JUPITER PRIME
Consulting • Training • Advisory
جوبيتر برايم للاستشارات والتدريب

COURSE BROCHURE

Market Risk Measurement, Limits and Back Testing Training Course

23 – 27 May 2027
Muscat

Market Risk Measurement, Limits and Back Testing Training Course

Ref: 3106_117929 **Date:** 23 – 27 May 2027 **Location:** Muscat **Fees:** 5500 GBP

Market Risk Measurement, Limits and Back Testing is a 1-week training course for market risk analysts, treasury officers, traders and risk managers who build a market risk limit and escalation pack for a trading or treasury book. Sudden swings in interest rates, currencies, equity prices and commodity prices can erase a year of earnings within days, so boards want loss estimates they can trust. Jupiter Prime Training delivers this course on Market Risk Measurement, Limits and Back Testing.

Why Market Risk Measurement, Limits and Back Testing Matters Now

Three forces shape this discipline today. Volatility regimes shift faster than historical windows can capture. Boards expect loss models tested against realised profit and loss. Treasury and trading desks hold more cross-asset positions, so correlation breakdowns are a live concern. An organisation that measures well sizes positions sensibly; one that measures poorly finds concentrations only after the loss. The course rests on internationally recognised supervisory principles for model testing.

Who Gains Most from Market Risk Measurement, Limits and Back Testing

- Analysts who calculate daily sensitivities, loss estimates and stress results
- Treasury officers who hedge interest rate and currency exposure
- Traders who run positions within delegated limits
- Risk managers who propose, approve and monitor limit structures across desks
- Model validation and control staff who test loss models

A front office desk and its independent risk function gain most when they attend together, because limit setting depends on both reading the same numbers.

Market Risk Measurement, Limits and Back Testing Capabilities

Participants move from a single loss number to a layered view of exposure that desks and committees can act upon.

- Calculate duration, basis point value, delta and vega for mixed portfolios — hedging choices of treasury and trading desks
- Compare historical, parametric and simulation loss estimates — the model choice put before a risk committee
- Design stress scenarios combining rate, currency and commodity shocks — senior management appetite discussions
- Test loss models against realised profit and loss using exception counts — model owners and validators
- Build tiered limits with soft triggers and hard stops — desk heads and the chief risk officer
-

Communicate breaches, drivers and remediation in a concise daily report — board risk committees

Key Market Risk Measurement, Limits and Back Testing Terms

- Value at Risk — an estimate of the loss a portfolio should not exceed over a set horizon at a chosen confidence level.
- Expected Shortfall — the average loss in the tail beyond the value at risk threshold.
- Basis Point Value — the change in a position's value when interest rates move by one hundredth of a percentage point.
- Back Testing — comparing predicted loss estimates with actual daily outcomes.
- Stress Scenario — a plausible but severe combination of market moves used to reveal losses.
- Limit Utilisation — the share of an approved limit currently consumed by positions.

Market Risk Measurement, Limits and Back Testing Day by Day

Day 1: Sources of Price Exposure

- Interest Rate Curve Moves — Where Parallel and Twist Shifts Hit Earnings
- Currency and Commodity Price Exposure — Mapping Open Positions by Desk
- Equity and Index Exposure — Concentration in Single Names and Sectors
- Trading Book Versus Banking Book Boundaries — Which Positions Need Daily Valuation
- Profit and Loss Attribution — Separating Market Moves from New Trades

Day 2: Sensitivities and Loss Estimates

- Duration, Convexity and Basis Point Value — Sizing Rate Hedges
- Delta, Gamma and Vega Ladders — Option Book Exposure Across Strikes
- Historical Simulation Loss Estimates — Choosing Window Length and Weighting
- Parametric and Random Path Simulation — Speed Against Accuracy for Complex Books
- Expected Shortfall Calculation — Reporting Tail Severity to Committees

Day 3: Stress Tests and Model Testing

- Historical Crisis Replays — Testing Today's Book Against Past Market Shocks
- Hypothetical Cross-Asset Scenarios — Joint Rate, Currency and Commodity Shocks
- Reverse Stress Testing — Finding Moves That Breach Capital Tolerance
- Exception Counting and Traffic Light Zones — Deciding When a Model Fails
- Clean and Dirty Profit and Loss Comparison — Explaining Back Test Exceptions

Day 4: Limits, Escalation and Reporting

- Limit Hierarchy Design — Allocating Appetite From Board to Individual Desk
- Sensitivity, Loss Estimate and Stop Loss Limits — Choosing the Right Mix
- Soft Triggers and Hard Breaches — Escalation Paths and Approval Rights
- Daily Risk Dashboard Layout — What Desk Heads and Committees Read First
- Breach Logs and Remediation Tracking — Evidence for Internal Audit

Day 5: Practising the Market Risk Limit and Escalation Pack

- Sensitivity Profile of a Sample Treasury Book — Applying Day 2 Measures
- Stress Results and Back Test Summary — Applying Day 3 Evidence
- Limit Calibration Exercise — Applying Day 4 Hierarchy to Real Positions
- Committee Presentation Rehearsal — Defending Limits Under Peer Challenge
- Market Risk Limit and Escalation Pack — Final Draft for Approval

Applying Market Risk Measurement, Limits and Back Testing After the Course

- Run a three-month back test of the current loss model, explaining each exception.
- Review one desk's limit structure and propose soft triggers where only hard stops exist today.

Market Risk Measurement, Limits and Back Testing Questions FAQ

What is market risk measurement, limits and back testing, and why does it matter now?

It is the discipline of estimating potential losses from price moves, capping them with limits and checking estimates against outcomes. It matters now because boards demand loss figures that are tested and explained.

Which roles gain most from market risk measurement, limits and back testing?

Market risk analysts, treasury officers, traders and risk managers gain most. Each role needs to read sensitivities, stress results and exceptions consistently.

How does a market risk measurement, limits and back testing course differ from a derivatives pricing course?

It focuses on measuring and controlling exposure rather than valuing instruments. It shows how a whole book's losses are estimated, tested, limited and reported.

What do you bring back from market risk measurement, limits and back testing?

You bring back a draft limit and escalation pack for a real or sample book. It combines sensitivities, stress and back test evidence, calibrated limits and a reporting layout.

Market Risk Measurement, Limits and Back Testing: The Way Forward

The market risk limit and escalation pack first informs how appetite is split between desks for the coming quarter. Desk heads and the risk committee use it to judge breaches. After its first cycle, revisit the stress scenarios and the back test window, since limits calibrated to calm periods can fail quietly.