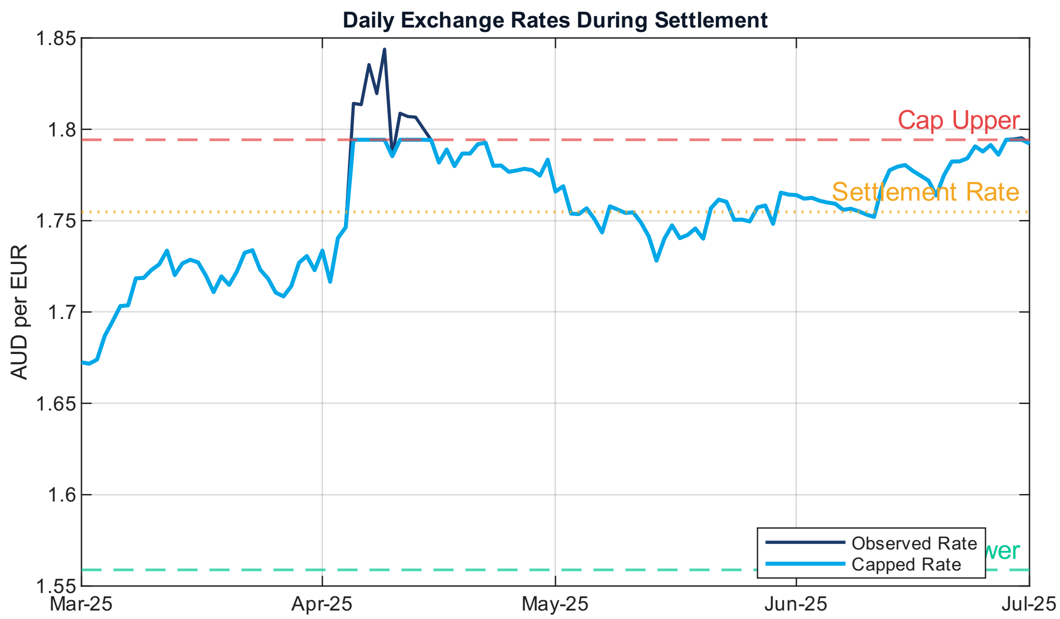
FAIR TRADE FX

Financial Shock Absorber for Exchange Rates | Statmechs Pty Ltd

CASE STUDY 2: AUSTRALIAN PREMIUM WINE EXPORTER

A Barossa Valley winery exports EUR 250,000 worth of premium wine to a German distributor, with settlement over 120 days.

Currency Pair	Contract Period	Notional Value	Industry
EUR / AUD	**Mar 2025 to Jul 2025**	**EUR $250,000**	**Agriculture & Wine**



KEY METRICS

Spot Rate at Inception	**1.6724**
Cap Upper Bound	**1.7943**
Cap Lower Bound	**1.5588**
Settlement Rate (Capped Avg)	**1.7548**
Annualised Volatility	**5.2%**
Forecast Risk Reduction	**76.1%**
Days Cap Activated	**12 / 123**
Actual Vol Reduction	**8.6%**

FINANCIAL IMPACT (AUD)

FairTradeFX Settlement	Uncapped Average	Worst-Case Single Day	Best-Case Single Day
AUD $438,707	**AUD $439,118**	**AUD $460,968**	**AUD $417,927**

Protection vs Worst-Case: AUD $22,261 saved

Methodology:

FairTradeFX uses a GARCH(1,1) volatility model fitted to 720 days of historical exchange rate data sourced from XE.com. The model forecasts conditional volatility over the contract horizon and establishes 95% confidence bands that serve as immutable cap and floor rates.

During the settlement period, each daily observed rate is clipped to the cap bounds before being included in a running average. The final settlement rate is the mean of all capped daily rates, providing dual protection: (1) daily cap limits protect against extreme single-day moves, and (2) averaging across the full period smooths residual volatility within the bands.

All figures in this case study are back-calculated using actual historical market rates — not simulations.