

LCR & NSFR

Capital is not enough.

A bank can still fail overnight.

BANKING METRIC SERIES

#1 Basel Accords

#2 Capital

#3 RWA

#4 Capital Ratio

→ #5 LCR

→ #5 NSFR

#6 ECL

Why Capital Ratios Are Not Enough

A strong CET1 ratio signals the bank can absorb unexpected losses.

Solvency is a static snapshot: it tells you nothing about timing.

SIMPLIFIED BANK BALANCE SHEET — the maturity mismatch

ASSETS (mature LATER)

■ Mortgages	25 years	100
■ Corporate loans	5 years	50
■ Govt bonds	2–10 years	20

LIABILITIES (mature NOW)

■ Demand deposits	1 day	60
■ Overnight repo	1 day	40
■ CP / short bonds	< 6 months	20

Banks borrow short and lend long: this is their core function.

A 25-year mortgage asset funded by overnight deposit liability is a problem: If depositors withdraw and markets freeze, the bank cannot liquidate assets to give the money back to the client.

The SVB case · March 2023

Silicon Valley Bank had a CET1 ratio of ~15% well above requirements. It failed because \$42bn in deposits liability were withdrawn in a single day. The bank held long-dated bonds as an asset but it could not sell without realising large losses. A liquidity crisis, not a solvency crisis.

A liquidity crisis on a balance sheet that still looked solvent. Basel III had introduced LCR and NSFR exactly to close this gap: liquid in the short run, structurally funded in the long run.

**Liquidity Coverage
Ratio (LCR)**

**Net Stable Funding
Ratio (NSFR)**

KEY TAKEAWAY

Capital tells if a bank can absorb losses. LCR and NSFR tell when it can meet its obligations. Both are necessary.

Liquidity Coverage Ratio (LCR) – 30 days

Does the bank hold enough liquid assets to survive a 30-day market stress scenario?

LCR FORMULA

High Quality Liquid Assets

Net Cash Outflows (30 days)

$\geq 100\%$

UniCredit Q4 2024: ~131%

Source: Pillar 3 Report Q4 2025

What is HQLA?

Assets that can be sold for cash in one day with little loss.

Level 1

Cash, central bank reserves, sovereign bonds. No haircut, no cap.

Level 2A (15% haircut)

High-rated bonds, agency bonds. Banks need to liquidate fast, hence the market price can be lower.

Level 2B

Corporate bonds. Larger haircut.

What are Net Cash Outflows?

Stressed outflows (clients withdraw their money) over 30 days minus inflows (clients paying to the bank the mortgage installment);

- Retail deposits: 3–10% outflows
- Wholesale deposits (operational): 25% outflows
- Unsecured wholesale: 40–100% outflows
- Inflows is capped at 75% of outflows (conservative floor)

KEY TAKEAWAY

LCR is the short-term test. A bank could pass LCR today and still face a structural funding crisis in six months. This is why NSFR exists.

Net Stable Funding Ratio (NSFR)

Does the bank fund its long-term assets with stable, long-term liabilities? NSFR forces stable liabilities (equity, long-term bonds, sticky deposits) to back long-term assets.

NSFR FORMULA

Available Stable Funding

Required Stable Funding

$\geq 100\%$

UniCredit Q4 2024: ~131%

Source: Pillar 3 Report Q4 2025

Available Stable Funding (ASF)

Liabilities and capital weighted by their stability over 12 months. Higher weight = more likelihood to be there after 12 months.

Equity: 100%. Stable retail: 95%. Long wholesale: 100%. Short wholesale: 0–50%.

Required Stable Funding (RSF)

Assets weighted by how much stable funding they need. Higher weight = less liquid, more difficult to convert in cash soon.

Cash: 0%. L1 HQLA: 5%.

Retail mortgages: 65%. Corp loans (>1y): 65–85%.

The mortgage intuition

A 30-year mortgage of €100,000 will see the money back slowly, over 30 years. It cannot be funded with a 5-year wholesale bond: when the bond expires, the market may be closed, the bond cannot be rolled, and the bank is stuck.

This is Episode 5 of the Banking Metrics Series.

Each episode takes one key metric, breaks it down from principles, and illustrates it with real data.