

Retirement Benefits: Retirement Plan Investment and Risk Management Exam  
Fall 2015 / Spring 2016

**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 with this exam.

[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.

**Learning Objectives**

The candidate will understand how to analyze the issues facing retirement plan sponsors regarding investment of fund assets and make recommendations.

**Learning Outcomes**

The Candidate will be able to:

- a) Assess the different types and combinations of investment vehicles for providing retirement benefits given the particulars of the stakeholders' financial circumstances, philosophy, industry, work force and benefit package.
- b) Distinguish the various strategies, approaches and techniques used to manage retirement fund assets
- c) Given a context, analyze a Statement of Investment Policy.
- d) Assess the potential effects of various investments and investment policies on all of the stakeholders, including tax implications.
- e) Describe the regulatory restrictions on retirement plan assets.
- f) Identify and assess the sources of investment risk applicable to retirement fund assets
- g) Solve for a measure of investment performance relevant to a given benchmark

**Resources**

- *Modern Investment Management*, Litterman, Ch. 2, 17, 22, 23, 24, 27 (pp. 501-505 only) and Ch. 28 (pp. 516-520 only)
- *Fundamentals of Private Pensions*, McGill, 9<sup>th</sup> Edition, Ch. 26, 27, 28
- *Morneau Shepell Handbook of Canadian Pension and Benefit Plans*, 15th edition, Ch. 6
  
- RPIRM-100-14: Chapter 24 of *Retirement Plans: 401(k)s, IRAs and Other Deferred Compensation Approaches*, Allen, et. al., 11th Edition
- RPIRM-102-13: Equities in DB Plans – Is the Traditional 60/40 Mix a Dinosaur?
- RPIRM-103-15: Fiduciary Liability Issues for Selection of Investments
- RPIRM-104-15: Maginn and Tuttle, *Managing Investment Portfolios*, 3<sup>rd</sup> Edition Chapter 12, Sections 1-7 only.
- RPIRM-107-13: Reflections on the Efficient Market Hypotheses: 30 Years Later
- RPIRM-108-13: Introduction and Overview of Retirement Plan Investments
- RPIRM-130-14: Chapter 29 of *Retirement Plans: 401(k)s, IRAs and Other Deferred Compensation Approaches*, Allen, et. al., 11th Edition
- RPIRM-131-14: Morningstar Target-Date Series Research Paper, 2013, pp. 1-5 and 11-19 only
- RPIRM-132-14: CAPSA, Guideline No. 6, Pension Plan Prudent Investment Practices Guideline
- RPIRM-133-14: CAPSA, Guideline No. 7, Pension Plan Funding Policy Guideline
- RPIRM-134-14: Liability-Responsive Asset Allocation, Russell Research

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2.

**Learning Objectives**

The candidate will recognize and appropriately reflect the role of plan investments in retirement plan design and valuation.

**Learning Outcomes**

The Candidate will be able to:

- a) Evaluate the interaction of plan investments with plan design, valuation, accounting and funding
- b) Evaluate the interaction and relationship between plan investments and valuation assumptions/methods
- c) Model the effect on setting investment strategy of factors including, cash flow requirements, various plan designs and various economic environments.
- d) Apply and evaluate strategies and techniques for asset/liability management.

**Resources**

- *Fundamentals of Private Pensions*, McGill, 9<sup>th</sup> Edition, Ch. 27
- RPIRM-109-13: Jim Moore Discusses Liability Driven Investment Strategies and Concepts
- RPIRM-110-13: Plan Sponsor Guide to Liability –Driven Investing
- RPIRM-111-13: Mind the Gap: Using Derivatives Overlays to Hedge Pension Duration
- RPIRM-112-13: Asset/Liability Modeling and Asset Allocation for Pension Plans
- RPIRM-113-13: How the Liability Benchmark is Developed and Used in Practice
- RPIRM-114-13: Top 10 Myths About Liability-Driven Investing
- RPIRM-115-13: *Pensions in the Public Sector*, Ch. 9
- RPIRM-116-13: Financial Economics and Actuarial Practice
- RPIRM-117-13: Financial Economics and Canadian Pension Valuation
- RPIRM-118-13: Reinventing Pension Actuarial Science, with discussion
- RPIRM-119-13: Accounting for Pension Buy-In Arrangements
- RPIRM-134-14: Liability-Responsive Asset Allocation, Russell Research
- RPIRM-136-15: Longevity Risk Management: New Tools for Defined Benefit Pension Plans, Coughlan, Institutional Investor Journals, Fall 2013
- RPIRM-137-15: Longevity Risk and Insurance Solutions for U.S. Corporate Pension Plans, Marcks & McDonald, Prudential Retirement
- [Embedded Options and Pension Plans](#) pp.1-17
- [Can Pensions Be Valued as Marketed Securities](#), Bader, Pension Section News, June, 2009

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3.

**Learning Objectives**

The candidate will understand how to evaluate the stakeholders' financial goals and risk management with respect to their plan.

**Learning Outcomes**

The Candidate will be able to:

- a) Compare the interests of plan sponsors, employees, shareholders, taxpayers and other stakeholders related to the financial management of a retirement plan.
- b) Describe how the retirement plan financial and design risks integrate with the sponsor's risk management strategy
- c) Analyze how the retirement plan integrates with the sponsor's overall financial position.
- d) Compare the financial economics perspective to the traditional perspective on funding and accounting for retirement plans.
- e) Provide advice and analysis to stakeholders regarding the economic assumptions used in the valuation of their retirement plans

**Resources**

- RPIRM-115-13: Pensions in the Public Sector, Ch. 9
- RPIRM-118-13: Reinventing Pension Actuarial Science, with discussion
- RPIRM-120-13: The Case Against Stock in Public Pension Plans
- RPIRM-121-13: The Case for Stock in Pension Funds
- RPIRM-122-13: Guaranteed Trouble: The Economic Effects of the Pension Benefit Guaranty Corporation
- RPIRM-123-13: Risk Management and Public Plan Retirement Systems - (appendix background only)
- RPIRM-124-13: Bader and Gold's Rebuttal to The Case for Stock in Pension Funds
- RPIRM-125-13: The Pension Bomb
- RPIRM-126-13: Funding Regulations and Risk Sharing, pp. 15-24
- RPIRM-127-13: Retirement Benefits, Economics and Accounting: Moral Hazard and Frail Benefit Designs
- RPIRM-128-13: The Impact of the Financial Crisis on Defined Benefit Plans and the Need for Counter-Cyclical Funding Regulations, excluding appendices
- RPIRM-134-14: Liability-Responsive Asset Allocation, Russell Research
- RPIRM-135-14: CAPSA Guideline No. 4, Pension Plan Governance Guidelines and Self-Assessment Questionnaire
- [Adequate Funding for a Pension Plan](#), Sze Pension Forum
- [Pension Funds: Company Manager's View](#), Exley & Mehta
- [Pension Forum](#): April, 2005, entire issue
- [Can Pensions Be Valued as Marketed Securities](#), Bader, Pension Section News, June, 2009
- [Pension Actuary's Guide to Financial Economics](#) and [Pension Arbitrage Example](#)