

## US Rates Watch

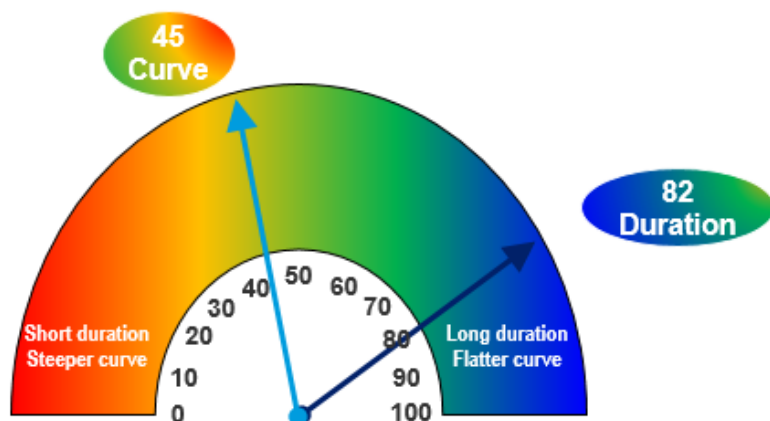
## Weekend homework: Long positions remain challenged, fund inflows continue

## Longs still prone to covering

Our positioning indicators continues to suggest that investors are long duration, a position prone to covering given recent price action (Exhibit 1). Futures show an increase in open interest on the week and indicate new short positions were created while longs were covered. CFTC data reflects some moderation in stretched positions: asset managers long, leveraged fund shorts, and directional speculators long.

## Exhibit 1: Curve-o-meter

Positioning points to more of a bias for rates to selloff given OTM long position



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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## Positioning proxy shows net OTM position is long

The futures positioning proxy (for construction details see: [Gauging positioning in Treasury Futures](#)) shows that the net out of the money position remains long, suggesting a bias for rates to sell off across the curve (Exhibit 12). On the week through Thursday, open interest increased with shorts created primarily in FV, TU, and WN. Longs were also destroyed to the largest extent in TU and TY.

## CFTC data shows small moderation in stretched positions

The leveraged fund (LF) short position and asset manager long both moderated slightly on the week, particularly at the back-end of the curve (Exhibit 7). Non-commercial positioning ex- leveraged funds continues to point to some of the longest levels over the past 5 years, but showed a slight reduction (Exhibit 5). The long position in 10-year equivalents remains more concentrated at the back-end of the curve (Exhibit 6).

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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**Refer to important disclosures on page 13 to 14.**

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TSY= Treasury

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

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

## Non-reportable and momentum show CTA long covering

Our cross-over momentum signal shows some reversal in the long duration signal (Exhibit 13), consistent CFTC non-reportable positioning reflecting long covering (viewed as a proxy for CTAs, Exhibit 16). Our CTA model is lagged due to its construction (for details see: [CTA impact on rates market](#)) and shows continued short covering that likely materialized weeks ago (Exhibit 15).

## Primary dealers continue to sell back-end cash holdings

Primary dealer cash positions in 10y equivalents declined modestly the week ending May 17<sup>th</sup>, led by a reduction in holdings at the back end of the curve while they took down more cash in the 3-6y sector (Exhibit 36). Futures shorts were added across 7-11y tenors. Since the banking risk events, dealers still maintain a larger basis position, with cash holdings higher at the back end and belly alongside a pickup in short futures positions (Exhibit 37).

## Foreign buying continues

Japanese investors bought about \$7bn foreign bonds the week ending May 19th (Exhibit 24). Buying though may reflect an increase in European bond holdings, as USD FX hedging cost is still prohibitive (Exhibit 23). Additionally, the increase in MoF holdings in March was not reflective of Japan UST purchases based on the most recent TIC data (Exhibit 27).

Foreign custodial holdings increased \$7bn the week ending Wednesday to new YTD highs (Exhibit 25). The buying comes alongside USD appreciation which suggests that the add could be more so related to curve positioning (adding to steepeners) rather than a net duration position.

## Strong net US inflows, but inflation outflows

We continue to see strong inflows to US fixed income funds overall (Exhibit 28). Mixed allocation and long term Gov funds saw the largest inflows. Inflation funds however continue to see outflows, which have continued since the inflection in realized YoY inflation (Exhibit 33).

Total return fixed income funds modestly underperformed the benchmark while 10y rates moved higher (Exhibit 30). This could suggest mixed duration positioning across US fixed income funds, which started the quarter underweight UST allocations (Exhibit 32).

**Exhibit 2: Week ahead calendar**

Schedule of upcoming events

	US Data			Fed Speaker / Event	Treasury Auction			Treasury Settlements	
	Series	BofA	BB Consensus		Security	Amount (\$bn)	Prior Δ	Security	Amount
Tu, May 30	Case-Shiller HPI (yoy)	1.50%	-	13:00 Fed's Barkin speaks on monetary policy outlook	13 week bill	63	6	Security Bills	-24
	Consumer Confidence	99.0	99.8		26 week bill	56	2		
					161 day bill	50	5		
W, May 31	MBA Mortgage Applications	-	-	8:50 Collins, Bowman (voter) give opening remarks at Fed Listens event	17 week bill	N/A		Coupons	60
	Chicago Purchasing Managers	47.5	47.5	12:20 Fed's Collins gives closing remarks at Fed Listens event					
	JOLTS Job Openings	-	-	12:30 Fed's Harker (voter) speaks on macroeconomic, monetary conditions					
				14:00 Federal Reserve releases Beige Book					
Th, Jun 1	Initial Jobless Claims	234k	-	13:00 Fed's Harker (voter) speaks on economic outlook	4 week bill	N/A		Bills	64
	Nonfarm Productivity	-2.50%	-2.70%		8 week bill	N/A			
	Unit Labor Costs	6.10%	6.30%						
	S&P Global US manufacturing PMI	-	-						
	Construction Spending (mom)	0.20%	0.20%						
	ISM Manufacturing	46.5	47						
	ADP Employment	-	160k						
	Total Vehicle Sales	-	15.3M						
F, Jun 2	Change in Nonfarm Payrolls	200k	180k						
	Private Payrolls	180k	158k						
	Unemployment Rate	3.40%	3.50%						
	Average Hourly Earnings mom	0.30%	0.30%						
	Average Weekly Hours	34.4	34.4						

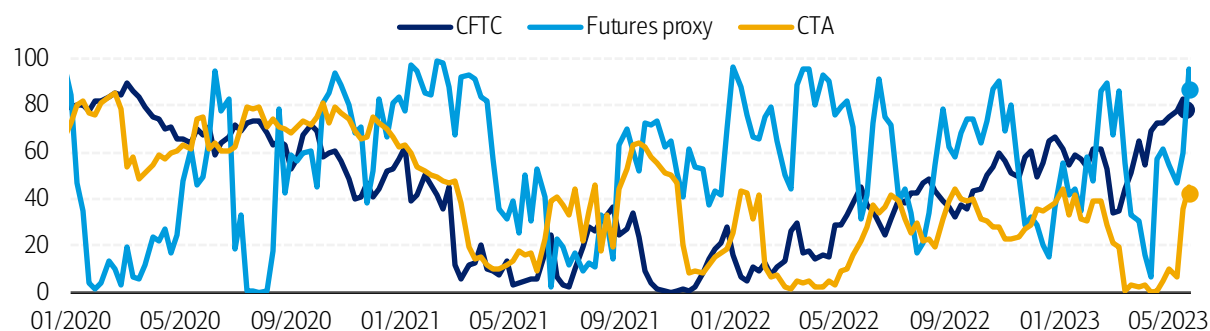
Source: BofA Global Research, Bloomberg

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## Positioning indicators

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

Futures positioning proxy does not show clear bias, CFTC data adjusted for LFs is long, top down CTA model is lagged and shows historic shorts that have likely already been covered



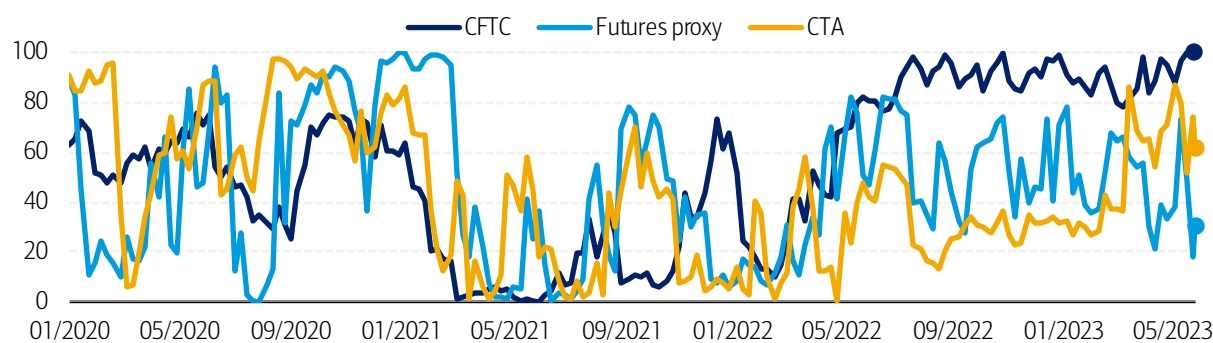
Source: BofA Global Research

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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

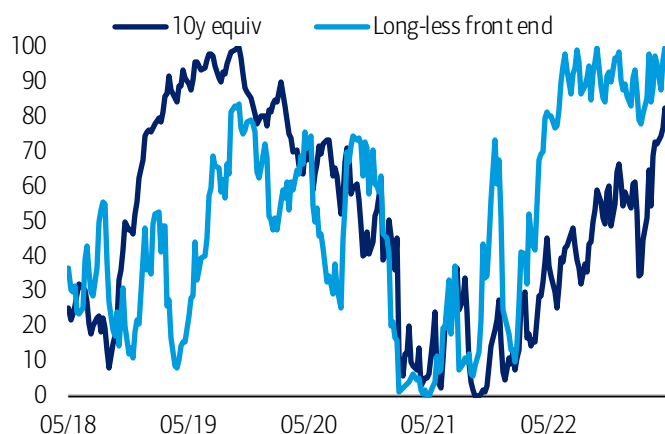


Source: BofA Global Research

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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

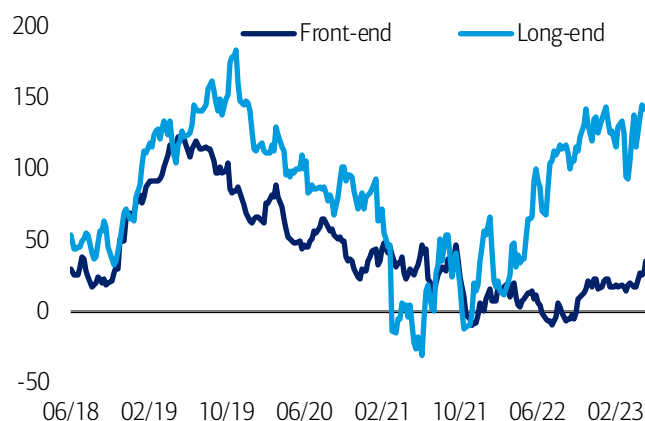


Source: BofA Global Research, Bloomberg

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

Longs are more concentrated in the back-end

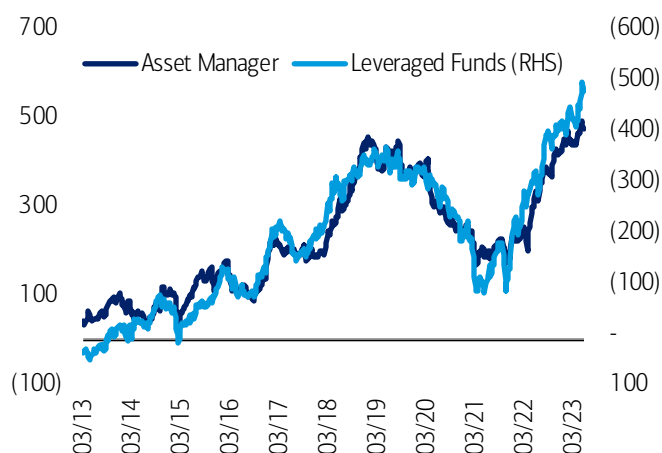


Source: BofA Global Research, Bloomberg

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

Asset manager longs correspond with leveraged fund shorts

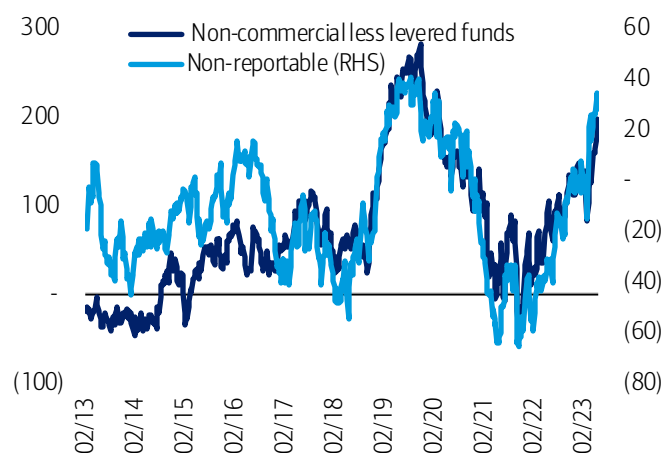


Source: BofA Global Research, Bloomberg

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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

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

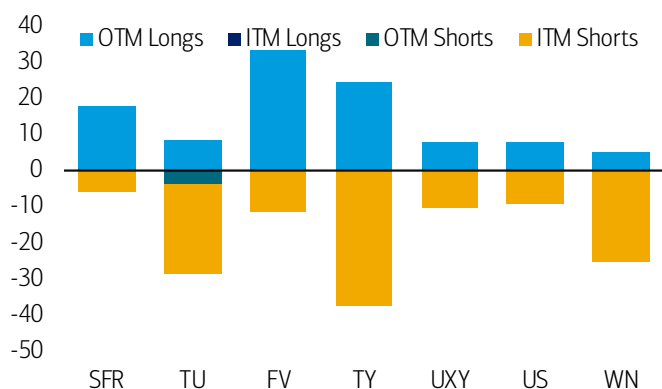
	1w	4w	8w	12w	16w
0 to 10	-3	-3	-2	-1	-1
10 to 20	2	-2	-2	-2	-3
20 to 30	-5	-3	-4	-4	-5
30 to 40	-2	-1	-1	-2	-2
40 to 50	3	2	2	1	1
50 to 60	1	1	1	1	1
60 to 70	1	1	2	3	4
70 to 80	4	4	4	3	4
80 to 90	3	4	4	4	4
90 to 100	-1	-2	-1	0	0

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

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### Exhibit 11: Proxies for futures positioning

Longs OTM, shorts ITM broadly across curve

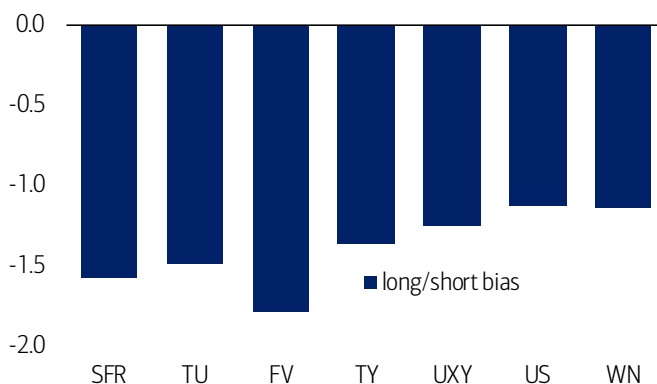


Source: BofA Global Research, Bloomberg

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### Exhibit 12: Analysis of proxies for futures positioning

Bias for rates to sell off across the curve

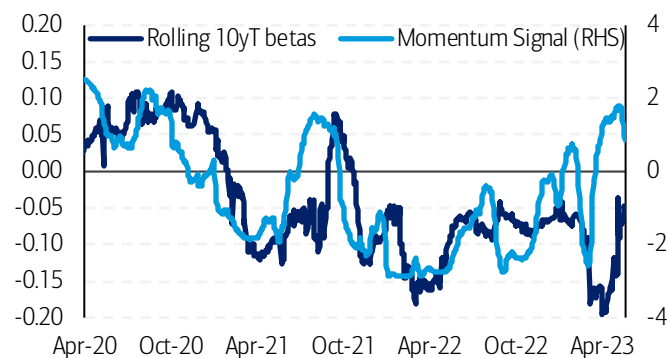


Source: BofA Global Research, Bloomberg, Note: reflects average positioning of futures stack over last 5 days

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**Exhibit 13: CTA positioning in 10yT**

CTA top down model implies short covering, momentum signal reversing

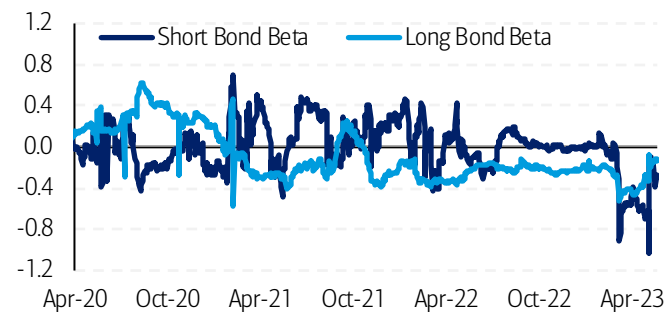


Source: BofA Global Research

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

Top-down model suggests CTAs added shorts in short duration bonds and saw moderate short covering in long duration bonds

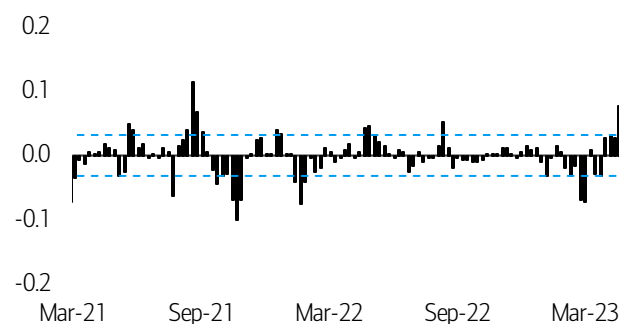


Source: BofA Global Research

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**Exhibit 15: Changes in CTA 10yT beta**

Change in 10yT beta continued to increase on the week, likely lagged due to model construction

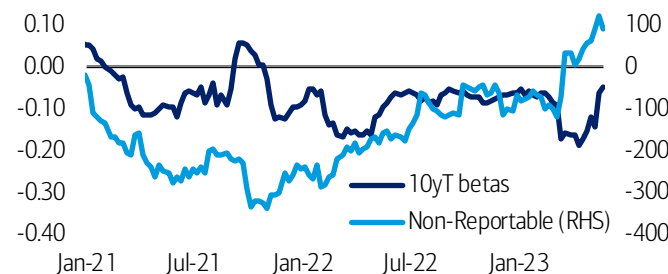


Source: BofA Global Research

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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



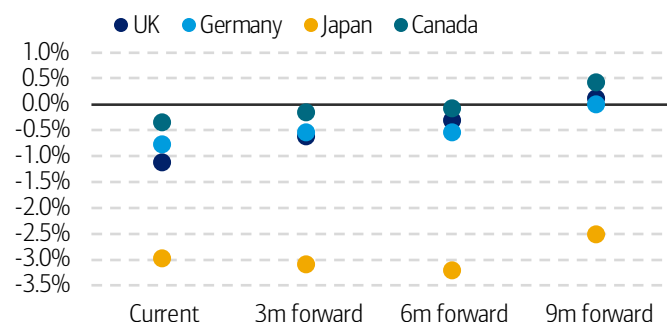
Source: BofA Global Research, Bloomberg

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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 modest 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

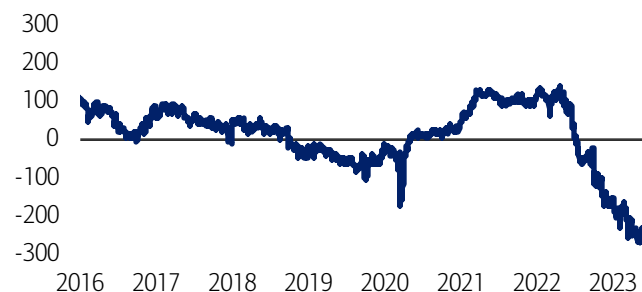


Source: BofA Global Research, Bloomberg

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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

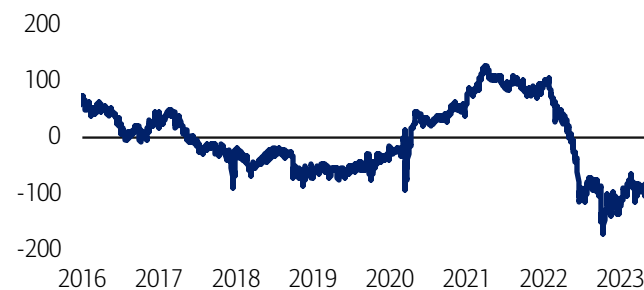


Source: BofA Global Research, Bloomberg

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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

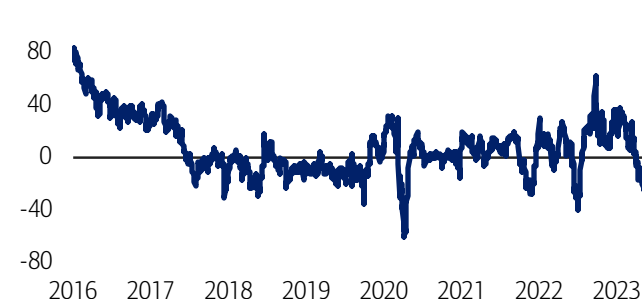


Source: BofA Global Research, Bloomberg

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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

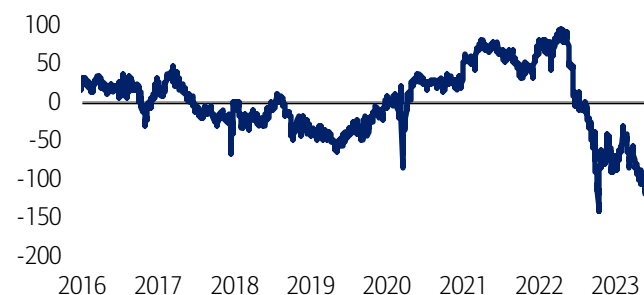


Source: BofA Global Research, Bloomberg

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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



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

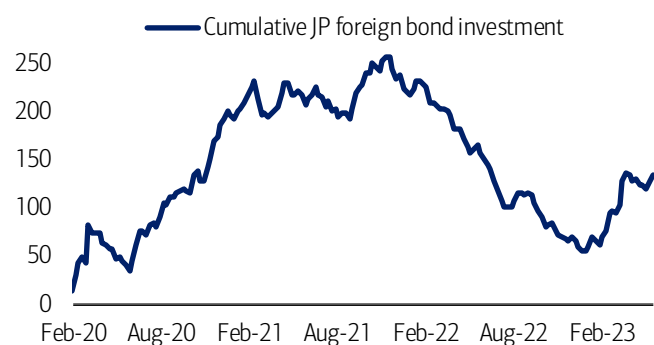
	5/25/2023		As of 1 wk ago		As of 1 mo ago		As of 1 yr ago	
	Pickup to 10y JGB	Pickup to 20Y JGB	Pickup to 10y JGB	Pickup to 20Y JGB	Pickup to 10y JGB	Pickup to 20Y JGB	Pickup to 10y JGB	Pickup to 20Y JGB
10y UST	-2.42%	-3.03%	-2.37%	-2.96%	-2.56%	-3.17%	0.69%	0.18%
10y GER	-1.61%	-2.22%	-1.62%	-2.22%	-1.67%	-2.28%	0.96%	0.46%
10y FRA	-1.03%	-1.64%	-1.05%	-1.65%	-1.10%	-1.71%	1.48%	0.97%
10y BEL	-0.90%	-1.51%	-0.93%	-1.52%	-0.98%	-1.59%	1.56%	1.06%
10y ITA	0.25%	-0.36%	0.20%	-0.39%	0.18%	-0.43%	2.90%	2.40%
10y SPA	-0.55%	-1.16%	-0.58%	-1.18%	-0.63%	-1.24%	2.04%	1.54%
10y UK	-1.25%	-1.86%	-1.40%	-1.99%	-1.62%	-2.23%	0.15%	-0.35%
10y CAN	-2.05%	-2.66%	-2.13%	-2.72%	-2.42%	-3.03%	0.61%	0.10%

Source: BofA Global Research, Bloomberg

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

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

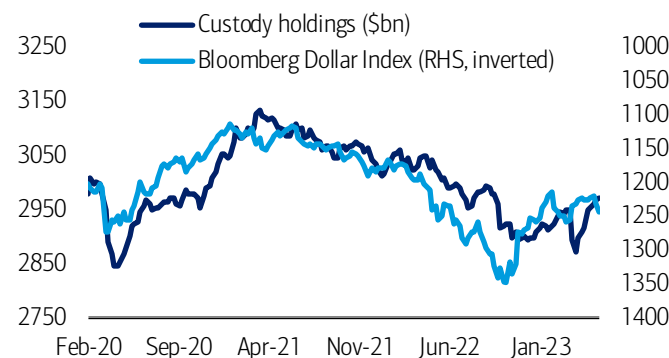


Source: BofA Global Research, Bloomberg

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

Custody holdings have recovered drop around banking risk events in March

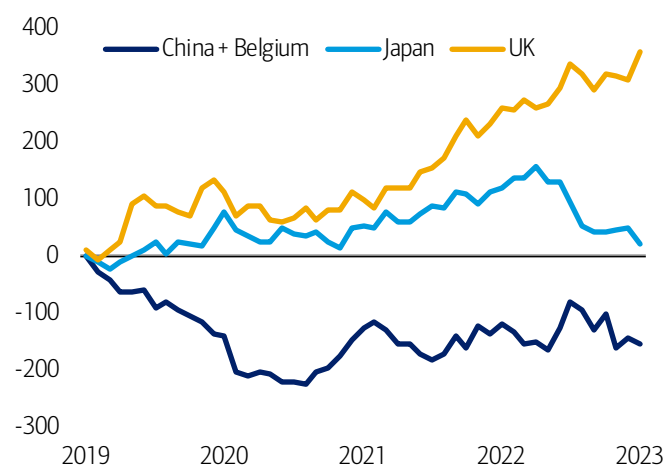


Source: BofA Global Research, NY Fed

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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

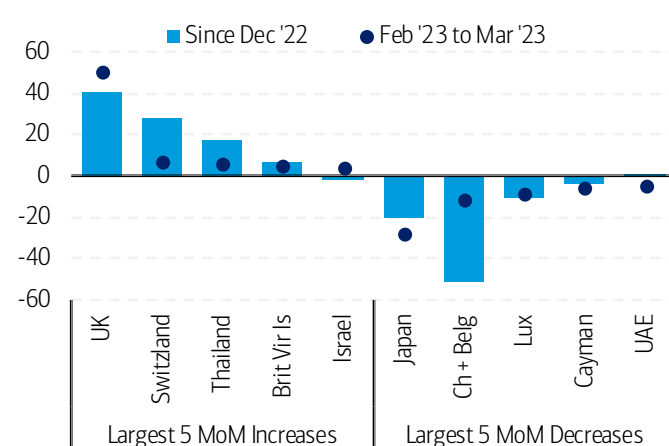


Source: BofA Global Research, TIC, Note: adjusted for level of rates

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

UK was largest buyer, Japan largest seller in March



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 fixed income funds continue to see inflows, this week was led by mixed allocation & US gov long-term funds, outflows in inflation funds

	5/24/2023	Rolling 4w average	Rolling 8w average	Rolling 12w average	Rolling 52w average
<b>Gov: short</b>	(98)	571	448	1,349	1,225
<b>Gov: intermediate</b>	720	508	293	687	530
<b>Gov: long</b>	3,090	1,866	1,399	1,684	1,207
<b>Corp: IG</b>	1,694	266	693	139	328
<b>Corp:HY</b>	280	(613)	481	(36)	(312)
<b>Corp: all quality</b>	54	42	35	19	(1)
<b>MBS</b>	101	175	208	238	(53)
<b>Inflation</b>	(1,001)	(361)	(554)	(443)	(482)
<b>Muni</b>	(457)	(226)	(183)	(178)	(586)
<b>Mixed allocation</b>	4,378	3,739	2,808	1,981	3
<b>All US FI</b>	8,187	5,212	4,928	4,592	1,342

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 was below benchmark

	AUM (\$Bn)	5/25/2023	Vs. Agg	Last 4w	Vs. Agg
Vanguard Total Bond Market II Index Fund	247	-0.89%	-0.07%	-1.76%	-0.04%
Vanguard Total Bond Market Index Fund	205	-0.88%	-0.06%	-1.74%	-0.02%
PIMCO Income fund	121	-0.65%	0.17%	-0.77%	0.95%
The Bond Fund of America	76	-1.07%	-0.24%	-1.98%	-0.26%
MetWest Total Return Bond Fund	62	-1.12%	-0.29%	-1.96%	-0.24%
PIMCO Total Return Fund	56	-0.98%	-0.16%	-1.69%	0.04%
Dodge & Cox Income Fund	57	-0.65%	0.18%	-1.36%	0.36%
PGIM Total Return Bond Fund	40	-0.76%	0.07%	-1.51%	0.22%
BlackRock Strategic Income Opportunities Fund	36	-0.57%	0.26%	-0.62%	1.10%
Baird Aggregate Bond Fund	38	-0.85%	-0.03%	-1.76%	-0.04%
JPMorgan Core Bond Fund	38	-0.88%	-0.05%	-1.64%	0.08%
DoubleLine Total Return Bond Fund	33	-1.01%	-0.19%	-1.58%	0.14%
Fidelity Series Investment Grade Bond Fund	34	-0.83%	0.00%	-1.59%	0.13%
Fidelity Total Bond Fund	31	-0.77%	0.05%	-1.58%	0.14%
Western Asset Core Plus Bond Portfolio	24	-1.40%	-0.58%	-2.52%	-0.79%
Baird Core Plus Bond Fund	24	-0.71%	0.11%	-1.60%	0.12%
John Hancock Bond Fund	22	-0.82%	0.01%	-1.70%	0.03%
TIAA-CREF Bond Index Fund	21	-0.89%	-0.06%	-1.76%	-0.03%
BlackRock Total Return Fund	17	-0.82%	0.01%	-1.66%	0.06%
JPMorgan Core Plus Bond Fund	17	-0.83%	-0.01%	-1.65%	0.07%
Bridge Builder Core Bond Fund	16	-0.94%	-0.12%	-1.72%	0.00%
T Rowe Price New Income Fund	15	-1.03%	-0.21%	-2.02%	-0.30%
Western Asset Core Bond Fund	15	-1.15%	-0.32%	-2.22%	-0.49%
CREF Bond Market Account	11	-0.82%	0.01%	-1.64%	0.09%
Fidelity Investment Grade Bond Fund	9	-0.77%	0.05%	-1.67%	0.05%
DoubleLine Core Fixed Income Fund	7	-0.86%	-0.03%	-1.57%	0.15%
TCW Total Return Bond Fund	3	-1.33%	-0.50%	-1.84%	-0.11%
Janus Henderson Flexible Bond Fund	3	-1.10%	-0.27%	-1.81%	-0.09%
Weighted avg	1278	-0.87%	-0.05%	-1.62%	0.10%
Agg		-0.82%		-1.72%	
10y return		-1.72%		-2.97%	

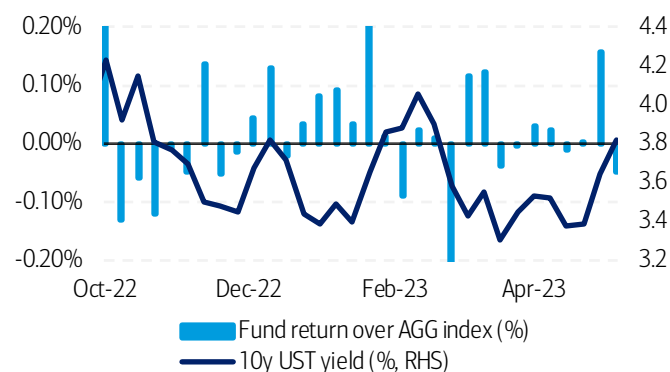
Source: BofA Global Research, Bloomberg. Note: Excess returns are fund total returns over Bloomberg Barclays Agg Index

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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 below benchmark on the week

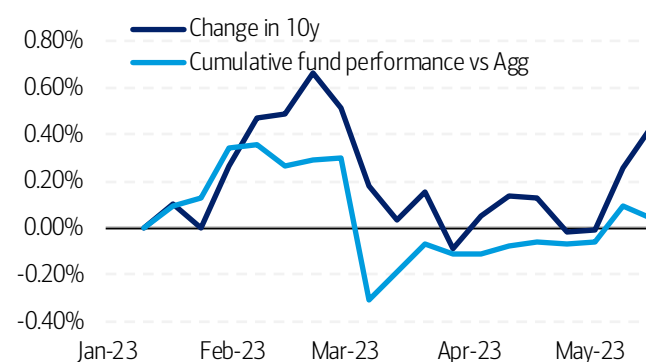


Source: BofA Global Research, Bloomberg. Note: Excess returns are fund total returns over Bloomberg Barclays Agg index

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

Funds have performed in-line with benchmark 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

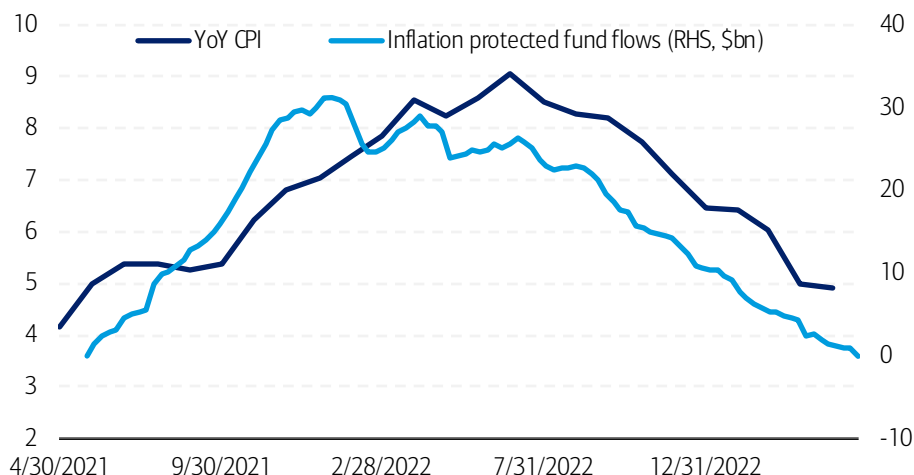
		AUM (\$bn)	Q4 '22 (%)	Q1 '23 (%)	Change (PPTS)
VTBIX	Vanguard Total Bond Market II Index Fund	247.4	1.6	2.4	0.8
VBMFX	Vanguard Total Bond Market Index Fund	205.3	1.2	1.7	0.5
PIMIX	PIMCO Income fund	120.8	-37.7	-43.4	-5.7
ABNDX	The Bond Fund of America	76.3	-9.7	-11.3	-1.6
MWTIX	MetWest Total Return Bond Fund	62.4	-17.4	-16.5	0.9
DODIX	Dodge & Cox Income Fund	56.6	-31.2	-28.1	3.1
PTTRX	PIMCO Total Return Fund	55.7	-15.2	-15.4	-0.2
PDBAX	PGIM Total Return Bond Fund	40.1	-33.8	-33.7	0.1
PGBOX	JPMorgan Core Bond Fund	37.9	-7.3	-5.0	2.3
BAGIX	Baird Aggregate Bond Fund	37.5	-17.7	-16.9	0.8
BSIIX	BlackRock Strategic Income Opportunities Fund	36.0	-14.6	-17.3	-2.7
FSIGX	Fidelity Series Investment Grade Bond Fund	33.9	-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	30.6	-18.3	-12.0	6.3
WACPX	Western Asset Core Plus Bond Portfolio	24.5	-29.1	-33.7	-4.6
BCOIX	Baird Core Plus Bond Fund	23.9	-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	20.8	0.9	0.8	-0.1
MAHQX	BlackRock Total Return Fund	17.4	21.3	-13.7	-35.0
ONIAI	JPMorgan Core Plus Bond Fund	16.9	-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	15.4	-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	10.9	-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	2.9	-40.6	-38.5	2.1
<b>AUM weighted</b>		1277.6	-12.6	-13.2	-0.5

Source: BofA Global Research, funds' publicly available reports

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**Exhibit 33: Cumulative inflation fund inflows and realized inflation**

Fund outflows have occurred since inflection point in inflation



Source: BofA Global Research, Bloomberg

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**Bank balance sheets**Data as of May 19<sup>th</sup> release**Exhibit 34: Changes to bank balance sheet assets (\$bn)**

Large bank assets increased, primarily 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
<b>All (\$bn, NSA)</b>	<b>Total Assets</b>	22888	58	-18	-47	-10	6
	Cash	3265	66	-23	-24	9	-1
	UST & Agency	1544	-5	-1	-9	-8	-4
	MBS	2611	-13	1	-14	-12	-6
	Loans and Leases	12098	-17	12	1	4	18
	Other	3370	27	-7	-1	-3	-1
<b>Large Domestic (\$bn, NSA)</b>	<b>Total Assets</b>	13197	-21	-34	-27	7	0
	Cash	1450	-8	-40	-23	11	0
	UST & Agency	1139	-11	-4	-8	-6	-4
	MBS	1953	-11	1	-1	-1	-2
	Loans and Leases	6686	-10	3	4	4	7
	Other	1969	18	6	1	-1	-2
<b>Small Domestic (\$bn, NSA)</b>	<b>Total Assets</b>	6636	-4	6	-23	-6	3
	Cash	489	2	4	-5	6	-2
	UST & Agency	290	0	0	-1	-2	0
	MBS	633	-1	0	-13	-11	-3
	Loans and leases	4387	-1	12	-2	2	9
	Other	836	-4	-10	-3	-2	0
<b>All Domestic (\$bn, NSA)</b>	<b>Total Assets</b>	19833	-26	-28	-49	0	2
	Cash	1939	-6	-37	-27	17	-2
	UST & Agency	1428	-11	-4	-9	-8	-4
	MBS	2586	-12	1	-14	-12	-6
	Loans and leases	11074	-11	15	3	7	16
	Other	2805	14	-4	-2	-3	-2
<b>Foreign (\$bn, NSA)</b>	<b>Total Assets</b>	3055	84	10	2	-10	4
	Cash	1326	72	14	3	-8	1
	UST & Agency	115	6	2	0	0	0
	MBS	25	-1	0	0	0	0
	Loans and leases	1024	-7	-3	-2	-3	2
	Other	565	13	-3	1	0	0

Source: BofA Global Research, Federal Reserve, Bloomberg

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**Exhibit 35: Select bank balance sheet liabilities (\$bn, NSA)**

Deposits declined, concentrated in large domestic banks

		Current	1w change	Rolling 4w avg wkly chg	Rolling 8w avg wkly chg	Rolling 12w avg wkly chg	Rolling 52w avg wkly chg
<b>Deposits (\$bn, NSA)</b>	All	17101	-57	-67	-48	-46	-17
	Domestic	15865	-58	-64	-41	-36	-16
	Large Domestic	10637	-52	-49	-32	-17	-12
	Small Domestic	5228	-6	-14	-8	-19	-4
	Foreign	1235	1	-3	-8	-10	-1
<b>Other borrowing (\$bn, NSA)</b>	All	2463	11	15	-3	41	16
	Domestic	1489	-4	9	-14	36	16
	Large Domestic	916	-8	2	2	21	9
	Small Domestic	573	4	7	-16	14	7
	Foreign	974	14	6	11	5	0

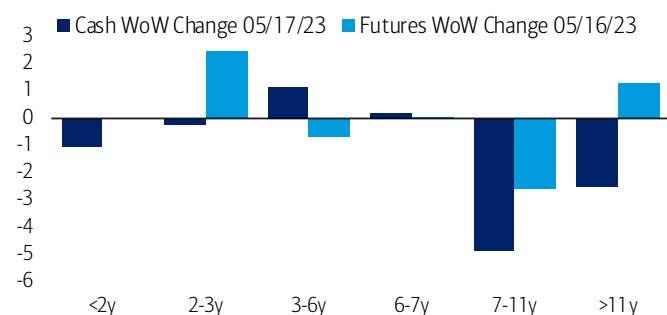
Source: BofA Global Research, Federal Reserve, Bloomberg

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## Primary dealer balance sheet

**Exhibit 36: Dealers WoW change in positions**

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

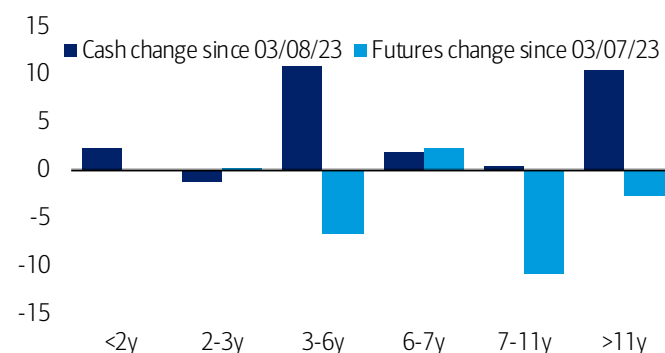


Source: BofA Global Research, NY Fed, CFTC

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**Exhibit 37: Dealers change in positions since bank risk events**

10y equivalent, \$bn, cash positions still higher &gt;11y and 3-6y

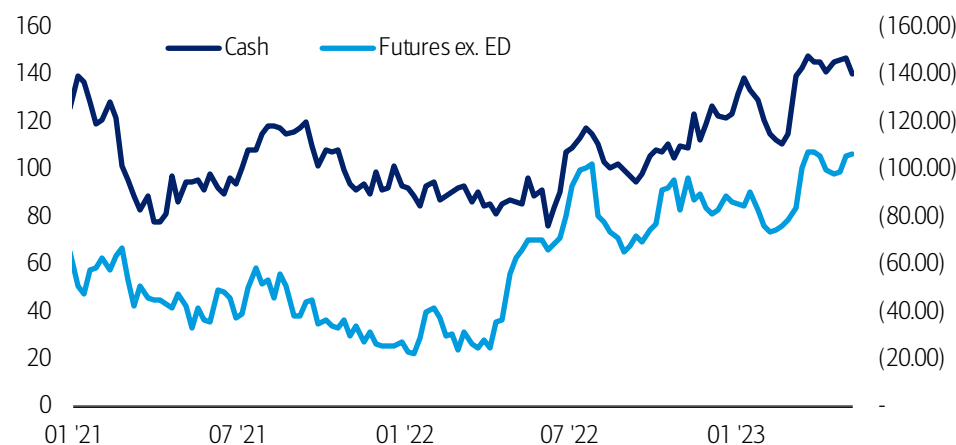


Source: BofA Global Research, NY Fed, CFTC

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**Exhibit 38: Dealers total sector positions**

10y equivalent, \$bn, both cash longs &amp; futures shorts positioning since mid '22



Source: BofA Global Research, NY Fed, CFTC

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