Understanding XVA

The role of XVA's in pricing OTC derivatives.

The Global Financial Crisis was a combination of many different factors, one of which was an ignorance of risk. There has been a build-up of hidden risks on banks' balance sheets which became a major contribution to the difficulties banks faced during the crisis. The so called XVA's are a direct response to the crisis and were borne from a more detailed understanding of the risk that are present in OTC derivatives. Fundamental to this new understanding is an appreciation of the precise nature of each trade. That is, who the trade was done with, how the counterparty credit risk is managed, what is treated from a regulatory perspective and how the trade and any hedge it is to be funded.

This course presents the main adjustments that are now important considerations that are factored into the value of OTC derivatives. These adjustments are CVA, DVA, FVA, LVA, COLVA, KVA and MVA. Each of these concepts are interlinked and present banks with an opportunity to position their derivative trading business to have optimal outcomes in terms of funding, credit and capital.

HOW YOU WILL BENEFIT

At the end of this course, the delegates will:

» Have been presented with the drivers that have resulted in the rise of the XVA's
» Have a detailed examination at the different adjustments that are needed to be made to OTC derivatives
» Be familiar with the techniques used to price the XVA adjustments
» Be aware of the challenges that banks have when calculating and managing the XVA's
» Have a comprehension of how the XVA's interact with each other
» Have working Excel models that demonstrate many of the XVA calculations demonstrated on the course.

Understanding XVA

DELEGATE CHALLENGES/YOUR SOLUTIONS

- The XVA adjustments have become an increasing complex area of OTC pricing. By presenting the different XVA's in isolation, this program will show how each XV adjustment aims to account of the cost to a bank of doing OTC derivatives
- The interaction of the different value adjustments changes fundamentally the way banks approach and perceive their OTC businesses. This course will demonstrate how different trading and hedging decisions impact a bank in terms of credit, funding, capital and margin requirements
- XVA calculations are complicated and the interpretation of the adjustments often lack intuition. By presenting back-of-the-envelope approximations for the various adjustments, student are not only provided with short-cut tools but also an appreciation of the impact of the adjustment.

WHO SHOULD ATTEND

This workshop will be very useful for anyone who is interested in how counterparty credit is price and the risk is managed. In particular it will be of great value to those working in the following areas:

- Derivative Trading
- Derivative Sales
- XVA Desks
- Credit Risk Management
- Counterparty Management
- Collateral Management
- Trading Management
- Quantitative Analytics
- Finance
- Regulatory Reporting
- Balance Sheet Management
- Market Risk Management
- Technology/IT supporting XVA projects

FACILITATOR

BEN WATSON is the CEO of Maroon Analytics Australia, a Quantitative Analytics Consultancy that helps Banks and Financial institutions with any aspect of their quant requirements. Maroon has been helping its clients with some of the more complex issues that they face today, such as OIS discounting, FVA, CVA/DVA and quantitative impacts of regulation.

Ben came to the Maroon business with 22+ years working for Investment Banks as a Quantitative Analyst. Up to 2012 he was the APAC regional head of the Quant function for RBS and before that the local head of Quant at ABN AMRO Australia. He has a long track record of building real time pricing and risk management systems for traders and risk management teams. In 2012 he managed the successful OIS migration of a large derivatives trading book for a global bank.

Since starting his own consultancy he has developed a number of industry training courses that have been run in Australia, New Zealand, Singapore and Taiwan. His courses include OIS Discounting, Counterparty Credit and CVA, Funding, Liquidity and FVA, Interest Rate Options and Stress Testing, Initial Margin and MVA, The Fundamental Review of the Trading Book and VaR.

AGENDA

Introduction to XVA

Background to XVA
- Pre-GFC OTC Derivative Pricing
- What the GFC changed
  - Concept of Risk Free
  - Regulation
  - Accounting for OTC Derivatives
- Replacement costs vs the Mark-to-Market
- Post-GFC OTC Derivative Pricing Considerations
- XVA primer
  - CVA and DVA
  - FVA, LVA and COLLVA
  - MVA
  - KVA
  - Other VA's

Counterparty Credit and CVA
- Credit Risk vs Counterparty Credit Risk
- Mitigating Credit Risk
- Counterparty Exposures and the Impact of Collateral
- Probability of Default
- Credit Value Adjustment (CVA)
- DVA and BCVA
- Regulatory CVA
- Accounting CVA
- OTC Pricing example with CVA and DVA

Liquidity and Funding and FVA
- Funding Implications of Replacement Cost
- Internal Funding Curves
- Sources of FVA
  - Funding Asymmetry and Collateral Value Adjustment (COLVA)
  - Hedging Funding adjustment or HVA
  - Liquidity Value Adjustment or LVA
- Pricing the Funding Value Adjustment (FVA)
- DVA as a Special Case of FVA
- OTC Pricing Example with CVA and FVA
- Cleared OTC Pricing Example with FVA, LVA and COLVA

Regulatory Capital and KVA
- Regulatory Capital Models
- Economic Capital Models
- The impact of the FRTB
- Pricing the Capital Value Adjustment (KVA)
- KVA relationship to CVA

Initial Margin and MVA
- Central Counterparty Clearers (CCPs) and the Loss Waterfall
- The role of IM for Cleared Trades
- IM Requirements for Uncleared Trades
- Margin Value Adjustment (MVA)
- MVA for Cleared v's Uncleared Trades
- MVA as private capital
- MVA's relationship to CVA, FVA and KVA

The interaction of the XVA's
- CVA v's KVA
- DVA as a special case of FVA
- MVA v's CVA
- MVA v's KVA

REGISTRATION FORM

PERSONAL DETAILS

❑ Dr ❑ Mr ❑ Ms

Name________________________ Surname________________________

Position ____

Company Name ____________________________________

Address ____

City ____________________ State__________ Postcode __________

Country ____

Telephone ____________________ Mobile ____________________

Fax________________________ Email________________________

Are you an AFMA Member Yes / No

WORKSHOP DATES & LOCATIONS

Please refer to **www.afma.com.au** for latest workshop dates & times.

Preferred date: ______________________________

FEE PER COURSE

❑ Member $935.00 inc GST

❑ Non-member $1,166.00 inc GST

This document becomes a Tax Invoice for GST purposes upon completion and payment. Please photocopy and retain for your records.

METHOD OF PAYMENT

Attach cheque made payable to AFMA or provide credit card details below:

❑ Visa ❑ Mastercard ❑ American Express ❑ Diners Club

Please note a surcharge applies of 2.75% for American Express and 3.72% for Diners Club.

Cardholders Name ____________________________________

Total Amount $______________________________________

Card Number ______________________________________

Expiry Date __________________________ CCV* ____________

Signature ____

** 3 digit number found on the back of your Mastercard or Visa; 4 digit number found on your American Express*

AFMA

All enquiries and applications should be directed to:

Tel: (61 2) 9776 7914
Fax: (61 2) 9776 4488
Email: education@afma.com.au
Web: www.afma.com.au

Posted applications should be directed to:

AFMA Education & Training
GPO Box 3655
Sydney NSW 2001

Terms and Conditions

Payment Terms

» For AFMA Members, invoices are issued upon enrolment and are payable within 14 days of being issued.
» Full payment is required at the time of registration from non-member organisations.

Cancellation and Transfers

» To obtain a full refund, delegates must notify AFMA in writing at least 10 working days prior to the program start date that they wish to transfer to an alternate program, or cancel.
» Delegates who transfer or cancel from a program inside 10 working days from the program start date are liable for the full program fee. No refunds will be given in this instance.
» Substitutions can be made, with prior notification to AFMA, at any time up to the program start date with no penalty

Non attendance

» If a delegate fails to attend a program, program fees will not be refunded or allocated to another program.

General

» AFMA reserves the right to cancel, postpone or re-schedule programs due to low enrolments or unforeseen circumstances. Full refunds or transfers will be given in this instance.
» AFMA is not liable for any costs incurred by the attendee if the program is cancelled or postponed.
» AFMA reserves the right to change course fees, dates, content, speakers or method of presentation at its discretion.
» The information in this brochure was correct at the time of publication but may be subject to change.

Privacy

All personal information collected by AFMA is protected by the Privacy Act, 1988. Information collected on this enrolment form is for the purposes of processing registrations and creating and maintaining student records. Information will not be disclosed to third parties except where authorised or required by law. Please forward any enquiries you may have in relation to privacy to info@afma.com.au