

US Rates Watch

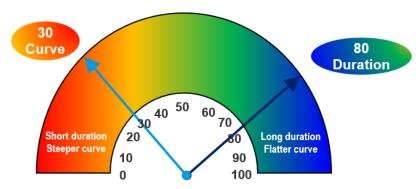
Curve biased flatter and higher, dealers show drop in cash holdings

Positioning biases curve higher and flatter

Our positioning indicators largely point to a net out-of-the-money long position, particularly at the front-end, biasing the curve flatter and higher (Exhibit 1). Our momentum indicator suggests that CTAs should be short, but CFTC data indicates they may have room to cut. Foreign buying continues to cool and TIC data for April points to selling from private investors and the official sector. Primary dealers reduced cash UST holdings while adding to futures positions last week.

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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Positioning proxy shows curve prone to flatten

The futures positioning proxy (for construction details see: Gauging positioning in Treasury Futures, 09 May 2019) shows that longs are OTM while shorts are largely in the money (Exhibit 11). This points to more of a bias for rates to sell off, particularly in TU and FV, and suggests the curve is still prone to flatten (Exhibit 12). On the week through Thursday, open interest increased, with more shorts vs longs created. particularly at the front-end of the curve.

CFTC data shows directional longs despite some covering

Non-commercial positioning ex-leveraged funds continues to point to some of the longest levels over the past five years (Exhibit 5). While duration was cut in SF and TU, longs were added in US. The long position in 10-year equivalents remains more concentrated at the back-end of the curve (Exhibit 6). Ten-year equivalent duration positioning across leveraged fund (LF) shorts and asset manager longs remains at historically stretched levels (Exhibit 7).

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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Trading ideas and investment strategies discussed herein may give rise to significant risk and are

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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

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

CTA momentum signal points short

Our cross-over momentum indicator suggests that CTAs should be modestly short duration (Exhibit 13). While non-reportable positioning does reflect some long covering in recent weeks, (viewed as a proxy for CTAs, Exhibit 16), CTAs may have some room to go to catch-up to this directional switch. Our CTA model is lagged due to its construction (for details see: CTA impact on rates market, 18 August 2020) but also shows an add to shorts on the week (Exhibit 15).

Sharp drop in primary dealer cash holdings

Primary dealers sharply reduced their cash position in 10y equivalents over the week ending June 7th, largely concentrated in 3-6y tenors (Exhibit 35). Therefore, futures contracts were higher, particularly at the 6-7y point. This downtick in cash holdings could suggest greater demand for cash USTs. Since the banking risk events, dealer cash positions are now little changed on net, but modestly higher in the front-end/ belly and lower at the back-end (Exhibit 36).

Foreign buying limited

Foreign buying evidenced in the MoF data and custodial holdings continue to reflect some cooling from the buying in prior weeks. Japanese investors bought no foreign bonds the week ending June 11th (Exhibit 24). Foreign custodial holdings were also roughly flat the week ending Wednesday (Exhibit 25).

TIC data for April shows foreign selling: \$9bn from the official sector, \$32bn from private investors. Adjusted for valuation, we did observe notable buying from Japan of about \$30bn and UK was the largest seller of \$35bn USTs (Exhibit 27).

Agg funds & long-term UST funds see inflows

US Agg and long-term UST funds saw inflows on the week while elsewhere fund flows were more muted (Exhibit 28). Total return fixed income funds performed roughly in line with their benchmark (Exhibit 30), alongside little change in 10y UST yields on net for the week ending June 15th.



Exhibit 2: On deck next week

 ${\it Calendar}\, of \, up coming \, events$

	US Data			Fed Speaker / Event	Treasury	Auction		asury ements	
M, Jun 19	Series NAHB Housing Market Index	BofA 51	BB Consensus 51	No major events	Security	Amount (\$bn)	Prior ∆	Security	Amount
Tu, Jun 20	Housing Starts Building Permits	1350k 1420k	1402k 1435k	Fed's Bullard Speaks at Barcelona School of Economics Fed's Williams (voter) Speaks on Leadership at NY Fed Event	13 week bill 26 week bill 42-day bill	65 58 50	0 0 5	Bills	50
W, Jun 21	MBA Mortgage Applications	-	-	Powell (voter) Appears Before House Financial Services Panel Fed's Goolsbee (voter) Speaks at Global Food Forum	17 week bill 19-year 11-month bonds	N/A 12	0		
Th, Jun 22	Initial Jobless Claims Current Account Balance Leading Indicators Existing Home Sales	266k - - 4.2M	- -\$217bn -0.80% 4.27M	Fed Chair Powell (voter) Appears Before Senate Banking Panel Fed's Mester Speaks on the Economic Outlook in Cleveland Fed's Barkin Speaks at Risk Management Association - Richmond	4 week bill 8 week bill 4-year 10-month TIPS	N/A N/A 19	0	Bills	71
F, Jun 23	S&P Global US manufacturing PMI S&P Global US services PMI	49 55	48.5 54	Fed's Bullard Speaks at Central Bank of Ireland Conference Fed's Mester Delivers Closing Remarks at Policy Summit					

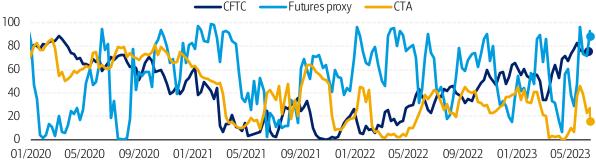
Source: BofA Global Research, Bloomberg, US Treasury

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Positioning indicators

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

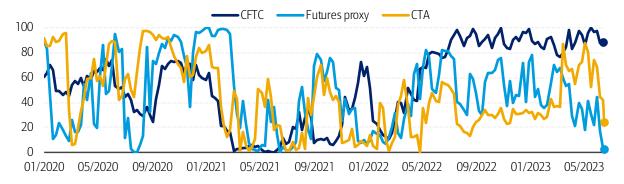
Futures positioning proxy shows bias for rates to sell off, CFTC data adjusted for LFs is long, top down CTA model is lagged and shows historic shorts that have likely already been covered



Source: BofA Global Research

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

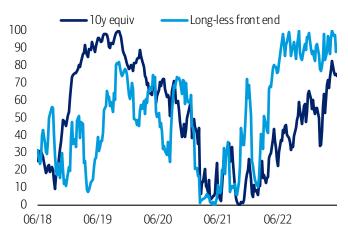
Indicators generally point mixed curve positioning, but futures positioning proxy shows bias for curve flattening



Source: BofA Global Research

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Exhibit 5: 5y percentile of non-commercial ex LF positioningPositioning is historically long and largely concentrated at the back-end

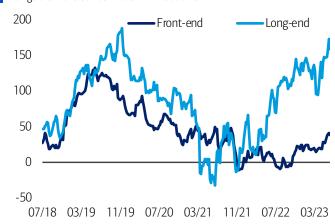


Source: BofA Global Research, Bloomberg

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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



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

Asset manager longs correspond with leveraged fund shorts

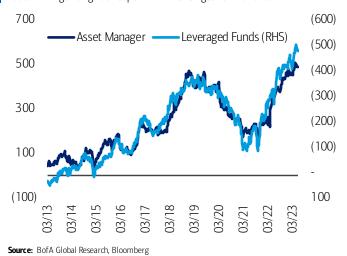


Exhibit 9: 10y rate change for given percentile of non-commercial ex-Leveraged fund positioning (higher percentile = longer)

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

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

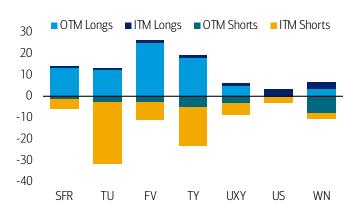
Source: BofA Global Research, Bloomberg, average performance calculated over last 5y

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Exhibit 11: Proxies for futures positioning

Longs OTM while shorts are mostly ITM except in WN

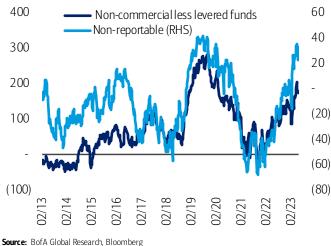


Source: BofA Global Research, Bloomberg

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

Directional positions trend together



bear and a second research, broomberg

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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

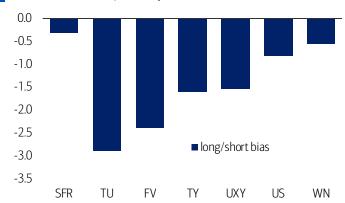
	1w	4w	8w	12w	16w
0 to 10	-1	-1	-1	-1	-1
10 to 20	1	-3	-2	-2	-3
20 to 30	-7	-3	-4	-4	-5
30 to 40	-2	-2	-3	-2	-3
40 to 50	3	3	3	1	1
50 to 60	2	2	1	0	0
60 to 70	2	1	2	3	4
70 to 80	4	4	4	3	4
80 to 90	2	4	4	4	5
90 to 100	-1	-2	-1	0	0

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

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Exhibit 12: Analysis of proxies for futures positioning

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



 $\textbf{Source} : BofA \ Global \ Research, \ Bloomberg, \ Note: \ reflects \ average \ positioning \ of \ futures \ stack \ over \ last \ 5 \ days$



Exhibit 13: CTA positioning in 10yT

CTA added shorts as momentum signal dropped further

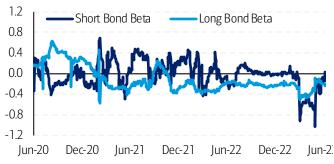


Source: BofA Global Research

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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

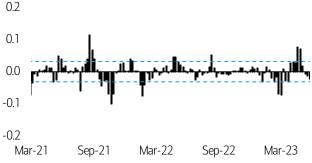


Source: BofA Global Research

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Exhibit 15: Changes in CTA 10yT beta

Change in 10yT beta turned negative 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



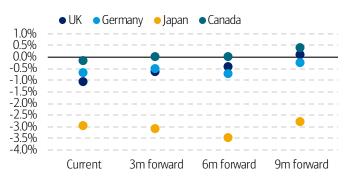
Source: BofA Global Research, Bloomberg

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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

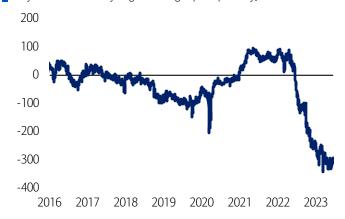


Source: BofA Global Research, Bloomberg, Note: pickup vs 10y local alternative except Japan which is relative to 20y JGB using 3m forward FX hedge

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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 20y JGBs



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

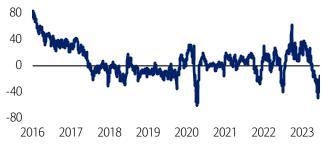


Source: BofA Global Research, Bloomberg

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

 $10 \mathrm{y}\,\mathrm{TSY}\,\mathrm{erased}$ previous modest hedged pickup to $10 \mathrm{y}\,\mathrm{CAD}\,\mathrm{gov}$ bond



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 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

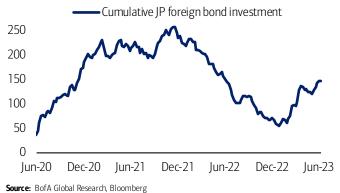
From the perspective of Japanese investor, pickup has been unattractive except vs the EU periphery

	6/15/2023		As of 1	wk ago	As of 1 mo ago As of 1 yr		yr ago	
	Pickup to	Pickup to	Pickup to	Pickup to				
	10y JGB	20Y JGB	10y JGB	20Y JGB	10y JGB	20Y JGB	10y JGB	20Y JGB
10y UST	-2.41%	-2.99%	-2.45%	-3.04%	-2.37%	-2.96%	0.54%	-0.12%
10y GER	-1.72%	-2.30%	-1.78%	-2.37%	-1.62%	-2.22%	1.53%	0.87%
10y FRA	-1.21%	-1.79%	-1.24%	-1.83%	-1.05%	-1.65%	2.11%	1.46%
10y BEL	-1.08%	-1.65%	-1.11%	-1.70%	-0.93%	-1.52%	2.20%	1.54%
10y ITA	-0.11%	-0.69%	-0.06%	-0.65%	0.20%	-0.39%	3.70%	3.05%
10y SPA	-0.79%	-1.37%	-0.81%	-1.39%	-0.58%	-1.18%	2.77%	2.12%
10y UK	-1.32%	-1.90%	-1.38%	-1.97%	-1.40%	-1.99%	0.34%	-0.32%
10y CAN	-2.25%	-2.83%	-2.21%	-2.80%	-2.13%	-2.72%	0.80%	0.14%

Source: BofA Global Research, Bloomberg

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

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



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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 unchanged over the week

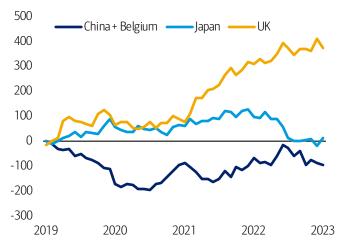


Source: BofA Global Research, NY Fed

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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

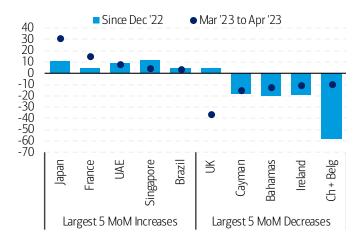


Source: BofA Global Research, TIC, Note: adjusted for level of rates

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

UK was largest buyer, Japan largest seller in April



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

Fund flows and returns

Exhibit 28: US fixed income fund flows (\$million)
US fixed income funds saw continued inflows, this week was led by mixed allocation & US gov long-term funds, outflows primarily in Inflation funds

	6/14/2023	Rolling 4w average	Rolling 8w average	Rolling 12w average	Rolling 52w average
Gov: short	20	148	480	530	1,181
Gov:					
intermediate	235	471	458	368	523
Gov: long	1,258	2,105	1,736	1,668	1,271
Corp: IG	880	405	83	494	365
Corp:HY	103	678	(39)	357	(239)
Corp: all quality	34	39	34	32	4
MBS	714	444	312	287	4
Inflation	(444)	(629)	(449)	(519)	(522)
Muni	37	(168)	(20)	(134)	(480)
Mixed allocation	2,614	3,045	3,116	2,438	250
All US FI	4,738	5,959	5,022	4,861	1,811

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 slightly underperformed benchmark

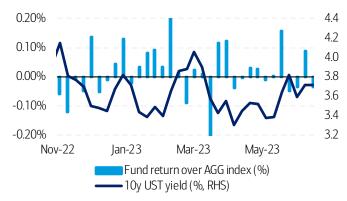
	AUM				
	(\$Bn)	6/15/2023	Vs. Agg	Last 4w	Vs. Agg
Vanguard Total Bond Market II Index Fund	248	0.16%	-0.09%	0.23%	-0.18%
Vanguard Total Bond Market Index Fund	203	0.27%	0.01%	0.33%	-0.08%
PIMCO Income fund	122	0.31%	0.05%	1.05%	0.64%
The Bond Fund of America	77	0.07%	-0.18%	-0.07%	-0.48%
MetWest Total Return Bond Fund	64	0.19%	-0.06%	0.21%	-0.20%
PIMCO Total Return Fund	55	0.19%	-0.06%	0.40%	-0.01%
Dodge & Cox Income Fund	56	0.32%	0.07%	0.73%	0.31%
PGIM Total Return Bond Fund	41	0.34%	0.08%	0.50%	0.09%
BlackRock Strategic Income Opportunities Fund	36	0.20%	-0.06%	0.46%	0.05%
Baird Aggregate Bond Fund	39	0.21%	-0.05%	0.39%	-0.03%
JPMorgan Core Bond Fund	39	0.10%	-0.16%	-0.03%	-0.44%
DoubleLine Total Return Bond Fund	34	0.11%	-0.14%	-0.01%	-0.43%
Fidelity Series Investment Grade Bond Fund	34	0.28%	0.02%	0.51%	0.09%
Fidelity Total Bond Fund	31	0.29%	0.04%	0.64%	0.22%
Western Asset Core Plus Bond Portfolio	25	0.50%	0.25%	0.85%	0.44%
Baird Core Plus Bond Fund	24	0.20%	-0.05%	0.49%	0.08%
John Hancock Bond Fund	22	0.31%	0.05%	0.62%	0.20%
TIAA-CREF Bond Index Fund	21	0.16%	-0.09%	0.33%	-0.09%
BlackRock Total Return Fund	18	0.18%	-0.07%	0.43%	0.01%
JPMorgan Core Plus Bond Fund	17	0.14%	-0.12%	0.17%	-0.24%
Bridge Builder Core Bond Fund	16	0.29%	0.04%	0.29%	-0.12%
T Rowe Price New Income Fund	16	0.08%	-0.18%	-0.07%	-0.48%
Western Asset Core Bond Fund	15	0.26%	0.00%	0.38%	-0.04%
CREF Bond Market Account	11	0.18%	-0.07%	0.31%	-0.10%
Fidelity Investment Grade Bond Fund	9	0.21%	-0.05%	0.41%	0.00%
DoubleLine Core Fixed Income Fund	7	0.22%	-0.04%	0.28%	-0.13%
TCW Total Return Bond Fund	3	0.12%	-0.13%	-0.12%	-0.54%
Janus Henderson Flexible Bond Fund	3	0.09%	-0.17%	-0.01%	-0.42%
Weighted avg	1283	0.22%	-0.03%	0.39%	-0.03%
Agg		0.25%		0.41%	
10y return		0.01%		-0.71%	

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



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

Weekly asset-weighted total returns for total return funds. Funds return slightly underperformed benchmark on the week

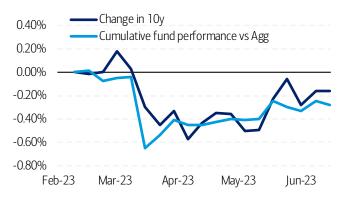


Source: BofA Global Research, Bloomberg, Note: Excess returns are fund total returns over Bloomberg Bardays Agg index

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

Funds' cumulative return since start of the year now underperforms bmk



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

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$Exhibit \, 32: Total \ return \ funds' \ published \ UST \ allocations \ vs \ benchmark \ from \ Q3 \ and \ Q4 \ `22 \ and \ Q4 \ `23 \ and \ Q4 \ `2$

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

		AUM	04 122 (0/)	04 122 (0/)	Change
		(\$bn)	Q4 '22 (%)	Q1 '23 (%)	(PPTS)
VTBIX	Vanguard Total Bond Market II Index Fund	248.0	1.6	2.4	
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	76.8	-9.7	-11.3	-1.6
MWTIX	MetWest Total Return Bond Fund	63.7	-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	41.0	-33.8	-33.7	0.1
PGBOX	JPMorgan Core Bond Fund	38.8	-7.3	-5.0	2.3
BAGIX	Baird Aggregate Bond Fund	38.6	-17.7	-16.9	0.8
BSIIX	BlackRock Strategic Income Opportunities Fund	35.9	-14.6	-17.3	-2.7
DBLTX	DoubleLine Total Return Bond Fund	33.8	-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	24.7	-29.1	-33.7	-4.6
BCOIX	Baird Core Plus Bond Fund	24.4	-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	18.0	21.3	-13.7	-35.0
ONIAX	JPMorgan Core Plus Bond Fund	17.4	-7.6	-5.1	2.5
BBTBX	Bridge Builder Core Bond Fund	16.4	-22.6	-22.1	0.5
PRCIX	T Rowe Price New Income Fund	15.7	-11.2	-16.2	-4.9
WATFX	Western Asset Core Bond Fund	15.3	-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	7.1	-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
	AUM weighted	1283.3	-12.7	-13.3	-0.5

Source: BofA Global Research, funds' publicly available reports



Bank balance sheets

Exhibit 33: Changes to bank balance sheet assets (\$bn)After notable increases last week, large US bank assets declined, primarily driven by cash and loans and leases

		Current	1w change	Rolling 4w avg wkly chg	Rolling 8w avg wkly chg	Rolling 12w avg wkly chg	Rolling 52w avg wkly chg
	Total Assets	22891	-88	1	-9	-31	5
	Cash	3336	34	18	-3	-10	1
All (\$bn,	UST & Agency	1527	1	-4	-3	-7	-4
NSA)	MBS	2586	-15	-6	-3	-12	-6
	Loans and Leases	12091	-52	-1	5	0	15
	Other	3350	-56	-5	-6	-2	-1
	Total Assets	13264	-169	-6	-20	-20	-2
	Cash	1548	-87	20	-10	-9	2
Large Domestic	UST & Agency	1123	3	-4	-4	-7	-4
(\$bn, NSA)	MBS	1934	-14	-5	-2	-2	-2
(ŞUII, NSA)	Loans and Leases	6719	-40	-5	-1	1	5
	Other	1941	-30	-12	-3	-3	-2
	Total Assets	6565	-22	5	6	-13	2
Small	Cash	466	-16	-1	1	-3	-2
Domestic	UST & Agency	289	-1	0	0	-1	0
(\$bn, NSA)	MBS	627	-1	-1	0	-9	-4
(3011, N3A)	Loans and leases	4363	-1	7	9	1	8
	Other	820	-3	0	-4	-1	0
	Total Assets	19830	-191	-1	-14	-33	1
	Cash	2013	-104	19	-9	-12	0
All Domestic	: UST & Agency	1412	2	-4	-4	-7	-4
(\$bn, NSA)		2561	-15	-6	-3	-11	-6
	Loans and leases	11082	-42	2	8	3	13
	Other	2761	-33	-11	-7	-5	-2
	Total Assets	3061	104	2	6	2	4
	Cash	1323	137	-1	6	2	1
Foreign	UST & Agency	115	-1	0	1	0	0
(\$bn, NSA)	MBS	25	0	0	0	0	0
	Loans and leases	1010	-11	-3	-3	-2	1
	Other	589	-23	6	1	2	1

Source: BofA Global Research, Federal Reserve, Bloomberg

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Exhibit 34: Select bank balance sheet liabilities (\$bn, NSA)
Deposits and other borrowing declined materially across 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
	All	17203	-87	26	-21	-24	-15
Donosite	Domestic	15958	-87	23	-20	-19	-14
Deposits (\$bn, NSA)	Large Domestic	10747	-92	11	-19	-18	-11
(SUII, NSA)	Small Domestic	5211	5	12	-1	-1	-4
	Foreign	1245	0	3	0	-4	-1
	All	2431	25	-8	4	-5	15
Other	Domestic	1408	-57	-20	-5	-16	14
borrowing (\$bn, NSA)	Large Domestic	883	-32	-11	-5	-2	8
	Small Domestic	525	-25	-9	-1	-13	6
	Foreign	1024	82	12	9	11	1

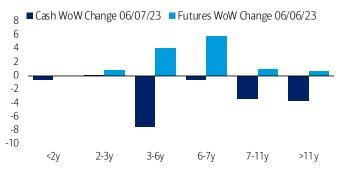
Source: BofA Global Research, Federal Reserve, Bloomberg



Primary dealer balance sheet

Exhibit 35: Dealers WoW change in positions

 $10y\,equivalent,$ Sbn, cash positions saw largest decline at 3-6y, futures position increased at 6-7y

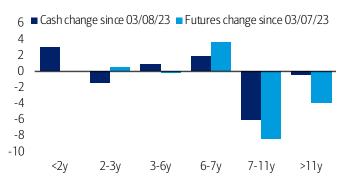


Source: BofA Global Research, NY Fed, CFTC

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Exhibit 36: Dealers change in positions since bank risk events

10y equivalent, \$bn, cash positions saw biggest decline at back end

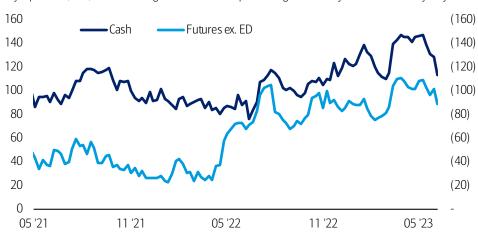


Source: BofA Global Research, NY Fed, CFTC

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Exhibit 37: Dealers total sector positions

10y equivalent, \$bn, both cash longs & futures shorts positioning has recently declined from early May



Source: BofA Global Research, NY Fed, CFTC

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