

# **Pricing Liquidity Support: A PLB for Switzerland**

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# Public Liquidity Support

## Key points

- Swiss PLB proposal, assessment
- UBS's benefit from TBTF status
- Monetary architecture

# Swiss Proposal

## Public liquidity backstop for SIBs

- ✓ Liquid assets, market refinancing options, regular SNB liquidity assistance **exhausted**
- ✓ **Solvency** ensured by restructuring plan (FINMA)
- ✓ Public interest, proportionality
  - ▷ **Discretionary** activation (input from FINMA, SNB)
    - Risk-based **fee** (2022, all SIBs, CHF 0.15bn)
    - **Charges**, bankruptcy priority, dividend restrictions ... ex post

## Simple framework

- Shareholders/management choose balance sheet
- Shock
- Central bank/treasury may provide liquidity support
- Bank internal (debt, equity), external payoffs

# Assessment

- Liquidity support **ex post**

Benefits general public, senior debt holders

Burden sharing of limited relevance for support

Why need a legal framework?

- Distortions **ex ante**

Support benefits shareholders ex ante (even if wiped out)

Shapes external-cost, corporate-governance externalities

These **externalities** (not fiscal costs) are main concern

## Assessment, cont.

- Liquidity support increases **TBTF subsidy** on senior debt
- Need for **corrective measures**

Comprehensive, ex ante, not piecemeal, ex post

- **Too big to save?**

USD, confederation solvency vs. inflation

# Implicit TBTF Subsidies on Senior Debt

Model-implied vs. measured **CDS** premium

$$c^* = \frac{1 - P}{P} (1 - R)$$
$$s^{\text{TBTF}} = c^* - \tilde{c}$$

Estimate for UBS, 2022

- **CreditGrades** model for distress probability  $1 - P(t)$   
**Merton (1974); Finkelstein et al. (2002)**
- Value of bank assets follows diffusion
- Government intervenes when losses have erased TLAC

# Results

- **Optimistic** scenario calibration
  - Highest TLAC, lowest volatility, highest recovery
- $s^{\text{TBTF}}(5) \approx 1.6\%$ , sensitive to volatility
- Total subsidy excl./incl. deposits: **USD 2.9bn/11.6bn**
  - UBS net profit USD 7.2bn
- Standard calibration yields higher subsidies

# Allenspach et al. (2021) estimates for all Swiss SIBs

Figure 3: CreditGrades: international comparison of TBTF advantage

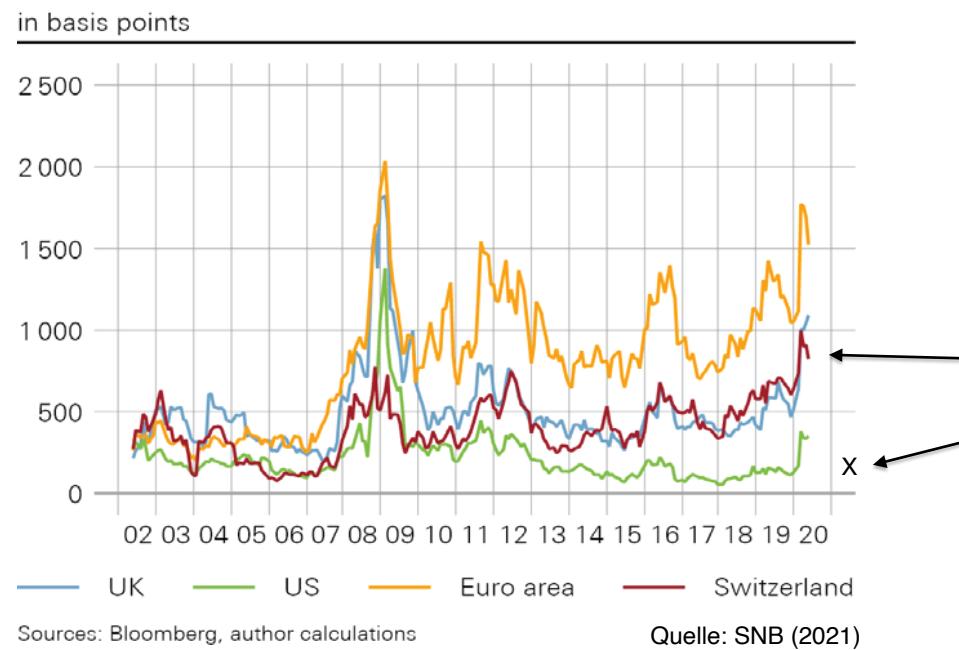


Figure 1: SNB estimates

# Big Picture: Monetary Architecture

Are banks entitled to liquidity support?

- **Central banks** take relaxed stance ([BIS, 2003](#))  
Shared responsibility for money creation, exclusive control over unit of account ([Ricardo, 1816](#); [Issing, 1999](#))
- **rCBDC** discussions call for re-evaluation
  - rCBDC is about **public vs. private money**, balance sheets
  - Also other issues, but often “solution in search of problem”

▷ Which monetary architecture is preferable ([Niepelt, 2024](#))?

Haldane (June 2021), discussing rCBDC

digital currency could change the **topology of banking** fundamentally ...

focus of debate so far has been on the **costs** of this disruption ... disintermediation ...

there are significant potential **benefits** to be had too ...

would **reduce at source the fragilities** in the banking model that have been causing financial crises for over 800 years.

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## References

Allenspach, N., Reichmann, O. and Rodriguez-Martin, J. (2021). Are banks still 'too big to fail'? A market perspective, *Working Paper 18/2021*, Swiss National Bank, Zurich.

Bastos e Santos, E., Esho, N., Farag, M. and Zuin, C. (2020). Variability in riskweighted assets: What does the market think?, *Working Paper 844*, Bank for International Settlements, Basel.

Bennett, R. L. and Unal, H. (2015). Understanding the components of bank failure resolution costs, *Financial Markets, Institutions & Instruments* **24**(5): 349–389.

BIS (2003). The role of central bank money in payment systems, *Report*, BIS: Committee on Payment and Settlement Systems, Basel.

Finkelstein, V., Lardy, J.-P., Pan, G., Ta, T. and Tierney, J. (2002). CreditGrades technical document, *Technical report*, Credit Grades, New York. Editor: Christopher C. Finger. <https://www.msci.com/www/research-report/creditgrades-technical-document/018193536>.

Issing, O. (1999). Hayek—currency competition and European Monetary Union. [Speech at Institute of Economic Affairs, London, May 27](#).

Merton, R. C. (1974). On the pricing of corporate debt: The risk structure of interest rates, *Journal of Finance* **29**(2): 449–470.

Niepelt, D. (2024). Money and banking with reserves and CBDC, *Journal of Finance* **79**(4): 2505–2552.

Ricardo, D. (1816). *Proposals for an Economical and Secure Currency*, John Murray, London.

Estimated subsidy rate falls to 0.8% with volatility 0.04 ([Bastos e Santos et al., 2020](#)) rather than 0.05

	Value/range	Source
$\sigma_V$	[0.0531, 0.2563]	Extrema of estimated asset growth volatility, Refinitiv data
$\frac{V}{LD}$	1.1054	Maximum TLAC share (2022), UBS annual reports
$r$	0.4858%	2022 risk-free rate Swiss Confederation bonds, Refinitiv data
$R$	0.7700	Optimistic historical average ( <a href="#">Bennett and Unal, 2015</a> )
$\tilde{c}(5)$	0.8479%	2022 annual average, Refinitiv series UBSJ5YEUAM=R