# International Treasury Forum 2018

# Liquidity Buffer Management

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Райффайзен БАНК

Difference
in attitude

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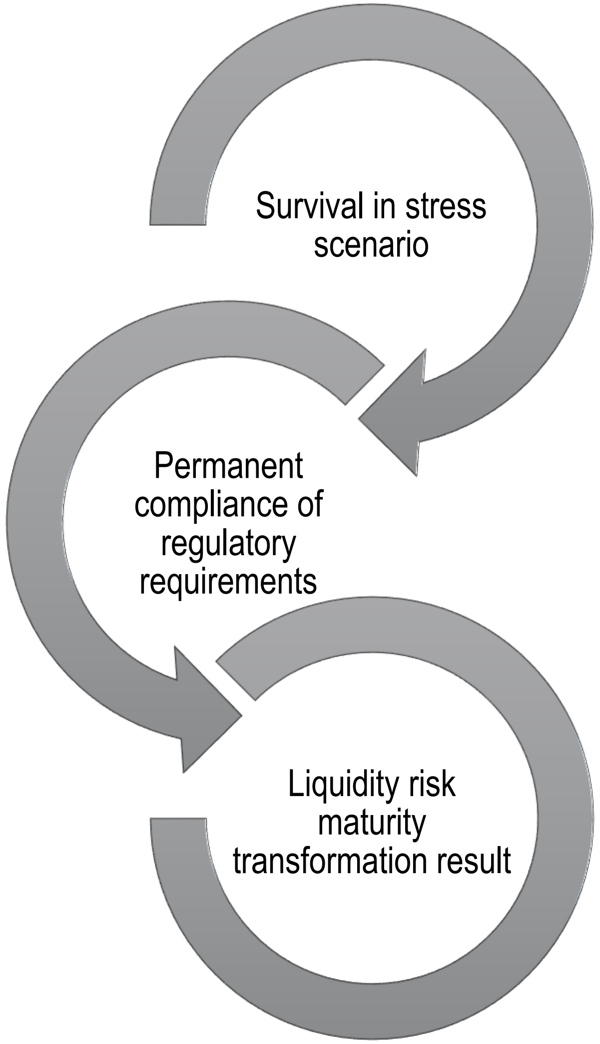
# Why Liquidity Buffer Management is (still) relevant?


Source: https://www.bankingsupervision.europa.eu/about/ssmexplained/html/srep.en.html

EBA guidelines on ICAAP and ILAAP, effective since 01.01.2017 and enforced via SREP (“Pillar 2”)

# Why Liquidity Buffer Management is (still) relevant?



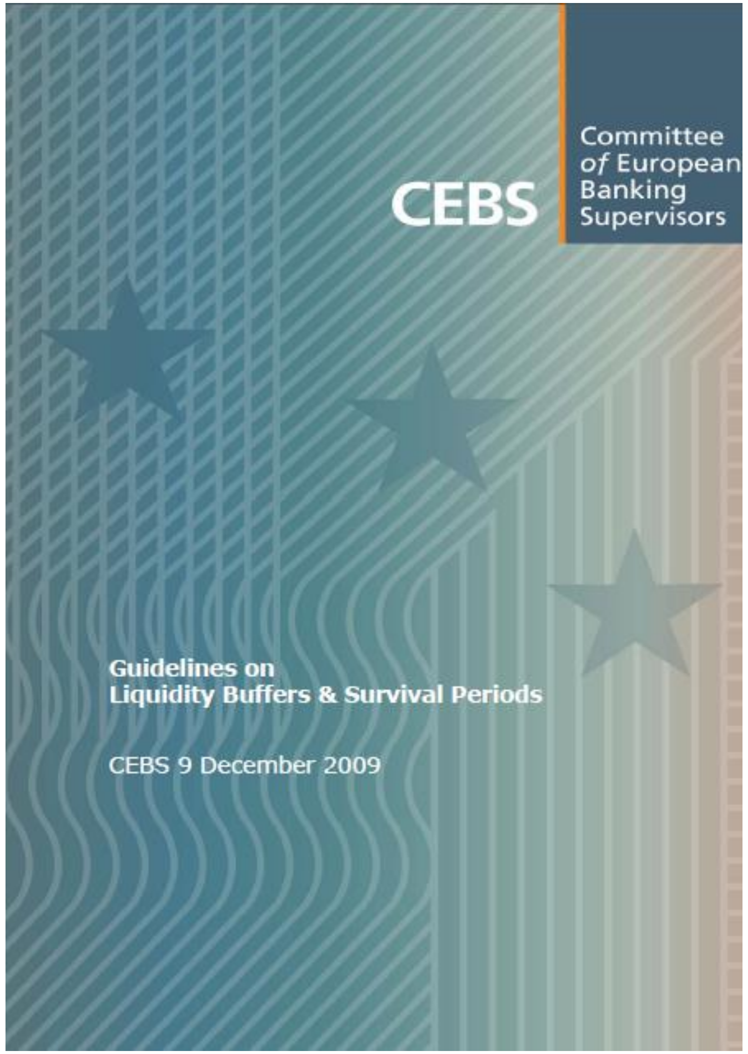

**ILAAP**

- Funding strategy
- Liquidity buffers and collateral management
- Cost benefit allocation
- Intraday liquidity risk management
- Stress Testing
- LCP

FTP ~ Does the bank have surplus liquidity?

# What is the Liquidity Buffer?

- Short end of the counterbalancing capacity
- Kept for times of stress (idiosyncratic, market specific, combination)
- When an institution has an urgent need to raise liquidity within a short timeframe
- When normal funding sources are no longer available (in the required amount)
- Enables the institution to weather liquidity stress during its defined survival period without requiring adjustments to its business model



# EBA Guidelines – old but (still) relevant under ILAAP

1. A liquidity buffer represents available liquidity, covering the **additional need for liquidity** that may arise over a defined short period of time under stress conditions

2. Institutions should apply **three types of stress scenarios**: idiosyncratic, market specific, and a combination of the two. The core of the idiosyncratic stress should assume **no rollover of unsecured wholesale funding and some outflows of retail deposits**. The market-wide stress should assume a **decline in the liquidity value of some assets and deterioration in funding-market conditions**.

3. A **survival period of at least one month** should be applied to determine the overall size of the liquidity buffer under the chosen stress scenarios. Within this period, a shorter time horizon of at least one week should also be considered to reflect the **need for a higher degree of confidence over the very short term**.

Source https://www.eba.europa.eu/documents/10180/16094/Guidelines-on-Liquidity-Buffers.pdf

# EBA Guidelines – old but (still) relevant under ILAAP

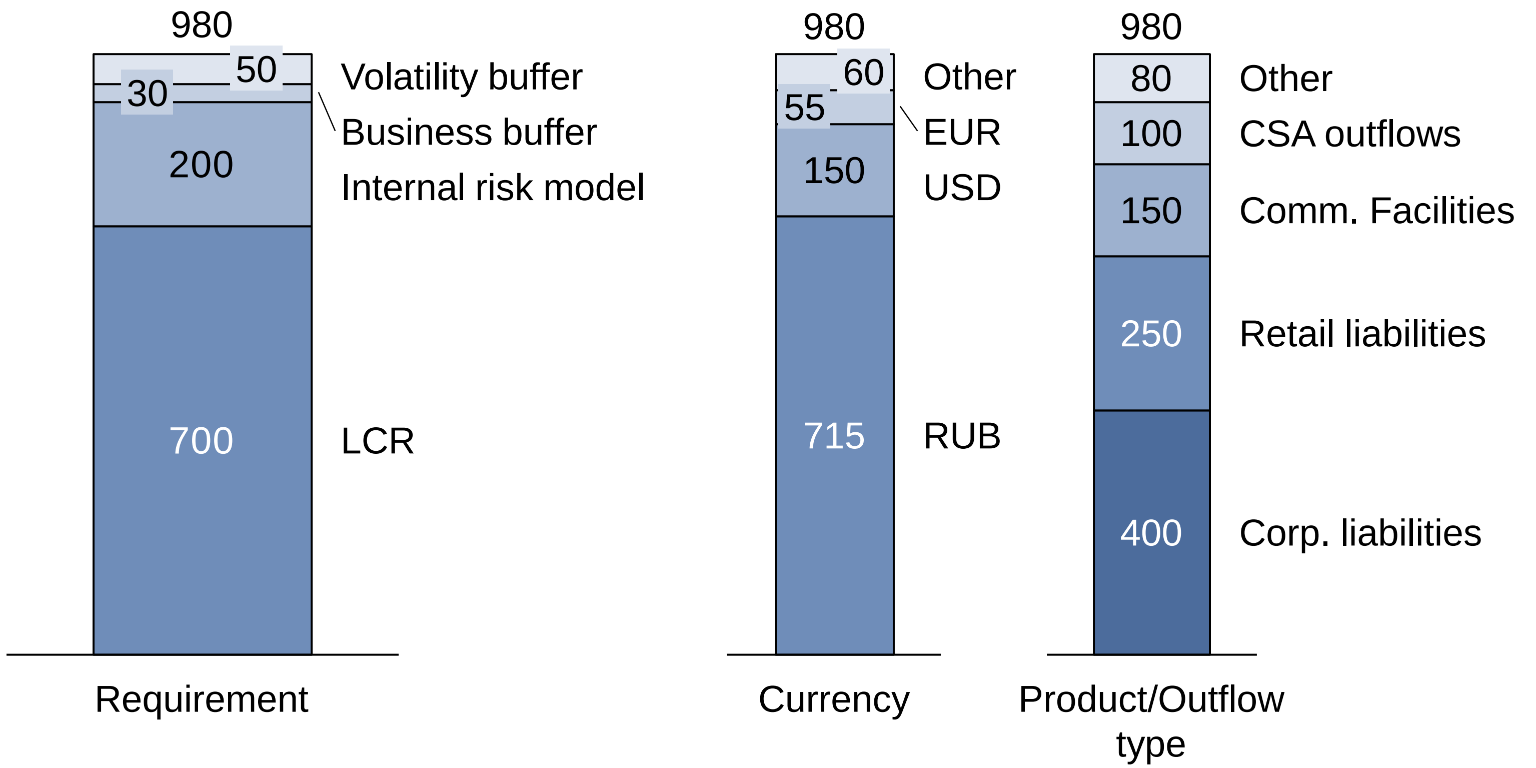
4 The liquidity buffer should be composed of cash and core assets that are **both central bank eligible and highly liquid in private markets**. For the longer end of the buffer, a broader set of liquid assets might be appropriate, subject to the bank demonstrating the ability to generate liquidity from them under stress within the specified period of time.

5 Credit institutions need to manage their stocks of liquid assets to ensure, to the maximum extent possible, that they will be available in times of stress. They should **avoid holding large concentrations** of particular assets, and there should be **no legal, regulatory, or operational impediments to using these assets**.

6 The location and size of liquidity buffers within a banking group should **adequately reflect the structure and activities** of the group in order to minimize the effects of possible legal, regulatory or operational impediments to using the assets in the buffer.

Source https://www.eba.europa.eu/documents/10180/16094/Guidelines-on-Liquidity-Buffers.pdf

# How much do you really need and what for?



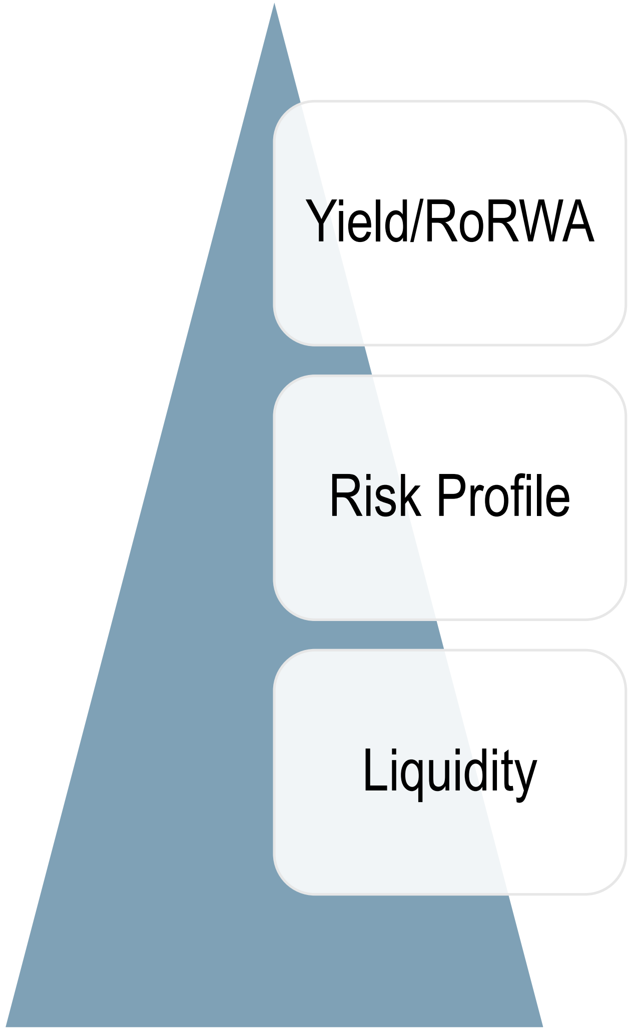

| | |
|---|---|
| Volatility Buffer | As LCR etc are based on static balance sheet observations, it may make sense to include a cushion for typical balance sheet volatility. Drivers: trading book (depending on FTP approach), short term assets & liabilities origination, concentration in depositor base etc |
| Business Buffer | To have stability in planning and business development, it may make sense to account for your budgeted balance sheet development. Eg 10% growth of customer loans within next 3-6 months. How much of it will be reflected in the t0 buffer will depend on the business model and risk appetite |

For SIFIs, typically the liquidity buffer size is determined by required liquidity to cover stress induced outflows. Therefore the focus of this presentation is laid on this aspect.
Illustrative numbers for stylized 1 month survival period

# What is the right size and how to achieve it?

- The marginal benefits of holding liquidity buffer (resp. the defined hurdle rate) should exceed its marginal cost
- Given defined and approved risk appetite, the following items are typical candidates for review of liquidity buffer drivers
  - Review the deposit structure in the light of the overall business model and seek optimization potential ie operational stability and relationship accounts
  - Review if the loan facilities both committed and uncommitted are properly priced from an internal and external perspective
  - Review short term revolving facilities as no inflows are modeled
  - Review derivatives business and its impact on (modeled) CSA outflows
- Implement consistent internal pricing for all liquidity costs and benefits to enforce a self regulating mechanism

# Liquidity Buffer Allocation



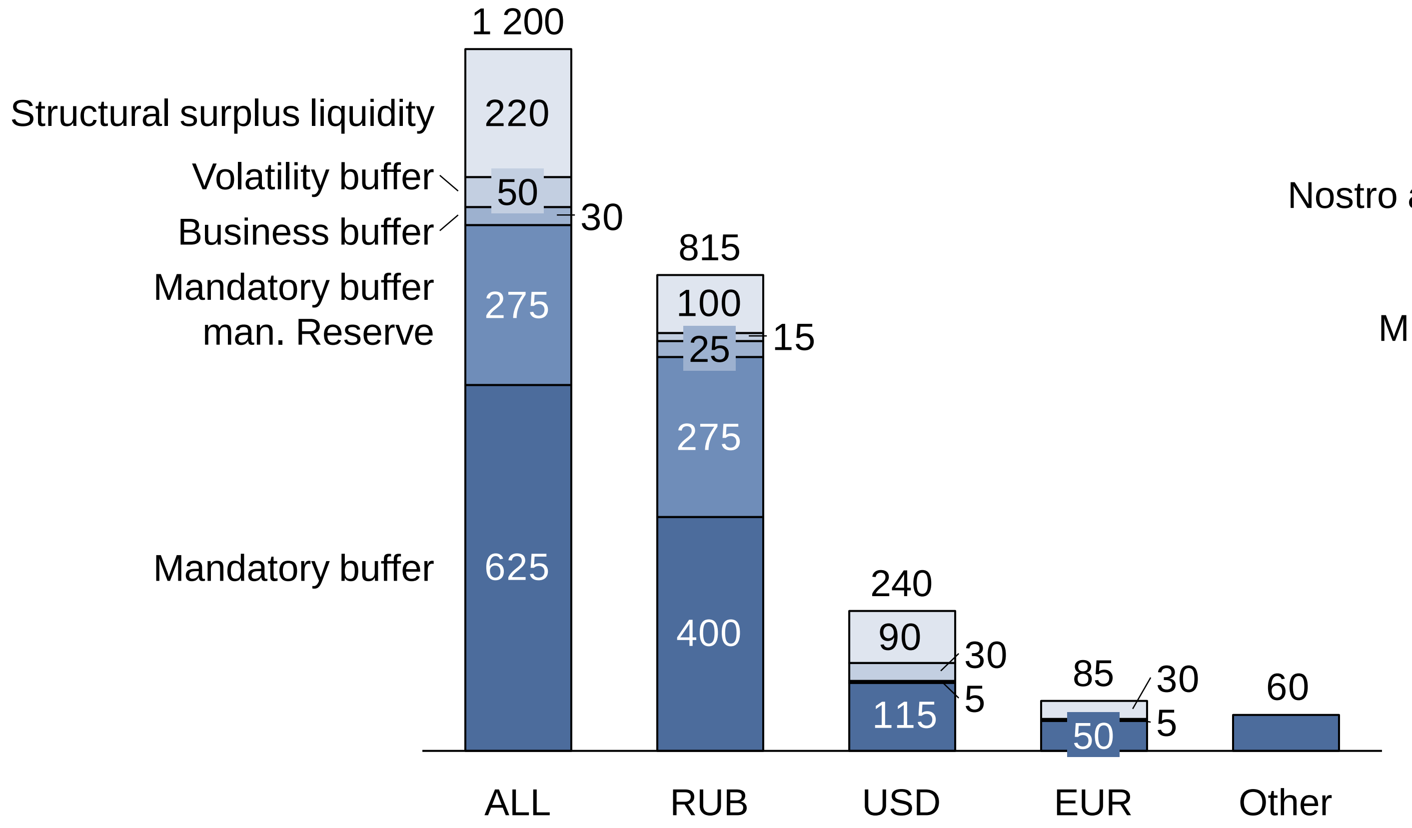

**Liquidity:** proven (tested) secondary market liquidity ie active, developed and recognized market or eligible for central bank operations

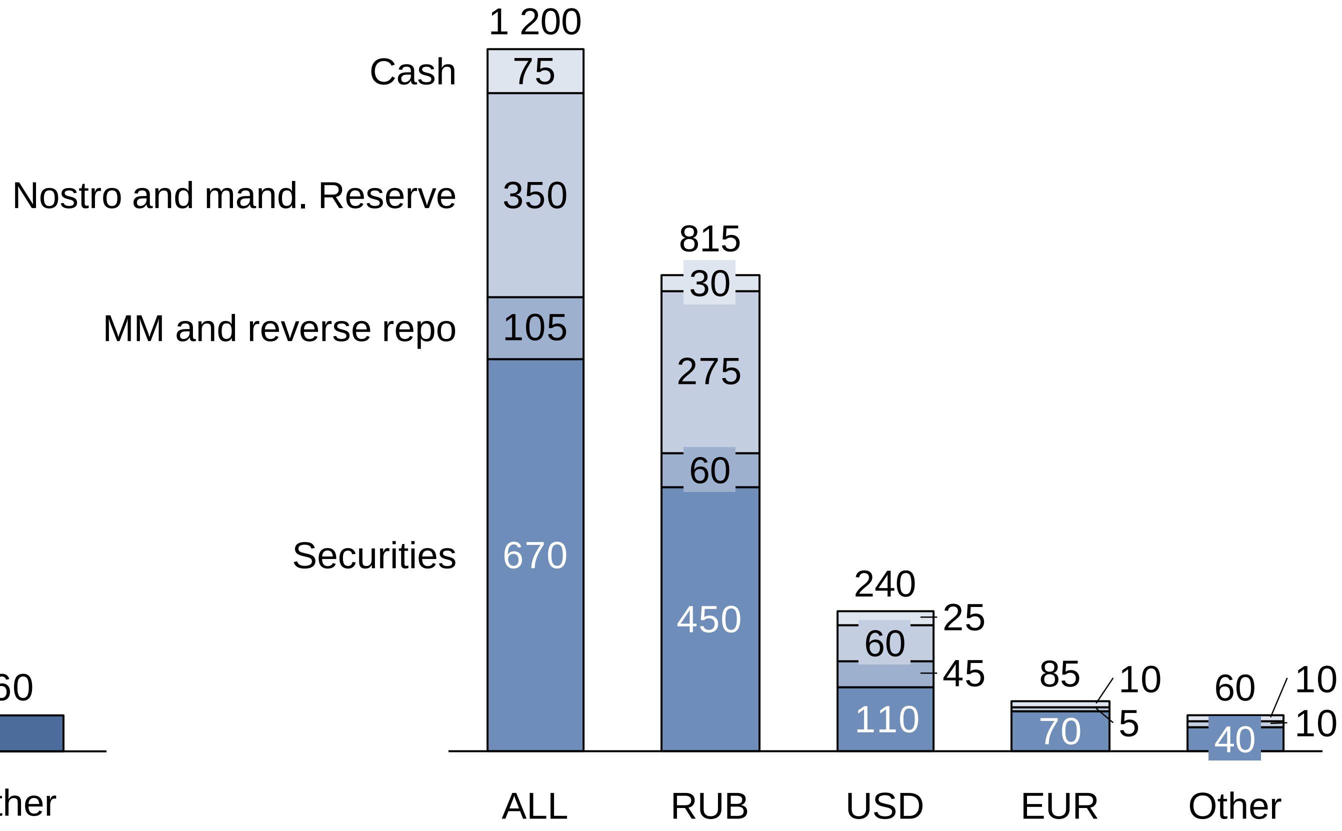
**Risk profile:** Typically liquidity buffers have low risk profile, both credit- and market risk, therefore exhibit low overall low price sensitivity and price volatility
Additionally concentration risk limits should be established and observed

**Yield/RoRWA:** While absolute yield is not in the focus for liquidity buffer management (it is high liquidity and low risk), yield shall be maximized given a certain chosen risk profile.

The above and the targeted split of the liquidity buffer among asset classes (products, industries, issuers), currencies, accounting categories ultimately forms the **strategic asset allocation for the liquidity buffer.**

# Breakdown by Type, Product and Currency

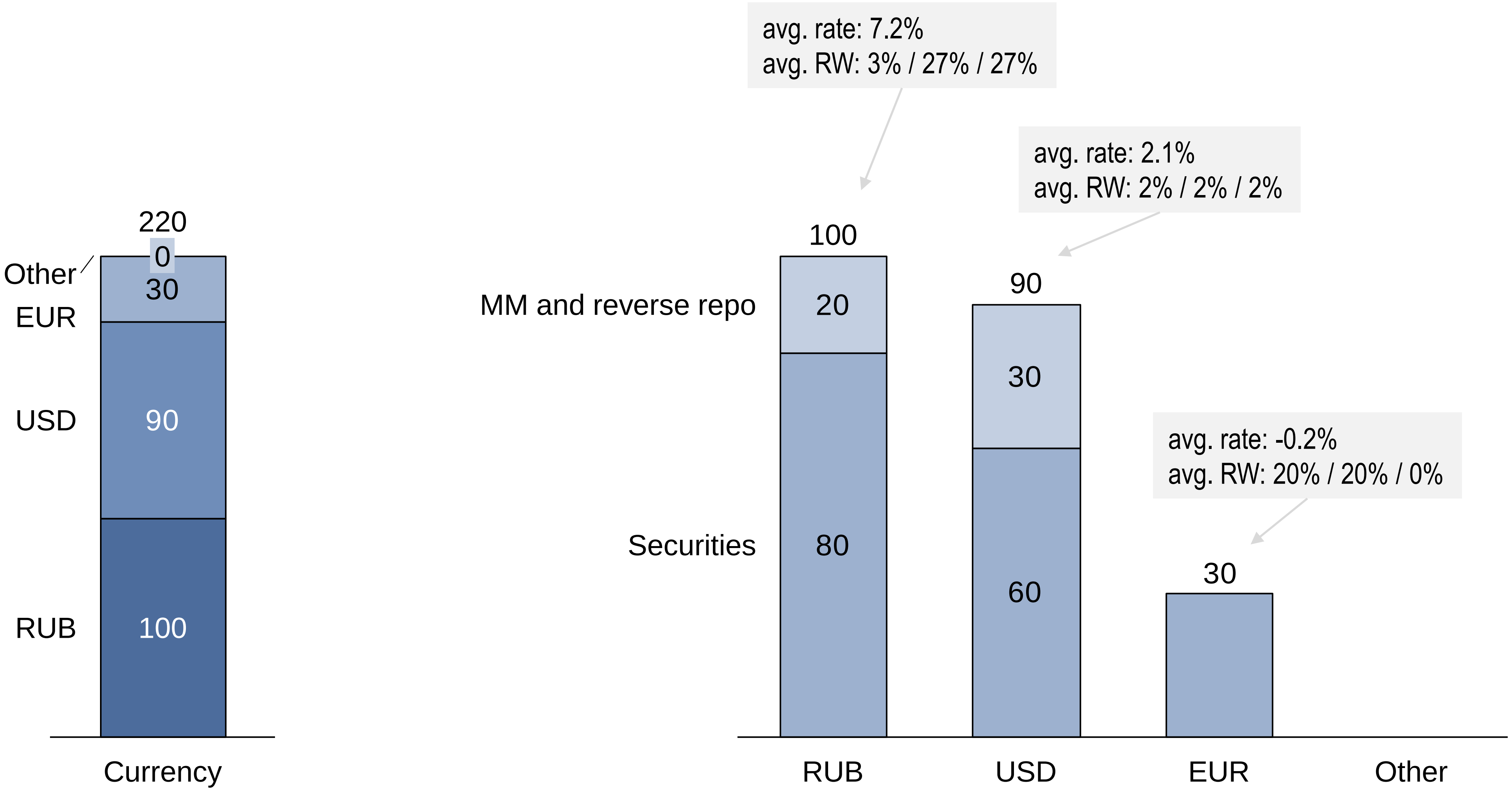


# Liquidity Buffer Asset Allocation

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | |
| 4 | | Surplus Liq. [% of Tr.Assets] | | | | | | | | | | | | | | | | | | |
| 5 | | Surplus Liq. [in mn EUR] | | | | | | | | | | | | | | | | | | |
| 6 | | - thereof costly | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | |
| 8 | | | **Central** | | **Sovereigns** | | **Supras /** | | **Financial** | | **Non-bank** | **Corporate** | Derivatives for | | | | | **Targeted** | | |
| 9 | | | **Bank** | | | | **Agencies** | | **Institutions** | | **FIs / Muni** | | | | | | | | | |
| 10 | | | | 0 - 3Y | 3 - 5Y | +5Y | | 0 - 1Y | 1 - 3Y | +3Y | | | ALM | IRRBB | | | | **ASW** | **TtM** | |
| 11 | | **Volatility (VB)** | | | | | | | | | | | | | | | | | | |
| 12 | | - Products | | | | | | | | | | | | | | | | | | |
| 13 | | - Currency (LCY, MFC) | | | | | | | | | | | | | | | | | | |
| 14 | | **Business (BB)** | | | | | | | | | | | | | | | | | | |
| 15 | | - Products | | | | | | | | | | | | | | | | | | |
| 16 | | - Currency (LCY, MFC) | | | | | | | | | | | | | | | | | | |
| 17 | | **Mandatory (MB)** | | | | | | | | | | | | | | | | | | |
| 18 | | - Products | | | | | | | | | | | | | | | | | | |
| 19 | | - Currency (LCY, MFC) | | | | | | | | | | | | | | | | | | |
| 20 | | **Total MLB** | | | | | | | | | | | | | | | | | | |
| 21 | | **Treasury Assets** | | | | | | | | | | | | | | | | | | |
| 22 | | - thereof In-Border | | | | | | | | | | | | | | | | | | |
| 23 | | - thereof Cross-Border | | | | | | | | | | | | | | | | | | |
| 24 | | - thereof CM un. T Control | | | | | | | | | | | | | | | | | | |
| 25 | | Current - ASW | | | | | | | | | | | | | | | | | | |
| 26 | | - Time to M. | | | | | | | | | | | | | | | | | | |
| 27 | | - Credit S. BPV | | | | | | | | | | | | | | | | | | |
| 28 | | **Targeted - ASW** | | | | | | | | | | | | | | | | | | |
| 29 | | **- Time to M.** | | | | | | | | | | | | | | | | | | |
| 30 | | **- Credit S. BPV** | | | | | | | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | | | | | | | | | |

# Breakdown of Surplus Liquidity



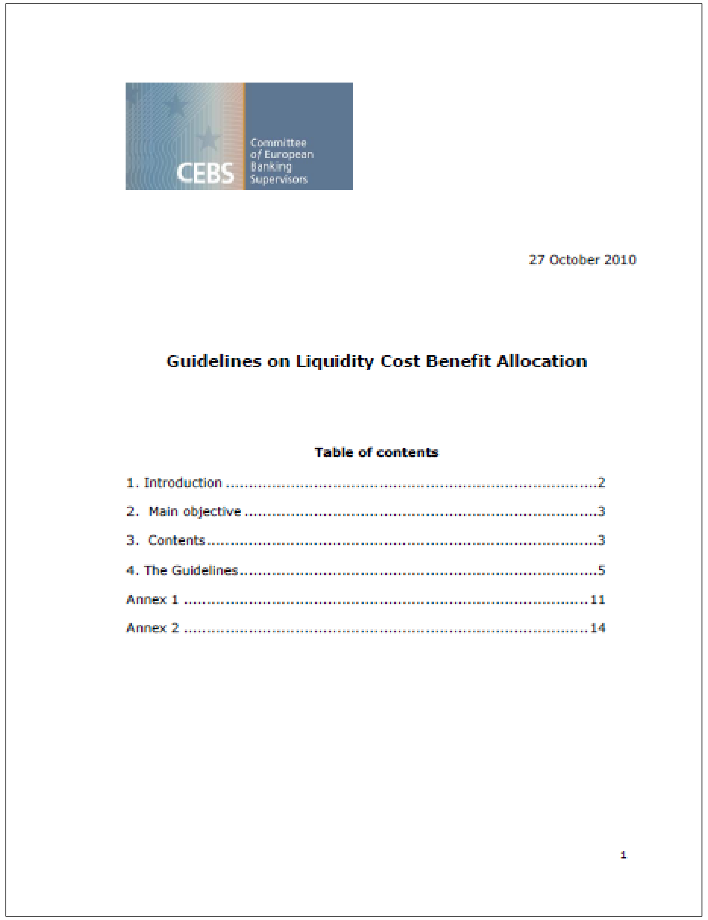
# Allocation of Stress Buffer Cost (SBC)

Since EBA 2010 Guidelines on liquidity cost and benefit allocation, institutions under EBA supervision are r**equired to have adequate allocation mechanisms** of liquidity cost, benefits and risk in place.

Usually running a liquidity buffer comes at a cost for the bank. Therefore, in order to achieve **proper bank steering** and **risk-adjusted performance measurement of products and business lines**, liquidity buffer cost needs to be allocated by outflow drivers.

Major principles (based on a setup where Treasury has financial KPIs and risk based FTP is implemented):

- Strictest liquidity requirements shall be taken as a basis
- If partial outflows (eg current accounts) are already reflected in base FTP rules, only add. stress-based outflows shall be priced
- All on- and off-balance sheet products shall be covered
- Only the liquidity risk part within FTP is affected (if you price it off a clean OIS curve). Interest rate risk component not in scope.
- Stress buffer cost (liquidity buffer cost of carry) per product = stress induced buffer amount * (liquidity premium paid eg for deposits – liquidity cost earned on liquidity buffer)
- SBC should be priced against HQLA ie minimal credit risk
- Depending on Treasury operating model, also economic capital cost for credit spreads may need to be charged


CEBS
Committee of European Banking Supervisors

27 October 2010

Guidelines on Liquidity Cost Benefit Allocation

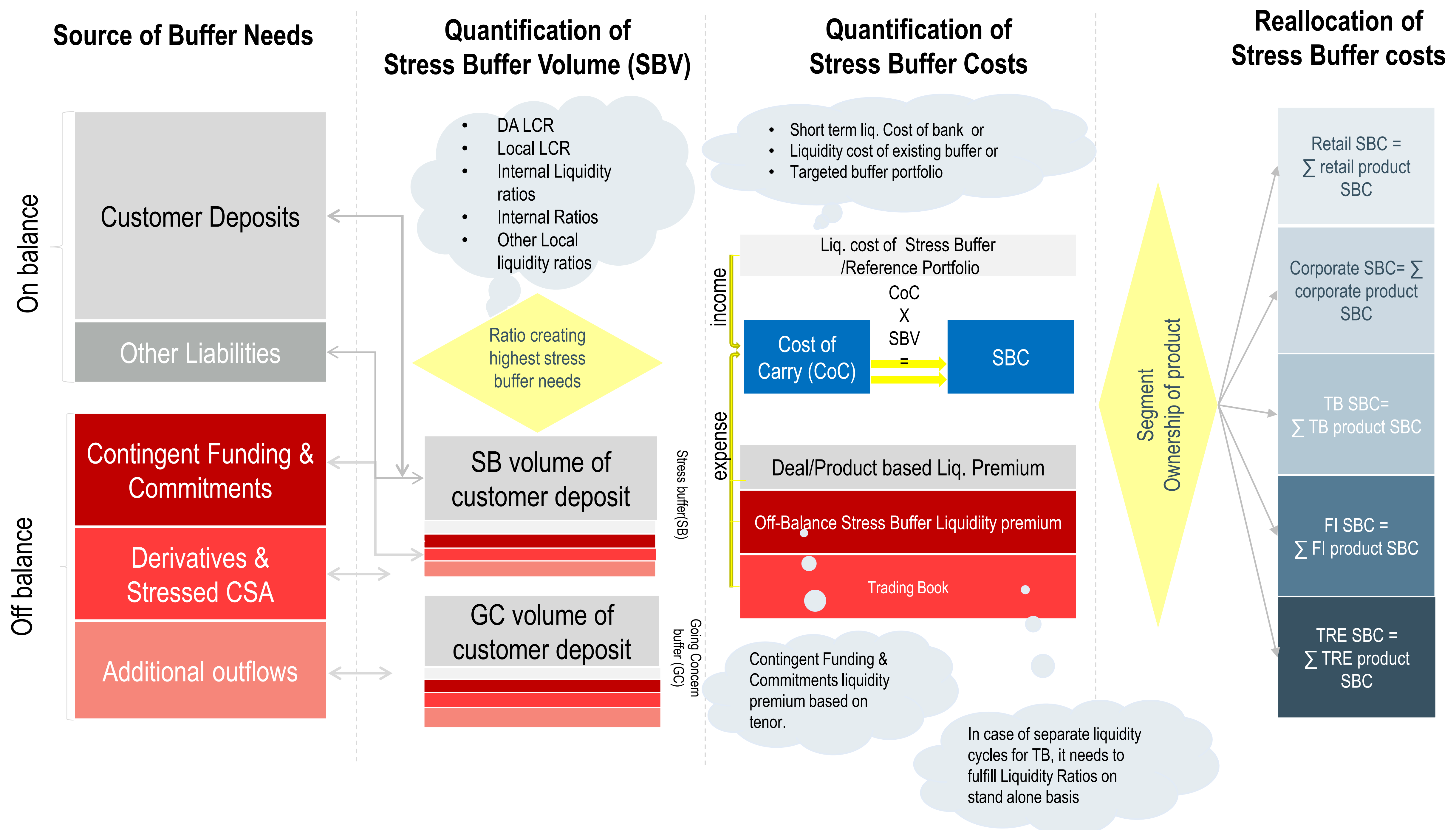
Table of contents



1

Source
https://www.eba.europa.eu/documents/10180/16094/cebs18_Guidelines.pdf

# Allocation of Stress Buffer Cost



# Allocation of Stress Buffer Cost

Example: USD Retail Current accounts (illustrative figures)

Product amount: 500 mn USD
Internal liability premium: 100 bps (average FTP out of eg. replicating portfolio model)

| Cumulative outflow | **1 day** | **1 week** | **1 month** | **2 months** | **3 months** |
|---|---|---|---|---|---|
| Internal risk model - going concern | 1.0% | 1.0% | 1.0% | 1.5% | 1.5% |
| Internal risk model - combined stress | 3.0% | 5.0% | 10.0% | 12.0% | 14.0% |
| LCR & NSFR | | | 7.5% | 7.5% | 7.5% |

| Liquidity buffer required | Most strict liquidity risk requirement |
|---|---|
| 1st month | 10% |
| 2nd and 3rd month | 4% |
| Total requirement | 14% |

| | |
|---|---|
| Delta between max. requirement and going concern | 12.5% |
| Liquidity buffer requirement in mn USD | 62.5 |

| | |
|---|---|
| Liquidity premium, bps | 100 |
| Liquidity cost earned from buffer | 10 |
| Cost of carry | -90 |

| | |
|---|---|
| Stress buffer cost, mn USD p.a. | -0.56 |

The same approach can be applied for all items that cause a liquidity buffer need

# Regulatory and operational Requirements

| Selected EBA requirements | Selected Operational requirements by CBR |
|---|---|

**Characteristics which indicate high liquidity value**

Market related liquidity factors

- Active and sizable market
- Presence of committed market makers
- Low market concentration

Fundamental characteristics

- Low credit and market risk
- Ease of valuation
- Low correlation with risky assets
- Listed on a developed and recognized market

**Delivering liquidity value**

- Maintaining an OTC market repo capability
- Regular turning-over of assets in the liquidity buffer
- Not holding a large proportion of the market

- Decision authority on operations with HQLA is with bank's department that manages liquidity risk (Treasury)
- Assets should be grouped in **separate portfolio** for liquidity management purposes. Assets which are not included into the separate portfolio for liquidity management can be included into HQLA upon condition that they can be sold or pledged by order of Treasury without violation of Bank's (risk) strategy.
- Securities included into HQLA have to be **market tradable and have market price**. Adequate **haircut** for 30d price decline need to be applied. Securities included into HQLA have to have low market, credit, FX risk.
- Price volatility, possibility of immediate sale or pledging of all kinds of assets included into HQLA have to be **estimated on regular basis**.
- HQLA assets needs to be **diversified** and bank needs to have HQLA portfolio management approach including relevant limits and respective compliance control

# Selected related Questions for discussion

- How to ensure sufficiently broad diversification in the HQLA part of the liquidity buffer taking into account the narrow HQLA definition and market liquidity in Russia?
- How much dependency to the central bank is acceptable for financial institutions, the central bank and the banking system?
- How to run liquidity buffers within international banking groups across multiple legal entities, jurisdictions, regulations, time-zones, transfer restrictions?
- How to ensure operational control of the liquidity buffer and is it in conflict with reduction of stress buffer cost?
- How to achieve Corporate deposits exhibiting “operational stability”?
- What is the right currency split for your liquidity buffer?

# Thank you

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