

ILA – Life Finance & Valuation, U.S. Exam

Spring 2019/Fall 2019

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.

Case Study

A case study will not be used for this examination.

[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.

Individual Life and Annuities - Life Finance & Valuation U.S. Exam
Spring 2019/Fall 2019

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

Resources

- *Statutory Valuation of Individual Life and Annuity Contracts - Volume I*, Claire, D., Lombardi, L. and Summers, S., 5th Edition, 2018
 - Ch. 1: Overview of Valuation Concepts (excluding 1.1-1.9)
 - Ch. 2: Product Classifications (excluding 2.1 & 2.3-2.5)
 - Ch. 3: NAIC Annual Statement
- *US GAAP for Life Insurers*, Herget et al., 2nd Edition, 2006
 - Ch. 13 (excluding 13.7) & 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 (excluding Appendix D)
- LFV-800-07: IASA Life and Accident and Health Insurance Accounting, Ch. 8, pp. 12-16 and Ch. 12, pp.1-15 & 32-33
- LFV-804-16: Actuarial Opinion and Memorandum Model Regulation (NAIC) (pp. 822.1-822.17)
- 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 (excluding pp. 20-29)
- ASOP 10: Methods and Assumptions for Use in Life Insurance Company Financial Statements Prepared in Accordance with GAAP (excluding Transmittal Memo and Appendices)
- ASOP 11: The Treatment of Reinsurance Transactions in Life and Health Insurance Company Financial Statements (excluding Transmittal Memo and Appendices)

Individual Life and Annuities - Life Finance & Valuation U.S. Exam
Spring 2019/Fall 2019

- ASOP 21: Responding to the Auditor (excluding Transmittal Memo and Appendices)
- ASOP 41: Actuarial Communication (excluding Transmittal Memo and Appendices)
- Actuarial Aspects of SOX 404, Financial Reporter, Issue 59, Dec 2004
- Responsibilities of the Actuary for Communicating Sarbanes-Oxley control: Effectiveness in Accordance with Actuarial Standards of Practice, Financial Reporter, Issue 59, Dec 2004
- AAA Model Audit Rule, Nov 2010

Individual Life and Annuities - Life Finance & Valuation U.S. Exam
Spring 2019/Fall 2019

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

Resources

- *Statutory Valuation of Individual Life and Annuity Contracts - Volume I*, Claire, D., Lombardi, L. and Summers, S., 5th Edition, 2018
(note – the Lombardi text contains Excel workbook files which supplement and illustrate the content in the text. Candidates are encouraged to download and review them to gain a deeper appreciation for the methodologies and relationships being illustrated)
 - Ch. 4: Standard Valuation Law
 - Ch. 5: The Valuation Manual
 - Ch. 10: Valuation Assumptions (excluding 10.1.3 & 10.3.8)
 - Ch. 11: Valuation Methodologies (excluding 11.3.9-11.3.11)
 - Ch. 12: Whole Life
 - Ch. 13: Term Life Insurance
 - Ch. 14: Universal Life (excluding 14.4.8, 14.4.9, 14.5.0 & 14.6.2-14.6.6)
 - Ch. 16: Indexed Universal Life
 - Ch. 18: Fixed Deferred Annuities (excluding 18.7.4 & 18.8)
 - Ch. 19: Variable Deferred Annuities
 - Ch. 20: Indexed Deferred Annuities
 - Ch. 21: Immediate Annuities
 - Ch. 22: Miscellaneous Reserves (excluding 22.3-22.4)
- *US GAAP for Life Insurers*, Herget et al., 2nd Edition, 2006
 - Ch. 3, 4 & 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 & 32-33
- LFV-812-10: A Discussion of Actuarial Guideline 43 for Variable Annuities, Milliman Research Report, April 2009 (excluding pp. 15-31)

Individual Life and Annuities - Life Finance & Valuation U.S. Exam
Spring 2019/Fall 2019

- 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 (excluding pp. 6-8)
- LFV- 829-17: Tax Basis Assets and Liabilities of U. S. Life Insurers, Robbins and Bush, 2014
 - Ch. 2: Tax-Basis Reserves Generally
 - Ch. 7: section 807(f) and Changes in the Computation of Reserves
 - Ch. 13: Reserve Issues in Reinsurance, Section 13.2 only, Statutory Accounting for Reserves
- LFV-831-17: Actuarial Guideline 43 (excluding Appendices 2, 4, 5, 7, 8, 9, 10 & 11)
- LFV-832-17: AG 49 – A Closer Look
- LFV-836-17: AG 49 Post Standards Update
- LFV-837-19: Proposed Changes to US GAAP - An Impact Analysis of Proposed Targeted Improvements, Milliman Research Paper, 2017
- ULSG AG38 Valuation Research Report, Financial Reporter, Jun 2013, pp. 1, 4-7
- Model Efficiency Study Results, SOA Research, 2011, pp. 10-30 & 43-49
- Negative GAAP Term Insurance Reserves—to Floor or Not to Floor?, Financial Reporter, Dec 2016

Individual Life and Annuities - Life Finance & Valuation U.S. Exam
Spring 2019/Fall 2019

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: <ul style="list-style-type: none">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 Modernizationb) Compare and contrast rules-based and principles-based approaches
Resources
<ul style="list-style-type: none">• LFV-141-18: IFRS 17 Insurance Contracts – IFRS Standards Effects Analysis, May 2017, IASB (sections 1, 2, 4 & 6.1-2 only)• 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-835-17: Overview of the FASB’s Proposal for Long-Duration Contracts of Insurers, PwC, October 17, 2016• LFV-839-19: U.S. GAAP Targeted Improvements for Long Duration Insurance Contracts• <u>ASOP 52 - Principle-Based Reserves for Life Products under the NAIC Valuation Manual on PBR for Life Products, section 3</u>• <u>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 & 6</u>• <u>An Approach for measurement of the Fair Value of Insurance Contracts, Gutterman, et al., Actuarial Practice Forum, May 2007</u>• <u>Fair Value Accounting: Trouble-maker or Life-saver?</u>, Financial Reporter, Apr 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

Resources

- 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 & 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, Jul 2015
- LFV-827-16: Financial Reinsurance to Address GAAP Earnings Volatility, SCOR, 2014
- LFV-834-17: Regulatory Capital Considerations for U.S. Life Insurance
- Economic Capital for Life Insurance Companies, SOA, Feb 2008, Ch. 1, 3-6
- A Multi-Stakeholder Approach to Capital Adequacy, Conning Research
- Stochastic Analysis of Long Term Multiple-Decrement Contracts, Clark and Runchey, Jan 2008 (excluding Appendices)
- Strategic Management of Life Insurance Company Surplus, TSA XXXVIII, pp. 105-116
- Embedded Value: Practice and Theory, SOA, Actuarial Practice Forum, Mar 2009

Individual Life and Annuities - Life Finance & Valuation U.S. Exam
Spring 2019/Fall 2019

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: <ul style="list-style-type: none">a) Risk transfer considerationsb) Cash flow mechanicsc) Accounting and financial statement impactsd) Reserve credit considerations
Resources
<ul style="list-style-type: none">• <i>Life, Health & Annuity Reinsurance</i>, Tiller, John E. and Tiller, Denise, 4th Edition, 2015<ul style="list-style-type: none">○ Ch. 4, 5, 6 (pp. 157-172), 7, 8 (U.S. content only), 11, 13 & 17• <i>US GAAP for Life Insurers</i>, Herget et al., 2nd Edition, 2006<ul style="list-style-type: none">○ Ch. 17 (sections 17.4-17.7)