

EDUCATION AND EXAMINATION COMMITTEE OF THE SOCIETY OF ACTUARIES (SOA)

SPRING 2009

ADVANCED FINANCE / ENTERPRISE RISK MANAGEMENT EXAM

INTRODUCTORY STUDY NOTE

1. The Advanced Finance/Enterprise Risk Management examination for Spring 2009 will be given on **Friday, May 1, from 8:30 a.m. - 11:45 a.m. and 1:30 p.m. – 4:45 p.m.** The examination will consist of six hours of written answer questions. The first 15 minutes in the morning session and 15 minutes in the afternoon session will be a read-through before the actual 3 hours of writing begins.
2. Any changes in the Syllabus for this exam will be published under “Updates” on this exam’s home page of the SOA Web site.
3. The Syllabus material includes textbooks, online published readings, as well as the study notes listed below. A complete listing of the Syllabus and Learning Objectives is located in this exam’s home page on the SOA Web site. All questions concerning study notes should be directed to Education Study Materials at 847-706-3525 or azionce@soa.org. Study notes listed with an asterisk (*) will also be available in the Revision set of study notes.

FE-C05-09*	Introductory Study Note
FE-C13-09*	Case Study (This will be sent in a second mailing and posted on Updates page) Available approx. early February.
FE-C102-07	General American Life Can't Pay Investors, Looks at Suitors
FE-C104-07	Insurance OP Risk: The Big Unknown
FE-C106-07	Mapping of Life Insurance Risks AAA Report to NAIC
FE-C117-07	Chapters 1, 7 and 8 of <i>Integrated Risk Management</i> (Doherty)
FE-C118-07	Securitization of Life Insurance Assets and Liabilities
FE-C124-07	Performance Measurement Using Transfer Pricing
FE-C125-07	Total Return Approach to Performance Measurement
FE-C127-07	Asset-Liability Management for Insurers
FE-C128-07	Asset/Liability Management
FE-C129-07	Principles for the Management of Interest Rate Risk
FE-C130-07	Hedging with Derivatives in Traditional Insurance Products
FE-C133-07	Internal Control—Guidance for Directors on the Combined Code
FE-C134-07	Supervisory Framework—1999 and beyond
FE-C135-07	Financial Oversight of Enron: The SEC and Private-Sector Watchdogs (pages 97-127 only)
FE-C137-07	Moody's Looks at Risk Management & The New Life Insurance Risks, October 2000
FE-C138-07	Managing The Invisible: Measuring Risk, Managing Capital, Maximizing Value
FE-C139-07	No Assurance of Good Governance: Observations on Corporate Governance in the U.S. Insurance Sector
FE-C140-07	Risk Measurement, Risk Management and Capital Adequacy in Financial Conglomerates (exclude appendices)
FE-C141-07	Letter To SEC Regarding Fitch Ratings' View on the Role and Function of Rating Agencies in the Operation of Securities
FE-C142-07	Theory and Practice of Model Risk Management
FE-C143-07	Dynamic Financial Models of Property-Casualty Insurers

FE-C145-07	Dynamic Financial Analysis Handbook (Chapters 1[background only], 8 and Appendix A)
FE-C147-07	Derivatives: Practices and Principles
FE-C149-07	Use of Stochastic Techniques to Value Actuarial Liabilities Under Canadian GAAP
FE-C151-08	Chapter 13 (sections 13.1-13.4) of <i>Life Insurance Products and Finance</i>
FE-C153-09*	Variable Annuities—"No Loss" Propositions
FE-C154-09*	Life Insurance Pricing and the Measurement of the Duration of Liabilities
FE-C155-09*	Risk Management by Insurers: An Analysis of the Process
FE-C156-09*	Key Rate Durations: Measures of Interest Rate Risks
FE-C157-09*	Long-Term Economic and Market Trends and Their Implications for Asset/Liability Management of Insurance Companies
FE-C158-09*	Variable Product Hedging Practical Considerations
FE-C159-09*	Countering the Biggest Risk of All
FE-C160-09*	Moody's Looks at Terrorism Risk in the U.S. Life Insurance Industry
FE-C161-09*	Ernst & Young Presentation on Fair Value Measurements Standards (FAS 157) Reprint permission not yet received. Available online at: http://www.eei.org/meetings/nonav_2007-09-27-ds/index.htm
FE-C162-09*	EVA & Strategy
FE-C163-09*	Modern Valuation Techniques
FE-C164-09*	Chapter 4 of <i>Credit Portfolio Modeling Handbook</i> Reprint permission not yet received. Available online at: http://www.csfb.com/institutional/research/CreditPortfolioModeling.pdf
FE-C165-09*	Chapter 9 of <i>Credit Portfolio Modeling Handbook</i> Reprint permission not yet received. Available online at: http://www.csfb.com/institutional/research/CreditPortfolioModeling.pdf
FE-C166-09*	Black Monday and Black Swans
FE-C167-09*	Hedging the Bet: Variable Annuity "Bells and Whistles"
FE-C168-09*	Chapter 1 of <i>Credit Portfolio Management</i>
FE-C169-09*	Chapter 3 of <i>Life Insurance Products and Finance</i>
FE-C170-09*	Why COSO is Flawed
FE-C171-09*	Insurance Criteria: Refining the Focus of Insurer Enterprise Risk Management Criteria
FE-C172-09*	Enterprise Risk Management—Integrated Framework (Executive Summary)
FE-C173-09*	Risk Management and the Rating Process for Insurance Companies

4. ERRATA: Attached are errata for:

- ***Investment Guarantees; Modeling and Risk Management for Equity-Linked Life Insurance***
<http://www.stats.uwaterloo.ca/Faculty/erratum.pdf>

5. Study Note FE-C13-09 is a Case Study that will be used as a basis for questions on the Spring examination. Be sure to answer the questions asked by referring to the Case Study. For example, if asked for the advantages of some action the company referenced in the Case Study is considering, limit your response to the specifics for that company. Other advantages should not be listed as they are extraneous to the question and will result in no additional credit. Further, if they conflict with the applicable advantages, no credit will be given for either answer. Candidates are advised to familiarize themselves with the Case Study. A copy will be included in the examination booklet. Candidates will not be allowed to bring their study note copy of the Case Study into the examination room.

The exam comprises three types of question: traditional, integrated and case study. Case study questions could represent a significant portion of the exam.

6. EXAM OVERVIEW

The syllabus for this exam trains candidates in the financial aspects of operating and evaluating a financial institution, with particular emphasis on financial risk management. This includes gaining an understanding of several subjects, including capital funding and structure, financial analysis, measuring value, modeling and managing risk, credit risk, and enterprise risk management.

This overview section is intended to provide candidates with an approach for organizing the course of reading for studying the various sections of the syllabus. In addition, the candidates should be familiar with the Learning Outcomes as described in the syllabus. These Learning Outcomes were the first ingredient in developing the syllabus, and will provide an indication of the level of understanding required for each major area of focus. While studying the syllabus material, candidates may want to consider both the organizational approach provided by this overview note, and to refer back to the Learning Outcomes to remain focused on the goals of the Advanced Finance/Enterprise Risk Management exam.

The syllabus has been organized into five major areas of focus, which align with the Learning Outcomes: Risk Definitions, Categories, and Identification; Value, Accounting Measures, and Risk Quantification; Risk Management; Enterprise Risk Management Framework, Enterprise Risk Management Process. Note that many syllabus sources relate to more than one topic. Candidates will be expected in the exam to integrate material across the various topics.

The candidate should focus on both the concepts and principles addressed in the exam syllabus. Candidates may be asked to apply concepts and principles in a particular context in an examination question. So for example, although the candidate is not expected to remember detailed nation specific capital requirements, the candidate may be expected to understand how to apply capital requirements for products or portfolios within a specific regulatory environment as specified in the examination.

7. Several book distributors carry some or all of the textbooks for the Society of Actuaries exams. A list appears on this exam's Home Page of the SOA Web site. A set of order forms from these distributors is included with this study note package.

The order forms contain information about prices, shipping charges, mailing policy and credit card acceptance. Any book distributor who carries books for SOA exams may have their order form included in this set unless the SOA office receives substantial complaints about service. Candidates should notify Basic Education Study Materials of the SOA in writing if they encounter serious problems with any distributor.

8. The examination questions for this exam will be based on the required readings for this exam. If a conflict exists (in definitions, terminology, etc.) between the readings for this exam and the readings for other exams, the questions should be answered on the basis of the readings for this exam.
9. Candidates may ONLY use the battery or solar-powered Texas Instruments BA-35 model calculator, the BA II Plus* the BAI Plus Professional* or TI-30Xa or TI-30X II* (IIS solar or IIB battery) or TI-30X MultiView (XS solar or XB battery). Candidates may use more than one of the approved calculators during the examinations.

Calculator instructions may not be brought into the exam room. During the exam, the calculator must be removed from its carrying case so the supervisor can confirm that it is an approved model.

Candidates using a calculator other than the approved models will have their exams disqualified. Candidates can purchase calculators directly from: Texas Instruments, Attn: Order Entry, PO Box 650311, Mail Station 3962, Dallas, TX 75265, phone 800/842-2737 or <http://epsstore.ti.com>.

The memory of **TI-30X II, TI-30X MultiView, BA II Plus and BAII Plus Professional will need to be cleared by the examination supervisor upon the candidate's entrance to the examination room.*

10. Order forms for various seminars/workshops and study manuals are included with this set of study notes. A list also appears in each exam home page of the SOA Web site. These seminars/workshops and study manuals do not reflect any official interpretation, opinion, or endorsement of the Society of Actuaries or its Education & Examination Committee.
11. The Society of Actuaries provides study notes to persons preparing for this examination. They are intended to acquaint candidates with some of the theoretical and practical considerations involved in the various subjects. While varying opinions are presented where appropriate, limits on the length of the material and other considerations sometimes prevent the inclusion of all possible opinions. These study notes do not, however, represent any official opinion, interpretation or endorsement of the Society of Actuaries. The Society is grateful to the authors for their contributions in preparing study notes.

The American Academy of Actuaries, the Canadian Institute of Actuaries, the Conference of Consulting Actuaries, and the Society of Actuaries jointly sponsor the examinations administered by the Society of Actuaries.