

Finance 4335 Midterm 2 Synopsis Outline and Study Questions

Here is a summary of the key points from the [Finance 4335 Midterm 2 Synopsis](#), along with Study Questions and Answers:

Summary

- Insurance economics
 - Bernoulli principle - fully insure if insurance is actuarially fair
 - Mossin's theorem - partially insure if insurance is actuarially unfair
 - Arrow's theorem – holding expected indemnities equal, optimal partial insurance is the deductible contract
- Asymmetric information
 - Moral hazard - hidden actions after the formation of a principal-agent relationship
 - Adverse selection - hidden information before the formation of a principal-agent relationship
- Portfolio theory
 - Mean-Variance Efficient (MVE) portfolios lie along the northwest perimeter of the feasible set of portfolios
 - Optimal risk exposure is positively related to the Sharpe ratio and risk tolerance, inversely related to volatility
- Capital market theory
 - Investors lend/borrow at the risk-free rate for funding investment in the market portfolio
 - Capital Market Line (CML) - portfolios that lie on the CML are mean-variance efficient
 - CAPM Equation: expected return = risk-free rate + beta*(market risk premium)
 - CAPM implies that only systematic risk is priced.
 - However, firms manage idiosyncratic as well as systematic risks.

Study Questions and Answers

Question	Answer
What is the Bernoulli principle?	If insurance is actuarially fair, risk averters fully insure.
What does Mossin's theorem state?	If insurance is actuarially unfair, risk averters partially insure.

Question	Answer
What is Arrow's theorem regarding insurance?	Cet. par., the optimal partial insurance contract is the deductible contract.
What is moral hazard?	A hidden action problem after a principal-agent relationship is formed.
What is adverse selection?	A hidden information problem before a principal-agent relationship is formed.
Where do efficient portfolios lie according to portfolio theory?	Along the northwest perimeter of the feasible set.
What does the CAPM state?	Expected return = risk-free rate + beta*(market risk premium)
What does the CAPM imply about risk?	Only systematic risk is priced.