

Module Quiz 4.1 - Questions

Question 1

In backtesting a value at risk (VaR) model that was constructed using a 97.5% confidence level over a 252-day period, how many exceptions are forecasted?

- A) 2.5.
- B) 3.7.
- C) 6.3.
- D) 12.6.

Question 2

Unconditional testing does not reflect the:

- A) size of the portfolio.
- B) number of exceptions.
- C) confidence level chosen.
- D) timing of the exceptions.

Question 3

Which of the following statements regarding verification of a VaR model by examining its failure rates is false?

- A) The frequency of exceptions should correspond to the confidence level used for the model.
- B) According to Kupiec (1995), we should reject the hypothesis that the model is correct if the log-likelihood ratio (LR) > 3.84 .
- C) Backtesting VaR models with a higher probability of exceptions is difficult because the number of exceptions is not high enough to provide meaningful information.
- D) The range for the number of exceptions must strike a balance between the chances of rejecting an accurate model (a Type I error) and the chances of failing to reject an inaccurate model (a Type II error).

Question 4

A risk manager is backtesting a sample at the 95% confidence level to see if a VaR model needs to be recalibrated. He is using 252 daily returns for the sample and discovered 17 exceptions. What is the z-score for this sample when conducting VaR model verification?

- A) 0.62.
- B) 1.27.
- C) 1.64.
- D) 2.86.