25/01 560 FINANCIAL MARKETS

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FM Graded Quiz M3

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QUESTIONS

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Question 1

According to "Special Feature: Evaluating Changes in Correlations during Periods of High Market Volatility.", what is the primary reason for increased correlations between asset returns during periods of high market volatility?

- ○ A natural consequence of probability theory even if the underlying relationships remain unchanged
- ◉ Contagion effects between markets
- ○ New market structures or practices
- ○ Changes in the underlying relationships that determine returns

Question 2

What is the main advantage of using the Sharpe ratio over the Coefficient of Variation?

- ○ The Sharpe ratio is easier to calculate
- ◉ The Sharpe ratio accounts for the risk-free rate
- ○ The Sharpe ratio is always positive
- ○ The Sharpe ratio works better for non-normal distributions

Question 3

According to "Financial Management for Small Businesses", what does a beta coefficient of 0.48 for a potential new investment indicate?

- ○ The new investment will eliminate 48% of the firm's portfolio risk
- ◉ A 10% change in the firm's portfolio return will likely be accompanied by a 4.8% change in the new investment's return
- ○ The new investment will increase the firm's portfolio risk by 48%
- ○ 48% of the new investment's return is independent of the firm's portfolio return

Question 4

Assume that a portfolio consists of two equally weighted assets having returns of 5% and 11%, standard deviations of 3% and 8% respectively, and the correlation between the two assets is 1. What is the reduction in volatility if the correlation was -0.5 instead?

- ◉ 0.02
- ○ 0.005
- ○ 0.01
- ○ -0.02

Question 5

If an asset allocation ETF charges 0.25% annually and you invest $50000 what would be your annual fee?

- ◉ $125
- ○ $100
- ○ $175
- ○ $150

Question 6

How might you create a hedging strategy using ETFs to protect against potential market downturns?

- [x] Combine long positions in broad market ETFs with short positions in volatile sector ETFs or inverse ETFs
- [ ] Increase leverage by borrowing to buy more of the same ETFs
- [ ] Invest all assets in a single sector ETF
- [ ] Sell all ETF holdings and hold only cash

Question 7

Calculate the Sharpe ratio for a portfolio with return 8%, risk-free rate 1%, and standard deviation 5.162%.

- [ ] 1.215
- [ ] 1.4
- [ ] 1.3
- [x] 1.356

Question 8

If an ETF tracking the S&P 500 has a correlation of 0.98 with the index, what is its tracking error?

- [x] 0.02%
- [ ] 0.98%
- [ ] 1%
- [ ] 2%

Question 9

How does volatility typically affect correlations between asset classes?

- [ ] Volatility has no effect on correlations
- [x] High volatility often leads to higher correlations
- [ ] High volatility always leads to lower correlations
- [ ] Low volatility always leads to higher correlations

Question 10

Propose a method to incorporate illiquid assets into a portfolio while maintaining accurate risk and return calculations. What challenges would you need to address?

- [x] Develop a robust mark-to-model approach with regular valuation updates and stress testing
- [ ] Exclude all illiquid assets from the portfolio
- [ ] Assume illiquid assets have the same risk-return profile as liquid assets
- [ ] Use only historical data for illiquid assets

Question 11

Which of the following best describes the relationship between Pearson's and Spearman's correlation coefficients?

- [ ] Pearson's is always larger than Spearman's
- [ ] They are always equal
- [ ] Spearman's is always larger than Pearson's
- [x] Spearman's is usually larger than Pearson's

Question 12

If a portfolio consists of two assets with standard deviations of 6% and 2% respectively and a correlation of 0.5 what is the portfolio standard deviation for equal weights?

- (•) 4.27%
- ( ) 4.00%
- ( ) 5.20%
- ( ) 3.60%

Question 13

If two assets have a correlation of 0.5 and individual volatilities of 15% and 20% what is their covariance?

- ( ) 0.025
- ( ) 0.01
- ( ) 0.02
- (•) 0.015

Question 14

What is the primary focus of sector selection in ETF investing?

- ( ) Individual company performance analysis
- (•) Macro-economic modeling and understanding of business cycles
- ( ) Predicting short-term individual stock rallies
- ( ) Technical analysis of stock charts

Question 15

Calculate the weight of Stock A in a portfolio if it has 100 shares at $50 per share, and Stock B has 200 shares at $25 per share.

- ( ) 0.6
- (•) 0.5
- ( ) 0.33
- ( ) 0.4

Question 16

If a US-exchange-traded ETF's NAV is calculated at 11:30 AM ET due to tracking a European index and the US exchange closes at 4:00 PM ET, what time frame is considered the NAV of this ETF 'stale'?

- ( ) 9:30 AM ET - 11:30 AM ET
- ( ) 12:00 PM ET - 4:00 PM ET
- ( ) 9:30 AM ET - 4:00 PM ET
- (•) 11:30 AM ET - 4:00 PM ET

SUBMIT