Fundamentals of derivative valuation

Understand the basic concepts of derivative valuation and learn how to value some of the common financial derivatives

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1 day course – now scheduled in Hong Kong

Check www.jzpartners.com.hk/training/ for schedule and price

☐ Gain an understanding of the mechanics and uses of financial derivatives, including forwards, futures, options, and swaps

☐ Understand the basic concepts of derivative valuation and their applications

☐ Learn how to value financial derivatives using widely accepted analytical and numerical methods

☐ Develop an appreciation of derivative risk management, including hedging and the Greek letters

Derivatives have grown quickly both in popularity and complexity over recent years. An understanding of the mechanics and pricing of derivatives has become ever more important for trading, accounting, and risk management purposes.

The training course is intended to introduce participants to the concepts of derivative valuation and to give them an understanding of how to value derivatives. No prior knowledge of financial derivatives is assumed. The course is suitable for anyone who has an interest in derivatives and who would like to develop an understanding of valuation methods.

An overview of the characteristics and uses of derivatives will be given. The basic elements of derivative valuation – discounting, no arbitrage, hedging, and volatility – will be explained. Widely accepted analytical and numerical methods, such as Black-Scholes model and binomial trees, will be illustrated with examples. The course will also look at more advanced topics, including implied volatility, the Greeks, risk-neutral valuation, and exotic options.

Course Syllabus

PART A: Introduction to derivatives

☐ Definition and characteristics

☐ An overview of the derivative markets

☐ Why use derivatives?

PART B: Valuation of bonds and interest rate swaps

☐ Time value of money

☐ Discounted cash flow method

PART C: Valuation of forwards and futures

☐ The principle of no arbitrage

☐ Pricing and valuation of stock, index, and currency forwards

☐ Marking-to-market

PART D: Valuation of options

☐ Put-call parity

☐ Binomial tree

☐ Black-Scholes model

☐ Valuation of European and American vanilla options

PART E: Special topics

☐ Implied volatility

☐ Delta hedging

☐ The Greek letters

☐ Risk-neutral valuation

☐ Monte Carlo method

☐ Exotic options