

QFI – Investment Risk Management Exam

Spring/Fall 2018

Important Exam Information:

<u>Exam Registration</u> Candidates may register online or with an application.

Order Study Notes Study notes are part of the required syllabus and are not available

electronically but may be purchased through the online store.

<u>Introductory Study Note</u> The Introductory Study Note has a complete listing of all study

notes as well as errata and other important information.

Case Study There is no case study for this examination.

Past Exams Past Exams from 2000 - present are available on the SOA website.

Updates Candidates should be sure to check the Updates page on the exam

home page periodically for additional corrections or notices.

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1. Topic: Governance

Learning Objectives

The candidate will understand the needs and methods of governing investments.

Learning Outcomes

The Candidate will be able to:

- a) Compare the interest of key stakeholders.
- b) Explain principal versus agent conflict.
- c) Identify sources of unethical conduct and explain the role of a fiduciary.
- d) Describe governance mechanisms that attempt to address these conflicts.
- e) Understand the importance of an organization's culture in effectuating governance.
- f) Explain how governance may be structured to gain competitive advantages and efficiencies.
- g) Demonstrate understanding of how ethics relates to business decision-making, and relate ethics in business to personal ethics.

Resources

- Financial Enterprise Risk Management, Sweeting, Paul, 2nd Edition, 2017
 - o Ch. 1: An Introduction to ERM
- Risk Management: Foundations for a Changing World, Haslett, Walter V., 2010
 - o Ch. 45: The Ten Commandments of Operational Due Diligence
- Investment Ethics, Peck, Sarah, 2011
 - o Ch. 1-3, 7 and 9
- QFII-101-14: Ch. 11 of Strategic Management: An Integrated Approach, Hill & Jones
- QFII-103-14: Advances in Risk Management and Risk Governance
- QFII-111-17: Tracing the True Origins of Bad Behavior: New Ways to Predict Conduct Risk Exposure, Dr. Roger Miles

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2. Topic: Investment Risk Management

Learning Objectives

The candidate will understand and be able to apply the components of an effective risk management system.

Learning Outcomes

The Candidate will be able to:

- a) Explain the importance of risk culture in an investment firm.
- b) Identify and describe the various kinds of risks, including market, credit, operational, etc.
- c) Identify and describe various approaches for managing risks including risk budgeting, position limits, etc.
- d) Explain the features of a best practices enterprise risk management system.
- e) Evaluate a company's risk management process.
- f) Examine examples of risk management failure.

Resources

- Managing Investment Portfolios, Maginn, John L. & Tuttle, Donald L., 3rd Edition, 2007
 - o Ch. 9: Risk Management (sections 1-4 and 6)
- Risk Management: Foundations for a Changing World, Haslett, Walter V., 2010
 - o Ch. 18: The Sense and Nonsense of Risk Budgeting
 - o Ch. 33: Risk Management Programs
- Financial Enterprise Risk Management, Sweeting, Paul, 2nd Edition, 2017
 - o Ch. 7: Definitions of Risk
 - o Ch. 8: Risk Identification
 - o Ch. 20: Case Studies
- The Top Ten Operational Risks: A Survival Guide for Investment Management Firms and Hedge Funds,
 Miller and Lawton, 2010
- QFII-101-14: Ch. 11 of Strategic Management: An Integrated Approach
- QFII-110-15: The Devil is in the Tails: Actuarial Mathematics and the Subprime Mortgage Crisis
- QFII-112-17: Ch. 26 of *Paul Wilmott Introduces Quantitative Finance*, Wilmott, Paul, 2nd Edition, 2007
- QFII-113-17: Revisiting the Role of Insurance Company ALM Within a Risk Management Framework
- QFII-114-17: Ch. 10 of Modern Investment Management: An Equilibrium Approach

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3. Topic: Risk Measurement

Learning Objectives

Understand and be able to apply different approaches to risk measurement.

Learning Outcomes

The Candidate will be able to:

- a) Evaluate a company's or a portfolio's exposures to various risks.
- b) Explain the advantages and limitations of different risk metrics.
- c) Explain how different approaches and tests form a set of complementary investment risk metrics.
- d) Analyze and evaluate risk aggregation techniques, including the use and misuse of correlation, integrated risk distributions and copulas.

Resources

- Managing Investment Portfolios, Maginn, John L. & Tuttle, Donald L., 3rd Edition, 2007
 - o Ch. 9: Risk Management (section 5)
- Risk Management: Foundations for a Changing World, Haslett, Walter V., 2010
 - o Ch. 2: Practical Issue in Choosing and Applying Risk Management Tools
 - o Ch. 14: Merging the Risk Management Objectives of the Client and Investment Manager
- QFII-104-14: Correlation: Pitfalls and Alternatives
- QFII-105-14: Risk²: Measuring the Risk in Value at Risk
- QFII-107-14: Ch. 14 of Value at Risk, Third Edition, Jorion
- QFII-108-14: Developments in Modelling Risk Aggregation, pp. 76-87
- QFII-110-15: The Devil is in the Tails: Actuarial Mathematics and the Subprime Mortgage Crisis
- QFII-115-17: Ch. 2 and 3 of Liquidity Measurement and Management: A Practitioners Guide to Global Best Practices