

## US Rates Watch

## Fed funds: higher when FHLB discos rise

**Fed funds will rise with FHLB discount note rates**

Clients have increasingly asked: when will the effective federal funds (FF) rate rise? Our answer: when FHLB discount note (DN) rates increase. DNs will rise as bill supply builds and cheapens money market paper. We expect signs of upward FF moves in August with the arrival of +\$240b of bill supply.

**Fed funds background: FHLBs lend, foreign banks borrow**

FF is highly idiosyncratic. Short FF refresher is below; detail in [Fed policy plumbing](#).

**Lending:** dominated by FHLBs who comprise 90-95% of activity. FHLBs hold cash liquidity to fund member advances. If no advances, FHLBs lend excess cash in FF because they cannot earn IORB. FHLBs value flexibility to invest FF late day and have cash returned early. FHLBs fund FF partially via DNs and target a 3-5bps spread of FF-DN (Exhibit 1).

**Borrowing:** currently concentrated with foreign banks (FBOs). FBOs borrow FF to arbitrage IORB. FBOs do FF-IORB arb because they have fewer balance sheet constraints vs domestic banks. FBOs will use FF for other money market arb, including lending in GC repo.

**FHLBs will demand higher FF when disco rates rise**

FF will rise with FHLB DN rates. FHLBs will demand greater return on FF with higher DN funding costs. Historically FF-O/N DN spread and FF volumes are correlated (Exhibit 2); as discos richen vs FF, FHLBs increase FF lending (& vice versa). If DNs too cheap vs FF, FHLB volumes decline until FF rises. We expect to see this dynamic in coming months.

In theory, DN rates correlate with DNs outstanding, bill rates, and bill supply. In practice, the results are mixed (Exhibit 3, Exhibit 4). We overweight theory vs practice. DN rates should cheapen with DN issuance and bill supply + cheaper bills. DN issuance is driven by (muted) FHLB advances; bill supply will rise in Aug and likely cheapen bills & DNs.

FF has not yet moved because O/N DN rates are not high enough. We suspect higher bill supply will cheapen bills & DNs, eventually leading to upward pressure on FF.

**SOFR / FF disconnect: plumbing frictions**

Historically there is a strong relationship between higher repo and FF (Exhibit 5, Exhibit 6). Higher repo should theoretically be correlated with higher bill & DN rates. At present, money market frictions are resulting in a surprising wedge between repo and bill / DN rates (see [plumbing frictions](#)). This gap could widen and take SOFR higher vs FF.

**Bottom line:** FF will rise with higher short-dated bills & DNs. Once short-dated bills & DNs start cheapening, FF will increase. Higher FF pull should result in a modest knee-jerk widening of SOFR/FF. FF isn't stationary, it will move higher.

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**Refer to important disclosures on page 3 to 4.**

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FF = fed funds

FHLB = Federal Home Loan Bank

DN = discount note

IORB = interest on reserve balances

FBO = foreign banking organization

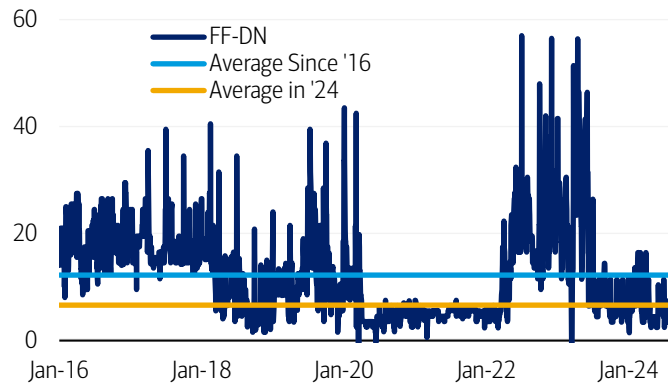
O/N = overnight

SOFR = secured overnight financing rate

TGCR = tri-party general collateral repo

**Exhibit 1: Historic spreads of FF to FHLB O/N DN (bps)**

FHLBs target a 3-5bps spread for FF to O/N DN, in-line with '24 average

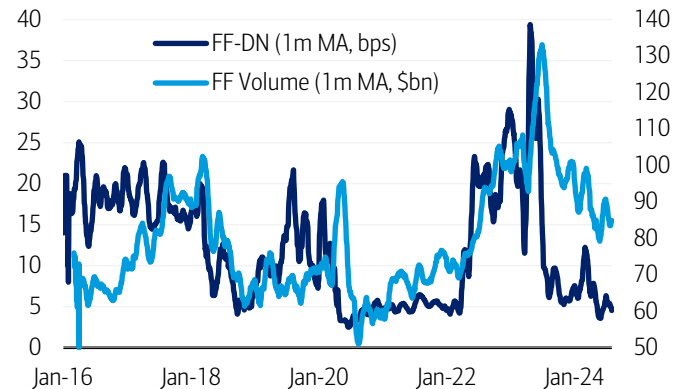


Source: Bloomberg

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**Exhibit 2: Relationship of FF-O/N DN (LS) & FF volumes (RS)**

When FF-DN spread wide, FF volumes rise; if FF-DN tight, FF volume drop

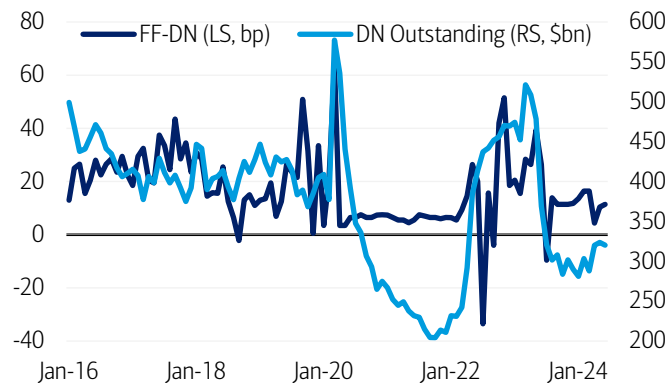


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**Exhibit 3: FF to O/N DN spread & DNs outstanding**

DNs typically grown in times of stress, which sees DN richen vs FF

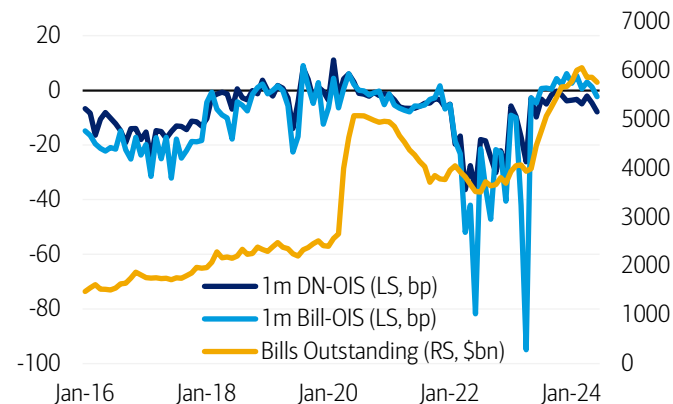


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**Exhibit 4: 1m DN & bills to OIS vs bill supply**

DNs &amp; bills typically cheapen with higher bill supply

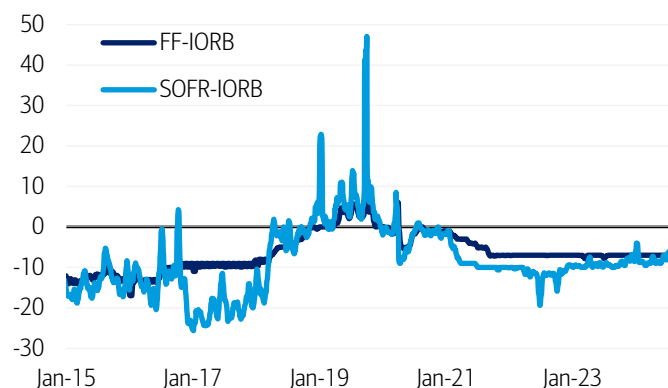


Source: Bloomberg

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**Exhibit 5: FF & SOFR to IORB spread (bps)**

FF typically rises vs IORB as SOFR increases

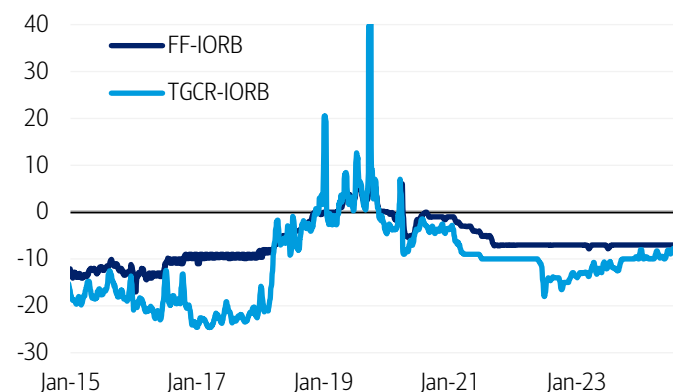


Source: Bloomberg, NY Fed

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**Exhibit 6: FF & TGCR to IORB spread (bps)**

FF typically rises vs IORB as TGCR increases



Source: Bloomberg, NY Fed

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