

ILA – Life Finance & Valuation, US 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.

Canadian version of this exam is recognized by the Canadian Institute of Actuaries

1. Topic: Accounting, Financial Statements and Disclosures

Learning Objectives

The candidate will understand U.S. life insurance company financial statements and reports.

Learning Outcomes

The Candidate will be able to:

- a) Construct, analyze and evaluate basic U.S. GAAP, Statutory, and Tax financial statements for a life insurance company.
- b) Describe the major exhibits and schedules of the U.S. Annual Statement and explain the purpose of each.
- c) Describe, apply and evaluate regulatory documentation and disclosure requirements.
- d) Describe, apply and evaluate the appropriate accounting treatments for insurance products, separate accounts, assets, derivatives and reinsurance.
- e) Apply and recommend methods for performing reviews of financial statements including reserves.

- Valuation of Life Insurance Liabilities, Lombardi, Louis J., 4th Edition, 2006
 - o Ch. 1, 2, 13 and 15
- US GAAP for Life Insurers, Herget et al., 2nd Edition, 2006
 - o Ch. 13 (excluding 13.7) and 14
- LFV-100-07: Financial Reporting Developments Accounting for Derivative Instruments and Hedging Activities: A Comprehensive Analysis of FAS 133 Overview and Appendix C only.
- LFV-102-09: Actuarial Review of Reserves and Other Annual Statement Liabilities
- LFV-800-07: IASA, 2001 Ch. 12 (up to pg. 15 and pp. 32-33 only)
- LFV-804-16: Actuarial Opinion and Memorandum Model Regulation (NAIC)
- LFV-819-16: Greenwich Treasury Derivative Accounting & Hedging
- LFV-828-17: Global Insurance Regulatory Issues: Implications for U.S. Policy and Regulation, Bipartisan Policy Center, November 2015
- ASOP 10: Methods and Assumptions for Use in Life Insurance Company Financial Statements Prepared in Accordance With GAAP (excluding Transmittal Memo and Appendixes)
- ASOP 11: The Treatment of Reinsurance Transactions in Life and Health Insurance Company Financial Statements (excluding Transmittal Memo and Appendices)
- ASOP 21: Responding to the Auditor (excluding Transmittal Memo and Appendices)
- ASOP 41: on Actuarial Communication (excluding Transmittal Memo and Appendices)
- Actuarial Aspects of SOX 404, Financial Reporter, Financial Report # 59, December 2004

- Responsibilities of the Actuary for Communicating Sarbanes-Oxley control: Effectiveness in Accordance with Actuarial Standards of Practice, Financial Reporter, December 2004
- AAA Model Audit Rule, November 2010

2. Topic: Valuation

Learning Objectives

The candidate will understand valuation principles and methods of individual life insurance and annuity products issued by U.S. life insurance companies.

Learning Outcomes

As applicable to the valuation of U.S. GAAP, Statutory, and Tax reserves, the Candidate will be able to:

- a) Compare and apply methods for life and annuity product reserves.
- b) Evaluate, calculate, and interpret liabilities and DAC assets.
- c) Recommend and justify appropriate valuation assumptions.

- Valuation of Life Insurance Liabilities, Lombardi, Louis J., 4th Edition, 2006
 - o Ch. 1, 4-12
- US GAAP for Life Insurers, Herget et al., 2nd Edition, 2006
 - o Ch. 3, 4 and 6-9
- LFV-133-16: Cluster Analysis: A Spatial Approach to Actuarial Modeling, Milliman, 2008
- LFV-800-07: IASA Ch. 8, pp. 12-16 and Ch. 12, pp.1-15 and 32-33
- LFV-803-14: NAIC Standard Valuation Law
- LFV-811-10: Actuarial Guideline XXXV on Annuities (NAIC)
- LFV-812-10: A Discussion of Actuarial Guideline 43 for Variable Annuities, Milliman Research Report, April 2009
- LFV-820-16: Transamerica Term Life: Understanding Post-Level Experience
- LFV-821-16: Insurance Contract Modifications or Exchanges pp. 1-3, E&Y, 2012
- LFV-822-16: Study Note on Actuarial Guidelines 38 and 48
- LFV-829-17: Tax Basis Assets and Liabilities of U. S. Life Insurers, Robbins and Bush, 2014
 - o Ch. 2: Tax-Basis Reserves Generally
 - o Ch. 7: section 807(f) and Changes in the Computation of Reserves
 - o Ch. 13: Reserve Issues in Reinsurance, Section 13.2 only, Statutory Accounting for Reserves
- LFV-830-17: Actuarial Guideline 36
- LFV-831-17: Actuarial Guideline 43
- LFV-832-17: AG 49 A closer Look
- LFV-836-17: AG 49 Post Standards Update
- ULSG AG38 Valuation Research Report, The Financial Reporter, pp. 1 and 4-7, June 2013

Model Efficiency Study Results, SOA Research, pp.43-49, 2011

3. Topic: Emerging Standards

Learning Objectives

The candidate will understand and apply emerging financial and valuation standards, principles and methodologies.

Learning Outcomes

The Candidate will be able to:

- a) Describe, evaluate and calculate the impact on reserves, income, capital, and processes of emerging developments in Statutory and U.S. GAAP reporting, International Financial Reporting Standards, and Solvency Modernization.
- b) Compare and contrast rules-based and principles-based approaches.

- LFV-134-16: IFRS PWC Ready or Not, October 2014
- LFV-140-17: Investor Perspectives Mind the Gap?, December 2015
- LFV-141-18: IFRS 17 Insurance Contracts IFRS Standards Effects Analysis, May 2017, IASB
- LFV-823-16: ORSA Guidance Manual, NAIC, 2014
- LFV-824-16: Model Risk Mitigation and Cost Reduction Through Effective Documentation, PWC, 2013
- LFV-825-16: The Long and Winding Road The IASB's Project on Insurance Contracts, IASB, 2013
- LFV-833-18: Fundamentals of the Principle Based Approach to Statutory Reserves for Life Insurance,
 2017
- LFV-834-17: Regulatory Capital Considerations for U.S. Life Insurance
- LFV-835-17: Overview of the FASB's Proposal for Long-Duration Contracts of Insurers, PwC, October 17, 2016
- Analysis of Methods for Determining Margins for Uncertainty Under a Principle-Based Framework for Life Insurance and Annuity Products, Ch. 3, 4, 5.1, 5.5-5.6 and 6
- An Approach for measurement of the Fair Value of Insurance Contracts, Gutterman, et al., Actuarial Practice Forum, May 2007
- Fair Value Accounting: Trouble-maker or Life-saver?, Financial Reporter, April 2009

4. Topic: Financial and Capital Management

Learning Objectives

The candidate will understand basic financial management, capital management and value creation principles and methods in a life insurance company context.

Learning Outcomes

The Candidate will be able to:

- a) Assess financial performance, including analyzing and interpreting the financial performance of a product line or company.
- b) Apply methods and principles of embedded value.
- c) Explain and apply methods in determining regulatory capital and economic capital.
- d) Explain and evaluate the respective perspectives of regulators, investors, policyholders and insurance company management regarding the role and determination of capital.
- e) Explain U.S. Risk Based Capital (RBC) regulatory framework and principles.
- f) Explain and apply methods in earnings management and capital management.

- Valuation of Life Insurance Liabilities, Lombardi, Louis J., 4th Edition, 2006
 - o Ch. 16 (excluding 16.6)
- LFV-106-07: Ch. 4 of Insurance Industry Mergers & Acquisitions (Sections 4.1-4.6)
- LFV-136-16: Life Insurance Products and Finance, Atkinson & Dallas, Ch.11, pp. 499-502
- LFV-137-16: EVARAROC vs MCEV Earnings A Unification Approach, Kraus, 2011
- LFV-138-16: Prudential Financial Stockholder's Equity and Operating Leverage, HBR, 2008
- LFV-807-09: Market Value Margins for Insurance Liabilities in Financial Reporting and Solvency Applications, October 2007 (pp. 2-41 and 46-65)
- LFV-813-13: U.S. Insurance Regulation Solvency Framework and Current Topics
- LFV-815-13: Understanding Profitability in Life Insurance
- LFV-816-13: Regulatory Issues in Insurance, Sigma #3/2010 Swiss Re (pp. 3-24)
- LFV-818-16: Introduction to Source of Earning Analysis, July, 2015
- LFV-827-16: Financial Reinsurance to Address GAAP Earnings Volatility, SCOR, 2014
- LFV-833-18: Fundamentals of the Principle Based Approach to Statutory Reserves for Life Insurance, 2017
- LFV-834-17: Regulatory Capital Considerations for U.S. Life Insurance
- Economic Capital for Life Insurance Companies, SOA Research paper, Ch. 1 and 3-6, Feb 2008

- A Multi-Stakeholder Approach to Capital Adequacy, Conning Research
- <u>Stochastic Analysis of Long Term Multiple-Decrement Contracts</u>, Clark and Runchey, January 2008 (excluding Appendices)
- Strategic Management of Life Insurance Company Surplus, TSA XXXVIII, pp. 105-116
- Embedded Value: Practice and Theory, SOA, Actuarial Practice Forum, March 2009

5. Topic: Reinsurance

Learning Objectives

The candidate will understand the nature and uses of basic reinsurance arrangements used by life insurance companies.

Learning Outcomes

The Candidate will be able to understand the various forms of reinsurance, and be able to, with respect to both the ceding and assuming parties, analyze and evaluate:

- a. Risk transfer considerations
- b. Cash flow mechanics
- c. Accounting and financial statement impacts
- d. Reserve credit considerations

- Life, Health & Annuity Reinsurance, Tiller, John E. and Tiller, Denise, 4th Edition, 2015
 - o Ch. 4, 5, 6 (pp. 157-172), 7, 8 (U.S. content only), 11, 13 and 17
- US GAAP for Life Insurers, Herget et al., 2nd Edition, 2006
 - o Ch. 17 (sections 17.4-17.7)