

US Rates Watch

Fed funds: sticky low

Fed funds drop is proving more persistent

Fed funds dipped down to 4.57% on Feb 9 but quickly reversed back to 4.58% the next day. On Feb 27, FF again dropped down to 4.57% and has been stickier there (Exhibit 1).

We are surprised by this drop. As discussed in [EFFR drop: a cuspy print](#), we believe this could be due to a reduction of FHLB bargaining power. Updated observations below.

EFFR drop observations (1) seems FHLB specific (2) FHLB advance repayments may be contributing (3) has occurred with front-end inflows & richer front-end rates. Overall, we still think the EFFR drop is related to FHLB activity & their bargaining power reduction.

EFFR drop seems FHLB specific: EFFR is small market dominated by one lender & borrower type: lender = FHLBs, borrower = foreign banks (Exhibit 2). FHLBs lend b/c they can't earn IORB, foreign banks borrow for O/N money market arb (including IORB).

EFFR drop likely specific to FHLBs b/c (1) OBFR stable (2) FF percentiles:

OBFR is a broader measure of O/N unsecured activity including Eurodollar & FF; OBFR is stable, suggesting EFFR drop is concentrated in FF with FHLBs & not broader O/N rates.

FF percentiles: FF distribution was stable till today, suggesting EFFR on the cusp & influenced by FHLB behavior. FF percentile drop says lower EFFR may stick (Exhibit 3).

FHLB advance repayments: advance repayments may leave FHLBs with more cash to reinvest, pushing EFFR lower. Timing of cash flows matter for FHLB lending: FHLBs prefer to lend early in FF or Fed ON RRP. Late day advance repayments (post ON RRP close) push FHLBs to invest at lower FF rates or park cash in Fed deposit earning zero.

FHLB advance activity was robust in Q4 but may have slowed over recent weeks. Call reports from Q4 suggest commercial bank advances increased \$132b (mega regional banks largest advance demand, Exhibit 4, Exhibit 5). Fed H.8 data implies that advance activity may have slowed in recent weeks; domestic bank loans & borrowings have been flat during Feb (Exhibit 6). Slower loans likely mean fewer advances.

FHLB debt outstanding also declined in Feb for the first time in nearly 1Y. FHLB debt outstanding fell \$18bn in Feb, led by a reduction in DN outstanding (Exhibit 7).

FHLBs may have been long cash in Feb due unexpected reduction in advance activity or early advance repayments. FHLBs that are long cash will need to lend more in FF. More FF lending will push EFFR lower, esp if advance repayments occur late day. FF volumes rose in Feb, consistent with possibility of more cash / lower advance activity (Exhibit 8).

A sustained drop in advance activity would be surprising. Loan growth has been strong & banks are competing for funds as deposits leave for higher yielding alternatives. There may be a seasonal moderation in loans & advances, but we would be surprised if it sticks. Banks are likely to see on-going loan demand, outflows, & competition for funds.

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FF: fed funds

EFFR: effective FF rate

FHLB: federal home loan bank

EFFR: effective fed funds rate

OBFR: overnight bank funding rate

O/N = overnight

IORB = interest on reserve balances

SOFR: secured overnight financing rate

DN: discount note

TGA: Treasury general account

IORB: interest on reserve balances

Front-end inflows leading to front-end richening: bills and discount notes have richened to OIS since February (Exhibit 9). Despite the \$119bn net increase in bill supply in Feb (Exhibit 10), 3m bill-OIS richened, likely driven by cash coming into the front-end.

The TGA declined \$153bn in Feb, largely due to tax refunds. The TGA decline from tax refunds has not shown up in higher reserves (Exhibit 11). More cash paired with lower collateral & bills could lead to further richening in bills and lower repo rates.

Front-end rates are likely to stay rich near term. Bill cuts & front-end inflows will likely continue pressuring money market rates lower. We expected to see this in bills & downward pressure on SOFR but may be seeing early evidence of this in EFFR.

The expected front-end richening led us to believe SOFR/FF basis should be biased wider in near-term (see: [SOFR/FF basis: biased wider](#)). We didn't expect the EFFR drop to hold. We still think SOFR/FF basis is biased wider near-term with richening front end rates & potential downward pressure on SOFR. SOFR has remained steady, though the 25th and 75th percentiles have been trending downward since early Feb (Exhibit 12). Risks skew in the direction of not only EFFR falling but SOFR falling as well.

Fed reaction to lower fed funds

If the EFFR continues to drop, this increases the risk of an administered rate adjustment. While we view this as unlikely, we believe the Fed would raise IORB if the EFFR dropped to 5bps above the bottom of the target range as they have done historically (Exhibit 13). This would represent a widening of the IORB to ON RRP spread; we expect a similar widening of SOFR / FF upon any Fed administered rate change. EFFR needs to drop to ON RRP+1bp or ON RRP flat to generate more discussion of any Fed admin rate change.

Bottom line: EFFR drop has proven stickier than we expected & is likely to stay at current levels near term. We think the EFFR drop is related to FHLB activity, potential slowing in FHLB advances, & richening money market rates. We also believe the EFFR drop represents a slow erosion of FHLB bargaining power in O/N rates. A further drop of EFFR to ON RRP flat or +1bps is needed before Fed admin rate changes are considered.

Exhibit 1: Effective fed funds rate (%)

The EFFR dropped 1bp to 4.57% and has been sticking there

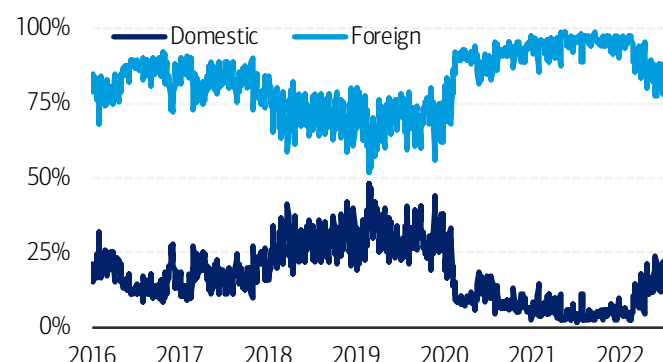


Source: FRBNY, Bloomberg

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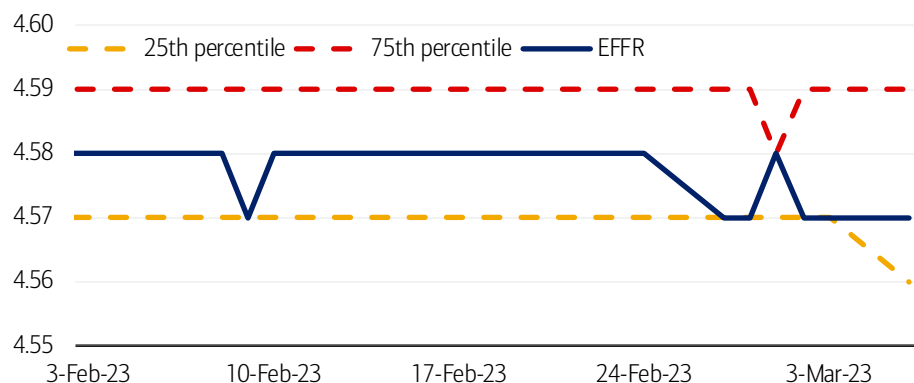
Exhibit 2: Percent of fed funds transactions by bank type (%)

Foreign banks still dominate the transactions in the FF market



Source: FRBNY FR2420 data

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Exhibit 3: Effective fed funds rate vs 25th and 75th percentile (%)Softness in the 25th percentile implies EFFR may stick lower for longer

Source: FRBNY, Bloomberg

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Exhibit 4: Total FHLB advance activity by quarter (\$mn)

Q4 data implied advance activity was ramping up

	Q4'22	Q3'22	Q2'22	Q1'22	Q4'21	Q3'21	Q2'21	Q1'21
Total FHLB advances	522,904	390,579	279,788	162,812	143,216	145,614	161,162	178,610
QoQ change	132,326	110,791	116,976	19,596	(2,398)	(15,548)	(17,448)	(20,358)

Source: BofA Global Research, commercial bank call reports

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Exhibit 5: Top banks by FHLB advance holdings and QoQ growth (\$mn)

A majority of the largest FHLB holders saw holdings increase over the last quarter

Top 10 banks by Q4'22 FHLB advance holdings				Top 10 banks by Q/Q growth in FHLB advance holdings			
Company Name	2022Q4	QoQ	YoY	Company Name	2022Q4	QoQ	YoY
PNC Bank, National Association	32,075	2,000	32,075	Wells Fargo Bank, National Association	32,000	15,000	32,000
Wells Fargo Bank, National Association	32,000	15,000	32,000	Truist Bank	29,702	12,800	28,839
Truist Bank	29,702	12,800	28,839	Charles Schwab Bank, SSB	10,000	10,000	10,000
Flagstar Bank, National Association	20,325	7,485	5,220	Signature Bank	11,284	9,829	8,644
Citibank, N.A.	19,250	-	14,000	TD Bank, N.A.	9,505	9,499	9,498
U.S. Bank National Association	19,001	5,408	15,728	City National Bank	10,000	7,950	10,000
Silicon Valley Bank	15,000	1,500	15,000	Flagstar Bank, National Association	20,325	7,485	5,220
First Republic Bank	14,000	3,000	10,300	U.S. Bank National Association	19,001	5,408	15,728
KeyBank National Association	11,344	996	10,739	BOKF, National Association	4,700	4,500	4,700
Signature Bank	11,284	9,829	8,644	Zions Bancorporation, National Association	7,100	3,600	7,100

Source: BofA Global Research, commercial bank call reports

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Exhibit 6: Fed H8 non-seasonally adjusted bank balance sheets (\$bn)

Domestic bank borrowing and loan activity have been relatively flat in the last month

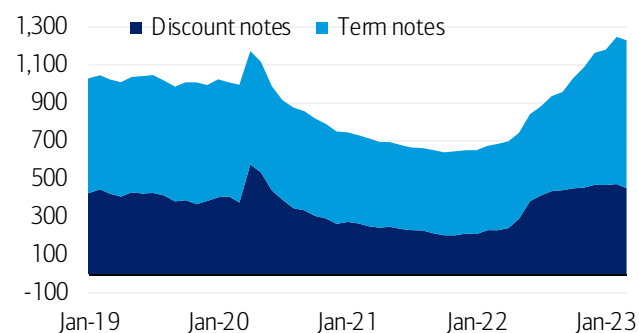
		Total	Assets						Liabilities			
			Cash	UST & Agy	MBS	Repo & FF	Loans & Leases	Other	Deposits	Borrowings	Net due to related foreign offices	Other
All	2/22/2023	22,957	3,084	1,636	2,756	612	12,037	2,832	17,576	2,012	378	2,990
Banks	1m Chg	40	1	-27	13	2	5	47	-33	44	-21	50
	3m Chg	-111	-165	-43	-32	24	146	-41	-185	138	-95	31
	YTD Chg	-5	-6	-16	-17	3	-60	92	-347	143	95	103
Domestic	2/22/2023	19,780	1,693	1,522	2,732	269	10,995	2,568	16,204	1,077	-322	2,821
Banks	1m Chg	5	-9	-26	13	-29	14	43	-67	12	14	46
	3m Chg	-113	-123	-42	-17	-34	132	-28	-232	99	-22	42
	YTD Chg	-193	-163	-24	-4	-49	-43	89	-398	84	17	103
Large	2/22/2023	13,001	1,260	1,209	2,061	222	6,469	1,780	10,703	654	-365	2,009
Banks	1m Chg	-28	-16	-25	1	-27	0	39	-76	9	8	30
	3m Chg	-232	-90	-39	-16	-43	-4	-39	-233	40	-32	-6
	YTD Chg	-182	-154	-20	1	-43	-49	84	-344	74	12	76
Small	2/22/2023	6,779	433	313	671	47	4,526	789	5,501	422	43	8,12
Banks	1m Chg	34	7	-1	12	-2	14	4	9	3	6	16
	3m Chg	119	-33	-3	-1	9	136	12	2	59	10	48
	YTD Chg	-12	-9	-4	-5	-6	7	6	-54	11	6	26
Foreign	2/22/2023	3,177	1,392	113	24	342	1,042	264	1,372	936	700	169
Banks	1m Chg	35	10	-1	0	31	-9	4	34	32	-35	4
	3m Chg	2	-43	-1	-14	58	14	-13	47	40	-73	-11
	YTD Chg	189	158	7	-12	51	-18	2	51	59	77	1

Source: BofA Global Research, Federal Reserve H.8 data

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Exhibit 7: FHLB debt outstanding (\$bn)

FHLB debt issuance was negative for the first time since 2021 in Feb



Source: BofA Global Research, FHLB Office of Finance

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Exhibit 8: Fed fund volumes (\$bn)

Fed funds volumes ticking higher from Feb onwards

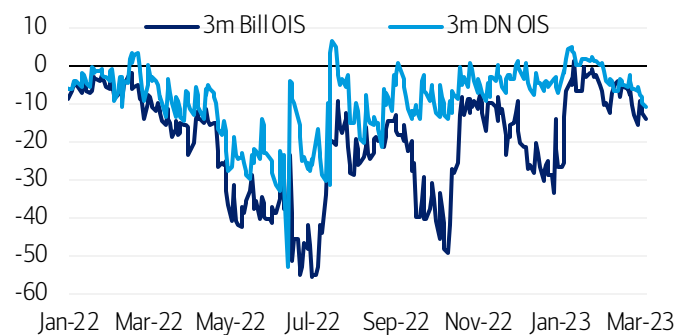


Source: FRBNY, Bloomberg

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Exhibit 9: 3m bill-OIS vs 3m discount note-OIS (bps)

3m bills and discount notes richened to OIS in Feb

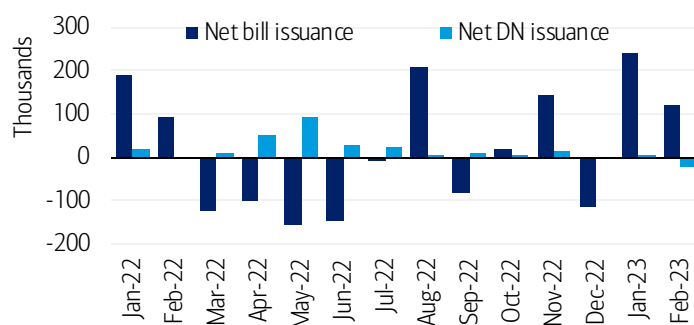


Source: BofA Global Research, Bloomberg

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Exhibit 10: Monthly change in bill and discount note issuance (\$bn)

Feb bill issuance was strongly positive but DN issuance declined

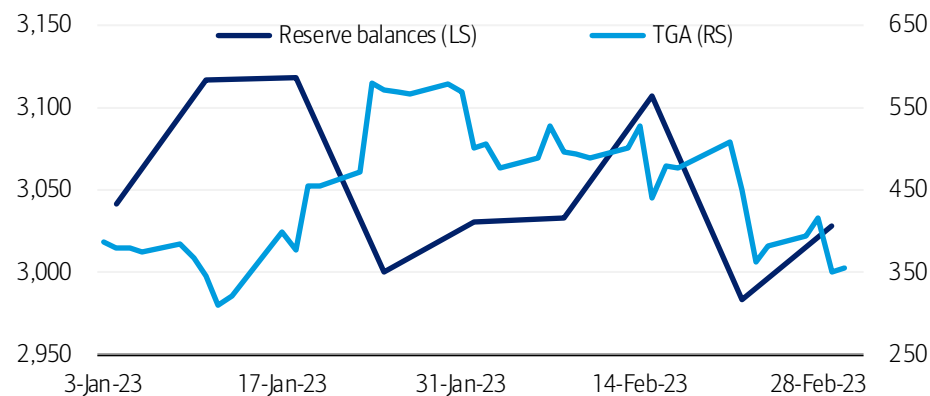


Source: BofA Global Research, Bloomberg

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Exhibit 11: TGA vs reserve balances (\$bn)

Decline in TGA from individual tax returns in Feb has not yet been reflected in higher reserve balances

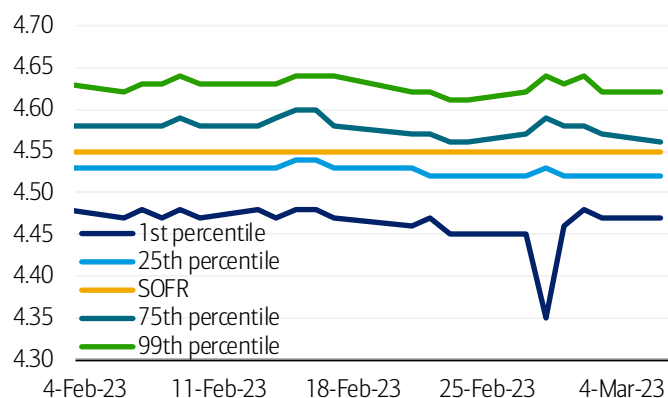


Source: BofA Global Research, Bloomberg

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Exhibit 12: SOFR percentiles (%)

SOFR has been steady despite downward trend in 25th and 75th percentiles

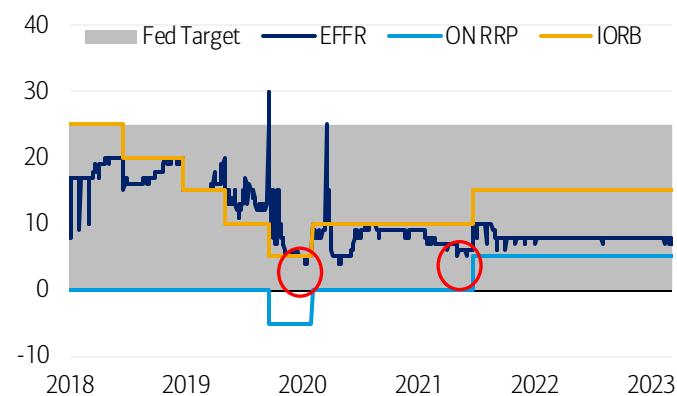


Source: FRBNY, Bloomberg

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Exhibit 13: EFR and administered rates within the target range (bp)

Fed likely to raise IORB if FF falls within 5bp of the bottom of the range



Source: BofA Global Research, Bloomberg, FRBNY

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