Two versions of the Strategic Decision Making (SDM) Exam

For Fall 2013 and Spring 2014 there will be two versions of this exam. Note that in the transition effective July 1, 2013 candidates who have passed either the AFE exam or **both** the ERM and AdvF exams receive credit for this exam.

Part B

Candidates who do not have transition credit for the SDM exam but have passed the Advanced Finance (AdvF) transitional exam must take this version. It is a three-hour exam given in the morning and will have the same questions as the morning session for those taking the complete exam. Starting in Fall 2014 only the complete SDM exam will be given, Hence, candidates who do not pass Part B by then will lose the transition credit and must take the complete exam.

Complete

All other candidates must take the complete five-hour SDM exam. The exam will be passed or failed in its entirety. That is, candidates whose total score for the exam is below the pass mark but whose score for the morning questions is above the pass mark set for candidates taking only Part B will not receive any credit.

Important Exam Information:

Exam Date and Time	A read-through time will be given prior to the start of the exam-15 minutes in the morning session and 15 minutes in the afternoon session.
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.
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.

1. Topic: Accounting and Value Measures / Managerial Accounting

Learning Objectives

The candidate will understand measures of corporate value and their uses in risk management.

Learning Outcomes

The Candidate will be able to:

- a) Apply basic accounting concepts used in producing financial statements.
- b) Explain how economic capital can be used as a value measure by financial institutions.
- c) Compare and contrast MCEV and Solvency II and their uses in risk management and corporate decisionmaking.

- SDM-100-13: Managerial Accounting for CERAs and FSAs, 2013, by Tim Cardinal
- SDM-101-13: Hidden Hedge Fund in Insurers
- SDM-102-13: Chapter 24 of Asset/Liability Management of Financial Institutions: Maximizing Shareholder Value through Risk-Conscious Investing
- SDM-103-13: A Market Cost of Capital Approach to Market Value Margins
- SDM-104-13: A Comparative Analysis of US and Canadian Solvency II Capital Adequacy Requirements in Life Insurance
- SDM-105-13: The European Insurance CFO Forum Market Consistent Embedded Value Principles
- <u>An ERM Approach to Income Tax Risk</u>, by John Manistre, *Risk Management* March 2009 Issue 15

2. Topic: Credit and Liquidity Risk

Learning Objectives

The candidate will understand various approaches to measuring and managing credit and liquidity risk.

Learning Outcomes

The Candidate will be able to:

- a) Apply credit and liquidity risk concepts.
 - Describe and analyze credit, counterparty, liquidity, and wrong-way risk.
 - Analyze the credit risk exposure of a given contract.
 - Explain the various forms of credit risk models. Demonstrate the ability to perform analysis with these models.
- b) Compare and contrast risk metrics and their uses in risk management.
 - Compare and contrast commonly used credit risk metrics.
 - Compare and contrast various credit risk mitigation strategies, and recommend a course of action.
 - Compare and contrast various liquidity risk measures, and recommend a strategy for managing liquidity risk.
- c) Explain how regulatory requirements impact capital and management of credit and liquidity risks.
 - Explain and calculate Credit Value Adjustment.
 - Explain the impact of Regulation, including Basel II, Basel III, and Dodd-Frank on Capital requirements.
 - Explain exposure and regulatory capital as prescribed in these regulations.

- Counterparty Credit Risk, Gregory, Jon, 2nd edition
 - Ch. 2.1-2.6, 3.1-3.4, 4.1-4.4, 5.1-5.5, 6.1-6.5, 7.1, 8.1-8.7, 9.1-9.5, 10.1-10.2, 11.1-11.4, 12.1-12.6, 15.1-15.6, 16.1-16.4 and 17.1-17.6
- SDM-106-13: Chapters 5-6 of *Credit Risk Measurement In and Out of the Financial Crisis,* 3rd Edition by Saunders and Allen
- SDM-107-13: Chapter 17 of *Financial Institutions Management: a Risk Management Approach,* 2010 7th edition, by Saunders and Cornett.
- SDM-108-13: Chapters 2 and 3 of *Liquidity Risk Measurement and Management*, Matz and Neu editors.

3. Topic: Capital Management and ERM Process

Learning Objectives

The candidate will understand best practices for ERM processes and Capital Management and their use in setting a risk-return strategy.

Learning Outcomes

The Candidate will be able to:

- a) Explain ERM principles and frameworks
 - Describe the best practices and frameworks for ERM processes under various industry forums and regulatory guidelines and standards.
 - Explain the principles driving the direction of new regulation and industry standards in risk governance.
 - Describe the components of a risk appetite statement. Design and develop a risk appetite statement and risk-return strategy.
- b) Explain ERM and capital management concepts to evaluate and recommend corporate financial and ERM decisions.
 - Apply capital allocation models to a multi-line organization.
 - Compare and contrast various ERM and Capital Management frameworks as to their ability to assess value and articulate the risk-return strategy of an organization.
 - Evaluate the value-added for an organization by jointly evaluating risk measurement and capital allocation.
 - Assess how an ERM process can improve capital efficiency and articulate the risk-return strategy.

Resources

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- Corporate Value of Enterprise Risk Management: The Next Step in Business Management, Segal
 - Chapter 6 Risk Decision Making
 - Chapter 7 Risk Measuring
 - Chapter 8 Risk Governance
- SDM-101-13: Oliver Wyman: Hidden Hedge Fund in Insurers
- SDM-103-13: A Market Cost of Capital Approach to Market Value Margins
- SDM-105-13: The European Insurance CFO Forum Market Consistent Embedded Value Principles
- SDM-109-13: Managing the Invisible: Measuring Risk, Managing Capital, Maximizing Value, Panning
- SDM-110-13: ASB ASOP 46 Risk Evaluation in Enterprise Risk Management
- SDM-111-13: Quantitative Risk Management
 - Chapter 2.2 (Risk Measurement) background
 - o Chapter 6.1 (Coherent Measures of Risk)
 - Chapter 6.3 (Capital Allocation)

- SDM-112-13: Risk Measurement, Risk Management and Capital Adequacy in Financial Conglomerates (exclude appendices)
- SDM-113-13: Revisiting the Role of Insurance Company ALM within a Risk Management Framework by Goldman Sachs
- <u>Economic Capital: A Case Study to Analyze Longevity Risk</u>, *Risk Management*, September 2010
- US ORSA Developments, The Financial Reporter Issue 87 December 2011
- <u>Report on Pricing Using Market Consistent Embedded Value (MCEV)</u> June 2012 (Appendices as background)
- <u>Solvency II and US Equivalence</u>, *The Financial Reporter*, June 2011
- <u>Risk Appetite Statements: What's on your Menu?</u>, Risk Management, June 2009
- <u>How is Your Risk Appetite These Days?</u>, Risk Management March 2012
- The Full Spectrum of Risk Attitude, The Actuary Aug/Sept 2010
- <u>Risk Appetite for Variable Annuities: Managing the "Three Headed Monster" Challenging Variable</u> <u>Annuity Writers</u>, *Risk Management*, September 2010:

4. Topic: The Decision Making Process

Learning Objectives

The candidate will understand organizational behavioral concepts and apply strategic management frameworks to corporate financial and ERM business problems.

Learning Outcomes

The Candidate will be able to:

- a) Apply organizational behavior concepts
 - Describe the communication process and explain the strategic importance of communication to organizations.
 - Describe the fundamentals of decision making and explain decision-making styles and influences.
 - Describe common types and causes of organizational conflict and apply the elements of a basic negotiation process.
 - Assess how the behavior of individuals and groups in organizations drives organizational decisions and performance;
- b) Evaluate and apply the concepts of strategic management, recognizing the factors that affect the development and implementation of strategies:
 - Demonstrate the importance of analyzing the firm's external environment and the internal organization.
 - Define types of business-level strategies and recommend an appropriate business-level strategy for a given situation.
 - Explain the impact of competitive dynamics on strategic management.
- c) Use organizational behavior and strategic management concepts to evaluate and recommend corporate financial and ERM decisions.

- Organizational Behavior: A Strategic Approach, Hitt, Michael, Miller, C. Chet, and Colella, John Wiley & Sons, 3rd Edition
 - o Ch. 9, Communication
 - Ch. 10, Decision making by individuals and groups
 - Ch. 11, Groups and Teams
 - Ch. 12, Conflict, Negotiation, Power and Politics
- Strategic Management: Competitiveness and Globalization, Concepts, Hitt, Michael, Ireland, Duane, and Hoskisson, Robert, 10th Edition
 - Ch. 1, Strategic Management and Strategic Competitiveness
 - Ch. 2, External Environment: Opportunities, Threats, Industry Competition, and Competitor Analysis
 - o Ch. 3, Internal Organization: Resources, Capabilities, Core Competencies and Competitive

Advantages

- Ch. 4, Business-Level Strategy
- Ch. 5, Competitive Rivalry and Competitive Dynamics

5. Topic: Case Studies and Strategic Risk Management

Learning Objectives

The candidate will understand the decision making process and the lessons learned from the risk taking activities and experiences of other organizations. In particular, the candidate will be able to apply the learning objectives of all the prior sections of the syllabus to the risk management principles embodied within the case studies explored in this section.

Learning Outcomes

The Candidate will be able to:

- a) Critique financial models, assumptions and decisions including the impact of behavioral finance concepts.
- b) Evaluate the robustness and flexibility of the risk management framework and recommend approaches for continual improvement in the framework and processes.
- c) Assess the risk of the status quo alongside any other risky and or risk management decision.

- Nudge: Improving Decisions about Health, Wealth and Happiness, Thaler, Richard and Sunstein, Cass
 - o Ch. 1-5
- SDM-115-13: Chapter 12 of *Investments*, 9th Edition
- SDM-116-13: Duckworth Asset Management Inc.
- SDM-117-13: Managing Risk in the New World
- SDM-118-13: The Six Mistakes Executives Make in Risk Management
- SDM-119-13: The Role of the Audit Committee in Risk Oversight
- SDM-120-13: Ping An's Overseas Expansion: Financial Uncertainties and Risk Management
- SDM-121-13: British Petroleum (PLC) and John Browne: A Culture of Risk Beyond Petroleum
- SDM-122-13: Enterprise Risk Management at Hydro One, Multimedia Case
- SDM-123-13: Understanding the Risk of the Status Quo
- SDM-124-13: Air Canada Risk Management
- SDM-125-13: JP Morgan Private Bank: Risk Management during the Financial Crisis 2008- 2009
- SDM-126-13: Managing the Multiple Dimensions of Risk-Part II the Office of Risk Management
- SDM-127:13: Nephila: Innovation in Catastrophe Risk Insurance