

EA-B — Empirical Annex Nostro Capital Compression under Deterministic Netting

1. The Liquidity Trap: Current State

The correspondent banking model requires pre-funded Nostro accounts to bridge multi-day settlement lags.

These balances remain idle to absorb reconciliation risk and settlement failure, resulting in systemic capital stagnation.

2. The SOP-C Optimization Logic

SOP-C enforces deterministic admissibility constraints prior to execution, achieving millisecond-scale finality.

Real-time netting compresses gross obligations, reducing the liquidity required to settle equivalent trade volumes.

When settlement finality is guaranteed by architectural constraints, pre-funding becomes mathematically redundant.

3. Macroeconomic Impact Scenario

Global liquidity held in Nostro/Vostro accounts is estimated in the multi-trillion dollar range.

A conservative 10% compression of pre-funded balances implies a \$1.0–\$1.2 trillion release of stagnant capital.

This released capital re-enters domestic economies, constituting a sovereign liquidity dividend.