

X-LNG CASE STUDY · AUG 2025

Estimating losses in an LNG portfolio

See why historical prices and simulated prices give different loss estimates for the same LNG portfolio.

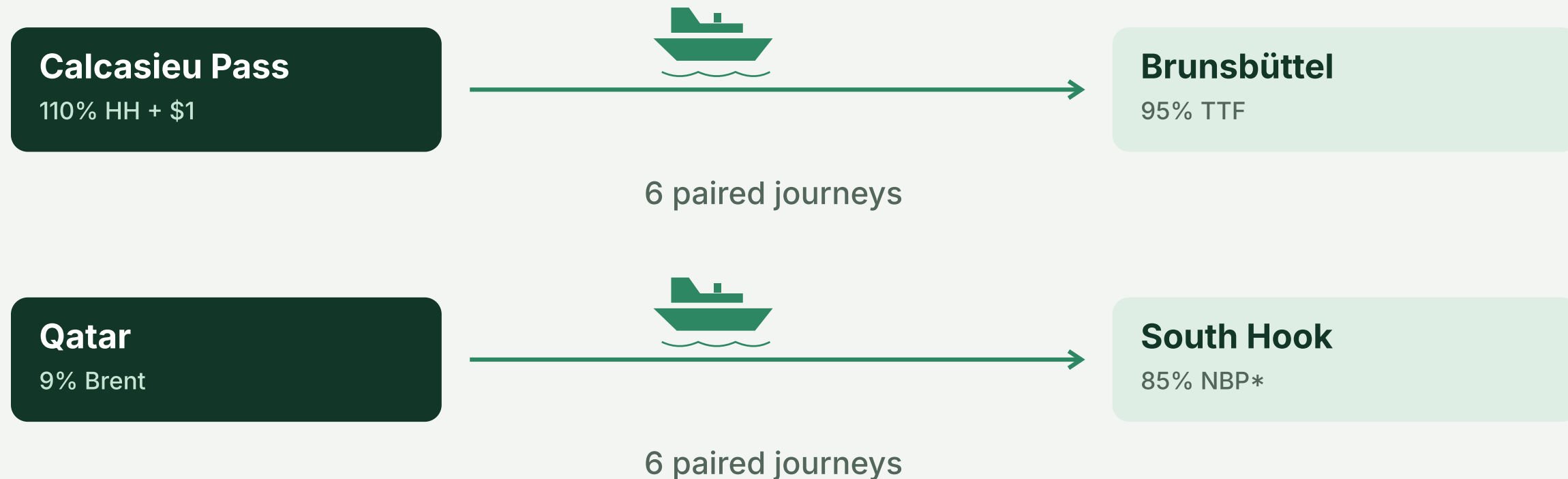


\$46.1M / \$64.5M

ONE-DAY VAR · HISTORICAL / SIMULATED · 5%
LOSS TAIL

Two LNG routes carry four different pricing indices

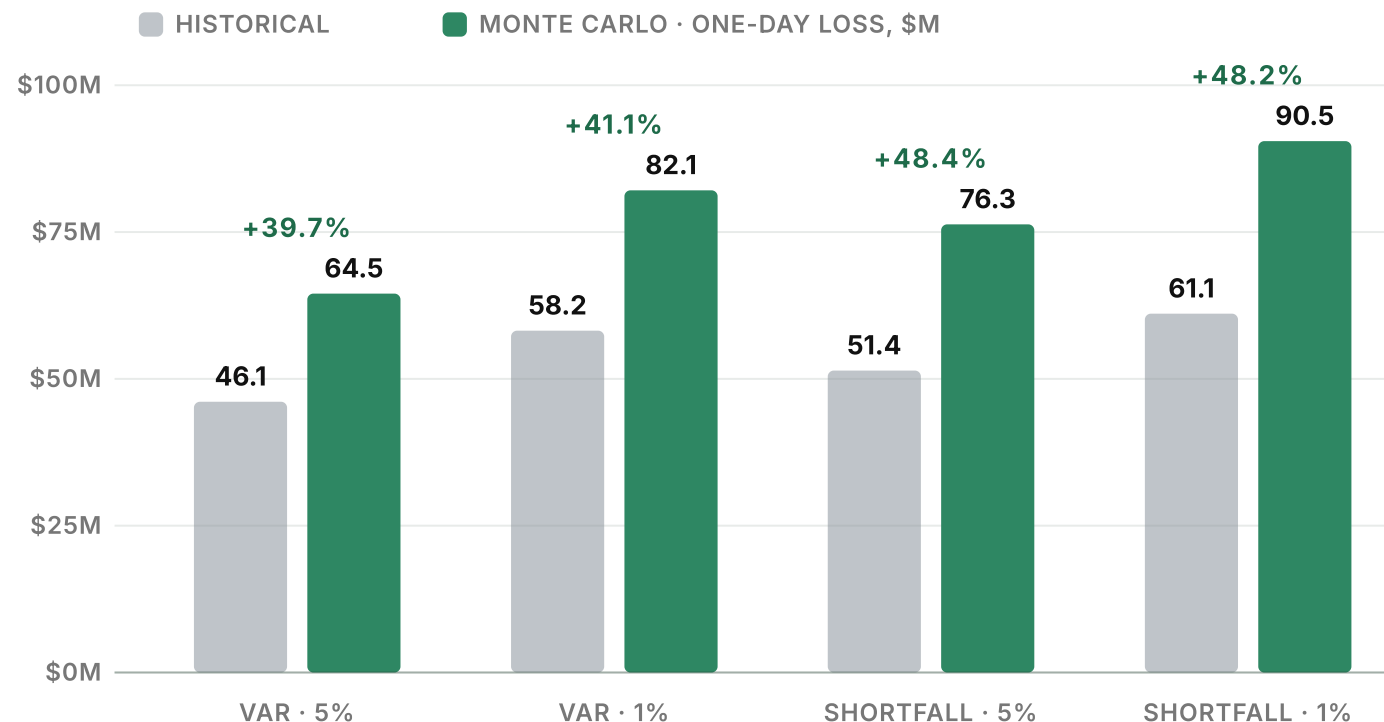
Twelve paired journeys; hold the operating plan fixed



Apply each price scenario to the same portfolio before comparing the loss estimates.

*Source setup uses 85% NBP. A later source comparison uses a different UK reference formula; that result remains separate.

Simulated loss estimates exceed historical estimates

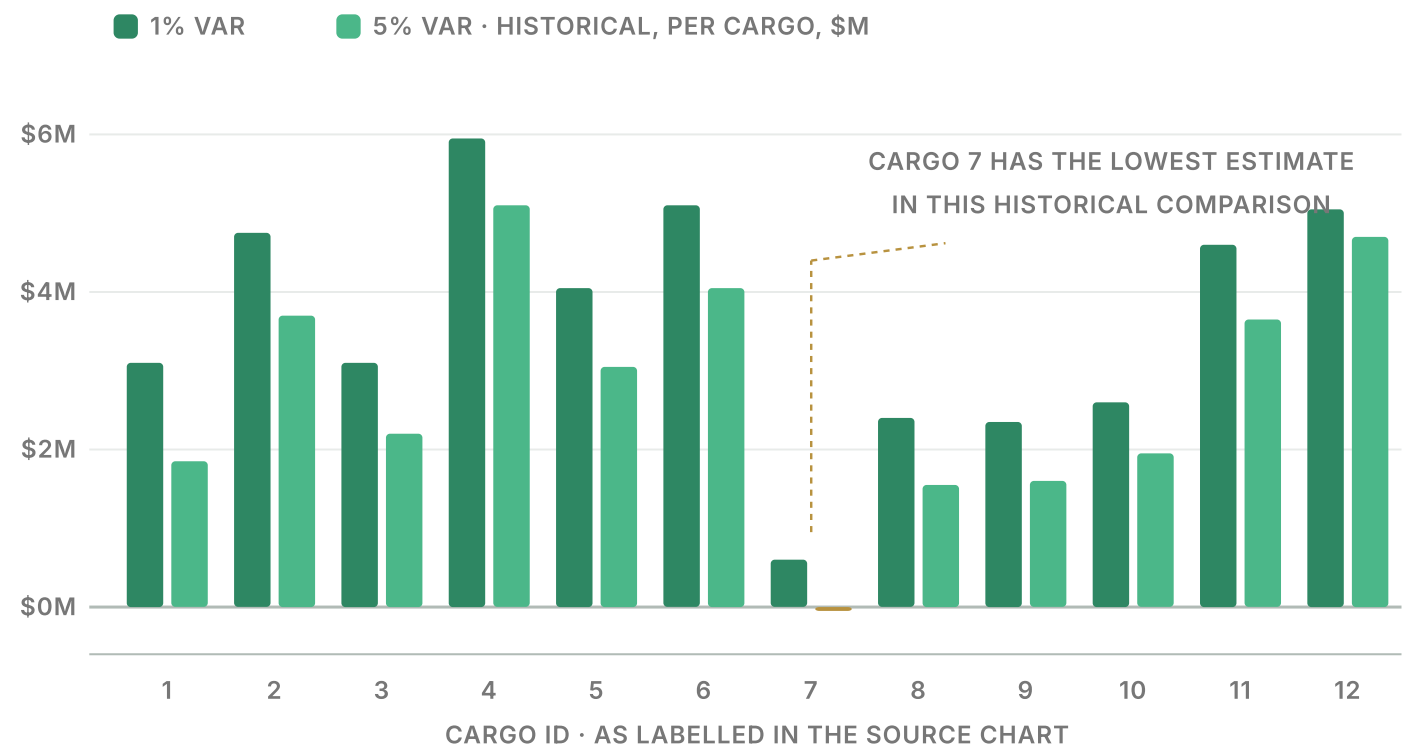


SAME BOOK, SAME DAY · HISTORY JAN 2024 TO JUL 2025 VS 1,000 SIMULATIONS

EXACT · HISTORICAL \$46.1M / \$58.2M / \$51.4M / \$61.1M · MONTE CARLO \$64.5M / \$82.1M / \$76.3M / \$90.5M

Both methods estimate one-day losses with the operating plan fixed. The 5% VaR is exceeded in 5% of scenarios. Expected shortfall averages losses beyond that threshold.

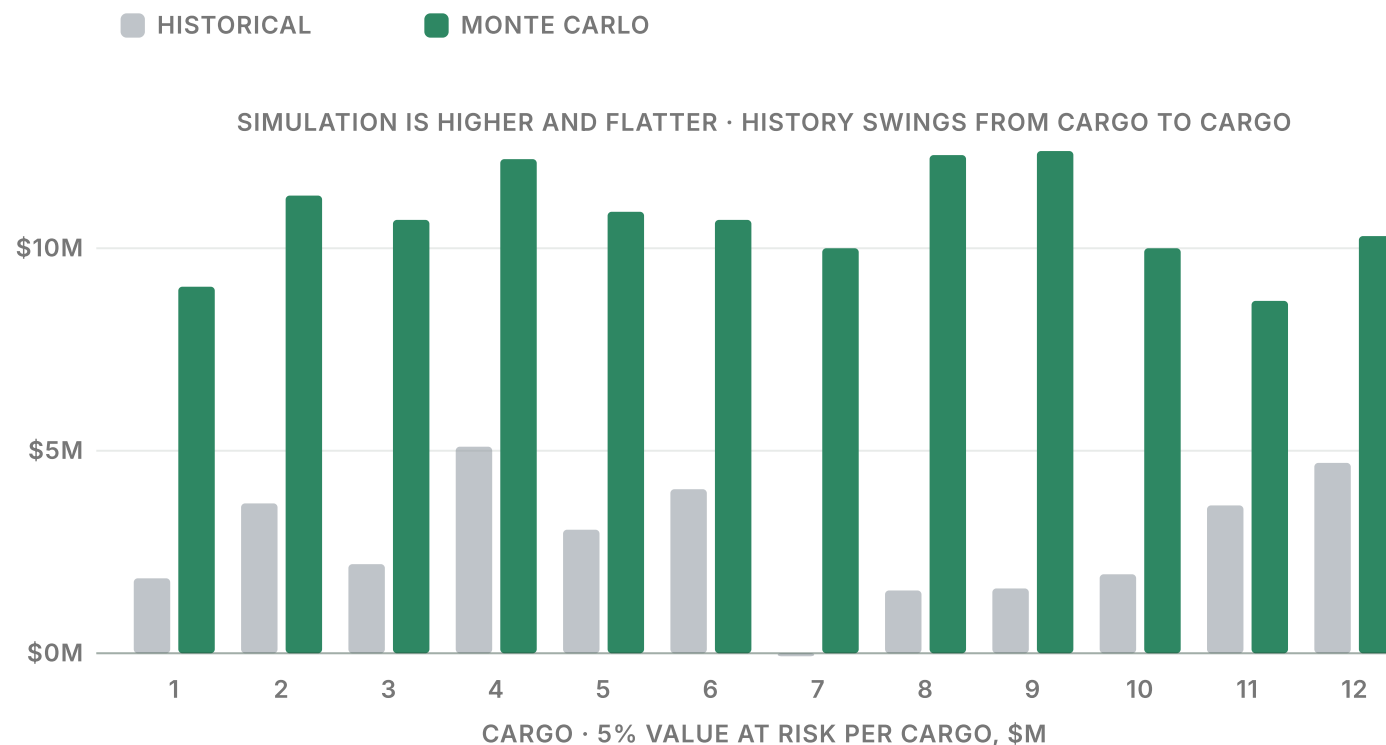
Historical risk estimates vary between cargoes



READ FROM THE ENGINE CHART · CARGO IDS AS SHOWN IN THE SOURCE

The study breaks down the results by cargo and delivery period. The estimates differ because the cargoes carry different pricing indices and timings.

The two methods also rank cargoes differently



1,000 SIMULATIONS · MONTE CARLO VALUES READ FROM THE ENGINE CHART

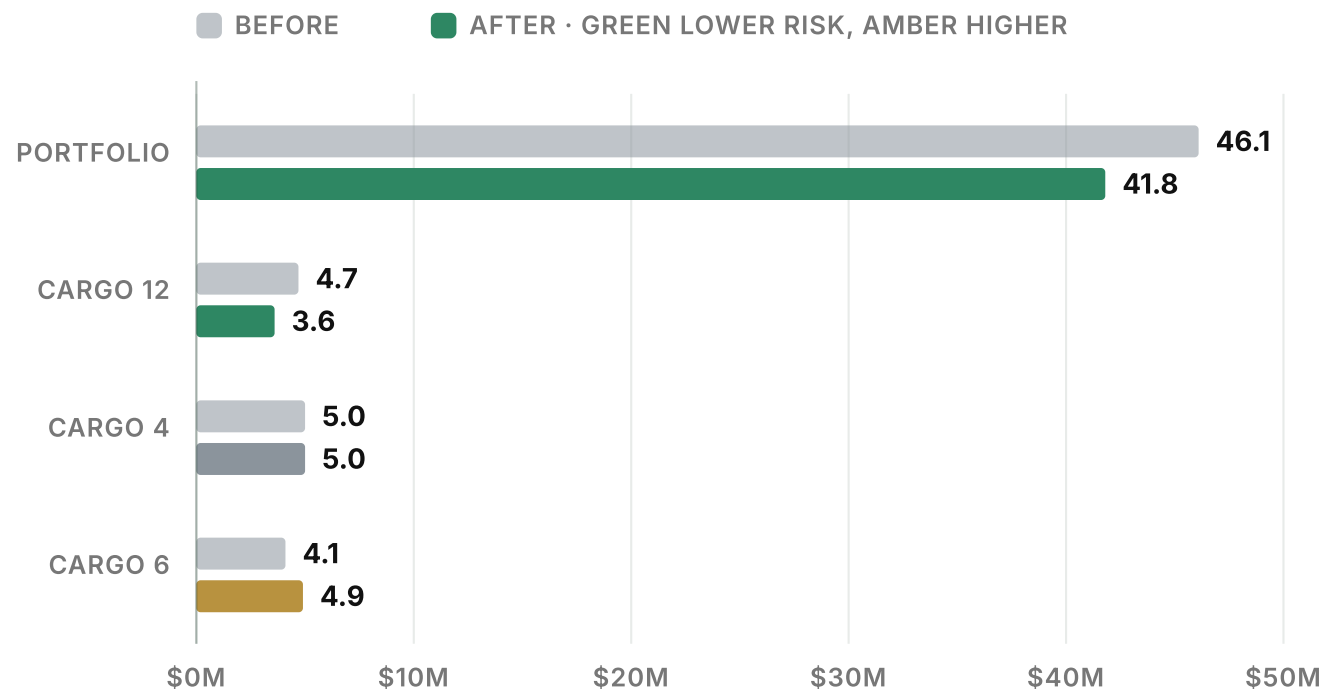
Historical and simulated estimates can rank individual cargoes differently. Their price histories, correlations and delivery periods differ. The study holds the operating plan fixed when calculating these risk measures.

RESULT AND SCOPE

**Reported one-day VaR at the 5% loss tail:
\$46.1M historically and \$64.5M under
simulation.**

The study holds the operating plan fixed for the risk calculation. Historical and simulated estimates use different price scenarios. The UK reference formula differs between source slides, so the revised-formula comparison is reported as a separate source result.

The separate UK formula test reduces historical VaR



5% VAR BEFORE AND AFTER RE-INDEXING · FORWARD PROFIT CHANGES BY +0.18%

PROFIT \$169.2M TO \$169.5M (+0.18%) · 5% EXPECTED SHORTFALL \$51.4M TO \$46.8M

Changing the UK leg to 50% NBP plus \$4 reduces the reported historical VaR from \$46.1M to \$41.8M. Expected shortfall falls from \$51.4M to \$46.8M, while forward profit changes by +0.18%.

Compare risk methods and identify the contracts driving your exposure

Calypso Ventures GmbH

www.calypso-commodities.com · ms@calypso-commodities.com

+49 157 769 40574

Bismarckstraße 10-12, 10625 Berlin · HRB 239736 B, Amtsgericht Charlottenburg

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