

In-House Training for 2017

Customised in-house training courses for banks, other financial institutions, end-users of OTC derivatives, third-parties and regulators

Course title	Level	Length	Page
Counterparty Credit Risk and CVA	Intermediate	1 day	2
The xVA Challenge	Intermediate	2 days	3
The xVA Challenge	Intermediate	3 days	4
Advanced xVA – Towards MVA and KVA	Advanced	2 days	5
Initial Margin for Bilateral and Centrally Cleared Derivatives	Intermediate	2 days	6

All courses customised to precise requirements and level of participants

Jon Gregory Biography

Jon Gregory is an independent expert specialising in counterparty risk and xVA related projects. He has worked on many aspects of credit risk in his career, being previously with Barclays Capital, BNP Paribas and Citigroup. He is author of the book “Counterparty Credit Risk: The new challenge for global financial markets” (now in its third edition) and “Central Counterparties: The Impact of Mandatory Clearing and Bilateral Margin Requirements on OTC Derivatives”. He is a senior advisor at Solum Financial Derivatives Advisory and a faculty member of the CQF (certificate of quantitative finance).



Jon holds a PhD from Cambridge University.

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Counterparty Credit Risk and CVA

(Intermediate level, one-day course)

Day 1

1. Background

- History of CVA
- Accounting and regulatory considerations
- CVA desks
- How different banks manage CVA

2. Credit Exposure

- PFE and credit limits
- Close-out and netting
- Simulation approach
- Impact of netting and collateral

3. Default Probability

- Real world vs. risk-neutral default probabilities
- Market implied default probability calibration
- Credit spread proxy estimation
- Approaches for defining generic credit curves

4. Credit Value Adjustment (CVA)

- CVA formula
- CVA examples
- Impact of netting and collateral
- Bilateral CVA
- CVA capital charge

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The xVA Challenge

(Intermediate level, two-day course)

Day 1	Day 2
1. Background <ul style="list-style-type: none">• First thoughts• Role of xVA• Funding and capital• Accounting considerations• xVA components	5. Funding and FVA <ul style="list-style-type: none">• FVA formulas and examples• FVA framework and link to CVA/DVA• Defining funding costs• Arguments over FVA
2. Exposure and default probability <ul style="list-style-type: none">• Credit exposure• Simulating exposure• Risk-neutral default probabilities• Mapping methods	6. Regulatory Capital and KVA <ul style="list-style-type: none">• Counterparty risk capital requirements• Review of current capital methodologies• Impact of SA-CCR and FRTB• Capital value adjustment (KVA)• KVA examples
3. Collateral <ul style="list-style-type: none">• Collateral mechanics and variation margin• OIS discounting and collateral optionality• The impact of collateral on exposure• Initial margin• Collateral and funding	7. Initial Margin and MVA <ul style="list-style-type: none">• The clearing mandate• Bilateral margin rules• The impact of IM on CVA and KVA• MVA (initial margin)
4. CVA and DVA <ul style="list-style-type: none">• CVA formulas and examples• Incremental CVA• Impact of collateral on CVA• Bilateral CVA• DVA and the link to funding	8. Managing and Optimising xVA <ul style="list-style-type: none">• xVA desks• Mandate of the xVA desk• Passive vs. active management• CVA hedging and risk limits

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The xVA Challenge

(Intermediate level, three-day course)

Day 1	Day 2	Day
1. Background <ul style="list-style-type: none"> • Example • Overview and history • Accounting • The xVA concept • Setups 	5. CVA and DVA <ul style="list-style-type: none"> • CVA formulas / examples • Incremental CVA • Impact of collateral • Bilateral CVA • DVA and link to funding 	9. Central Counterparties <ul style="list-style-type: none"> • OTC clearing • The topology of clearing • Mechanics of OTC clearing • Client clearing
2. Regulation <ul style="list-style-type: none"> • Accounting and IFRS 13 • Basel III • Clearing mandate • Bilateral margining rules 	6. Funding and FVA <ul style="list-style-type: none"> • FVA formulas / examples • Defining funding costs • FVA framework and link to CVA/DVA • Arguments over FVA 	10. CCP Risk Management <ul style="list-style-type: none"> • Fire drills and auctions • The loss waterfall • Initial margin and default funds • Loss allocation methods
3. Exposure and Default <ul style="list-style-type: none"> • Credit exposure • Simulating exposure • Risk-neutral default probabilities • Mapping methods 	7. Regulatory Capital <ul style="list-style-type: none"> • Counterparty risk capital requirements • Review of methodologies • Capital value adjustment (KVA) • KVA examples 	11. Initial Margin methods <ul style="list-style-type: none"> • Standardised portfolio analysis of risk (SPAN) • Value-at-risk (VAR) and expected shortfall (ES) • Calibration issues • SIMM (standardised initial margin model)
4. Collateral <ul style="list-style-type: none"> • Collateral mechanics • Variation margin • OIS discounting • CoIVA • Initial margin 	8. Managing xVA <ul style="list-style-type: none"> • xVA desks • xVA calculation examples • CVA hedging and capital relief • Price optimisation 	12. Initial Margin and MVA <ul style="list-style-type: none"> • Segregation • The impact of initial margin on CVA and KVA • MVA • The risks of increasing margin requirements

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Advanced xVA – Towards MVA and KVA

(Advanced level, two-day course)

Day 1	Day 2
1. Overview and CVA/DVA <ul style="list-style-type: none">• History of xVA• Exposure modelling• PD calculations and mapping• IFRS 13 and CVA/DVA• CVA formula and examples	5. Central Counterparties (CCPs) <ul style="list-style-type: none">• The basics of central clearing• CCP mechanics• CCP risk management• CCP loss allocation• Capital requirements for CCP trades
2. Funding and FVA <ul style="list-style-type: none">• The problems with DVA• The source of funding costs• Defining FVA and examples• Arguments over FVA• Market approach for CVA/DVA/FVA	6. Initial Margin <ul style="list-style-type: none">• Initial margin and default fund at a CCP• Historical use of independent amount• The bilateral margin rules• Segregation and rehypothecation• Impact of initial margin in bankruptcy
3. Regulatory Capital Requirements <ul style="list-style-type: none">• EAD approaches (CEM, SA-CCR, IMM)• CCR and CVA capital charges• CVA capital charge• The leverage ratio and capital floors• The fundamental review of the trading book (FRTB) and BCBS 325	7. Initial Margin Methodologies <ul style="list-style-type: none">• SPAN• Historical Value-at-Risk• CCP initial margin methodologies• The FRTB requirements• Standardised initial margin methodology (SIMM)
4. Capital Value Adjustment (KVA) <ul style="list-style-type: none">• Return on capital hurdles• KVA formula• Calculating expected capital profiles• Impact of CVA hedges on capital• Intersection of KVA and CVA	8. Margin Value Adjustment (MVA) <ul style="list-style-type: none">• MVA formula• Projecting future margin requirements• Impact of initial margin on CVA• Treatment of initial margin in regulatory capital methodologies

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Initial Margin for Bilateral and Centrally Cleared Derivatives

(Intermediate level, two-day course)

Day 1	Day 2
<p>1. Background</p> <ul style="list-style-type: none"> • The OTC derivatives market • Impact of the financial crisis • The clearing mandate • BCBS-IOSCO bilateral margin requirements 	<p>5. Traditional initial margin methods</p> <ul style="list-style-type: none"> • Standard portfolio analysis of risk (SPAN) • Value-at-risk (VAR) and expected shortfall (ES) • Historical simulation • Example CCP methodologies • Potential problems
<p>2. Counterparty risk and margin</p> <ul style="list-style-type: none"> • History of central and OTC clearing • Netting and trade compression • Collateral (margin) and CSAs • Variation margin • Initial margin (independent amount) • Rehypothecation and segregation 	<p>6. Standard initial margin model (SIMM)</p> <ul style="list-style-type: none"> • Fundamental review of the trading book • Variance-covariance approx. to VAR / ES • SIMM methodology • Asset classes and risk classes • Risk weights, basis effects and netting • Comparison to Historical simulation
<p>3. Bilateral and central clearing</p> <ul style="list-style-type: none"> • Contractual terms • Default definitions • Close-out process • The margin period of risk (MPR) • CCP loss waterfall 	<p>7. Initial margin – risk reduction and cost</p> <ul style="list-style-type: none"> • Reduction of counterparty risk (CVA) • Capital relief from initial margin – comparison of CEM, SA-CCR and IMM • The cost of initial margin • MVA (margin valuation adjustment)
<p>4. The impact of netting and margining</p> <ul style="list-style-type: none"> • Bilateral vs. multilateral netting • Does netting reduce exposure? • The impact of variation margin • The impact of initial margin 	<p>8. The impact of initial margin</p> <ul style="list-style-type: none"> • Impact on CCP risk management • Risks of increase in margin requirements • Wealth transfer effects of initial margin

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