



EQUITY DERIVATIVES COURSE

9 October to 30 October 2004

Course Director

Dr Ang Kian Ping
Head of Equity Derivatives Desk
United Overseas Bank Group

Organised by:



ACI Singapore – The Financial Markets Association

Course Aim

The course is structured to enable participants to acquire practical and useful knowledge of various types of Equity Derivatives, and to learn how to apply the knowledge. It is useful for participants seeking for a more in-depth understanding of practical issues, trading, pricing, structuring and applications of Equity Derivatives.

Instructor

Dr Ang Kian Ping

Ph.D. (Bus), MSc (Bus, Gold Medal), B.Eng. (Electrical, First Class Honours)

Dr Ang is the Head of Equity Derivatives Desk at UOB, with 9 years of experience in trading (OTC & Exchange Floor), managing, pricing, products structuring, models development of Equity Derivatives. His areas of experience and expertise include the trading, managing of Exchanged-Traded Equity Options and Futures, OTC Equity and FX Options, Stock Index Arbitraging, Structured Warrants, Convertibles, Structured Equity Products, Software Development for trading, pricing and risk management for Derivatives. He has good theoretical foundation - his Ph.D. dissertation is on the Modeling of Equity Options, and he has published research paper on Equity Derivatives. He had conducted courses for SIMEX, IBF, Securities Houses and University.

Teaching Methodology

Presentation will be emphasized on practical issues with exercises, case examples, assignment and applications to reinforce understanding of Equity Derivatives Products. Bloomberg will be used to illustrate how to apply the knowledge.

Who should attend?

Participants who want to –

- know more in-depth understanding of Equity Derivatives: Stock Index Futures, Single Stock Futures, Equity Index Options, Single Stock Options, Stock Warrants, Structured Warrants, Equity Swaps, Convertible Bonds
- know how to trade, price, arbitrage and hedge using Equity Derivatives
- know how products are structured with Equity Derivatives
- know the applications of Equity Derivatives

EQUITY DERIVATIVES COURSE



Bloomberg

Official Financial Information Platform

Course Coverage

The course will stretch over 4 weeks. The following topics will be covered:

Equity Futures

(Saturday, 9 October 2004)

What are Equity Derivatives?

- Stock Index Futures, Single Stock Futures, Equity Index Options, Single Stock Options, Stock Warrants, Structured Warrants, Equity Swaps, Convertible Bonds.
- Structuring Products with embedded Equity Derivatives-
 - Equity-Linked Notes/Deposit (Yield Enhancement Product)
 - Index-Linked Notes/Deposit (Principal Guaranteed Notes/Deposit, Capital Protected Notes)

Equity Futures

- Fundamentals of Equity Futures
 - Types- Stock Index Futures & Single Stock Futures
 - Contract Specifications, Settlement & Fair Value of Futures versus its Underlying Index/Stock, Understanding of Index Stocks & Changes
 - Illustrations using Nikkei 225, MSCI-Free Singapore Futures & STI Futures
- Concept of Margin/leverage- initial & maintenance margin, margin call
- Who uses Equity Futures?
- Usage of Equity Futures–Trading (long, short), Hedging, Asset Allocation, Arbitrage, Indexed Fund, Synthetic Investment & Structured Products
- Case Examples on Trading, P/L Calculations, Margin Calculation, Settlement and Rollover
- Exercises – Hedging, Asset Allocation and Margin
- Spread Trading
- Trading Methods
- How to Participate in Equity Futures – Open Outcry System & Electronic Trading
- Types of Futures Orders
- Symbols of Contract Months
- Do & Don't of Futures Trading
- Futures Trading - Money Management; Market, Event, Fundamental, Sentimental & Technical Analysis
- Clearing & Mark-to-Market Mechanism of Equity Futures
- Practical Issues- Special Quotation Risk, Liquidity Risk, Rollover Risk, Execution Risk, Open Interest Risk, Tracking Errors- Impact from underlying stock components and weightings, Hedging Impact from delta hedging & Arbitraging activities
- Application: Hedging using futures
- Case Studies of Barings – What went wrong?

EQUITY DERIVATIVES COURSE



Equity Index Options & Single Stock Options

(Saturday, 16 October 2004)

Equity Options

- > Fundamentals of Equity Options
 - > Types – Equity Index Options, Single Stock Options
 - > Option Terminology, Maturity Payout
 - > Contract Specifications of
 - ◆ Equity Index Options- eg. Nikkei 225 Options
 - ◆ Single Stock Option
 - ◆ Option Exercise: cash settlement versus physical delivery
 - ⇒ Why Important? Settlement Risk
 - > Call Payout, and Put Payout
 - > Option Valuation – Risk-Neutral Approach
 - > Vanilla- Standard payout (Exchanged-Traded & OTC)
 - ◆ Vanilla Option Valuation – Black-Scholes
 - ◆ Useful Bloomberg commands to valuation & monitoring
 - > Exotic – more complex payout & criteria (OTC)
 - ◆ Asian – Averaging Frequency/Style, Average Strike/Rate
 - ◆ Barrier – With Knock-in, Knock-out features
 - ◆ Binary / Touch – payout if trade above/touch trigger
 - ◆ Range Accrual – cumulate daily payout if trade between range
 - ◆ Rainbow/Basket – payout depends on the outcome of stock in basket
- > Option Premium – Time value + Intrinsic Value
- > Factors affecting Option Prices
- > Pricing of Options – Implied Volatility, Skew/Smile
- > Differences between OTC & Exchange-Traded Options – Pricing Convention, Credit Risk, Mark-to-Market, Flexibility and Liquidity
- > Option Risk Parameters – Impact of Delta, Gamma, Vega, Theta
- > How to Delta Hedge? Exercise on Delta Hedging
- > Risk Management of Options – Delta Hedging, Delta Neutral Portfolio
- > Key Option Trading Concepts
- > Practical Issues- Delta Hedging Frequency, Market Delta Impact of Hedging, Liquidity, Frictional Cost, Borrowing Cost
- > Assignment on Option

Warrants, Equity Swap & Convertible Bonds

(Saturday, 23 October 2004)

Stock Warrants & Structured Warrants

- > Types – Stock Warrants & Structured Warrants
- > Fundamentals of Stock Warrants
- > Fundamentals of Structured Warrants
- > Different Rationale of the Issuance of Stock Warrants & Structured Warrants
- > Terminology: Gearing, Premium, Conversion Ratio
- > Factors Affecting Warrant Price
- > Pricing Differences between Stock Warrant & Structured Warrant
- > Volatility- Realized, Implied & Historical
- > Warrant Pricing and the Black-Scholes Model
- > Illustration Warrant Pricing with Bloomberg
- > Practical Issues – liquidity on pricing, relative trading volume of the warrants versus underlying stocks, market impact from hedging warrant, restriction on short selling and borrowing cost
- > Case Example of Stock Warrant
- > Case Examples of Structured Warrants –
 - > Zero Strike Structured Warrant
 - > Structured Warrant on Single Stock
 - > Structured Warrant of Spread of Shares
- > Regulatory Framework and Guidelines for Issuance of Structured Warrants

Equity Swaps

- Fundamentals of Equity Swaps
- Terminology of Equity Swaps
- Characteristics of Equity Swaps
- Basic types of Equity Swaps
 - Single equity swaps
 - Equity index swaps
 - Equity basket swaps
 - Equity-to-equity swaps
- Case Illustration of a Total Return Equity Swap on Single Stock
- Case Illustration of a Total Return Equity Swap on Equity Index
- Advantages/Disadvantages of Equity Swaps
- Usages of Equity Swaps
- Factor Affecting the Valuation of Equity Swaps
- Pricing of Equity Swaps

Convertible Bonds

- Fundamentals of Convertible
- Payoff diagram of Convertible
- Terminology of Convertible
- Performance of Convertible
- Factors affecting Convertible price
- Complications in the Pricing of Convertible
- Illustration of Convertibles Pricing - Bloomberg
- Embedded Equity Option and Credit Spread
- Convertible Asset Swap – Separating the Equity and Credit in Convertible Bonds
- How does Convertibles Asset Swap work?
- Convertible Arbitrage
- Practical Issues of convertible arbitrage – borrowing cost, frictional cost, slippage and liquidity, credit deterioration, callable features
- Case Examples – Chartered Semiconductor Convertibles

Structured Equity Products and Applications of Equity Derivatives

(Saturday, 30 October 2004)

Equity-Linked Notes/Deposits

- Types of Equity-Linked Notes/Deposits: Bull, Bear, Range
- Underlying Mechanism of Equity-Linked Notes/Deposits
- Who buys Equity-Linked Notes/Deposits
- Case Examples on Equity-Linked Notes/Deposits

Index-Linked Notes/Deposits

- Types of Index-Linked Notes/Deposits (Principal Guaranteed Products)
- Underlying Mechanism of Index-Linked Notes/Deposit
- Differences between Principal Guaranteed and Capital Protected
- Who buys Index-Linked Notes/Deposits
- Case Examples on Index-Linked Notes/Deposits

Who uses Equity Derivatives?

- Hedgers, Speculators, Arbitrageurs, Commodity Trading Advisors, Fund Managers (Indexing), Structured Products Specialists and Investors

Applications of Equity Derivatives

- Hedging with Futures and Options
- Trading with Futures and Options
- Arbitraging between Futures and Cash Markets
- Convertibles Arbitrage
- Market Allocation with Futures, Options and Equity Swaps
- Investment using Equity-Linked Notes and Convertibles

EQUITY DERIVATIVES COURSE

29 March to 26 April 2003

REGISTRATION FORM

- > Please complete the registration form in block letters.
- > It should be submitted together with the registration fee.
- > The mailing address is: ACI Singapore – The Financial Markets Association, Secretariat, Hexa-Team Planners Pte Ltd, 26 Duxton Hill, Singapore 089609.
- > Photocopies of this registration form for additional registrations are acceptable.

Participant's Details

Dr/Mr/Ms/Mrs.....
(Please underline your surname)

Designation..... ACI Singapore membership number.....

Institution.....

Address.....

.....

Telephone number..... Facsimile number.....

Email address..... Sponsored by employer: Yes / No

Qualifications

() Tertiary education

() Bachelor degree..... majored in.....

() Graduate degree..... majored in.....

() Diploma majored in.....

() Professional qualifications.....

() Others.....

Current job

() Advisory () Analysis () Bonds

Function

() Broking () FX/MM () Fund management

() General management () Operations () Risk management

() Sales/Marketing () Trading () Others

Experience and skills

.....

.....

First date of practice as a financial professional (month/year).....

Number of years in current job function.....

Purpose for taking this course.....

Payment

() ACI Singapore member S\$1,650.00 nett

() *Non-ACI Singapore member S\$1,950.00 nett

(*For non-ACI Singapore members, a complimentary membership of the association for year 2005.)

Please find enclosed cheque number.....for an amount of S\$.....
for payment of the registration fee.

Note

Payments should be made via cheque / bankdraft in Singapore currency to
"ACI Singapore – The Financial Markets Association".

Course Venue

The course will be held at Bloomberg L.P., 23 Church Street, 12th Floor, Capital Square, Singapore 049481.

Duration

16-hour sessions over 4 weeks. The course dates and duration are as follows:

Saturday	9 October 2004	9.00 am to 1.30 pm
Saturday	16 October 2004	9.00 am to 1.30 pm
Saturday	23 October 2004	9.00 am to 1.30 pm
Saturday	30 October 2004	9.00 am to 1.30 pm

Course Fees

ACI Singapore member S\$1,650 nett

*Non-ACI Singapore member S\$1,950 nett

(*For non-ACI Singapore members, a complimentary membership of the association for the current year.)

Financial Sector Development Fund (FSDF)

Course participants may be eligible for Financial Sector Development Fund (FSDF) support on a case by case basis. Interested applicants should submit their applications to the FSDF Secretariat directly. More details on the FSDF can be found at <http://www.mas.gov.sg>

Closing Date

The closing date for registration is 5 October 2004. As seats are limited, participants are encouraged to register early to avoid disappointment.

Accreditation

On successful completion of the course, ACI Singapore will award all participants a certificate of attendance.

About The Organiser, ACI Singapore

ACI Singapore – The Financial Markets Association seeks to be the standard bearer for financial market professionals in Singapore. Its membership spans major areas of the industry, including interest rates, bonds, foreign exchange and asset management. One of the association's key thrusts is to promote continuous education in the wholesale finance industry. ACI Singapore is affiliated to ACI – The Financial Markets Association, the Paris-based global umbrella body with about 19,000 members in 83 countries. For more information on ACI Singapore, please visit the association's website www.acisin.com.

Acknowledgement

ACI Singapore acknowledges Bloomberg L.P.'s provision of its training room for the course.

How to Register

Please complete the registration form and return it together with a cheque / bank draft made payable to "**ACI Singapore – The Financial Markets Association**" and to be sent to: ACI Singapore – The Financial Markets Association, Secretariat, Hexa-Team Planners Pte Ltd, 26 Duxton Hill, Singapore 089609.

For Enquiries

For enquiries, please contact ACI Singapore Secretariat, Fong Ling at telephone number 6227-8110, facsimile number 6227-8113 or email: lee_fong_ling@hexateam.com.

Cancellation and General Policies

If the registrant is unable to attend the course, his/her institution may nominate another staff to attend the course in his/her place. The registration fee will not be refunded for cancellation. The replacement staff will be screened for eligibility. If the replacement staff is not an ACI-Singapore member, he/she will pay the non-ACI Singapore members' course fee. ACI Singapore reserves the right to change the course contents. ACI Singapore shall not be held liable if the course is cancelled or postponed due to unforeseen circumstances. If the course is cancelled, the course fees will be refunded to the registrants. In the event that the course is postponed, the registrants will be notified of the revised course dates.

EQUITY DERIVATIVES COURSE

ACI Singapore –
The Financial Markets Association
Secretariat
Hexa-Team Planners Pte Ltd
26 Duxton Hill, Singapore 089609
Tel: 6227 8110
Fax: 6227 8113
Email: secretariat@acisin.com
Website: www.acisin.com