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## You can preview this quiz, but if this were a real attempt, you would be blocked because:

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### Question 1

Not yet answeredMarked out of 3.50

A bond investor from the U.S. is worried about a change in income tax rates. If income tax rates were increased, then

- a. the interest rate on U.S. municipal bonds would fall.
- b. the interest rate on U.S. municipal bonds would rise.
- c. the interest rate on Treasury bonds would rise.
- d. the price of Treasury bonds would fall.

### Question 2

Not yet answeredMarked out of 3.50

There is a wide array of financial derivatives available. Financial derivatives are not used for

- a. gaining exposure to underlying assets.
- b. risk management.
- c. regulatory arbitrage.
- d. calculating the mathematical formulas required for pricing.

### Question 3

Not yet answeredMarked out of 3.50

You are a trader at a hedge fund. The portfolio manager wants a derivative with a payoff based on the realized volatility of the underlying asset. What instrument would you recommend she should take a position in?

- a. VIX index.
- b. barrier option.
- c. volatility swap.
- d. exchange option.

## Question 4

Not yet answeredMarked out of 3.50

A speculator buys a call option for \$3, with an exercise price of \$150. The stock is currently priced at \$149, and rises to \$155 on the expiration date. What is the stock price at which the speculator would break even?

- a. \$152
- b. \$153
- c. \$149
- d. \$158
- e. \$150

## Question 5

Not yet answeredMarked out of 3.50

A 5-year maturity coupon bond with a 4.5% annual coupon and face value of USD 10,000 is selling for \$8,545.05. What is your rate of return if you sell this bond next year at a price of \$9,750.00?

- a. 57.05%
- b. 16.55%
- c. 19.37%
- d. 66.76%

## Question 6

Not yet answeredMarked out of 3.50

The greater the risk-free rate, the \_\_\_\_\_ the European call option premium and the \_\_\_\_\_ the American put option premium.

- a. lower; higher
- b. lower; lower
- c. higher; lower
- d. higher; higher

## Question 7

Not yet answeredMarked out of 3.50

A long straddle means that you are

- a. short one put and long one call option of different underlying securities, same expiration date and same strike price.
- b. long one put and long one call option of different underlying securities, same expiration date and same strike price.
- c. long one put and long one call option of the same underlying security, same expiration date and same strike price.
- d. short one put and short one call option of the same underlying security, same expiration date and same strike price.

## Question 8

Not yet answeredMarked out of 3.50

The Glass-Steagall Act was one of the most widely debated legislative initiatives before being signed into law by President Franklin D. Roosevelt in June 1933. Which of the following statements is false?

- a. New banks in the US have to choose between being a commercial bank or an investment bank due to the Glass-Steagall Act, which in effect constructed a wall between commercial banking and investing banking activities.
- b. The bill was designed, among other things, to give tighter regulation of national banks to the Federal Reserve System, requiring holding companies and other affiliates of state member banks to make several reports annually to their Federal Reserve Bank and to the Federal Reserve Board.
- c. This bill created the Federal Deposit Insurance Corporation.
- d. One of the purposes for which the Glass-Steagall Act was designed was to provide for the safer and more effective use of the assets of banks.

## Question 9

Not yet answeredMarked out of 40.00

In 1998, Long Term Capital Management (LTCM), a highly leveraged hedge fund which counted amongst its key board members Myron Scholes and Robert Merton, received a 3.6 billion USD bailout from a group of banks. The deal was brokered by the Federal Reserve Bank of New York (Fed) in order to avoid wider financial collapse. Among the main strategies of LTCM were convergence trading using quantitative models and the offering of portfolio insurance products.

- a) One of the main instruments that LTCM used in their trading was interest rate swaps. What are interest rate swaps and how did they influence the collapse of LTCM? (10 points)
- b) How can interest rate swaps be used by different market participants? (10 points)
- c) Explain in detail how portfolio insurance works and provide a historical example, other than the case of LTCM, when portfolio insurance contributed to a financial crisis. (10 points)
- d) A 6-month European call option for a stock has a strike price of \$11.50 with the underlying (non-dividend paying) asset currently trading at a price of \$11, annual volatility of the asset price 6% and 6-month U.S. T-bill rate currently offering a yield of 1.5% per annum. What is the price of this option? Use the Black-Scholes formula to illustrate your answer. (10 points)

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## Question 10

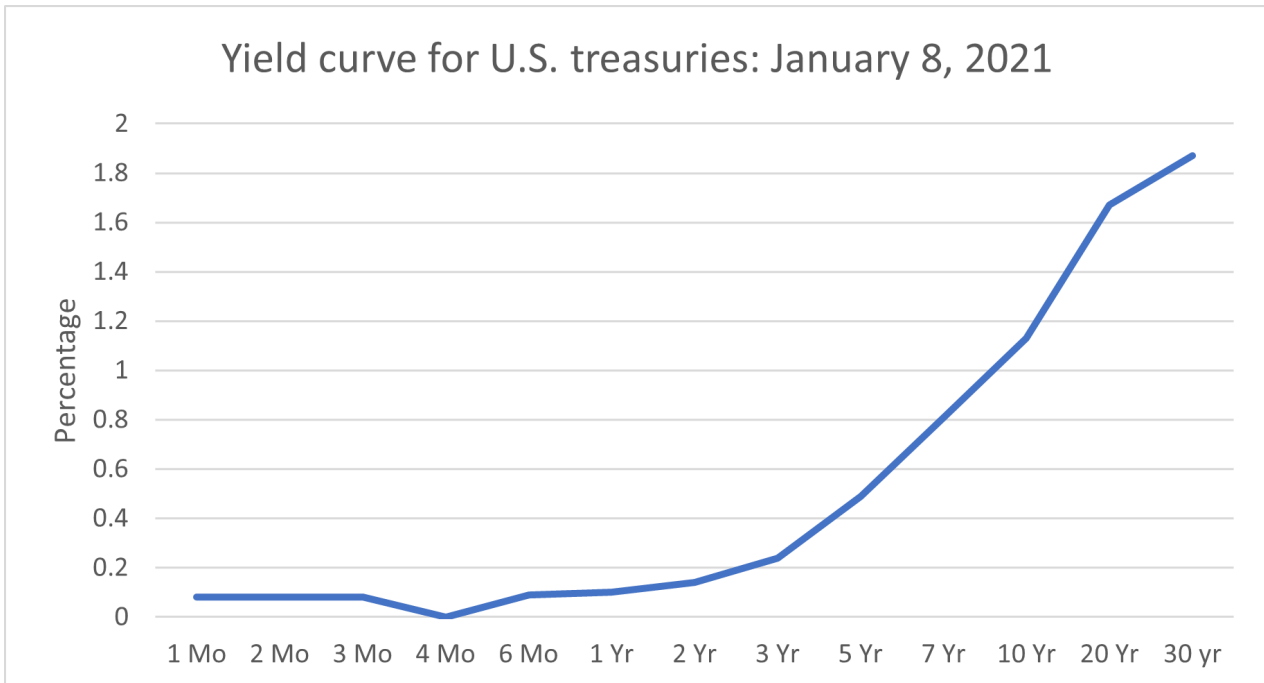
Not yet answered Marked out of 32.00

a) Recent headlines in the Financial Times address how major UK and European stock indexes such as the FTSE 100 index and S&P 500 have suffered record falls after announcements by central banks of another increase in interest rates. As an investor in the stock markets, you are considering making changes to your current stock holdings based on this news.

i) Discuss the benefits of diversification. (3 points)

ii) Explain how you can achieve portfolio diversification in your stock portfolio. Provide detailed examples. (9 points)

b) The graph below represents the yield curve of U.S. Treasuries on January 8, 2021.



i) Based on the liquidity premium theory, what is the market predicting about the movement of future short-term interest rates? (6 points)

ii) Based on your answer to part (i), what might the yield curve indicate about the market's predictions concerning the inflation rate in the future? (4 points)

c) In the aftermath of Liz Truss and Kwarteng's 'mini-budget,' in 2022, borrowing costs in the UK spiralled, leading to the Bank of England having to intervene to stabilise the market. Explain, in your own words, how these two events are connected and what led to this intervention. (10 points)

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