



Rebuilding Capital Efficiency in an Operating Airport Financing Stack

Derivative Collateral and CSA Design Failure

Scenario Type: Infrastructure – Operating Phase

Asset Class: Transport Infrastructure (Regional Airport)

Situation Type: Operating asset with floating-rate debt hedged via bilateral swaps under asymmetric CSAs

Primary Issue: Liquidity and capital drag driven by CSA design and collateral mechanics – not hedge failure or asset stress

1. Decision Context

The asset is a mature, operating regional airport with stable post-COVID traffic recovery and performance consistent with underwriting.

Floating-rate debt was hedged at acquisition using vanilla interest rate swaps – a standard infrastructure practice intended to stabilise funding costs.

The IC decision is **not** whether the hedge worked.

It is whether the **collateral and documentation mechanics embedded in the hedge structure remain compatible with the asset's liquidity planning, capital deployment objectives, and refinancing optionality** under higher-rate regimes.

This is a balance-sheet behaviour decision, not a market or credit view.

2. What Changed

At financial close:

- Collateral was treated as a minor operational consideration
- Margin estimates were static and un-stress-tested
- No linkage existed between CSA mechanics and liquidity planning

Post-2022:

- Rates moved sharply higher
- Swaps moved materially out-of-the-money
- Collateral postings increased by an order of magnitude
- Liquidity previously assumed to be deployable became immobilised

The hedge economics remained intact. **The capital behaviour did not**

3. How the Risk Actually Manifests

The failure mode is not hedge ineffectiveness. It is **liquidity becoming path-dependent on derivative documentation rather than operating performance**.

In practice:

- Cash is trapped in margin accounts during stress
- Capex, acquisitions, and distributions become constrained
- Liquidity headroom becomes illusory despite strong asset cashflows
- Strategic options are lost without any deterioration in credit quality

Nothing “breaks”. Capital simply stops being deployable.

4. What Surfaces on Review

When reviewed through a capital-efficiency lens, consistent issues emerge:

- CSA terms are structurally one-sided
- Independent amounts and low thresholds are duplicative across counterparties
- Fragmented ISDAs prevent netting
- Swap tenors extend beyond realistic refinancing horizons
- Collateral was never modelled as a binding balance-sheet constraint

This is not a pricing error. It is **documentation-driven capital drag** embedded at inception.

5. Structural Assessment

This is not:

- A hedge failure
- A counterparty credit issue
- A liquidity shock driven by operations

It is:

- A CSA architecture problem
- A capital planning blind spot
- A governance failure to treat collateral as deployed capital

Any solution must preserve:

1. Existing hedge economics
2. Liquidity resilience under stress
3. Refinancing and acquisition optionality
4. Forced unwind or cosmetic fixes destroy all three.

6. Structuring Logic

Effective remediation focuses on **capital behaviour, not trade replacement**.

Key principles:

- Treat collateral as a balance-sheet allocation
- Rebalance CSA asymmetry and independent amounts
- Reduce duplication across counterparties
- Align swap tenors with refinancing reality
- Improve netting and collateral eligibility
- Sequence changes to avoid MTM crystallisation

The objective is **defensible capital control**, not incremental optimisation.

7. Intended Outcomes

When addressed correctly:

- Collateral becomes predictable and governable
- Trapped liquidity is released without unwinding risk
- Capital deployment decisions reflect economics, not documentation
- Refinancing and growth optionality are restored
- Future financings adopt hardened CSA standards

The outcome is not lower margin calls. It is **usable capital**.

8. IC Takeaway

This was not a failure of hedging strategy or asset performance.

It was the predictable result of approving derivative documentation without understanding how collateral behaves under stress.

Collateral is not an operational detail. It is capital.

Treating it as such restores control.

9. Applicability

Most relevant where:

- Operating infrastructure assets use bilateral swaps
- CSAs are asymmetric or cash-only
- Liquidity headroom matters for growth or refinancing
- Derivatives are fragmented across counterparties

Less relevant where:

- Swaps are centrally cleared
- CSAs are already symmetric and market-standard
- Collateral is explicitly governed and forecast
- Liquidity is structurally surplus

10. Engagement Path

Primary Offer: Capital Efficiency Rebuild™ - Collateral, CSA, and liquidity architecture redesign – preserving hedge intent while restoring deployable capital.

A full structural narrative is available for readers who wish to review the underlying mechanics, trade-offs, and remediation sequencing in greater detail.

Disclaimer

Illustrative scenario for discussion purposes only. Not a transaction summary or client-specific case study.