# Advanced Finance Exam FINAL Fall 2012/Spring 2013

## **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.

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

exam home page periodically for additional corrections or

notices.

## Advanced Finance Exam FINAL Fall 2012 /Spring 2013

**Topic: Accounting and Value Measures** 

**Learning Objective:** 

1. The candidate will understand measures of corporate value and be able to analyze the data in corporate financial statements.

#### **Learning Outcomes:**

The candidate will be able to:

- a) Explain basic accounting concepts used in producing financial statements:
  - in insurance companies
  - in other financial institutions
  - in non-financial institutions
- b) Analyze a specific company financial situation by demonstrating advanced knowledge of balance sheet and income statement structures.
- c) Describe the concept of economic measures of value (e.g. MCEV) and demonstrate their uses in the risk management and corporate decision-making processes.
- d) Compare and contrast various regulatory/industry reserve and capital frameworks

#### RESOURCES

Fridson, Alvarez, Financial Statement Analysis: A Practitioners Guide, Fourth Edition, 2011

Ch. 1, The Adversarial Nature of Financial Reporting

Ch. 2, The Balance Sheet

Ch. 3. The Income Statement

Ch. 4, The Statement of Cash Flows

Ch. 13, Credit Analysis

AF-100-12: *Insurance Industry Mergers & Acquisitions*, Toole and Herget, 2005 Ch. 4: Valuation Techniques (sections 1-5 only)

AF-101-12: CRO Forum "A Market Cost of Capital approach to market value margins" paper (sections 1-3 background only)

AF-102-12: A Comparative Analysis of U.S., Canadian and Solvency II Capital Adequacy

AF-103-12: Market Consistent Embedded Value Principles

AF-109-12: Tilman, *Asset/Liability Management of Financial Institutions*, 2003 Ch. 24, Accounting Standards and Requirements, by E. Habayeh & S. Sethi

Fair Value – Financial Economics Perspective by Babbel, Gold and Merrill, NAAJ, <a href="http://www.soa.org/library/journals/north-american-actuarial-journal/2002/january/naaj0201\_2.pdf">http://www.soa.org/library/journals/north-american-actuarial-journal/2002/january/naaj0201\_2.pdf</a>

Fair Valuation of Insurance Liabilities: Principles and Methods, AAA Monograph, September 2002 http://www.actuary.org/pdf/finreport/fairval\_sept02.pdf

## Advanced Finance Exam FINAL Fall 2012/Spring 2013

**Topic: Risk Quantification and Risk Measures** 

### **Learning Objective:**

2. The candidate will understand how the risks faced by an entity can be quantified and the use of metrics to measure risk.

## **Learning Outcomes:**

The candidate will be able to:

- a) Demonstrate an understanding of a variety of quantitative risk measures
- b) Articulate shortcomings of statistical risk measures
- c) Explain various approaches for the measurement of credit risk
- d) Explain various approaches for the measurement of liquidity risk

## **RESOURCES:**

Saunders and Allen , Credit Risk Management In and out of the Financial Crisis, Third Edition, 2010

- Ch. 4, Loans as Options: The Moody's KMV Model
- Ch. 5, Reduced Form Models: Kamakura's Risk Manager
- Ch. 6. Other Credit Risk Models
- Ch. 7, A Critical Parameter: Loss Given Default
- AF-104-12: Sweeting, 15.4, Risk Measures
- AF-105-12: Black Monday and Black Swans, J. Bogle, Financial Analysts Journal, 64:2(30-40) 2008
- AF-106-12: AAA Report on Life Liquidity
- AF-107-12: Liquidity Risk Measurement and Management , Matz and Neu editors. Chapters 2 and 3  $\,$
- AF-108-12: Tilman, Asset/Liability Management of Financial Institutions, 2003,
  - Ch. 9, Measuring and Marking Counterparty Risk, by E. Canabarro & D. Duffie

# Advanced Finance Exam FINAL Fall 2012 /Spring 2013

**Topic: Risk and Capital Management Topics** 

## **Learning Objective:**

3. The candidate will understand various means available for managing risk and capital. Learning Outcomes:

The candidate will be able to:

### General

a. Explain why risk management adds value to a firm.

#### Reinsurance

b. Demonstrate knowledge of advanced methods of reinsurance

### Liquidity Risk Management

- c. Define liquidity risk.
- d. Explain methods for managing this risk, both pre-event and post-event.
- e. Evaluate examples of company disasters that were the result of these types of risks what the exposure was, what occurred, the sequence of events, what actions management took, didn't take and could have / should have taken, what the financial impacts and general consequences were.

## **RESOURCES**

AF-107-12: Liquidity Risk – Measurement and Management, Matz and Neu editors. Chapters 2 and 3

AF-106-12: AAA report on Life Liquidity

AF-110-12: Tiller, Life, Health and Annuity Reinsurance, 3<sup>rd</sup> Edition, 2005,

Ch. 5, Advanced Methods of Reinsurance

AF-111-12: Doherty, Integrated Risk Management,

Ch. 7, Why Is Risk Costly to a Firm?