events					
	Import Price Index ex Petroleum (mom)	0.00%	-						
	U. of Michigan Sentiment	65.5	65.5						

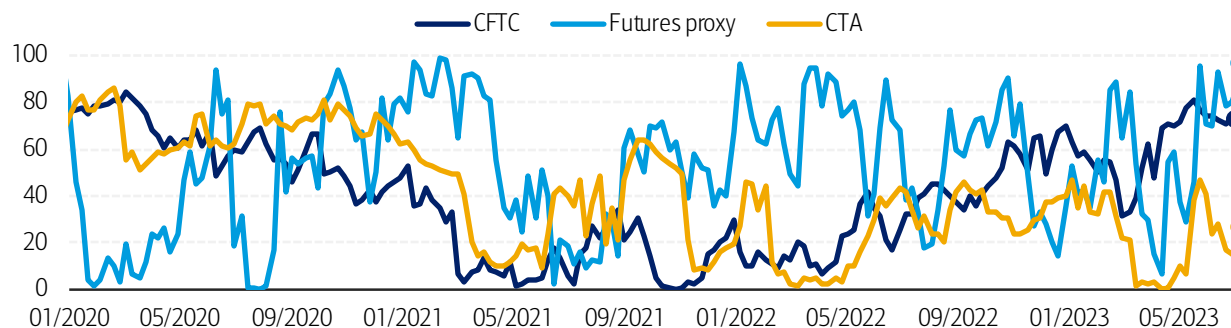
Source: BofA Global Research, Bloomberg, US Treasury

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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



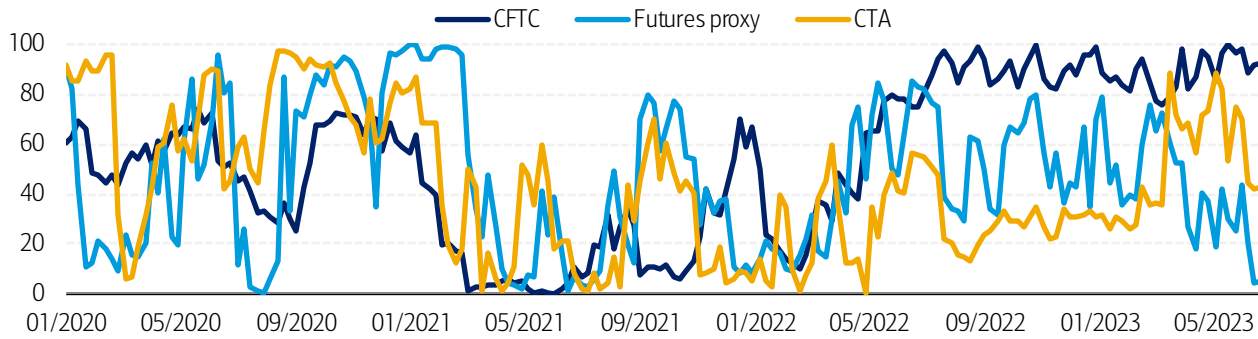
Source: BofA Global Research

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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

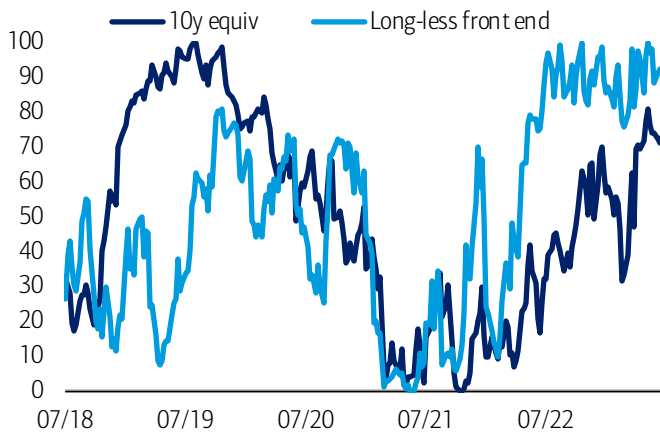


Source: BofA Global Research

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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

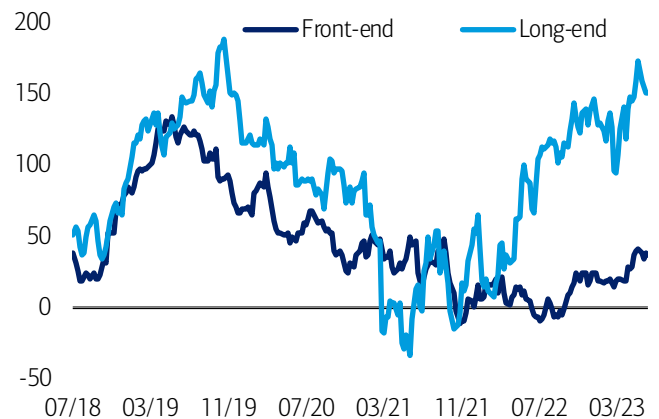


Source: BofA Global Research, Bloomberg

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

Longs are more concentrated in the back end

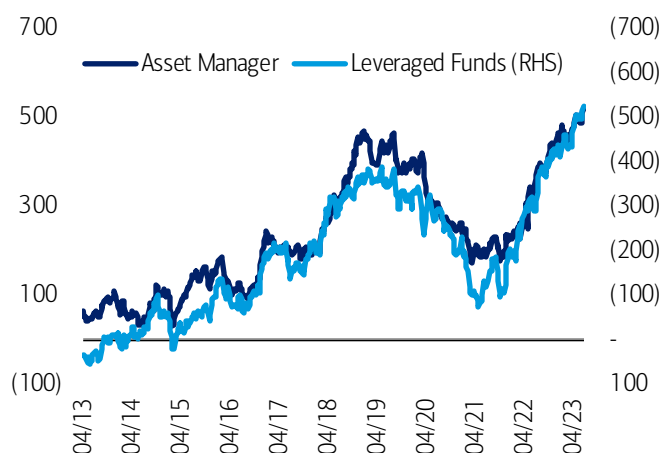


Source: BofA Global Research, Bloomberg

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

Asset manager longs correspond with leveraged fund shorts

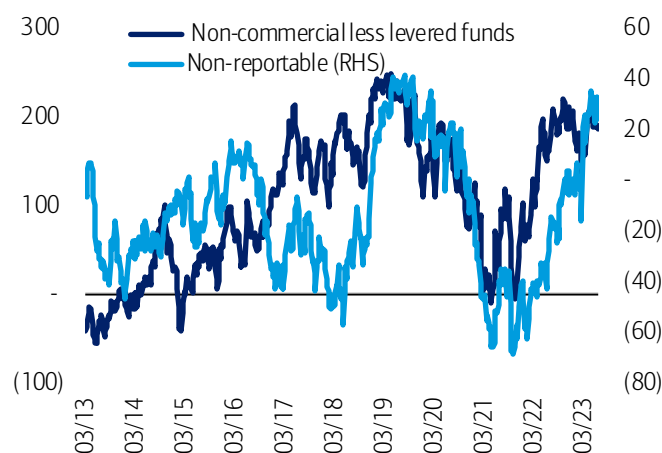


Source: BofA Global Research, Bloomberg

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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	3	2	2	1	2
30 to 40	40	6	5	4	3	4
40 to 50	50	1	3	2	2	3
50 to 60	60	-2	-1	0	0	0
60 to 70	70	1	0	0	0	0
70 to 80	80	-3	-3	-4	-6	-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

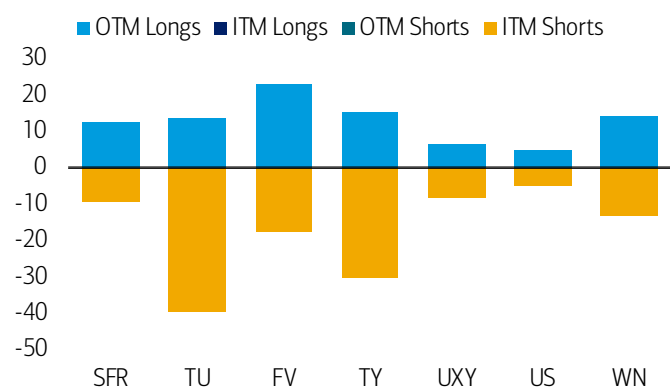
	0	1w	4w	8w	12w	16w
0 to 10	10	0	1	0	0	0
10 to 20	20	1	-4	-2	-2	-3
20 to 30	30	-7	-3	-4	-4	-5
30 to 40	40	-2	-2	-3	-3	-3
40 to 50	50	2	2	2	1	1
50 to 60	60	2	1	1	0	0
60 to 70	70	3	1	2	3	4
70 to 80	80	3	4	4	3	5
80 to 90	90	2	4	4	4	5
90 to 100	100	-1	-2	-1	0	0

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, while shorts are ITM

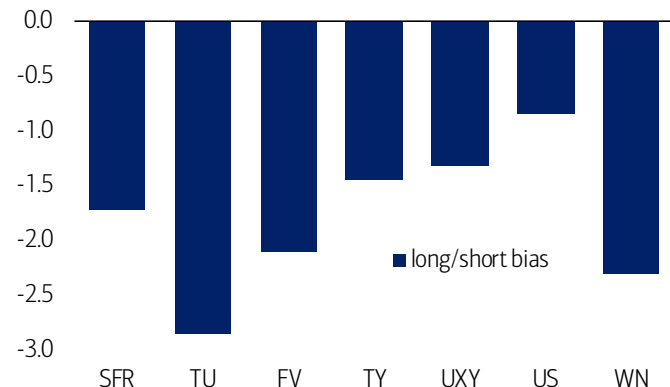


Source: BofA Global Research, Bloomberg

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Exhibit 12: Analysis of proxies for futures positioning

Bias for rates to sell off across the curve on the week

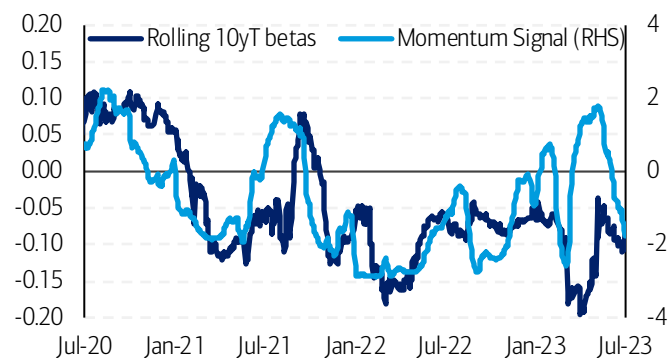


Source: BofA Global Research, Bloomberg. Note: reflects average positioning of futures stack over last 5 days

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Exhibit 13: CTA positioning in 10yT

CTA modestly reduced shorts while momentum signal dropped

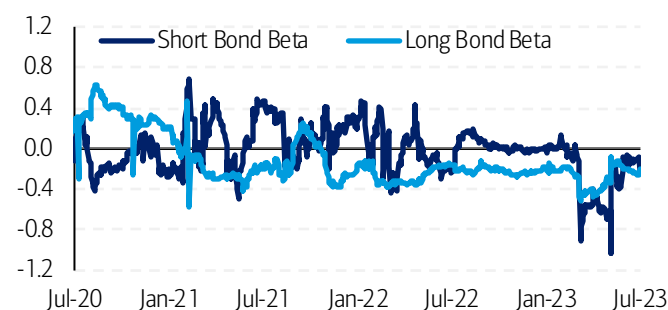


Source: BofA Global Research

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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

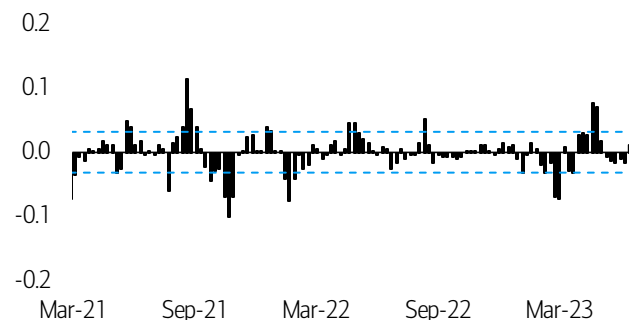


Source: BofA Global Research

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Exhibit 15: Changes in CTA 10yT beta

Change in 10yT beta turned positive on the week

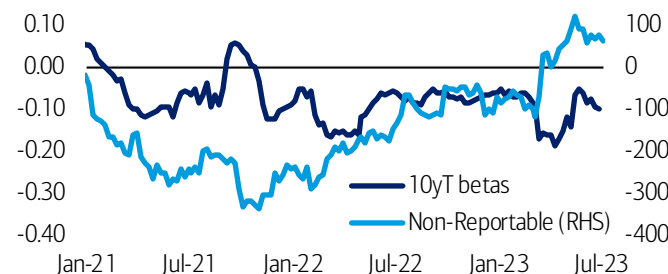


Source: BofA Global Research

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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



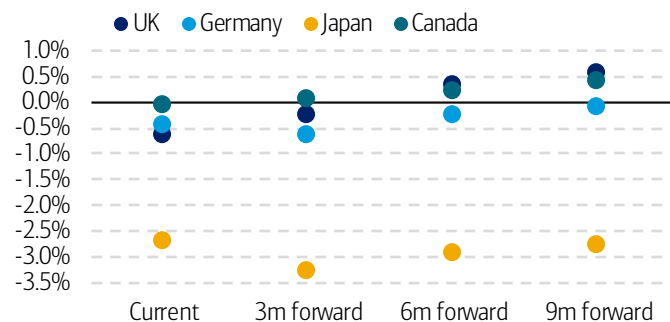
Source: BofA Global Research, Bloomberg

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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

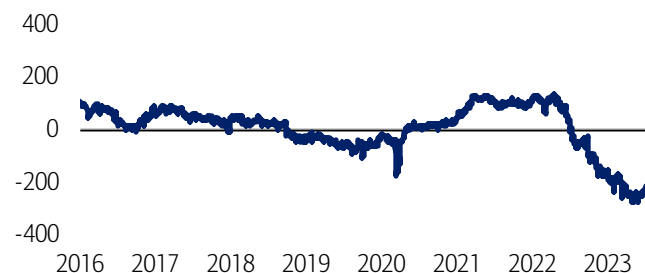


Source: BofA Global Research, Bloomberg

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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

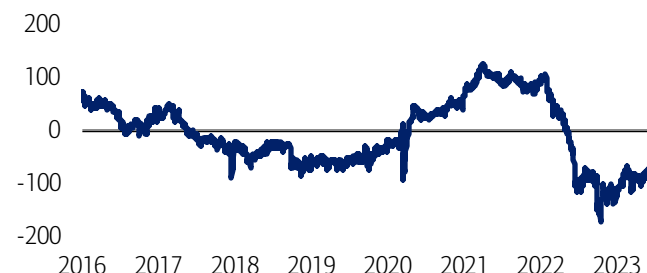


Source: BofA Global Research, Bloomberg

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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

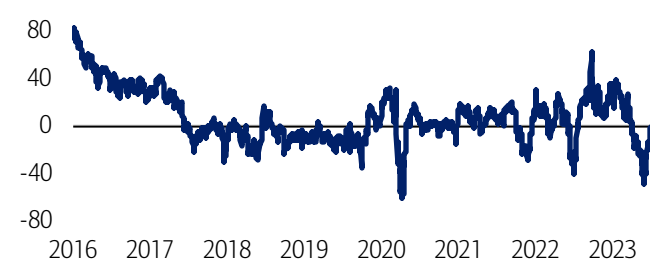


Source: BofA Global Research, Bloomberg

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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

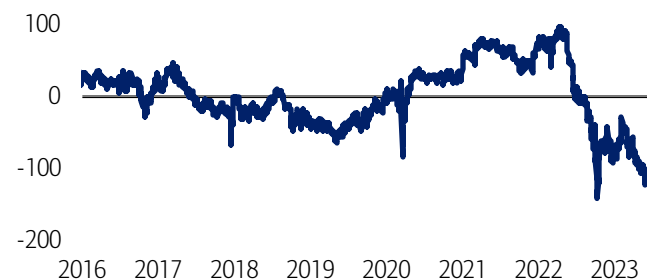


Source: BofA Global Research, Bloomberg

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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

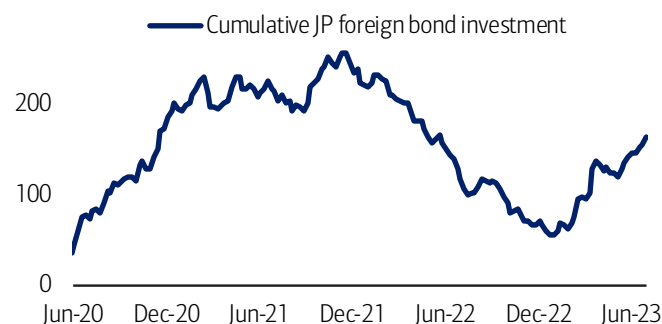
	7/6/2023		As of 1 wk ago		As of 1 mo ago		As of 1 yr ago	
	Pickup to 10y JGB	Pickup to 20Y JGB	Pickup to 10y JGB	Pickup to 20Y JGB	Pickup to 10y JGB	Pickup to 20Y JGB	Pickup to 10y JGB	Pickup to 20Y JGB
10y UST	-2.13%	-2.71%	-2.31%	-2.91%	-2.45%	-3.04%	-0.10%	-0.76%
10y GER	-1.69%	-2.27%	-1.90%	-2.50%	-1.78%	-2.37%	0.97%	0.31%
10y FRA	-1.13%	-1.71%	-1.37%	-1.97%	-1.24%	-1.83%	1.53%	0.87%
10y BEL	-1.02%	-1.59%	-1.25%	-1.85%	-1.11%	-1.70%	1.63%	0.97%
10y ITA	0.05%	-0.53%	-0.24%	-0.84%	-0.06%	-0.65%	2.92%	2.26%
10y SPA	-0.62%	-1.20%	-0.92%	-1.52%	-0.81%	-1.39%	2.04%	1.39%
10y UK	-1.48%	-2.06%	-1.69%	-2.29%	-1.38%	-1.97%	-0.16%	-0.81%
10y CAN	-2.09%	-2.67%	-2.29%	-2.89%	-2.21%	-2.80%	0.21%	-0.44%

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

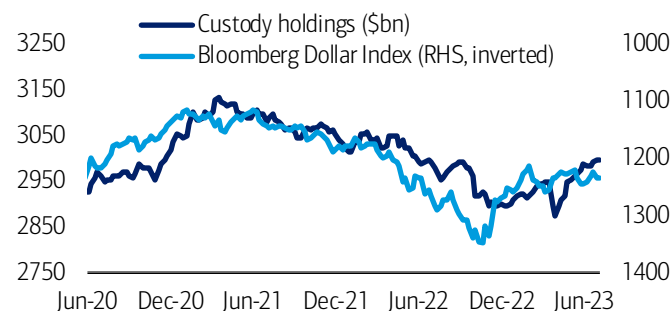


Source: BofA Global Research, Bloomberg

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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 little changed on the week

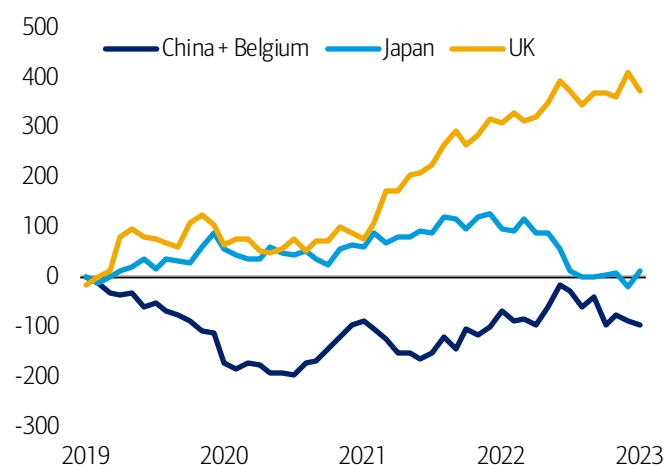


Source: BofA Global Research, NY Fed

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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

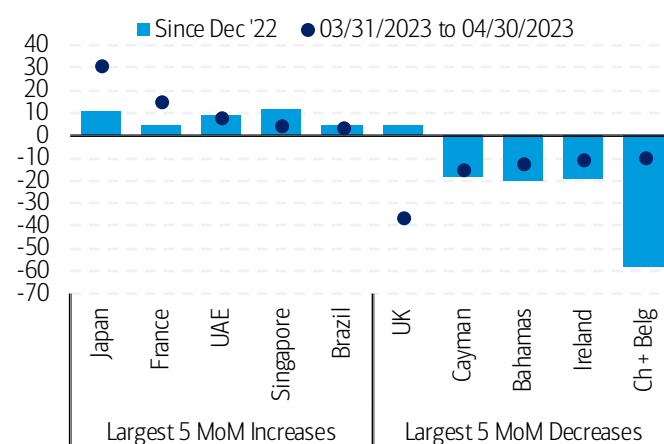


Source: BofA Global Research, TIC, Note: adjusted for level of rates

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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 large inflows, driven by mixed allocation funds

	7/5/2023	Rolling 4w average	Rolling 8w average	Rolling 12w average	Rolling 52w average
Gov: short	177	(2)	126	221	1,122
Gov: intermediate	30	263	392	333	483
Gov: long	1,328	786	1,459	1,370	1,146
Corp: IG	968	878	759	317	411
Corp:HY	145	(68)	92	163	(158)
Corp: all quality	40	38	40	40	10
MBS	404	477	393	328	56
Inflation	(334)	(389)	(462)	(435)	(556)
Muni	(544)	155	10	(53)	(441)
Mixed allocation	5,970	3,048	3,022	3,007	779
All US FI	7,834	4,697	5,213	4,675	2,302

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)	7/6/2023	Vs. Agg	Last 4w	Vs. Agg
Vanguard Total Bond Market II Index Fund	248	-0.90%	0.08%	-1.35%	0.11%
Vanguard Total Bond Market Index Fund	203	-0.99%	-0.01%	-1.34%	0.13%
PIMCO Income fund	124	-0.74%	0.24%	-0.69%	0.78%
The Bond Fund of America	75	-0.99%	-0.01%	-1.64%	-0.18%
MetWest Total Return Bond Fund	61	-1.13%	-0.15%	-1.86%	-0.40%
PIMCO Total Return Fund	55	-1.10%	-0.12%	-1.69%	-0.22%
Dodge & Cox Income Fund	56	-0.81%	0.17%	-0.82%	0.65%
PGIM Total Return Bond Fund	41	-0.84%	0.14%	-0.92%	0.54%
BlackRock Strategic Income Opportunities Fund	36	-0.56%	0.42%	-0.51%	0.95%
Baird Aggregate Bond Fund	39	-1.04%	-0.06%	-1.38%	0.08%
JPMorgan Core Bond Fund	39	-0.98%	0.00%	-1.40%	0.07%
DoubleLine Total Return Bond Fund	33	-1.00%	-0.02%	-1.45%	0.01%
Fidelity Series Investment Grade Bond Fund	34	-0.93%	0.05%	-1.21%	0.25%
Fidelity Total Bond Fund	31	-0.87%	0.11%	-0.96%	0.50%
Western Asset Core Plus Bond Portfolio	24	-1.30%	-0.32%	-1.17%	0.29%
Baird Core Plus Bond Fund	24	-0.91%	0.07%	-1.22%	0.24%
John Hancock Bond Fund	22	-0.97%	0.01%	-1.24%	0.23%
TIAA-CREF Bond Index Fund	21	-1.00%	-0.02%	-1.45%	0.01%
BlackRock Total Return Fund	18	-1.13%	-0.15%	-1.67%	-0.21%
JPMorgan Core Plus Bond Fund	17	-1.12%	-0.14%	-1.51%	-0.04%
Bridge Builder Core Bond Fund	16	-0.95%	0.03%	-1.29%	0.17%
T Rowe Price New Income Fund	16	-1.05%	-0.07%	-1.68%	-0.22%
Western Asset Core Bond Fund	15	-1.15%	-0.17%	-1.59%	-0.13%
CREF Bond Market Account	11	-0.88%	0.10%	-1.18%	0.28%
Fidelity Investment Grade Bond Fund	9	-0.92%	0.06%	-1.28%	0.18%
DoubleLine Core Fixed Income Fund	7	-0.80%	0.18%	-1.12%	0.34%
TCW Total Return Bond Fund	3	-1.48%	-0.50%	-2.20%	-0.73%
Janus Henderson Flexible Bond Fund	3	-1.11%	-0.13%	-1.81%	-0.35%
Weighted avg	1279	-0.94%	0.04%	-1.28%	0.19%
Agg		-0.98%		-1.46%	
10y return		-1.91%		-3.11%	

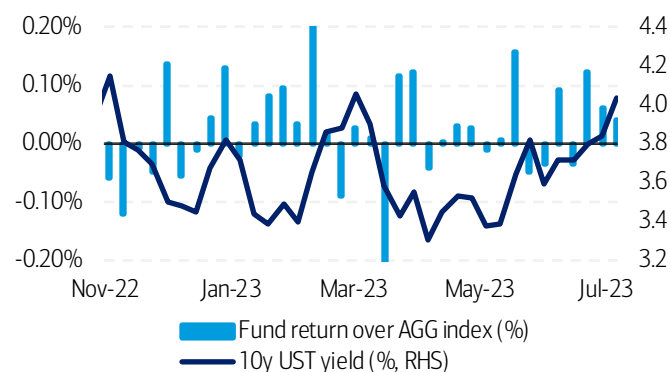
Source: BofA Global Research, Bloomberg. Note: Excess returns are fund total returns over Bloomberg Barclays Agg Index

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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

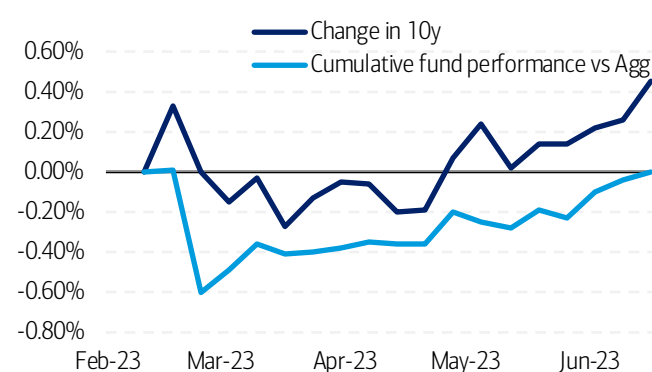


Source: BofA Global Research, Bloomberg. Note: Excess returns are fund total returns over Bloomberg Barclays Agg index

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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	123.7	-37.7	-43.4	-5.7
ABNDX	The Bond Fund of America	75.3	-9.7	-11.3	-1.6
MWTIX	MetWest Total Return Bond Fund	61.3	-17.4	-16.5	0.9
DODIX	Dodge & Cox Income Fund	56.4	-31.2	-28.1	3.1
PTTRX	PIMCO Total Return Fund	54.6	-15.2	-15.4	-0.2
PDBAX	PGIM Total Return Bond Fund	40.9	-33.8	-33.7	0.1
PGBOX	JPMorgan Core Bond Fund	38.9	-7.3	-5.0	2.3
BAGIX	Baird Aggregate Bond Fund	38.9	-17.7	-16.9	0.8
BSIIX	BlackRock Strategic Income Opportunities Fund	35.5	-14.6	-17.3	-2.7
FSIGX	Fidelity Series Investment Grade Bond Fund	33.5	-10.4	-7.5	3.0
DBLTX	DoubleLine Total Return Bond Fund	33.3	-32.4	-32.7	-0.3
FTBFX	Fidelity Total Bond Fund	31.1	-18.3	-12.0	6.3
WACPX	Western Asset Core Plus Bond Portfolio	24.3	-29.1	-33.7	-4.6
BCOIX	Baird Core Plus Bond Fund	24.0	-20.0	-18.5	1.4
JHBIX	John Hancock Bond Fund	22.0	-26.1	-22.8	3.3
TBIIX	TIAA-CREF Bond Index Fund	20.7	0.9	0.8	-0.1
MAHQX	BlackRock Total Return Fund	17.8	21.3	-13.7	-35.0
ONIAI	JPMorgan Core Plus Bond Fund	17.2	-7.6	-5.1	2.5
BBTBX	Bridge Builder Core Bond Fund	16.2	-22.6	-22.1	0.5
PRCIX	T Rowe Price New Income Fund	15.8	-11.2	-16.2	-4.9
WATFX	Western Asset Core Bond Fund	14.9	-23.6	-30.7	-7.1
QCBMIX	CREF Bond Market Account	10.7	-22.3	-21.1	1.2
FBNDX	Fidelity Investment Grade Bond Fund	8.8	-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		1279.2	-12.7	-13.3	-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 drive by cash and other

		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	22852	5	-33	2	-13	5
	Cash	3277	13	-11	8	-14	2
	UST & Agency	1519	4	-1	-3	-3	-4
	MBS	2595	-1	-3	-4	-3	-6
	Loans and Leases	12125	11	-3	3	6	13
	Other	3337	-22	-16	0	1	0
Large Domestic (\$bn, NSA)	Total Assets	13275	-52	-58	-14	-20	-4
	Cash	1513	-18	-38	1	-16	-1
	UST & Agency	1110	-1	-1	-4	-3	-4
	MBS	1955	1	-2	-3	-2	-2
	Loans and Leases	6751	2	-7	-2	1	4
	Other	1946	-36	-11	-5	-1	-1
Small Domestic (\$bn, NSA)	Total Assets	6492	0	-5	3	1	3
	Cash	445	-9	-7	-2	-4	-1
	UST & Agency	292	0	-1	0	0	0
	MBS	611	-2	-2	-1	-1	-3
	Loans and leases	4351	9	5	7	7	8
	Other	793	2	-1	-1	0	0
All Domestic (\$bn, NSA)	Total Assets	19766	-52	-63	-11	-19	-1
	Cash	1957	-26	-45	-1	-19	-2
	UST & Agency	1402	-1	-1	-4	-3	-4
	MBS	2567	-2	-3	-4	-3	-5
	Loans and leases	11102	12	-1	5	8	11
	Other	2739	-35	-12	-6	-1	-1
Foreign (\$bn, NSA)	Total Assets	3086	57	30	14	6	6
	Cash	1320	39	34	9	5	3
	UST & Agency	117	5	1	1	1	0
	MBS	28	1	1	0	0	0
	Loans and leases	1022	0	-1	-2	-2	1
	Other	598	12	-4	6	2	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 increase 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	17260	63	-11	11	-14	-14
	Domestic	15982	53	-17	7	-16	-14
	Large Domestic	10804	45	-19	2	-15	-11
	Small Domestic	5178	8	2	5	-1	-3
	Foreign	1278	11	6	4	2	0
Other borrowing (\$bn, NSA)	All	2330	-68	-21	-16	-4	13
	Domestic	1327	-44	-36	-21	-11	11
	Large Domestic	833	-40	-27	-16	-10	7
	Small Domestic	494	-4	-9	-5	-1	5
	Foreign	1003	-24	15	5	7	2

Source: BofA Global Research, Federal Reserve, Bloomberg

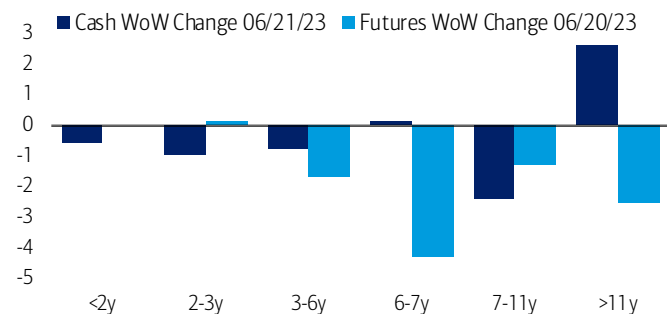
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Primary dealer balance sheet

Exhibit 35: Dealers WoW change in positions

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

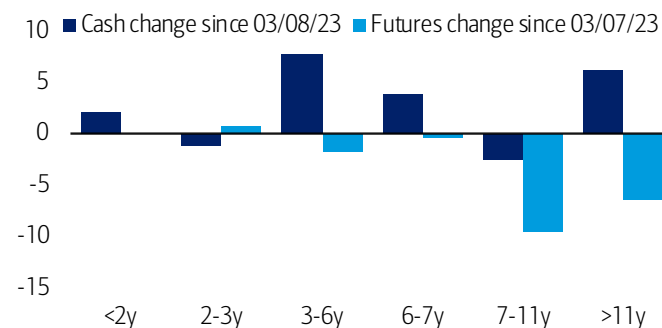


Source: BofA Global Research, NY Fed, CFTC

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Exhibit 36: Dealers change in positions since bank risk events

10y equivalent, \$bn, cash positions are higher and futures positions lower

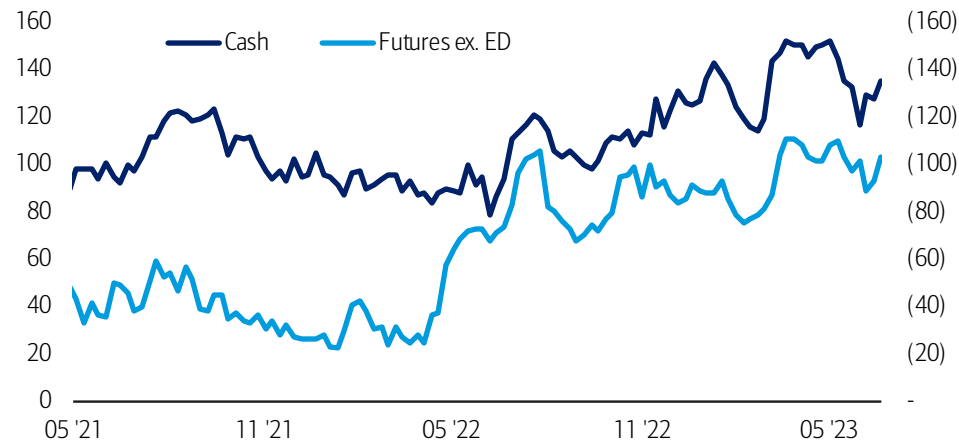


Source: BofA Global Research, NY Fed, CFTC

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Exhibit 37: Dealers total sector positions

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



Source: BofA Global Research, NY Fed, CFTC

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