

Agnès Bénassy-Quéré: Banks' liquidity in volatile macroeconomic and market environments

Speech by Ms Agnès Bénassy-Quéré, Second Deputy Governor of the Bank of France, at the Joint conference by the Research Group of the Basel Committee on Banking Supervision, the Bank for International Settlements and the Centre for Economic Policy Research, Basel, 15-16 May 2024.

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[presentation](#) accompanying the speech

Introduction

I am very glad to be here today to share some thoughts on the very topical issue of banks' liquidity.

Let me start with a quote of Franklin Allen and Douglas Gale (2017, p. 25, Slide 2): "*With capital regulation there is a huge literature but little agreement on the optimal level of requirements. With liquidity regulation, we do not even know what to argue about.*" This quote highlights the elusive and undefined nature of bank liquidity.

Liquidity risk is inherent in the banks' business model due to the **maturity transformation** function of banks: banks' balance sheets are made of short-term resources on the liability side (on-sight deposits and short-term debt); and medium-to long-term assets on the asset side. Furthermore, resources are mostly liquid, whereas some assets (especially loans) are illiquid. Finally, asset liquidity may greatly vary over time.

As made clear in the seminal paper by Diamond and Dybvig (1983), the maturity mismatch may give rise to **multiple equilibria** and sudden transitions from tranquil times to bank runs. Hence the crucial role of liquidity requirements, deposit insurance and the lender of last resort. And more generally, of all micro- and macro-prudential regulations, and financial safety nets that contribute to the confidence of depositors and creditors.

The **2007/2008 liquidity crisis** was a brutal wake-up call. The regulatory response was the introduction of internationally-agreed liquidity ratios (liquidity coverage ratio – LCR; and net stable funding ratio - NSFR). These regulations were recently tested in an environment of monetary policy tightening.

Another lesson from the global financial crisis was that **market liquidity and funding liquidity reinforce each other** (Brunnermeier and Pedersen, *Review of Financial Studies* 2009). Regulators need to take this interaction into account.

Against the risk of liquidity crises, we have made the financial system more resilient. But new vulnerabilities and transmission channels have appeared in recent years, as exemplified by two crises:

- The "**mini-budget crisis**" in the UK in 2022: a sell-off of sovereign bonds by British pension funds who suddenly had to find cash to pay for margin calls on their derivatives positions in 2022, after the rise in interest rates had reduced the value of their positions.
- The **SVB** crisis in March-April 2023. The origin of the SVB crisis was a combination of (i) large, concentrated, uninsured deposits, (ii) unrealized losses, and (iii) deficient risk management and supervision in a smaller bank, not covered by Basel 3 regulations (Jiang et al. 2023). With social media providing a new channel to quickly propagate rumors (Cookson et al. 2023).

Today I would like to discuss 3 closely intertwined issues (Slide 3):

- The case for a macroprudential approach to liquidity;
- Banks' excess reserves at the central bank;
- Implications of retail central bank digital currencies.

1. The case for a macroprudential approach to liquidity (Slide 4)

The introduction of Basel 3 liquidity ratios and central clearing requirements have clearly strengthened the resilience of individual financial institutions to liquidity risks. Here I would like to focus on a few unintended consequences at the systemic level (Slide 5).

1. During crisis periods, **banks have proved reluctant to drawdown their liquidity buffers, even when supervisors encouraged them to do so, in a measured way** (which happened during the Covid crisis, see Basel Committee, June 2020). The problem is that liquidity hoarding in each individual bank spills over the other banks.
2. **Ringfencing practices (or trapped liquidity)** limit the availability of liquidity in other parts of a group, as pointed out in the December 2023 FINMA report on Credit Suisse crisis. Basel rules allow to consolidate excess liquidity of the different entities of a group. This feature however relies on a proper calibration of the LCR in each entity of the group. Within the EU, progress can also be made to facilitate the reallocation of liquidity within banking groups.
3. The aggregate balance sheet of **Non-Bank Financial Institutions (NBFIs)** today is about as large as that of banks, globally. Yet, liquidity requirements for NBFIs are still in the infancy, while NBFIs do not have direct access to the lender of last resort. So there is a risk that illiquid assets migrate from banks to non-banks such as real-estate funds, while these funds would be relying on credit lines from the banks in case they need liquidity (Acharya et al. 2024). Fire sales are also a powerful channel of spillover (these are pecuniary externalities). Vice-versa, money market funds are an important source of funding for banks.
4. In stress periods, banks may face a **trade-off between deleveraging and providing liquidity to the market**. For instance, a bank that holds excess reserves at the central bank will increase its leverage ratio if it provides that liquidity to another bank or to a non-bank through a repo operation. And this, at the very moment when money market funds (for instance) tend to withdraw

liquidity from the market, because of actual needs or in order to build up reserves. Deleveraging dynamics may then call for the central bank to step in and provide liquidity in last resort.

5. With the central clearing requirements for derivatives, regulators have addressed counterparty risk. However, **margin calls** in cleared markets necessitate liquidity risk management, as shown recently in the case of British pension funds, or in European energy markets. As pointed out by ESRB (2017) and modelled by Aramonte et al. (2022), procyclical margin calls on derivative markets, and procyclical haircuts on repo markets, tend to amplify leveraging and deleveraging cycles. For instance, spikes in margins will simultaneously trigger dash-for-cash and deleveraging.

These factors make a case for a macroprudential approach to liquidity regulation and management (Slide 6). Let me illustrate with 2 examples:

1. Central counterparties (CCPs) apply **margins and haircuts** in a time-varying, pre-emptive and risk-based approach with respect to its participant's credit exposures and with respect to market conditions. According to the international Principles for Financial Market Infrastructures, a CCP should address procyclicality in its margin framework. Therefore a CCP should adopt forward looking and conservative margin requirements. For example, it may use margin "add-ons" on top of baseline (or minimum) margin levels. BCBS, CPMI and IOSCO have recently published a joint consultative report on transparency and responsiveness, aiming at increasing the disclosure by CCPs of their **anti-procyclicality tools**. The European regulation on market infrastructures (EMIR) went a step further by imposing the use of at least one anti procyclical tool to reduce margin calls spikes in time of stress. Regarding the recent market stress, such tools have proven to be efficient.
As a complement, and beyond the European approach, the Financial Stability Board has published recommendations for enhancing the liquidity preparedness of market participants regarding margin calls (FSB, 2024).
2. Concerning **investment funds**, there is a case for giving macroprudential authorities the ability to activate liquidity management tools (LMTs), such as redemption gates or fees, swing pricing or anti-dilution levies, in exceptional times and for a limited period, to specific groups of funds. Today, fund managers are responsible for the activation of LMTs. But they are unable, by definition, to internalize the externalities they produce. Worse, they may be reluctant to activate their LMTs in fear of a stigma effect. Of course, such macroprudential activation should be closely designed in order not to send a disturbing signal to the market at the wrong time. It should be coordinated at least at regional level.

The usual objection to a macroprudential approach to liquidity risk is **moral hazard**: with macro-prudential action, individual investors and institutions would reduce their risk awareness. This objection is weak: the flipside of a macroprudential approach would be reduced reliance on monetary and supervisory intervention once the crisis unfolds.

Further research in this area would be extremely welcome. For example, an independent assessment of the haircut floors now implemented for non-centrally

cleared securities financing transactions; or research on the interaction between various liquidity requirements, notably, minimum and time-varying margins, haircuts, and the amount of liquid, high-quality assets used by banks to fulfil their LCR requirements. Research on the design and effectiveness of LMTs is also a promising area (see; e.g., Baena and Garcia, 2023).

2. Banks' excess reserves at the central bank (Slide 7)

The liquidity created by central banks since the global financial crisis has helped banks to fulfil the liquidity requirements introduced by Basel 3 (Slide 8).

- **In the euro area**, the excess reserves held by the banks in the Eurosystem represented 65 percent of High Quality Liquid Assets (HQLA) taken into account for the calculation of the Liquidity Coverage Ratio (LCR) in December 2023. Sovereign securities only accounted for 30 percent.
- In a sense, **central banks have *de facto* provided the banks with the liquid assets that were required by the supervisors**. This mechanism especially holds for banks with lower LCRs relative to their peers (Kedan and Ventula Veghazy, 2021).
- While central banks are progressively reversing course, their balance sheets may need **to remain larger than they were prior to the financial crisis** and the associated introduction of new liquidity regulation.

As a matter of facts, the operational framework of central banks is not reversing to where it was prior to the global financial crisis (Slide 9).

- Several central banks (ECB, Fed, Bank of England) have decided to keep **ample reserves and a floor system rather than a corridor system**. This choice entails potential tradeoffs. On the one hand, an extra-buffer of reserves alleviates upward pressure on short-term interest rates in case of liquidity shocks. On the other hand, ample reserves lowers the need for an active management of liquidity: it reduces banks' competition for reserves in wholesale funding markets to meet precautionary or regulatory motives. Activity in the money market is disincentivized.
- Ultimately, the question arises of the **optimal composition of High Quality Liquid Assets**, i.e. the balance between reserves at the central bank and high quality securities. The ECB recently confirmed its broad collateral framework to avoid situations of impairment of market functioning, and situations in which collateral would become too scarce due to the central bank's market footprint.

A parallel issue is the provision of reserves to NBFIs in time of stress (Slide 10). Several approaches can be considered:

- **Ex ante: a macroprudential liquidity policy for investment funds** as previously mentioned. In addition to adequate buffer requirements, this could involve the adoption of liquidity management tools (LMTs) that could be activated

by the authorities. Establishing a macroprudential approach ex ante could reduce the need for monetary authorities or supervisors to intervene on a large scale once the crisis hits.

- **Ex post: some central banks, such as Canada or the United Kingdom,** consider it essential to provide liquidity to some segment of NBFIs in times of stress.
- During the pandemic, Canada introduced a repurchase agreement facility offering funding for a term up to one month against securities issued or guaranteed by the Government of Canada. This Contingent Term Repo Facility was open to market participants with significant activity in the Canadian dollar fixed income or money markets, and subject to financial regulation. This instrument was meant temporary, and it is no longer available today.
- The **Bank of England** also indicated in September 2023 its intention to create a lending facility for NBFIs. In March 2024, the main features of the facility were announced as contingent, not permanent, and as a first step available only for regulated pension funds and insurance companies, to avoid moral hazard.
- If such a facility is deemed necessary in addition to macroprudential regulation, it needs **to be designed in such a way that NBFIs are incentivized to improve their risk management**, first and foremost by properly designing the collateral accepted as well as the pricing and haircuts to be applied.
- Ultimately, **a combination of ex ante and ex post approaches** could emerge in the coming years.

3. Implications of retail central bank digital currencies for bank's liquidity (Slide 11)

There are 3 main objectives for the launch of a central bank digital currency (Slide 12):

- To preserve the anchoring role of central bank currency despite the declining use of banknotes;
- To provide households and non-financial companies with a secured and anonymous payment system while preserving financial stability.
- In emerging economies and in low-income countries, there is an additional objective of financial inclusion, as households and firms may use central bank digital currencies (CBDCs) even without having a bank account.

The anchoring role of a retail CBDC is debated: what is the purpose of a CBDC when we already have private digital payment schemes?

- It is useful here to cite **James Tobin** (1985, Slide 13): "*The idea of a disembodied fiat unit of account, with embodiments of it freely and competitively supplied by private agents, seems to me to be a fairy tale*" (p. 22). He goes on explaining that the dollar should not be confused with the yard. The yard is defined but not supplied by the government. The dollar is a promise, hence its value may differ depending on who issues it, unless a central bank is prepared to exchange it a fixed rate against a banknote. The monetary history of the United States in the 19th century illustrates this point quite nicely (Gorton, 1996).

- **Absent banknotes**, the central bank would need to provide this anchor in another way. Hence the retail central bank digital currency, which would allow households to hold small accounts with the central bank.

But then comes the question of the impact of retail CBDCs on bank deposits, hence on bank stability, also hotly debated (Slide 14).

The worry of the banks is twofold: (i) a permanent reduction in deposits, reducing their intermediation capacity (Fernandez-Villaverde et al, 2021; Tenner et al. 2023), and/or (ii) higher risks of bank runs in crisis times due to high substitutability of deposits with CBDC (Kumhof and Noone 2018, European Banking Federation 2021, Angeloni 2023).

- **The first risk (reduced deposits) can be mitigated** by holding limits, zero remuneration, waterfalls (automatic transfers from CBDC to linked bank accounts, when ceiling is reached) and reverse waterfalls (i.e. automatic transfers from linked bank deposits to CBDC accounts, when needed). At the limit, there could be no need to hold a positive cash balance on CBDC accounts (and this is what is envisaged in the euro area for corporations). Like banknotes, retail CBDC will be a means of payment rather than a store of value (Caccia, Tapking and Vlassopoulos, ECB 2024). But unlike for banknotes, there will be holding limits. Hence it is far from granted that household will hold more CBDC balances tomorrow than they held banknotes yesterday.
- **The second risk (volatile deposits) can also be mitigated by CBDC holdings limits** (Bindseil 2020; Cipollone, 2024). As I said, there is currently no holding limit for banknotes, which in theory involves larger potential for a bank run. In fact, recent bank liquidity crises were driven by large, unsecured depositors runs (SVB), or wholesale market freeze (2008 crisis), or money market outflows (Credit Suisse), rather than by small depositors (see, e.g., Jiang et al. 2023). As a matter of facts, retail customers can already transfer deposits from a bank to another bank, sometimes in real time, or invest in a money market fund or government bonds, without limit.
- Even during severe banking crises, many banks are considered safe (mainly because central banks act as system-wide lenders of last resort). For example, during the great financial crisis, but also during the recent US regional banking crisis, large banks benefited from capital inflows (Caglio et al. 2023; Carletti et al. 2024). The same dynamic occurred during the 1930s crisis in France (Baubeau et al. 2021).

The risks for bank deposits could in fact be reduced with CBDCs (Slide 15):

- New players such as stablecoins, e-money institutions and other narrow banking constructs, some sponsored by BigTech companies with huge customer bases, do not care about banks and their role in the economy and pose a greater risk to bank funding than CBDCs. Non-bank entities have no incentive to restrict the use of their stablecoins or the services they offer (Panetta 2023), and the use of stablecoins could become significant.

- **By linking CBDCs with bank deposits** (especially with reverse waterfalls), central banks will offer retail banks the possibility to retain their deposits by offering new services to their customers. In emerging economies and low-income countries, CBDCs will also substitute for banknotes for households and firms that do not have a bank account (hence they will be neutral for deposits).

The conclusion is twofold:

- **Compared to the "good old times" of bank deposits and banknotes**, the impact of CBDCs appears unclear and probably limited if appropriate safeguards are put in place.
- **Compared to a new world of bank deposits and private digital currencies**, CBDCs are likely to be stabilizing, if linked to bank deposits with appropriate holding limits, and with additional digital services provided by the bank.

Let me briefly conclude (Slide 16). I have covered three topics raised by recent and future evolutions of the liquidity ecosystem: (i) the rise of new institutions (NBFIs), (ii) the existence of excess reserves in the banks, and (iii) the prospects for retail CBDCs. These are likely to be three permanent changes. They require adjustments from commercial banks, central banks, regulators and supervisors. Research is especially useful to guide policy-makers in this new territory.

In a nutshell: **new financial liquidity requires-new financial plumbing.**

Thank you for your attention.

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