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"LENDERS OF NEXT-TO-LAST RESORT": TOO BIG A ROLE FOR THE FEDERAL HOME LOAN BANKS?

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On the margins of discussions about banking regulation and supervision, the role played by the Federal Home Loan Banks (FHLB) prior to the bank run in Spring 2023 is bitterly disputed.

Seeking to correct the distortions resulting from their status and refocus the FHLBs on their main mission, their regulator, the Federal Housing Finance Agency (FHFA), has proposed several areas of reform.

However, limiting the FHLBs' capacity to support bank liquidity could have significant effects on the money markets and structurally increase banks' requirements for central bank money.

FHLB ADVANCES: A TRIPLING BETWEEN MARCH 2022 AND MARCH 2023

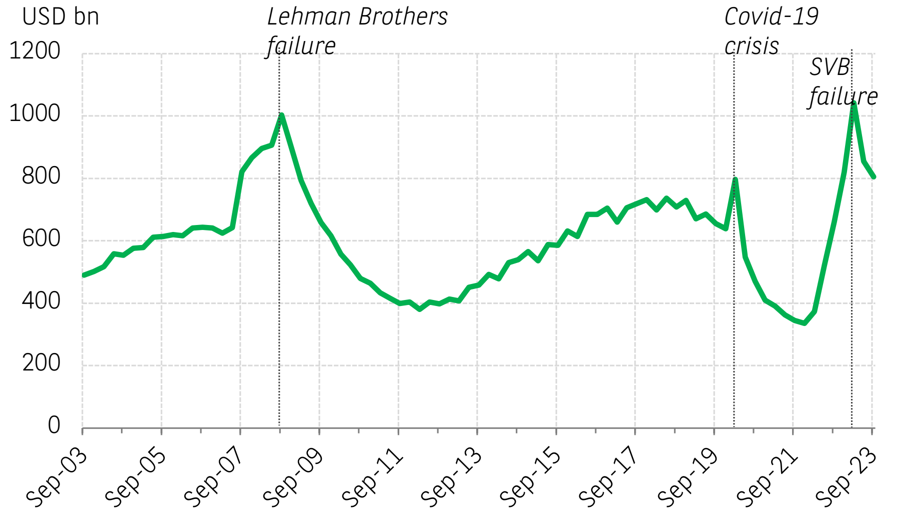

CHART 1

SOURCE: FHLB OFFICE OF FINANCE, BNP PARIBAS

The FHLBs form a network of 11 private cooperatives. They were set up in the wake of the Great Depression under the Federal Home Loan Bank Act of 1932. Their main role is to support the financing of the residential mortgage market through secured loans (advances), at moderate interest rates, to their members (commercial banks, credit unions, thrift institutions, insurance companies).

Their usefulness as a vector of support to bank liquidity (particularly for smaller banks with little or no access to the capital markets) is not in question. The FHFA is unsatisfied, however, with the fact that in the lead-up to the bank run of March 2023, and as they had on the eve of the major financial crisis in 2008, the FHLBs took on a role that was much too big for them, that of 'lender of next-to-last resort' (Ashcraft, Bech and Frame, 2008[1]). The tripling of advances between March 2022 and March 2023 (Chart 1) thus benefited in part banks that were virtually illiquid and, in some cases, far removed from the mortgage market. The FHFA has proposed several areas of reform[2] seeking most notably to refocus the FHLBs on their main mission, improve their evaluation of their borrowers' financial condition and limit their calls on the market.

1 The Federal Home Loan Bank System:The Lender of Next-to-Last Resort? - Federal Reserve Bank of New York - (newyorkfed.org)
2 FHLBank System at 100: Focusing on the Future (fhfa.gov)

PROFOUND CHANGES IN HOW THE MORTGAGE MARKET IS FINANCED

In order to ensure that advances serve the mission of the FHLBs, the FHFA plans to toughen the eligibility criteria for the network by requiring credit institutions to have at least 10% of their assets in residential mortgage loans or equivalent mission assets on an ongoing basis to retain FHLB membership (rather than just at the time of their entry into the network). The FHFA's ambition is to exclude members such as Silvergate Bank from the network[3].

Given the specific features of residential mortgage financing in the US and the weight of federal guarantees in the market, questions can be asked about the relevance of the FHLB's main mission. First, because 60% of mortgage loans are originated by mortgage companies which do not have the status of depository institutions and are thus not eligible to join the FHLB network. Secondly, because the securitisation of loans, widely used in the USA thanks to the public guarantees available, already provides a source of refinancing. It is estimated that around 70% of outstanding mortgage loans are securitised, mostly through one of the federal agencies (Fannie Mae, Freddie Mac or Ginnie Mae). US depository institutions, meanwhile, carry only one quarter of outstanding mortgage loans on their balance sheets.

A MORAL HAZARD WITH NEGATIVE EFFECT ON MARKET DISCIPLINE

The FHLBs have been criticised for having, in both 2007 and 2022, propped up banks in serious financial difficulties, preventing the Federal Reserve (Fed) from fully playing its role as lender of last resort and, ultimately, increasing the cost of bank failures.

In fact, the secured loans that the FHLBs make to their members are not only over-collateralised (the value of assets given in collateral significantly exceeds the amount of the advance) but more importantly benefit from the highest level of seniority through a blanket lien[4]. The moral hazard that results reduces the incentive to ensure the good health of their borrowers as, in the event of the failure of one of them, they will be fully repaid. It does however expose the Federal Deposit Insurance Corporation (FDIC) to higher costs in the event of bank resolution. Some have criticised the fact that this lack of caution has encouraged certain borrowing banks to take excessive risks, preventing the revelation as early as 2022 of the refinancing difficulties faced by certain banks and, in March 2023, obstructing the introduction of emergency loans by the Fed, which could have allowed a more ordered resolution process. Rather than changing the intrinsic nature

MONEY MARKET FUNDS FINANCE 46% OF FHLB DEBT SINCE 2016

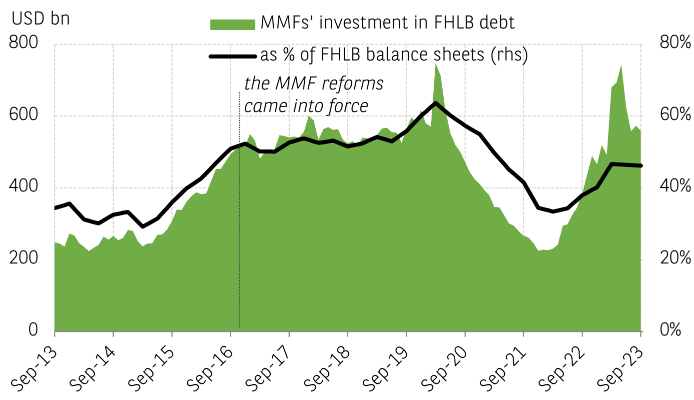

CHART 2

SOURCE : FHLB OFFICE OF FINANCE, OFFICE OF FINANCIAL RESEARCH, BNP PARIBAS

of advances, the FHFA has recommended that the FHLBs cooperate more closely with banking supervisors in order to better assess the financial situation of their borrowers.

FHLB PROVIDE SUPPORT TO BANK LIQUIDITY RATIOS

The very favourable treatment that banking regulations give to debt securities issued by the FHLBs and to the secured loans they grant gives them a unique de facto role amongst private institutions and encourages banks to make use of them.

The FHLBs effectively share the same status as Fannie Mae and Freddie Mac, the two big mortgage refinancing agencies (Government-Sponsored Enterprises, or GSEs). Thus, they benefit from the effective guarantee of the US Treasury (since the two big GSEs were placed under conservatorship in 2008). This guarantee brings several advantages. First, it enables them to finance themselves at modest interest rates, close to federal government borrowing rates. Secondly, it ensures them a large investor base as regulators consider the debt securities issued by the FHLBs[5] both as high-quality liquid assets (HQLA), under the Basel liquidity rules applied to banks[6], and as eligible for purchase by money market funds specialising in government debt (government money market funds)[7]. The increase in their resources (and thus in their advances) was therefore largely coincident with the reform of money market funds in 2014 (Chart 2) and the introduction of the Basel Liquidity Coverage Ratio (LCR) in the USA in 2015. Lastly, by virtue of this guarantee, bank regulators consider the secured loans issued by the Federal Home Loan Banks to other banks as stable financing[8].

3 The bank, which met eligibility criteria at the time of its entry into the San Francisco FHLB in 1997, gradually started to specialise in crypto assets from 2013, such that at the time of its collapse on 8 March 2023 its only, tenuous, link with mortgage financing was its holding of agency mortgage-backed securities (MBS).
4 This privilege is reflected in banking regulations, notably within the framework of liquidity rules. The rules require than an asset be unencumbered in order for it to be included as eligible high-quality liquid asset (HQLA). It must be free of all legal, regulatory, contractual or other restrictions that would limit the bank's ability to monetise the said asset (by sale or transfer). The asset must not be pledged, explicitly or implicitly, to secure or provide credit enhancement to any transaction. However, any asset meeting the liquidity and quality criteria, and which has been presented in advance, deposited or given in guarantee to a central bank or Government-Sponsored Enterprise, but which has not been used to mobilise liquidity, may be included as eligible HQLA. The US LCR rule stipulates that this exception seeks, in particular, to permit collateral that is covered by a blanket lien from a FHLB to be included as eligible HQLA.
5 In practice it is the Office of Finance which issues debt securities on behalf of the FHLBs.
6 Within the framework of capital requirements, MBS issued by the GSEs (excluding preferred debt securities) are given a low risk weighting of 15%, and for liquidity requirements are recorded in the range of level 2A assets (a discount of 15% is applied to them).
7 Money market funds' appetite for FHLB debt securities further supports bank liquidity by mitigating the effects of deposit flight. In March and April 2023, certain depositors made massive withdrawals of cash from banks to invest in money market funds. Thanks to these incoming resources, the funds were able to invest in FHLB debt securities and the FHLBs were able to increase secured lending to banks.
8 Although they are very largely backed by illiquid collateral (more than 80% in the form of mortgage loans), secured loans from the FHLBs are covered, within liquidity rules, by a

OTHER CHANNELS THROUGH WHICH THE FHLBS SUPPORT BANK LIQUIDITY

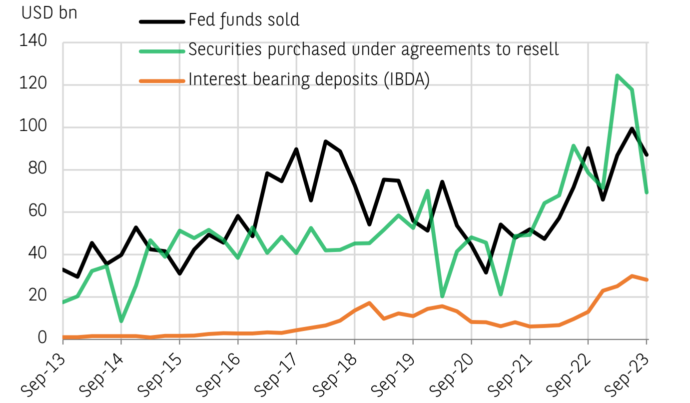

CHART 3

SOURCE: FHLB OFFICE OF FINANCE, BNP PARIBAS

THE SIZE OF FHLB LIQUIDITY PORTFOLIOS IS LARGELY DETERMINED BY THE AMOUNT OF DEBT RAISED ON THE MARKETS

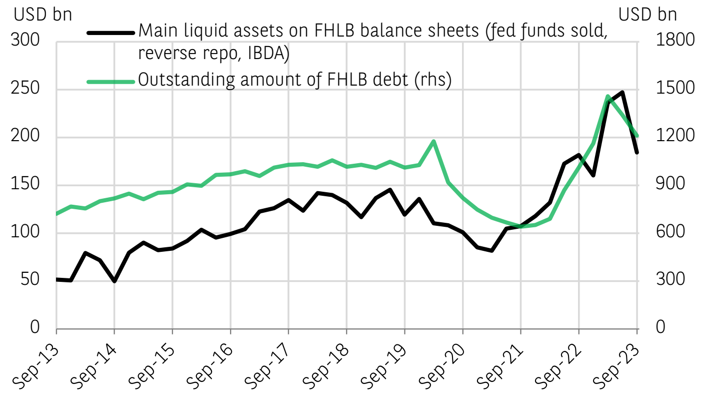

CHART 4

SOURCE: FHLB OFFICE OF FINANCE, BNP PARIBAS

THE STIGMA OF THE FED'S EMERGENCY WINDOW

The FHFA intends to draw a clear line between the role of the FHLBs, which, through their secured loans, provide funding to support their members' liquidity needs "across the cycle", and that of the Fed, which can provide emergency financing to financial institutions facing an immediate and substantial need for liquidity. In practice, the liquidity provided is not of the same nature. The central bank creates central bank money ex nihilo to lend to banks, whilst the FHLBs, through advances, lend resources (secondary money) which it has gathered on the markets. However, the capacity of investors to absorb their issuance over a short period of time is limited, particularly when requirements are high and come at the end of the day as debt markets are closing[9]. The FHFA has recommended that the FHLBs first ensure that their main borrowers have taken the necessary steps to use the Fed's discount window in emergency cases, and secondly to make arrangements with regional Federal Reserve banks to allow for a rapid transfer of pre-positioned collateral[10]. As the surveys and periods of stress have revealed, the stigma associated with the Fed's emergency windows disincentives the biggest banks from using them. For this reason, FHLB advances look like an admittedly imperfect but opportune alternative.

RESTRICTING THE FHLBS' CAPACITY TO OFFER SECURED LOANS TO BANKS COULD AFFECT THE MONEY MARKETS...

The FHFA requires that the FHLBs hold sufficient liquid assets to ensure the renewal of all maturing secured advances even in the event of debt market closure, for a defined period (between 10 and 30 days). These assets may be deposited in interest-bearing deposit accounts (IBDA) with banks, lent overnight on unsecured markets (fed funds market) or secured markets (repo markets) or invested, most notably in Treasuries (chart 3)

LENDERS IN THE FED FUNDS MARKET

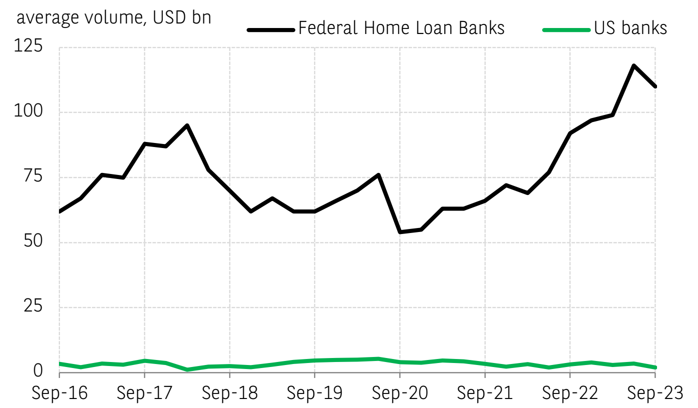

CHART 5

SOURCE: FEDERAL RESERVE BANK OF NEW YORK, BNP PARIBAS

The size of their liquidity portfolio is closely linked to the amount of debt that they raise on the markets (Chart 4). It follows that restricting bank access to secured loans from the FHLBs (stricter criteria, limits on debt issuance) would reduce FHLB borrowing on the market and, more generally, the other refinancing options offered to banks by the FHLBs (deposits and loans other than advances).

...BY DRYING UP THE MARKET FOR FED FUNDS

The effect could be particularly noticeable in the fed funds market. Granted, since 2008 the volumes traded on this market have been relatively modest, for a number of reasons[11]. The FHLBs nevertheless occupy a dominant place amongst lenders (Chart 5).

low assumption of non-renewal (25% where residual maturity is not more than 30 days, 0% in all other cases) due to the nature of the counterparty.

9 On 9 March 2023 the substantial (USD20 billion) and late (middle of the day) Silicon Valley Bank's request to the San Francisco FHLB for a secured loan was not satisfied within the required time frame.

10 Silicon Valley Bank, for example, had not pre-positioned sufficient collateral with the San Francisco Federal Reserve and had not subscribed to the Fed's Standing Repo Facility. When the bank run began on 9 March 2023, it was not able to free up and rapidly transfer to the San Francisco Fed the collateral that it had given in security to the San Francisco FHLB or that was being held in custody by Bank of New York Mellon. It was therefore unable to apply for an emergency loan.

11 A daily average of between USD150 billion and USD175 billion was traded on the fed funds market prior to 2008, a figure that fell to between USD60 billion and USD80 billion between 2010 and 2020 and stood at around USD110 billion in 2023.

MAIN BORROWERS IN THE FED FUNDS MARKET

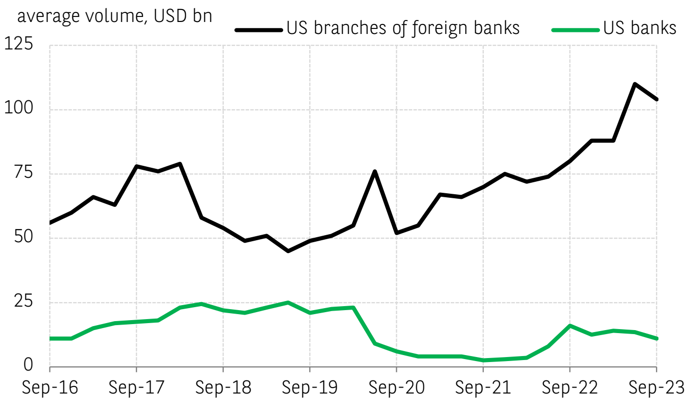

CHART 6 SOURCE: FEDERAL RESERVE BANK OF NEW YORK, BNP PARIBAS

THE FHLBS' DEPOSITS EARN HIGHER INTEREST THAN FED FUND LENDING

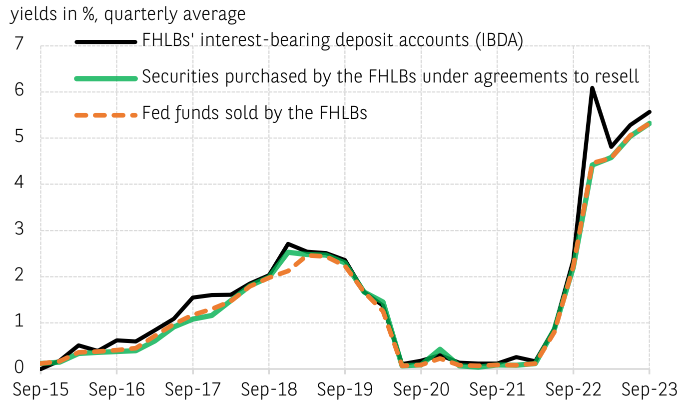

CHART 7 SOURCE: FHLB OFFICE OF FINANCE, BNP PARIBAS

The main borrowers have traditionally been the US branches of foreign banks (Chart 6)[12], whilst US banks tend to turn to this market when central bank money becomes scarcer. This was particularly so for regional banks at the end of 2018 (first signs of the tensions triggered by the Fed's quantitative tightening that began in November 2017). Moreover, according to the Fed's November 2022 survey of bank Senior Financial Officers[13], more than 70% of US banks asked (and nearly 90% of those at branches of foreign banks) thought it likely or very likely that they would borrow on the fed funds market to rebuild or maintain at the desired level their reserve cushion at the central bank[14]. Restraining the FHLBs' offering of fed funds would not only dry up the market but would also reduce the relevance (already fairly low) of the effective fed funds rate as an indicator of the transmission of monetary policy.

The FHLBs' fed fund lending could also be hit by the FHFA's ambition to raise the limits on interest-deposit accounts that a FHLB may have with an individual counterparty to the same level as those set for loans of fed funds. This harmonisation could lead the FHLBs to favour deposits, which earn higher interest, and thus push up the price of bank resources. One positive point is that this change could help the very big US banks meet their specific liquidity needs[15] . The speed at which FHLB deposits built up in 2018 and then in 2022 (Chart 3) and the remuneration earned (which exceeded the Fed IORB rate on bank reserves, Chart 8) suggest that, unlike wholesale financing, they improve the intraday and daily liquidity positions of the biggest banks. Their increase in December 2018 and 2022 on the eve of two episodes of intense pressure on liquidity (September 2019 and March 2023), although quite different in nature, also suggests that they are useful advance indicators.

FHLB DEPOSIT YIELDS PROVIDE EARLY SIGNS OF PRESSURE ON LIQUIDITY

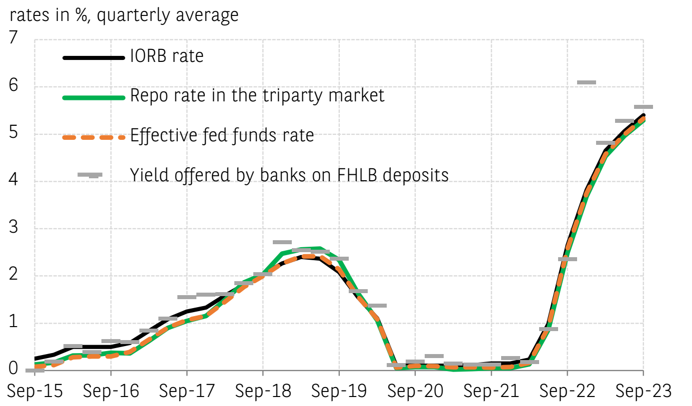

CHART 8 SOURCE: FHLB OFFICE OF FINANCE, BNP PARIBAS

... AND BY STRUCTURALLY INCREASING DEMAND FOR CENTRAL BANK RESERVES

Granted, some of the reform proposals will probably require approval in Congress and the election timetable this autumn could delay this. Yet the expectation of reduced availability of secured loans from the FHLBs risks encouraging banks to increase, as a precautionary measure, their structural demand for central bank reserves and thus act against the programme of shrinking the Fed's balance sheet.

12 Whilst central bank reserves remain abundant, US banks have little interest in borrowing or lending fed funds (commission paid to the FDIC, leverage requirements, penalty on interbank debts in the LCR calculation, interest rates on reserves higher than the effective fed funds rate). The FHLBs by contrast are encouraged to lend on this market (their accounts with the Fed do not earn interest; fed fund lending permits to meet their liquidity requirements and the supply of advances) and US branches of foreign banks have an incentive to borrow on the market (access to refinancing in dollars, attraction of the interest paid by the Fed on reserves, no commission payable to the FDIC).
13 The Fed - November 2022 Senior Financial Officer Survey (federalreserve.gov)
14The likely expansion of the scope of liquidity requirements currently imposed only on the major US banks could also structurally increase aggregate demand for central bank money.
15 That relating to the resolution plans of the G-SIBs assumes that maturity mismatches are minimised not on a daily but on an intraday basis. To meet this constraint, regulators recommend that G-SIBs hold a volume of liquid assets equivalent to the intraday peak of theoretical cash outflows. However, borrowing fed funds is not suited to this type of requirement. Lending in the fed funds market is overnight. The funds borrowed are generally repaid early next day (at 5.30am to 6.00am New York time) and borrowings resumed at noon. Although it thus releases liquidity for a few hours, fed fund borrowing can help LCR ratios, as these are calculated at the end of the day. However, this sort of borrowing does not meet the intraday liquidity requirements of the biggest banks.

Bank demand for central bank money is mainly aimed at satisfying liquidity stress-testing metrics and meeting payment and settlement needs. However, according to the Fed's May 2023 survey[16], more than 57% of US banks considered their ability to mobilise non-HQLA assets to obtain liquidity (i.e. the availability of advances) as an important, or even very important, factor in the desired minimum level of reserves (the level below which they would consider corrective measures). By comparison, only 26% of banks questioned believed that access to the Fed's discount window or repo facility is an important or very important factor. More than 90% of US banks questioned (and 100% of the branches of foreign banks) considered it likely, or very likely, that they would seek advances to rebuild or maintain at the desired level their cushion of central bank reserves, whilst 74% of banks considered use of the discount window to be very unlikely.

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16 The Fed - May 2023 Senior Financial Officer Survey Results (federalreserve.gov)

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