

RET – Funding & Regulation Exam

Fall 2022

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.

Syllabus Readings

Readings listed in this syllabus may include study notes, online readings and textbooks. Candidates are responsible for all readings in their entirety, including sections such as Appendices, unless it is stated otherwise in the syllabus.

[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 provided 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.

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1. Topic: Valuation Data
Learning Objectives
The candidate will understand how to analyze data for quality and appropriateness.
Learning Outcomes
The Candidate will be able to: a) Identify data needed b) Assess data quality c) Make and/or recommend appropriate assumptions where data cannot be provided d) Comply with regulatory and professional standards pertaining to data quality
Resources
<ul style="list-style-type: none">• FR-149-21: Does Your Pension Data Need a Refresh• ASOP 23: Data Quality• Experience Data Quality: How to Clean and Validate Your Data, SOA, 2011 (excluding introduction)• CIA Consolidated Standards of Practice, sections 1440, 1510 & 1530

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2. Topic: Assumptions
Learning Objectives
The candidate will understand how to analyze/synthesize the factors that go into selection of actuarial assumptions for funding purposes.
Learning Outcomes
The Candidate will be able to: <ul style="list-style-type: none">a) Describe and apply the techniques used in the development of assumptions for funding purposesb) Evaluate and recommend appropriate assumptions for funding purposesc) Evaluate actual experience, including comparisons to assumptions
Resources
<ul style="list-style-type: none">• FR-121-21: Assumptions for Hypothetical Wind-Up and Solvency Valuations with Effective Dates between December 31, 2019, and December 30, 2020• FR-125-17: Financial Services Commission of Ontario: Actuarial Guidance Note: Determination of the Solvency Liability Adjustment• FR-132-17: A Problem-Solving Approach to Pension Funding and Valuation, 2nd Ed., Ch. 5• FR-138-18: Alternative Settlement Methods for Solvency Valuations• FR-144-20: FSRA - Frequently Asked Questions Pertaining to the 2018 Funding Reform for Defined Benefit Pension Plans (Transition Rules section, Q400-Q404 background only)• FR-150-21: Alberta Treasury Board and Finance – EPPA Update 13-01 Alternative Settlement Methods for Hypothetical Wind-Up and Solvency Valuations• FR-151-21: CAPSA Guidance Solvency or Hypothetical Wind-up Liabilities Based on Actual Life Insurance Company Annuity Quotation• ASOP 25: Credibility Procedures• ASOP 27: Selection of Economic Assumptions for Measuring Pension Obligations• ASOP 35: Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations• Determination of Best Estimate Discount Rates for Going Concern Funding Valuations, CIA Educational Note, Dec 2015• Selecting and Documenting Mortality Assumptions for Pensions, AAA, June 2015 (Appendices background only)• Selection of Mortality Assumptions for Pension Plan Actuarial Valuations, CIA Educational Note, Dec 2017• Provisions for Adverse Deviations in Going Concern Actuarial Valuations, CIA Research Paper, Mar 2017• Expenses in Funding Valuations for Pension Plans, CIA Revised Educational Note, Sep 2014• Reflecting Increasing Maximum Pensions Under the Income Tax Act in Solvency, Hypothetical Wind-up and Wind-up Valuations, CIA Revised Educational Note, Jan 2015• Alternative Settlement Methods for Hypothetical Wind-Up and Solvency Valuations, CIA Educational

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Note, Apr 2020

- [Task Force Report on Mortality Improvement](#), CIA Final Report, Sep 2017
- [A Practical Approach to Establishing Margins for Adverse Deviations in Going Concern Funding Valuations](#), CIA Member Paper, Oct 2018
- [Guidance for Assumptions for Hypothetical Wind-Up and Solvency Valuations Update – Effective March 31, 2022, and Applicable to Valuations with Effective Dates Between March 31, 2022, and December 30, 2022](#), CIA Educational Note Supplement

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3. Topic: Methods

Learning Objectives

The candidate will understand how to apply/synthesize the methods used to value pension benefits for various purposes.

Learning Outcomes

The Candidate will be able to:

- a) Differentiate between the various purposes for valuing pension plans:
 - i. Funding
 - ii. Solvency
 - iii. Termination/wind-up/conversion
- b) Perform periodic valuations of ongoing plans, calculating normal cost and actuarial liability, using a variety of cost methods
- c) Analyze and communicate the pattern of cost recognition that arises under a variety of funding methods
- d) Analyze and communicate the impact on cost stability of a variety of asset valuation methods
- e) Perform valuations for special purposes, including:
 - i. Plan termination/windup/conversion valuations
 - ii. Hypothetical wind-up and solvency valuations
 - iii. Shared risk pension plan valuations
- f) Calculate actuarially equivalent benefits

Resources

- *Canadian Pensions and Retirement Income Planning*, Willis Towers Watson, 6th Edition, 2017
 - Ch. 15 (excluding Section 1525)
- *Morneau Shepell Handbook of Canadian Pension and Benefit Plans*, 17th Edition, 2020
 - Ch. 3
 - Ch. 6 (excluding pp. 176-183)
- *Pension Mathematics for Actuaries*, Anderson, Arthur W., 3rd Edition, 2006
 - Ch. 1
 - Ch. 2
 - Ch. 3
 - Ch. 4
 - Ch. 7
- FR-108-13: Pension Funding Exercises (background only)

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- FR-133-17: Actuarial Equivalence Calculations
- FR-138-18: Alternative Settlement Methods for Solvency Valuations
- FR-150-21: Alberta Treasury Board and Finance – EPPA Update 13-01 Alternative Settlement Methods for Hypothetical Wind-Up and Solvency Valuations
- [ASOP 4: Measuring Pension Obligations and Determining Pension Plan Costs or Contributions](#)
- [Guidance on Asset Valuation Methods](#), CIA Educational Note, Sep 2014
- [Calculation of Incremental Cost on a Hypothetical Wind-Up or Solvency Basis](#), CIA Educational Note, Dec 2010
- [Asset Valuation Methods under ERISA](#), Pension Forum, Sep 2002, Ch. 1, 3, 4 and 5
- [Survey of Asset Valuation Methods for Defined Benefit Pensions Plans](#), section 2 only
- [CIA Consolidated Standards of Practice](#), section 1400
- [CIA Consolidated Standards of Practice](#), sections 3100-3500
- [CIA Section 3500 of the Practice-Specific Standards for Pension Plans – Pension Commuted Values \(Subsection 3570\)](#)
- [CIA Section 3500 of the Practice-Specific Standards for Pension Plans – Pension Commuted Values \(other than Subsection 3570\)](#)
- [Use of Models](#), CIA Educational Note, Jan 2017
- [Alternative Settlement Methods for Hypothetical Wind-Up and Solvency Valuations](#), CIA Educational Note, Apr 2020
- [Funding of Public Sector Pension Plans](#), Retirement 20/20 Papers, Jun 2018
- [A Practical Approach to Establishing Margins for Adverse Deviations in Going Concern Funding Valuations](#), CIA Member Paper, Oct 2018
- [Guidance on Selection and Disclosure of Plausible Adverse Scenarios](#), CIA Educational Note, Feb 2019

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4. Topic: Regulations - Principles and Rationale
Learning Objectives
The candidate will understand the principles and rationale behind regulation.
Learning Outcomes
The Candidate will be able to: <ul style="list-style-type: none">a) Describe the principles and motivations behind pension legislation and regulationb) Describe sources and framework of government regulation
Resources
<ul style="list-style-type: none">• <i>Canadian Pensions and Retirement Income Planning</i>, Willis Towers Watson, 6th Edition, 2017<ul style="list-style-type: none">○ Ch. 1: Section 105○ Ch. 1: Section 110 (background only)○ Ch. 3• FR-127-15: Rebuilding New Brunswick: The Case for Pension Reform (including Appendices C, D and E)• FR-139-18: OECD Core Principles of Private Pension Regulation (Parts I and II, pp. 11-75)• FR-145-20: CAPSA Recommendations - Funding of Benefits for Plans Other than Defined Contribution Plans• FR-146-20: FSRA - Pension Sector Guiding Principles

5. Topic: Regulations - Evaluation and Application

Learning Objectives

The candidate will understand how to evaluate and apply regulatory policies and restrictions for registered retirement plans.

Learning Outcomes

The Candidate will be able to describe and apply pension standards and tax regulation pertaining to:

- a) Plan design
- b) Plan establishment
- c) Plan amendment
- d) Plan termination/windup
- e) Plan conversion
- f) Plan merger or spin-off
- g) Reporting requirements
- h) Members' rights
- i) Contributions and benefits
- j) Individual savings plans

Resources

- *Canadian Pensions and Retirement Income Planning*, Willis Towers Watson, 6th Edition, 2017
 - Ch. 2
 - Ch. 5-12
 - Ch. 14
 - Ch. 16-22
- *Morneau Shepell Handbook of Canadian Pension and Benefit Plans*, 17th Edition, 2020
 - Ch. 5 (background only)
 - Ch. 8
 - Ch. 9
 - Ch. 10
 - Ch. 11 (pp. 366-376)
 - Ch. 13 (pp. 402-410)
- FR-111-13: OSFI Guidelines for Converting DB to DC
- FR-114-21: Ontario Pension Benefits Act R.R.O. 1990, Reg 909 (excluding sections 5.5.1 and 5.5.2 - Funding and Funding Relief for Specified Pension Plans and 5.5.3, 5.6, 5.6.1, 5.6.2, 5.6.3, 5.7, 5.8, 5.9, 5.10 - Solvency Funding Relief)

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- FR-115-21: Ontario Pension Benefits Act, R.S.O. 1990, Ch. P.8
- FR-123-19: Pension Benefits Act–Ontario Regulation 310/13
- FR-129-16: Pension Asset Transfers made easier, Pension Benefits and Executive Compensation, February 2014
- FR-134-17: CIA Revised Educational Note: Transfer Values – Ontario Reporting Requirements
- FR-152-21: CAPSA – Adoption of the 2020 Agreement Respecting Multi-Jurisdictional Pension Plans
- FR-153-21: FSRA - Limitations on Commuted Value Transfers and Annuity Purchases (DB Pension Plans)
- [FSCO Policy - Conversion of a Plan from Defined Benefit to Defined Contribution](#)
- [FSCO Policy - Application by Employer for Payment of Surplus on Wind Up of a Pension Plan](#)
- [Canada Revenue Agency PA Guide](#)
- [Canada Revenue Agency PSPA Guide](#)
- [Canada Revenue Agency PAR Guide](#)
- [FSRA - Using Letters of Credit for Solvency Special Payments](#)
- [FSRA - Supervisory Approach to Defined Benefit Asset Transfers under the PBA](#)
- [FSRA – Questions and Answers on 2016 Agreement Respecting Multi-jurisdictional Pension Plans](#)

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6. Topic: Funding
Learning Objectives
The candidate will understand how to apply the regulatory framework in the context of plan funding.
Learning Outcomes
The Candidate will be able to: <ul style="list-style-type: none">a) Evaluate retirement funding alternatives for the plan sponsor, shareholders, participants, and, for public pension plans, taxpayersb) Evaluate funding restrictions imposed by regulations
Resources
<ul style="list-style-type: none">• <i>Canadian Pensions and Retirement Income Planning</i>, Willis Towers Watson, 6th Edition, 2017<ul style="list-style-type: none">○ Ch. 15 (excluding Section 1525)• <i>Morneau Shepell Handbook of Canadian Pension and Benefit Plans</i>, 17th Edition, 2020<ul style="list-style-type: none">○ Ch. 6 (excluding pp. 176-183)○ Ch. 9○ Ch. 11 (pp. 366-376)○ Ch. 12○ Ch. 13 (pp. 402-410)• FR-114-21: Ontario Pension Benefits Act R.R.O. 1990, Reg 909 (excluding sections 5.5.1 and 5.5.2 - Funding and Funding Relief for Specified Pension Plans and 5.5.3, 5.6, 5.6.1, 5.6.2, 5.6.3, 5.7, 5.8, 5.9, 5.10 - Solvency Funding Relief)• FR-115-21: Ontario Pension Benefits Act, R.S.O. 1990, Ch. P.8• FR-141-18: Alberta Interpretive Guideline #07: Solvency Reserve Account• FR-148-21: OSFI – Instruction Guide: Preparation of Actuarial Reports for Defined Benefit Pension Plans (sections 2.8 and 2.10 only)• Funding of Public Sector Pension Plans, Retirement 20/20 Papers, Jun 2018• A Mathematical Model for Assessing the Impacts of Policies Related to the Funding of Pension Plans• FSRA - Supervisory Approach to Defined Benefit Asset Transfers under the PBA

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7. Topic: Professionalism
Learning Objectives
The candidate will understand how to apply the standards of practice and professional conduct guidelines.
Learning Outcomes
The Candidate will be able to: <ul style="list-style-type: none">a) Apply the standards related to communications to plan sponsors and others with an interest in an actuary's results (i.e., participants, auditors, etc.)b) Explain and apply the Professional Conduct Guidelinesc) Explain and apply relevant qualification standardsd) Demonstrate compliance with requirements regarding the actuary's responsibilities to the participants, plan sponsors, etc.e) Explain and apply all of the applicable standards of practice related to valuing pension benefitsf) Recognize situations and actions that violate or compromise Standards or Professional Conduct Guidelinesg) Recommend a course of action to repair a violation of the Standards or Professional Conduct Guidelines
Resources
<ul style="list-style-type: none">• CIA Consolidated Standards of Practice, sections 1000-1700• CIA Consolidated Standards of Practice, sections 3100-3500• CIA Qualification Standards• CIA Rules of Professional Conduct• SOA Code of Professional Conduct• Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States• General Advice on the Application of Rule 13, CIA Guidance Document, Dec 2018• Events Occurring After the Calculation Date of an Actuarial Opinion for a Pension Plan, CIA Revised Educational Note, Jan 2015