US Rates Watch

Fed funds: lower volume, higher tail

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FF: fed funds

FHLB: Federal Home Loan Banks

QT: Quantitative tightening

LCR: Liquidity Coverage Ratio

SOFR: Secured Overnight Financing Rate

IORB: Interest on Reserve Balances

ON RRP: Overnight Reverse Repo Facility

Fed funds volumes falling with less FHLB funding need

Fed funds volumes have recently declined (Exhibit 1). We attribute the FF volume drop to a reduction in FHLB lending, largely driven by lower excess liquidity need & advance demand. Our preferred proxy for advance demand is FHLB debt outstanding, which has fallen sharply over recent weeks & retraced virtually all the post-SVB increase (Exhibit 2).

Recall, FF lending is largely dominated by FHLBs. Fed data suggests the FHLBs are 95% of all FF lending activity. When FHLB lending activity declines, FF volumes drop. For more detail see our recent primer on Fed policy plumbing.

FHLB excess liquidity driven by bank funding stress

FHLB quickly ramped up debt issuance in response to March '23 bank stress & increased advance demand. The strong advance demand pushed FHLBs to hold more cash on hand, which was then lent into the FF market if not drawn. We see this reflected in the increase in FF volumes through May.

Eventually, FHLB paid down most of the net new issuance, likely due to banks repaying precautionary funding. This in turn led to lower FF volumes around the same time. This indicates banking funding stability and lower bank stress.

Upward pressure in the 99th percentile of FF

The drop in FF volume is generally an encouraging sign through the lens of FHLB excess liquidity. However, we do see signs that not all bank funding stress is gone from the FF market. Some transactions are starting to occur at higher rates, as indicated by the spread between the 75th and 99th percentiles (Exhibit 4). The 99th percentile has been trending upward since the Fed began hiking and QT in mid '22.

The upward pressure appears to be primarily a Fed funds story as Eurodollars have not seen the same upward pressure (Exhibit 5). We believe this upward pressure on the 99th percentile is likely driven by domestic banks who are going to the FF market for actual liquidity need. Banks get an LCR benefit from borrowing from FHLBs that likely drives some borrowing in FF. We believe this activity is driven by domestic banks given a recent shift in Fed FR2420 data (Exhibit 6).

Taking a deeper dive into bank call reports, we find that domestic banks shifted from net lenders of FF to net borrowers around the start of QT (Exhibit 7). We also note roughly half of the average FFs purchased over the quarter were by banks with less than $100b in AUM as of Q1'23. We believe it is likely the smaller domestic banks with more limited cash buffers that are driving this upward pressure (Exhibit 8). Smaller banks have reported to us in the past that they value the FF market as a stable source to cover any unexpected short-term liquidity needs when their existing funding falls short.

SOFR/FF basis near-term biased wider

We expect the trend of marginal upward pressure in the right tail of the FF distribution to hold & grow as the Fed continues with QT. Fed liquidity drain should place upward pressure on bank funding needs, especially for smaller banks with a lower cash buffer. Indeed, smaller domestic banks have seen their cash / asset ratio decline more than larger domestic or foreign banks (Exhibit 9).

The persistence of smaller domestic bank funding pressure contributes to our expectation for Fed funds to move up sooner and more consistently than SOFR (Exhibit 10, Exhibit 11). As we discussed in SOFR/FF basis: biased wider 03 March 2023, we expect SOFR/FF to eventually tighten, but we believe the market is pricing in too much tightening too fast. We see this reflected in SOFR/FF contracts which continuously reprice wider as the contracts get closer to expiry.

SOFR is likely to remain well anchored around ON RRP until liquidity has been sufficiently drained. At the same time, FF is likely to continue to face upward pressure as reserves drain and domestic banks bid up for funding.

No near-term change in Fed's administered rate

We continue to believe that the Fed will not make adjustments to their IORB or ON RRP rates until SOFR has lifted off ON RRP and/or the FF rate is clear of the risk to settle within 5 basis points of the target range bottom (Exhibit 13). Discussion of IORB or ON RRP rate or counterparty limit changes has dropped with the recent reduction of ON RRP utilization. We don't expect any near-term changes until FF moves consistently higher in the Fed target range, likely to >= 10bps off target range bottom (for more detail see: ON RRP tweaks won't stop bank stress 30 March 2023).

Bottom line: FF volume decline is likely driven by reduction in FHLB excess liquidity need. Lower FHLB excess liquidity is driven by lower advance demand & reduced bank stress. Despite FHLB activity, there has been an increase in right tail of FF rate distribution. This is likely due to Fed QT & some domestic banks needing short-term liquidity. We expect this FF right tail to persist & help bias FF higher vs SOFR. Fed likely won't move IORB or ON RRP lower till FF around >=10bps from target range bottom.

Exhibit 1: Fed funds volumes ($bn)

FF volumes have declined alongside paydowns in FHLB debt since May 30

Source: BofA Global Research, Bloomberg

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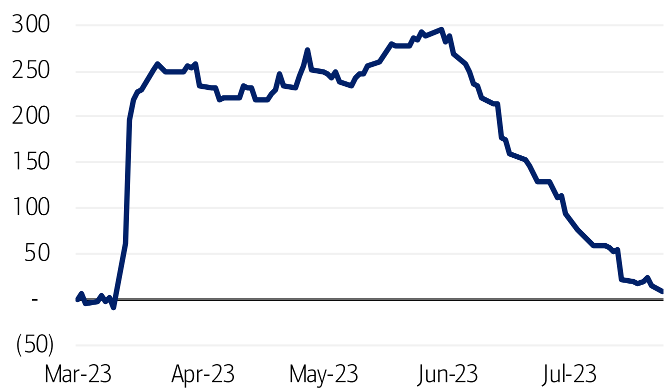
Exhibit 2: Cumulative change in FHLB debt since March 1 ($bn)

Daily FHLB debt is now only $8bn higher since March 1



Source: Bloomberg, FHLB Office of Finance. Note: we use estimates of daily net issuance

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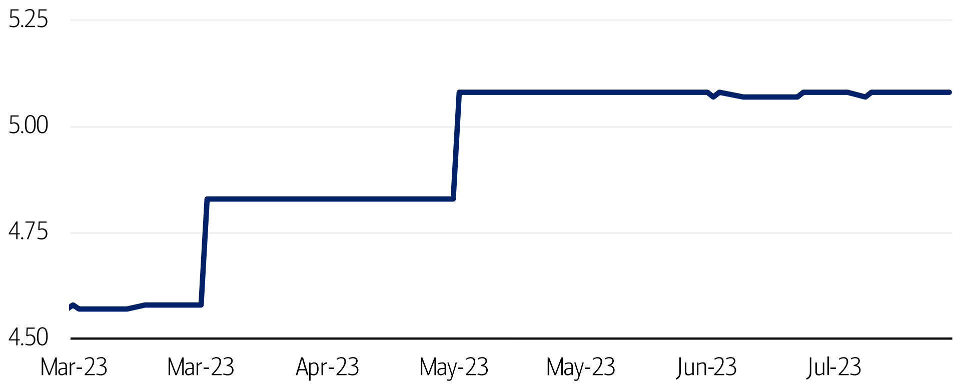
Exhibit 3: Effective Fed Funds Rate (EFFR, %)

The Fed funds rate is currently printing at 5.08%, 8bps above the bottom of the target range



Source: BofA Global Research, Bloomberg

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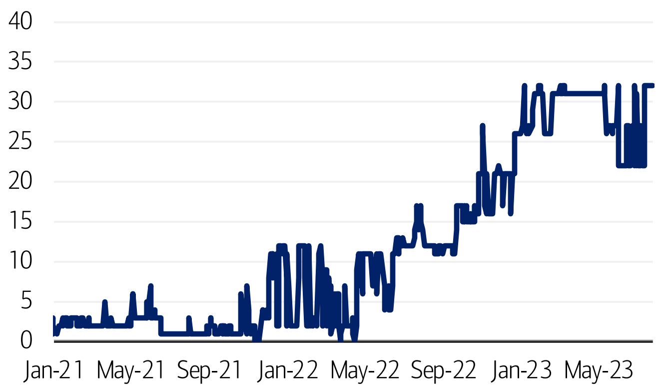
Exhibit 4: Fed funds 99th - 75th percentile spread (bps)

The 99th percentile has been trickling higher over the course of Fed QT



Source: BofA Global Research, Bloomberg

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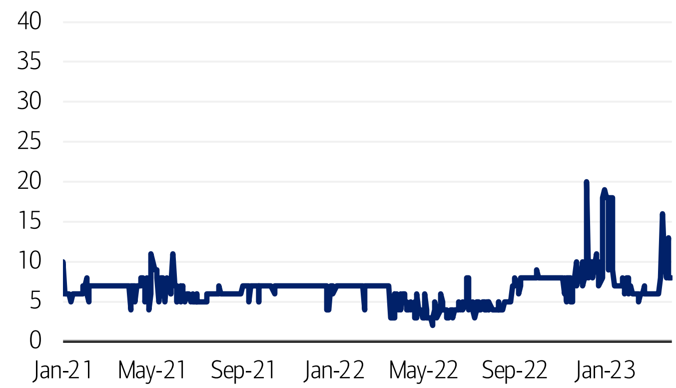
Exhibit 5: Eurodollars 99th - 75th percentile spread (bps)

Data as of March 31, 2023. 99th percentile has not moved up as much as FF



Source: BofA Global Research, Bloomberg

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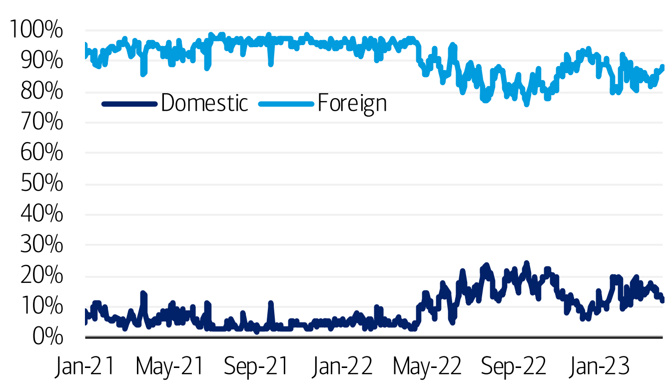
Exhibit 6: Foreign and domestic bank FF borrowing as a % of total FF

Data as of March 31, 2023. Domestic bank borrowing in FF was increasing YTD until it began to decline after bank stress



Source: BofA Global Research, NY Fed FR2420

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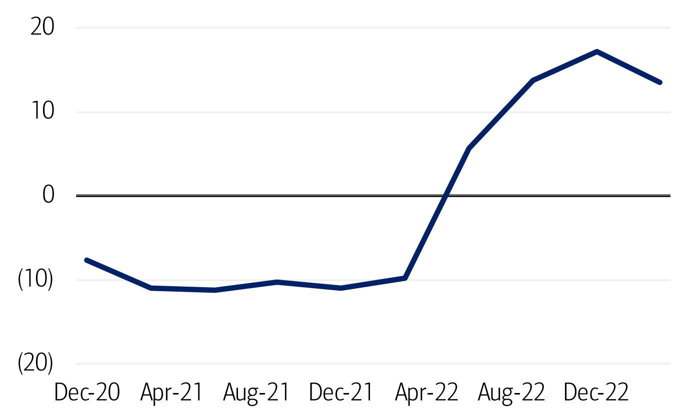
Exhibit 7: Domestic bank net FF borrowing ($bn)

FF borrowing began to outpace FF lending around the start of QT in '22



Source: BofA Global Research, S&P Market Intelligence

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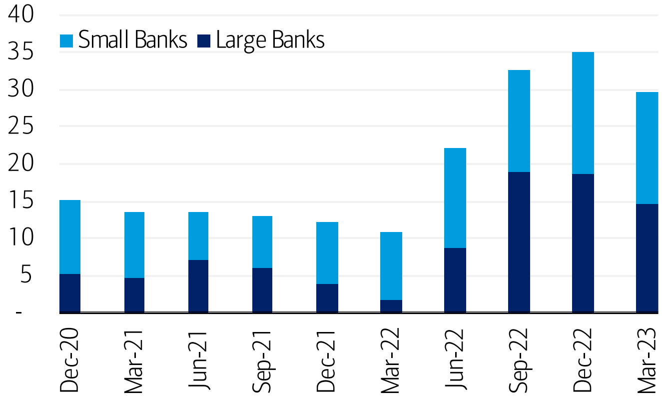
Exhibit 8: Domestic bank FF borrowing by quarter ($bn)

Small banks are defined as less than $100b in AUM



Source: BofA Global Research, S&P Market Intelligence

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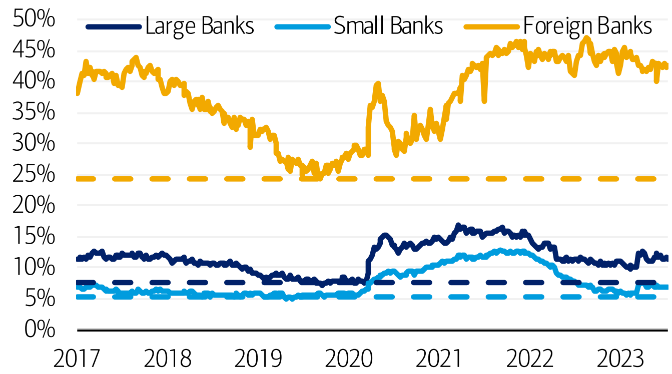
Exhibit 9: Domestic & foreign bank cash / total assets (%)

Smaller domestic banks have seen their cash / asset ratio decline more than larger domestic or foreign banks



Source: BofA Global Research, Federal Reserve H8. Note: Dashed lines represent Sept 2019 levels

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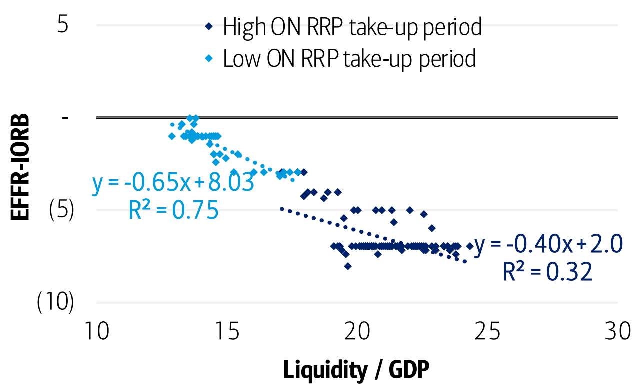
Exhibit 10: FF-IORB spread (bps) relative to liquidity / GDP (%)

As liquidity (ON RRP + Reserves) declines relative to GDP, FF typically moves higher in relation to IORB



Source: BofA Global Research, Bloomberg

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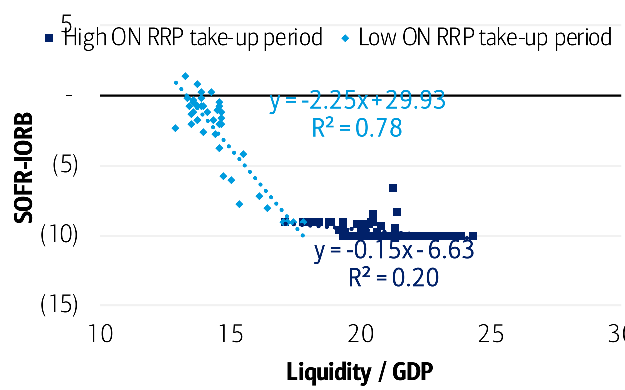
Exhibit 11: SOFR-IORB spread (bps) relative to liquidity / GDP (%)

Once below 16% of liquidity to GDP, SOFR tends to move up quickly relative to IORB



Source: BofA Global Research, Bloomberg

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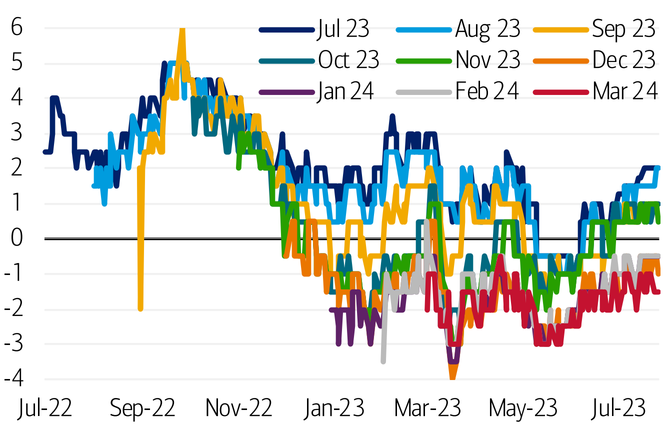
Exhibit 12: Monthly SOFR/FF basis spreads (bps)

SOFR/FF basis has widened recently for near term contracts but remains tight further out



Source: BofA Global Research, Bloomberg; note SOFR/FF basis = fed funds less SOFR

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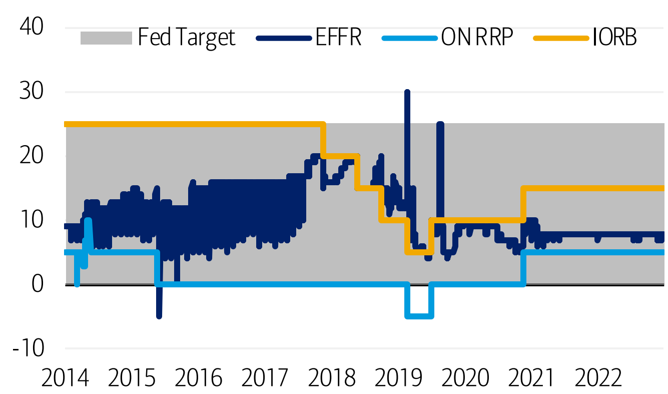
Exhibit 13: Fed funds rate within the target range relative to administered rates (bps)

The Fed is unlikely to lower the administered rates with EFFR printing only 8bps above the bottom of the target range



Source: BofA Global Research, Bloomberg

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