CFAspace

Provided by APF

Academy of Professional Finance 专业金融学院

CFA Level II

Derivatives

Introduction

CFA Lecturer: Jiahao Gu

Weight of Quantitative Methods

Topic Area	Level I	Level II	Level III
Ethical and Professional Standards	15	10-15	10-15
Quantitative Methods	12	5-10	0
Economics for Valuation	10	5-10	5-15
Financial Reporting and Analysis	20	15-20	0
Corporate Finance	7	5-15	0
Equity Investments	10	15-25	5-15
Fixed Income	10	10-20	10-20
Derivatives	5	5-15	5-15
Alternative Investments	4	5-10	5-15
Portfolio Management	7	5-10	40-55
Total	100	100	100

Data Source: CFAInstitute.org

Overview

Readings	LOS
Pricing and Valuation of Forward Commitments	4
Valuation of Contingent Claims	15
Derivative Strategies	10

Overview of LOS

Pricing and Valuation of Forward Commitments	1. Describe and compare how equity, interest rate, fixed-income, and currency forward and futures contracts are priced and valued
	2. Calculate and interpret the no-arbitrage value of equity, interest rate, fixed-income, and currency forward and futures contracts
	3. Describe and compare how interest rate, currency, and equity swaps are priced and valued
	4. Calculate and interpret the no-arbitrage value of interest rate, currency, and equity swaps

Overview of LOS

Valuation of Contingent Claims	1. Describe and interpret the binomial option valuation model and its component terms
	2. Calculate the no-arbitrage values of European and American options using a two-period binomial model
	3. Identify an arbitrage opportunity involving options and describe the related arbitrage
	4. Describe how interest rate options are valued using a two-period binomial model
	5. Calculate and interpret the values of an interest rate option using a two-period binomial model

Overview of LOS

Valuation of Contingent Claims	6. Describe how the value of a European option can be analyzed as the present value of the option's expected payoff at expiration
	7. Identify assumptions of the Black-Scholes-Merton option valuation model
	8. Interpret the components of the Black-Scholes-Merton model as applied to call options in terms of leveraged position in the underlying
	9. Describe how the Black-Scholes-Merton model is used to value European options on equities and currencies
	10. Describe how the Black model is used to value European options of futures

Overview of LOS

Valuation of Contingent Claims	11. Describe how the Black model is used to value European interest rate options and European swaptions
	12. Interpret each of the options Greeks
	13. Describe how a delta hedge is executed
	14. Describe the role of gamma risk in options trading
	15. Define implied volatility and explain how it is used in options trading

Overview of LOS

Derivative Strategies	1. Describe how interest rate, currency, and equity swaps, futures, and forwards can be used to modify risk and return
	2. Describe how to replicate an asset by using options and by using cash plus forwards or futures
	3. Describe the investment objectives, structure, payoff, and risk(s) of a covered call position
	4. Describe the investment options, structure, payoff, and risk(s) of a protective put position
	5. Calculate and interpret the value at expiration, profit, maximum profit, maximum loss, and breakeven underlying price at expiration for covered calls and protective puts

Overview of LOS

Derivative Strategies	6. Contrast protective put and covered call positions to being long an asset and short a forward on the asset
	7. Describe the investment objective(s), structure, payoffs, and risk of the following option strategies: bull spread, bear spread, collar, straddle
	8. Calculate and interpret the value at expiration, profit, maximum profit, maximum loss, and breakeven underlying price at expiration of the following option strategies: bull spread, bear spread, collar, and straddle
	9. Describe uses of calendar spreads
	10. Identify and evaluate appropriate derivatives strategies consistent with given investment objectives

CFAspace

Thank You!