

CFE – Foundations of CFE Exam

Fall 2019/Spring 2020

Important Exam Information:

[Exam Registration](#)

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.

[Introductory Study Note](#)

The Introductory Study Note has a complete listing of all study notes as well as errata and other important information.

[Overview Study Note](#)

Study Note F-20-19 is designed to provide an overview of the CFE Track and this exam. Candidates should read it prior to beginning preparation for the exam. While it can be a valuable aid in preparation, the material in this note will not be tested.

Case Study

A copy of the case study will be provided with the examinations. Candidates will not be allowed to bring their copy of the case study into the examination room.

[Past Exams](#)

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

[Updates](#)

Candidates should be sure to check the Updates page on the exam home page periodically for additional corrections or notices.

Corporate Finance and ERM – Foundations Exam
Fall 2019/Spring 2020

1. Topic: Corporate Finance

Learning Objectives

The candidate will understand how a company optimizes its corporate finance decisions based on its business objectives.

Learning Outcomes

The Candidate will be able to:

- a) Recommend an optimal capital structure for given business objectives and the competitive environment
- b) Compare and contrast methods to determine the value of a business or project, including the impact on capital budgeting and allocation decisions
- c) Evaluate the impact of non-financial factors on capital structure or capital budgeting decisions
- d) Assess the impact of business strategies such as acquisitions, divestitures, and/or restructurings

Resources

- *Corporate Finance*, Berk, Jonathan and Demarzo, Peter, 4th Edition, 2017
 - Ch. 8: Fundamentals of Capital Budgeting (background only)
 - Ch. 18: Capital Budgeting and Valuation with Leverage
 - Ch. 22: Real Options
 - Ch. 25: Leasing
 - Ch. 27: Short-Term Financial Planning
 - Ch. 28: Mergers and Acquisitions (pp. 962-978)
 - Ch. 31: International Corporate Finance
- F-120-15: Creating Value Through Best-In-Class Capital Allocation
- F-132-17: Capital Structure, Executive Compensation, and Investment Efficiency
- F-133-19: Ch. 10 of the *Handbook of Corporate Finance: Empirical Corporate Finance*, Volume 2
- F-134-19: Ch. 15 of *Damodaran on Valuation*, Damodaran, 2nd Edition, 2006
- F-135-19: Why are the Parts Worth More than the Sum; “Chop Shop,” A Corporate Valuation Model
- F-136-19: *Corporate Value Creation, Governance and Privatisation*, Ch. 4
- F-137-19: Hurdle Rates, Cost of Capital & Capital Structure: CFO Spotlight

2. Topic: Financial Statement Analysis
Learning Objectives
The candidate will understand how to gauge a company's performance through an evaluation of its financial reports.
Learning Outcomes
The Candidate will be able to: <ul style="list-style-type: none">a) Analyze the interrelationships between the income statement, cash flow statement, and balance sheet, in order to measure a corporation's financial performanceb) Identify and analyze the impact of unusual accounting practices on the quality of earnings and assets of a corporation, including analyzing the signs of questionable accountingc) Analyze the impact of foreign exchange rates, local regulations, and tax policies on a multinational corporation
Resources
<ul style="list-style-type: none">• <i>International Financial Statement Analysis</i>, Robinson et al, 3rd Edition, 2015<ul style="list-style-type: none">○ Ch. 1: Financial Statement Analysis: An Introduction (background only)○ Ch. 3: Financial Reporting Standards (background only)○ Ch. 4: Understanding Income Statements (background only)○ Ch. 5: Understanding Balance Sheets (background only)○ Ch. 6: Understanding Cash Flow Statements (background only)○ Ch. 7: Financial Analysis Techniques○ Ch. 11: Financial Reporting Quality○ Ch. 12: Financial Statement Analysis: Applications○ Ch. 16: Multinational Operations○ Ch. 17: Evaluating Quality of Financial Reports

3. Topic: Enterprise Risk Management & Operational Excellence

Learning Objectives

The candidate will understand how to apply and recommend appropriate ERM framework, principles and strategies to manage, evaluate, analyze and mitigate risk exposures faced by an entity and to ensure operational excellence in any industry.

Learning Outcomes

The Candidate will be able to:

- a) Assess the potential impact of risks faced by an entity in any industry
- b) Recommend best practices in risk measurement, modeling, and management of various financial and non-financial risks
- c) Develop an appropriate risk mitigation or risk transfer strategy for any given situation
- d) Recommend best practices to achieve operational excellence
- e) Design, analyze and develop ERM strategies for financial and non-financial companies

Resources

- *Enterprise Risk Management Models*, Olson, David L. and Wu, Desheng Dash, 2nd Edition, 2017
 - Ch. 1: Enterprise Risk Management in Supply Chain
 - Ch. 3: Value-Focused Supply Chain Risk Analysis
 - Ch. 4: Examples of Supply Chain Decisions Trading Off Criteria
 - Ch. 5: Simulation of Supply Chain Risk
 - Ch. 6: Value at Risk Models
 - Ch. 7: Chance Constrained Models
 - Ch. 8: Data Envelopment Analysis in Enterprise Risk Management
 - Ch. 9: Data Mining Models and Enterprise Risk Management
 - Ch. 10: Balanced Scorecards to Measure Enterprise Risk Performance
- *Managing Business Process Flows*, Anupindi, R., Chopra, S. and Deshmukh, S., 3rd Edition, 2012
 - Ch. 1: Products, Processes and Performance
 - Ch. 2: Operations Strategy and Management
- F-138-19: A Framework for Board Oversight of Enterprise Risk, CPA Canada, pp. 1-45

4. Topic: Quantitative Methods
Learning Objectives
The candidate will understand the application of quantitative methods with a risk management focus to business problems.
Learning Outcomes
The Candidate will be able to: <ul style="list-style-type: none">a) Assess methods and processes for quantifying and managing risk within any business enterprise<ul style="list-style-type: none">i. Evaluate method and model tradeoffs between usefulness, resource constraints, timeliness, fidelity, and accuracyii. Evaluate processes for vetting modelsb) Evaluate results of deterministic, stress-testing, stochastic and simulation methods and modelsc) Evaluate the impact of risk mitigation methods including risk hedging and insurance
Resources
<ul style="list-style-type: none">• <i>Measuring Market Risk</i>, Dowd, Kevin, 2nd Edition, 2005<ul style="list-style-type: none">○ Ch. 9: Applications of Stochastic Risk Measurement Methods○ Ch. 13: Stress Testing○ Ch. 15: Backtesting Market Risk Models○ Ch. 16: Model Risk• <i>Fundamentals of Machine Learning for Predictive Data Analytics</i>, Kelleher, John D., Mac Namee, Brian and D'Arcy, Aoife, 2015<ul style="list-style-type: none">○ Ch. 2: Data to Insights to Decisions (background only)○ Ch. 3: Data Exploration (background only)○ Ch. 8: Evaluation○ Ch. 9: Case Study: Customer Churn○ Ch. 10: Case Study: Galaxy Classification○ Ch. 11: The Art of Machine Learning for Predictive Data Analytics• F-131-16: Heavy Models, Light Models and Proxy Models, sections 1-5 & 7 (excluding Appendices)• F-139-19: How to Improve Quality of Stress Tests Through Backtesting (excluding Appendices)• F-140-19: The Costs and Benefits of Reinsurance, pp. 1-22• F-141-19: Empirical Evaluation of Selected Hedging Strategies for Cattle Feeders• F-142-19: An Analysis of Delta Air Lines' Oil Refinery Acquisition• Proposed Actuarial Standard of Practice - Modeling, Jun 2016, pp. 1-10

5. Topic: Advanced Techniques for Non-hedgeable Risks
Learning Objectives
The candidate will understand advanced techniques to evaluate and manage non-hedgeable risks in financial and non-financial organizations.
Learning Outcomes
The Candidate will be able to: <ul style="list-style-type: none">a) Apply frameworks or methods to evaluate non-hedgeable risks for both financial and non-financial organizationsb) Assess strengths and biases of techniques to measure risks given limited information for a range of business situationsc) Evaluate the efficacy of different approaches to managing non-hedgeable risks, including risk capital positions, operational risk management practices, risk mitigation and transfer strategiesd) Assess drawbacks and other costs to risk transfer solutions versus other internal risk management approaches for non-hedgeable risks
Resources
<ul style="list-style-type: none">• <i>How to Measure Anything</i>, Hubbard, Douglas W., 3rd Edition, 2014<ul style="list-style-type: none">○ Ch. 9: Sampling Reality: How Observing Some Things Tells Us about All Things○ Ch. 11: Preference and Attitudes: The Softer Side of Measurement○ Ch. 13: New Measurement Instruments for Management○ Ch. 14: A Universal Measurement Method: Applied Information Economics• F-107-13: A Market Cost of Capital Approach to Market Value Margins• F-113-14: Securitization, Insurance and Reinsurance• F-143-19: Managing Supply Chain Disruptions, sections 2-5• F-144-19: Wal-Mart's Response to Hurricane Katrina: Striving for a Public-Private Partnership• F-145-19: Content Analysis of Cyber Insurance Policies: How do Carriers Write Policies and Price Cyber Risk?, pp. 1-22