

25/01 560 FINANCIAL MARKETS

Course Overview

M1: Credit Risk and Financing

M2: Return and Volatility

M3: Correlation

M4: Leverage and Nonlinearity

FM Forum M4

LESSON 1: DERIVATIVES, WITH AN EMPHASIS ON OPTIONS

Required Readings

Lesson Notes

LESSON 2: LEVERAGE AND NON-LINEARITY

Required Readings

Lesson Notes

LESSON 3: HOME EQUITY AS AN OPTION

Required Readings

Lesson Notes

LESSON 4: OPTION STRATEGIES AND SCENARIOS

Required Readings

Lesson Notes

MODULE 4 SUMMARY

Leverage and Nonlinearity
Screencast

ASSESSMENTS

FM Collaborative Review Task
2

FM Practice Quiz M4

FM Graded Quiz M4

M5: Liquidity and Regulation

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FM Graded Quiz M4

Question 1

In the context of options trading, what does a "tug-of-war" at strike levels refer to?

- ☒ The conflict between option buyers and sellers as the stock price nears the strike price
- ☐ The process of determining the fair value of an option
- ☐ A physical competition between traders on the trading floor
- ☐ A method for resolving disputes between brokers and clients

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48:16

QUESTIONS

1 2 3 4 5
6 7 8 9 10
11 12 13 14 15
16

Question 2

You buy a put option with a strike price of \$75 for a premium of \$4. If the stock price at expiration is \$68, what is your profit per share?

- ☐ \$5
- ☐ \$11
- ☒ \$3
- ☐ \$7

Question 3

A put option has a strike price of \$75 and the current stock price is \$80. What is the option's intrinsic value?

- ☐ \$5
- ☐ \$80
- ☒ \$0
- ☐ \$75

Question 4

A call option with a strike price of \$100 is currently trading for \$5. The underlying stock is trading at \$98. What is the intrinsic value and time value of this option?

- ☐ Intrinsic value: \$2; Time value: \$3
- ☐ Intrinsic value: \$5; Time value: \$0
- ☒ Intrinsic value: \$0; Time value: \$5
- ☐ Intrinsic value: \$3; Time value: \$2

Question 5

Which strategy would be most appropriate for an investor who believes a stock price will remain relatively stable in the near future?

- ☒ Selling a call option (covered call strategy)
- ☐ Buying a put option
- ☐ Buying both a call and a put option
- ☐ Buying a call option

Question 6

What would be the effect on home prices if all mortgages were suddenly converted to non-recourse loans?

- ☐ Home prices would immediately decrease
- ☐ There would be no significant change in home prices

- ☐ Home prices would become more stable
- ☒ Home prices might initially increase due to increased demand and speculation

Question 7

Calculate the home equity for a house worth \$400,000 with a \$320,000 mortgage.

- ☒ \$80,000
- ☐ \$400,000
- ☐ \$320,000
- ☐ \$0

Question 8

How does the concept of intrinsic value relate to an option's payoff?

- ☐ Intrinsic value is the difference between the strike price and the premium
- ☐ Intrinsic value is always equal to the option's premium
- ☐ Intrinsic value is only relevant for put options
- ☒ Intrinsic value represents the option's payoff if exercised immediately

Question 9

What is the primary goal of an arbitrageur in the options market?

- ☐ To minimize risk through diversification
- ☒ To profit from price discrepancies between related securities
- ☐ To provide liquidity to the market
- ☐ To maximize returns through high-risk investments

Question 10

What is the conversion factor for stock options?

- ☐ 200
- ☐ 50
- ☐ 75
- ☒ 100

Question 11

An investor believes a stock currently trading at \$100 will experience increased volatility but is unsure of the direction. The investor buys a call with a strike of 110 for 5 and a put with a strike of \$90 for \$5. What is the maximum loss for this strategy?

- ☒ \$10
- ☐ \$25
- ☐ \$15
- ☐ \$20

Question 12

If a trader buys a put option with a strike price of \$40 for a premium of \$3, what is the break-even point?

- ☒ \$37
- ☐ \$46
- ☐ \$43
- ☐ \$40

Question 13

Which of the following is NOT a fundamental type of derivative?

- ☐ Forwards
- ☐ Futures
- ☒ Bonds
- ☐ Options

Question 14

What factors contribute to the carry cost of home ownership?

- ☐ Only maintenance and repair costs
- ☐ Only insurance costs and utility bills
- ☒ Mortgage payments, taxes, insurance, utilities, and maintenance
- ☐ Only mortgage payments and property taxes

Question 15

If a homeowner has a \$400,000 mortgage on a house now worth \$350,000, what is the bank's potential loss with a non-recourse loan?

- ☐ \$400,000
- ☒ \$50,000
- ☐ \$0
- ☐ \$350,000

Question 16

What is the maximum potential loss when buying an option?

- ☐ The current stock price
- ☐ There is no limit to the potential loss
- ☒ The premium paid for the option
- ☐ The strike price of the option

SUBMIT

