Financial Reporting Module

SECTION 1: MODULE OVERVIEW

Introduction

The purpose of the Financial Reporting module is to expose you to the concepts and terminology necessary to understand financial statements and regulatory capital requirements. It is not possible to cover these topics in detail in the limited time available. Therefore, a second important purpose of this module is to expose you to authoritative resources that will facilitate future additional reading and reference.

While applications and examples are taken from the insurance industry, much of the content is not industry specific. In addition, while the focus is on Canada and the United States, the adoption of International Financial Reporting Standards (IFRS) in Canada starting in 2011 and efforts in the United States to converge with these standards means that financial statements produced in conformance with generally accepted accounting principles (GAAP) in Canada and the United states will align with international standards.

Module Goals

The primary goal of this module is to enable candidates to discuss financial reporting and regulatory capital requirements, especially as they relate to actuarial work. Candidates will become familiar with concepts, terminology, standards, management issues and resources related to these topics.

After completing this module, a candidate should be able to explain the concepts and terminology used for financial reporting and regulatory capital requirements. The candidate will also know the resources available to keep abreast and study in-depth issues related to these topics.

Module Objectives

After you complete this module, you will be able to:

- •Describe the basic features of a financial reporting conceptual framework.
- •Explain the key concepts in determining fair value.
- •Describe international financial reporting standards.
- •Explain the general concepts underlying specific U.S. accounting standards for asset reporting, valuing deferred acquisition cost assets and valuing liabilities.
- •Apply the Canadian Asset/Liability Method (CALM) to appropriately value policy liabilities.
- •Explain how liabilities are calculated under U.S. statutory reporting.
- •Describe how insurance companies in the United States and Canada are taxed.

- •Explain the objectives and features of regulatory risk-based capital requirements.
- •Perform risk-based capital (RBC) calculations required by C3 Phase II.

Module Sections

This module consists of ten sections:

- •Section 1. Module Overview (you are here now).
- •Section 2. The Setting, Conceptual Framework and Fair Value.
- •Section 3. U.S. GAAP Liabilities, DAC and Reinsurance.
- •Section 4. U.S. Statutory Liabilities and AOMR.
- •Section 5. CALM.
- •Section 6. International Financial Reporting Standards.
- •Section 7. Asset Reporting.
- •Section 8. Taxation — United States and Canada.
- •Section 9. Regulatory Risk-Based Capital.
- •Section 10. C3 Phase II and Activity.
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In addition, this module includes an End-of-Module Test and an End-of-Module Exercise.

SECTION 2: THE SETTING, CONCEPTUAL FRAMEWORK AND FAIR VALUE

Introduction

A company produces financial information for each regulatory and tax jurisdiction in which the company operates. In addition, a public company produces financial information for investors and creditors. A company may produce additional financial information to manage its operations - for example, embedded values.

The organizations that set standards for financial reporting and related controls are talking to each other. Their goal is convergence of their conceptual foundations, standards and methodologies. Convergence makes sense because the companies that organizations set standards for operate in a global market. Convergence is occurring across different types of entities such as banks and insurers, across different jurisdictions such as Canada and the United States and across different reporting types such as regulatory and general purpose.

These dynamics are changing the standards covered in this module. Therefore, understanding concepts, terminology and how standards are likely to change is more important than memorizing the details of a particular standard.

Objectives

After completing Section 2, you will be able to:

- •Describe the major organizations that set standards for financial intermediaries.
- •Describe the basic features of a financial reporting conceptual framework.
- •Describe the changes toward a more principles-based approach to accounting.
- •Explain the strengths and weaknesses of rules-based and principles-based approaches to financial reporting.
- •Explain the key issues in determining fair value for insurance liabilities.
- •Explain the key concepts in determining fair value of assets.

SECTION 3: U.S. GAAP LIABILITIES, DAC AND REINSURANCE

Introduction

This section examines the important concepts and methods used to produce financial statements by insurance entities in the United States under Generally Accepted Accounting Principles (GAAP). This section focuses on the reporting standards for deferred acquisition costs (DAC), liabilities, and reinsurance. The basic GAAP standards for DAC and liabilities are given by contract type; hence most of the material in this section is presented by contract type. Some material is based on the nature of the transaction (e.g., a contract replacement) or on the nature of a contract provision (e.g., embedded derivatives).

Objectives

After you complete Section 3, you will be able to:

- •Explain the concepts and methods used in GAAP accounting for insurance contracts.
- •Value DAC and liabilities for insurance entities under GAAP.
- •Value reinsurance contracts under GAAP.

SECTION 4: U.S. STATUTORY LIABILITIES AND AOMR

Introduction

The purpose of this section is to guide you through a series of readings, questions and answers and exercises about various important concepts associated with statutory liabilities and the Actuarial Opinion and Memorandum (AOMR). By going through this material, we are hoping that you will gain a better understanding of these topics, which are important to actuaries.

Objectives

After you complete Section 4, you will be able to:

- •Explain how liabilities are calculated under U.S. statutory reporting.
- •Describe net level, full preliminary term and Commissioners Reserve Valuation methods for life insurance (CRVM).
- •Demonstrate calculations under the Commissioners Annuity Reserve Valuation Method (CARVM).
- •Identify the parts of the Actuarial Opinion and Memorandum (AOMR) as defined in the model regulation.

SECTION 5: CALM

Introduction

This section focuses on the steps used to implement the Canadian Asset/Liability Method (CALM). After completing this section, you will be able to apply the Canadian principle-based reserving approach (i.e., CALM) in practical situations to appropriately value policy liabilities. This is important for U.S. candidates as well, since the United States is moving toward a principles-based reserving approach, of which CALM is an example.

Steps of CALM

CALM can be described in four separate steps:

1. Select the expected experience scenario. Project cash flows with interest to the date of the last liability cash flow. The amount of starting assets required to produce zero surplus at the end of the projection period is the liability without provision for adverse deviations (PFAD).
2. Add PFAD for all but interest rate risk by applying margins to the cash flow assumptions. The actuary should ensure that the application of each margin for adverse deviation results in an increase to the value of the liability. Deterministic modeling is used.
3. Add PFAD for interest rate risk through scenario testing of the cash flow assumptions modified in step 2. The PFAD for interest rate risk from the base interest rate scenario is added by the actuary after considering the results of scenario testing (which includes prescribed scenarios as well as others as appropriate). The provision should be at least as great as that which results from the prescribed scenario that produces the highest liability.
4. Adjust the PFAD from steps 2 and 3 for the impact of any policyholder pass-through features (such as the policyholder assuming all interest rate risk). For policies with substantial pass-through features, steps 2, 3 and 4 may be combined.

SECTION 6: INTERNATIONAL FINANCIAL REPORTING STANDARDS

Introduction

A significant number of the world's jurisdictions are adopting the International Accounting Standards Board's (IASB) standards for financial reporting. Canada has adopted these standards for fiscal years commencing in 2011. In addition, the United States is moving to adopt or converge with these standards.

This module only provides a basic introduction to International Financial Reporting Standards and is not meant to be adequate for those required to apply or interpret these standards. As a survey of international standards, this module provides a good introduction to key standards and concepts and also provides an overview of resources available.

Objectives

After you complete Section 6, you will be able to:

- • Explain the general concepts underlying international accounting standards.
- • Explain considerations in accounting recognition criteria under international standards.
- • Describe different measurement attributes under international standards.
- • Identify and demonstrate valuation of embedded derivatives under international accounting.

SECTION 7: ASSET REPORTING

Introduction

This section, Asset Reporting, provides an introduction to International Accounting Standards Board's (IASB), U.S. GAAP (FASB) and U.S. statutory (NAIC) reporting for assets. (The current Canadian GAAP standards will be transitioning to international standards for year end 2011.) We will focus on the major asset categories reported by most life insurers and will provide an overview of asset reporting concepts, terms and references. We will provide this focus through a survey of financial statements, applicable standards, interpretations and literature — if you are required to produce or interpret these resources, you should study them in their entirety.

Objectives

After you complete Section 7, you will be able to:

- •Explain the key concepts in determining fair value of assets.
- •Explain considerations in accounting recognition criteria for assets.
- •Describe different measurement attributes such as depreciated cost and market value.
- •Identify and demonstrate valuation of embedded derivatives under ASC 815 and international accounting methodologies.
- •Explain the general concepts underlying specific accounting standards.

SECTION 8: TAXATION - UNITED STATES AND CANADA

Introduction

This section will cover company taxation for both the United States and Canada. It will look at ways in which an insurance company is taxed, who is doing the taxing, and the major components of the taxes.

The U.S. section will discuss both state and federal taxation of insurance companies. Federal taxation is income tax based. This section will include details on the pieces that have the largest impact on an insurance company's taxable income. The Canadian section will cover both provincial and federal taxation. This includes income taxes, capital taxes, premium tax, investment income tax, withholding tax, branch tax, sales tax, and excise tax.

The U.S. taxation system has a few general taxes (e.g., income tax and premium tax) that have a few main drivers. The Canadian taxation system has more special purpose taxes (e.g., capital tax and the Goods and Services Tax (GST)) in addition to the more general taxes such as income and premium tax. Adding to the complexity of the Canadian system, there are many different tax rates depending upon what type of business it is and where it is located.

This section will not cover taxation regarding all income and asset items for United States and Canada. Only the items that are more specific to insurance companies will be covered.

It is very important for you to thoroughly understand the key concepts presented in this section as tax is one of the major cost items for an insurance company. Optimizing the taxable position of the company is generally one of the key goals to accomplish in a competitive environment.

During this section, you will learn:

- •How are insurance companies taxed?
- •What are the “big drivers” of the taxes paid?

Objectives

After you complete Section 8, you will be able to:

- •Describe the two major categories of differences between pre-tax earnings and taxable earnings.
- •Define retaliatory tax.
- •Explain the rationale behind the Deferred Acquisition Cost (DAC) tax.
- •Identify the differences between statutory reserves and the tax reserves.
- •Distinguish between the different forms of taxes paid by Canadian companies.
- •Identify the differences between federal and provincial taxation.

SECTION 9: REGULATORY RISK-BASED CAPITAL

Introduction and Objectives

This section provides an overview of the financial reporting and current developments for regulatory risk based capital requirements and associated solvency information. To understand current reporting requirements as well as ongoing developments we begin with background material to develop the context of Risk-Based Capital (RBC) and its implication to various audiences such as management, regulators, rating agencies, policyholders and investors.

After completing this section, you will be able to explain the objectives and features of regulatory risk based capital requirements and its role in assessing solvency.

SECTION 10: C3 PHASE II AND ACTIVITY

Introduction and Objective

This section covers RBC C3 Phase II (C3P2) as initially released for the year end 2006. During this section, you will read portions of the following:

- •National Association of Insurance Commissioners' "2006 NAIC Life Risk-Based Capital Report Including Overview and Instructions for Companies," December 31, 2006.
- •"Recommended Approach for Setting Risk Based Capital Requirements for Variable Annuities and Similar Products," June 2005, American Academy of Actuaries' Life Capital Adequacy Subcommittee, © 2005 Reprinted by permission of the American Academy of Actuaries. As the Academy may supplement, update, or amend its articles and materials from time to time, parties should refer to the Academy website at http://www.academy.org for any such additions, changes, supplements, deletions, or modifications since the initial publication date."

You will also have the opportunity to test your knowledge through Thought Questions and to use pre-built spreadsheets to compute some of the important C3P2 concepts. These activities will give you an overview of the stochastic method in C3P2.

After completing this section, you will be able to perform calculations required by C3 Phase II.

END-OF-MODULE TEST

END-OF-MODULE EXERCISE