

# Retirement Plan IRM Exam

Fall 2016/Spring 2017

# **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.

errata and other important information.

Case Study A case study will not be used for 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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# **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-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-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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### **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-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
- RPIRM-137-15: Longevity Risk and Insurance Solutions for U.S. Corporate Pension Plans
- RPIRM-138-16: FSCO's IGN 001 Buy in Annuities for Defined Benefit Plans
- RPIRM-139-16: FSCO's IGN 002 Prudent Investment Practices for Derivatives
- RPIRM-140-16: OSFI's Policy Advisory #2014-002- Longevity Insurance and Longevity Swaps
- Embedded Options and Pension Plans pp.1-17
- <u>Can Pensions Be Valued as Marketed Securities</u>, Bader, Pension Section News, June, 2009

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# **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
- RPIRM-141-16: Chapter 9 of Recreating Sustainable Retirement: Resilience, Solvency and Tail Risk
- <u>Corporate Pension Risk Management and Corporate Finance</u> SOA August 2015
- Adequate Funding for a Pension Plan, Sze Pension Forum
- Pension Funds: Company Manager's View, Exley & Mehta
- Pension Forum: April, 2005, exclude pp 19-29

# Retirement Benefits: Retirement Plan Investment and Risk Management Exam Fall 2016 and Spring 2017

- <u>Can Pensions Be Valued as Marketed Securities</u>, Bader, Pension Section News, June, 2009
- Pension Actuary's Guide to Financial Economics and Pension Arbitrage Example