



POLICYHOLDER DIVIDENDS AND NONGUARANTEED ELEMENTS IN THE U.S. AND CANADA

Overview

This guide concerns policyholder dividends and other nonguaranteed elements in individual life insurance and annuities in Canada and the U.S. Participating insurance is most often offered by mutuals in the U.S. and by both mutual and stock companies in Canada.

The determination of divisible surplus is the responsibility of the directors of a company. Policyholder dividends on participating policies represent the sharing of divisible or distributable surplus among policyholders. Underlying principles are equity and the provision of insurance at cost. Use of the contribution principle represents generally accepted actuarial practice in both Canada and the U.S.

Nonguaranteed elements other than dividends are generally found in nonparticipating policies but may also be an element of current performance in some participating policies. Nonguaranteed elements may include any of the following:

- Current premium rates lower than the maximum guarantees on an indeterminate premium policy
- Current interest rates higher than the guaranteed rates, current cost of insurance, or expense charges lower than guaranteed maximums on interest-sensitive or universal life policies
- Nonguaranteed bonuses, such as a return of some charges or credit of additional interest to the policy, at certain durations.

Initial nonguaranteed elements and dividends are set as part of product design and pricing. They may be revised for in-force policies based on experience and profitability objectives and results.

Actuarial standards of practice exist for dividend determination in both countries and nonguaranteed elements in the U.S. The dividend standards are quite similar to one another and deal only with the equitable sharing of divisible surplus.

In December 1995 the NAIC developed a model regulation on the permissible basis of illustrated dividends and nonguaranteed elements. This model introduces the concepts of the illustration actuary and a disciplined current scale. The Actuarial Standards Board has developed related actuarial standards of practice. There have been similar discussions in Canada, although progress to date has been slower.

The Role of the Actuary

Actuaries carry out the basic design and pricing of life insurance policies, including the initial determination of the illustrated dividend scale and current nonguaranteed elements. After issue, actuaries monitor experience and evaluate the need for changes in light of that experience and emerging profitability. Annual asset-adequacy testing by the valuation actuary takes into account the dividends and nonguaranteed elements assumed in projected product performance and the ways in which those elements may be adjusted in conjunction with the various projected scenarios.

In both Canada and the U.S. the aggregate amount of dividends to be distributed to policyholders (the divisible surplus) is determined by a company's directors acting on the advice of senior management, which usually includes the dividend actuary. The amount is determined in light of many factors with an underlying requirement of continuing solvency of the company and its ability to fulfill all contractual obligations.

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Once the amount of divisible surplus is determined by company directors, the primary role of the dividend actuary is to establish methods to distribute it equitably to policyholders in accordance with any regulatory requirements and professional standards of practice. These standards require that the dividend actuary document his or her recommendations in a report to management. This report must state whether dividends, either illustrated or current scale, have been determined in accordance with actuarial standards of practice.

The actuary responsible for recommending the level of nonguaranteed elements must also prepare a management report outlining the basis on which those elements are determined and redetermined.

Under the NAIC Model Regulation on Sales Illustrations, the illustration actuary must provide specified certifications regarding the basis of dividends and other nonguaranteed elements authorized for illustration by the company.

Determination of Divisible Surplus and Policy Dividends

The first step in setting dividends for participating policies is the determination of the total divisible surplus. This divisible surplus is then allocated among participating policyholders according to one of various formula approaches.

The primary source of capital for a mutual company has traditionally been earnings and the management of dividends has a direct impact on earnings. Fundamental issues in the determination of divisible surplus include: creating a strategic business plan that develops a sustainable competitive advantage; determining, creating, and maintaining required capital; deploying that capital appropriately; and providing participating insurance at cost over the long term.

The determination of divisible or distributable surplus is at the sole discretion of the directors of the company, subject to the minimum and maximum regulatory limitations. The directors must consider such factors as the general financial strength of the company, recent earnings levels and profitability of products, strategic business plans, competitive position, growth rates of various types of business, and related capital requirements and financial condition goals. The directors must also consider the fair and equitable treatment of the company's participating policyholders.

Once the divisible surplus is determined, it must be allocated to the various classes of in-force policies. (The determination of dividend classes is discussed further under the two sections titled Philosophical and Practical Issues for Dividends and Nonguaranteed Elements, and Professional Standards of Practice.)

Broadly speaking, this allocation is done in proportion to contributed surplus. Commonly used techniques for setting individual dividends include the three-factor contribution method, the experience premium method, and the asset share or fund method. For any of these formula approaches, the dividend actuary must have effective systems to measure, by class of business, the actual experience that has emerged from major sources of earning, that is, interest income, expense, mortality, and persistency. Considerations in developing current experience factors include use of portfolio-averaging or investment-year methods, taxation factors, and the effect of policy loans. Many other considerations also apply, such as policyholder expectations, legal constraints, and professional standards of practice.

The notion of temporary surplus can be important to surplus creation and management. Small margins for various experience factors are held back in early policy years; that creates earnings and therefore surplus. To provide insurance services and benefits at net cost and to treat participating policyholders fairly and equitably, temporary surplus may be returned to policyholders in the form of terminal dividends at surrender or maturity of a policy. Alternatively, temporary surplus is sometimes returned in the form of higher annual dividends at later durations.

Terminal dividends are generally modest in the U.S. In Canada, several of the larger insurers have considerably more significant terminal dividend arrangements, which are then an important part of the company's surplus management program. This is perhaps a reflection of their international character and familiarity with practice in the U.K., where terminal dividends are universally used. Another factor might be the New York limitations, which are also referenced in the deductibility of IRC Section 7702.

In recent years, regulatory capital adequacy and financial condition standards that provide objective standards for surplus management have been introduced in both the U.S. and Canada. These capital requirements may also provide additional justification for terminal dividends as a measure of the risk capital released when a policy terminates. Recent adoption by the Canadian Institute of Actuaries of a new valuation standard of practice for participating policies (Valuation Technique Paper No. 10) may have an important bearing on these matters. The new standard requires that all dividends, including terminal dividends, be provided for in determining the actuarial reserves.

Saunders, R. Arthur. "Individual Life Insurance Dividends," *Society of Actuaries Study Note 340-33-89*.

This study note provides an overview of the considerations required in the dividend determination process. It discusses the determination of divisible surplus, various formula approaches (three-factor method, experience-premium method, and the asset share or fund method) that are currently in use to share the divisible surplus among participating policyholders, dividend illustrations and practical considerations such as policyholder expectations, legal constraints, professional standards of practice, approximations, and ad hoc adjustments, considerations in developing experience factors, and monitoring systems, capital gains, and policy loans.

Level of difficulty: Basic Pages: 55

Huntington, Henry S. "Distribution of Surplus," Chapter 2 in *Society of Actuaries Study Note B-108-79* (1982 Version).

Although this study note has been replaced, it contains a thorough discussion of some of the basic concepts.

Level of difficulty: Basic Pages: 45

Black, Kenneth Jr. and Skipper, Harold Jr. "Surplus and Its Distribution," last section of Chapter 12 in *Life Insurance*. 12th ed., Englewood Cliffs, N.J.: Prentice-Hall, 1994, p. 601-15.

This text gives a brief overview of divisible surplus, frequency of distribution, the contribution principle, and describes the three-factor contribution method (the most widely used approach for surplus distribution) that considers the three major sources of surplus: excess interest, mortality savings, and expense or loading savings.

Level of difficulty: Basic Pages: 15

Trowbridge, Charles L. "Theory of Surplus in a Mutual Insurance Organization," *Transactions of the Society of Actuaries XIX*, Part I (1967), p. 216-66.

This article addresses some fundamental questions: What is surplus? What is its purpose? What magnitude might it be? From whence does it arise? What are its implications with respect to equity between policyholders? The intent is to develop the beginnings of a comprehensive theory of surplus.

Level of difficulty: Basic Pages: 16

Jackson, Robert T. "Some Observations on Ordinary Dividends," *Transactions of the Society of Actuaries XI* (1959), p. 764-811.

This paper and associated discussions provide some useful deliberation of the determination of divisible surplus, terminal dividends, and the concept of temporary surplus.

Level of difficulty: Basic Pages: 48

Leckie, Robin B. "Some Actuarial Considerations for Mutual Companies," *Transactions of the Society of Actuaries XXXI* (1979), p. 187-259.

This paper attempts to develop an actuarial rationalization for the governance of a mutual life insurance company. The issues of surplus targets and of the size and purpose of mutual company surplus are addressed.

Level of difficulty: Intermediate Pages: 23

"Report of the Task Force on Mutual Life Insurance Company Conversion," *Transactions of the Society of Actuaries XXXIX* (1987), p. 295-391.

An important part of this report is an analysis of the financial management principles and practices used by mutual companies. There is a particular focus on the principles employed in the management of a mutual company's capital structure including, importantly, the interrelationship of this subject on policy pricing and dividends.

Level of difficulty: Intermediate Pages: 97

National Association of Insurance Commissioners. *NAIC Life Risk-Based Capital Overview and Instructions Book*. Kansas City, Mo.: published annually.

This overview details all the components of the current U.S. risk-based capital formula with general descriptions of the basis for each category and specific instructions on completion.

Level of difficulty: Intermediate Pages: 23 plus blank form

Office of the Superintendent of Financial Institutions. "OSFI Guidelines for Life Insurance Companies and Fraternal Benefit Societies (MCCSR)," *Society of Actuaries Study Note 442-92-95*.

This guideline defines the federal requirements for the minimum-continuing capital and surplus requirements that a Canadian company or a company operating in Canada must hold.

Level of difficulty: Intermediate Pages: 100

National Association of Insurance Commissioners. *Report of the Advisory Committee to the Life Risk-Based Capital Working Group*. Kansas City, Mo.: November 27, 1991.

This report explains the background, objectives, and analysis done in determining the initial U.S. risk-based capital factors for life and health companies.

Level of difficulty: Advanced Pages: 59

Cody, Donald D. "An Expanded Financial Structure for Ordinary Dividends," *Transactions of the Society of Actuaries XXXIII* (1981), p. 313–65.

This paper develops a dividend financial structure and a dividend formula based on the contribution principle in a completely expanded format. Objectives are suggested for the design of a dividend system that (1) fits an environment demanding carefully defined and demonstrable equity among dividend classes, (2) is understandable and controllable by management, and (3) has continuity from year to year.

Level of difficulty: Advanced Pages: 53

Philosophical and Practical Issues for Dividends and Nonguaranteed Elements

Understanding the philosophy underlying dividends is an important part of the process of dividend determination. Two concepts are fundamental to participating life insurance: insurance at cost, in which profits in excess of those required for normal company safety and growth are returned to the policyholders; and equity, in which each policyholder pays an equitable share of the net cost (including the cost of capital) associated with the block of business to which his or her policy belongs.

The contribution principle defined in the American Academy of Actuaries' *Actuarial Standard of Practice No. 15*, and the comparable Canadian Institute of Actuaries' *Standard of Practice*, requires that aggregate divisible surplus be distributed among policies in the same proportion as the policies are considered to have contributed to the divisible surplus.

There are some philosophical and practical questions in dividend determination that are not fully resolved: Should a dividend class be based on characteristics existing at issue? Are only characteristics relied on for pricing? Has a right, such as a policy loan, been exercised? Should the dividend interest rate be a portfolio rate or one developed by an investment-year method? Should a block of business make a permanent contribution to a company's surplus?

There is little general literature devoted to specific principals and philosophy of setting nonguaranteed elements. These nonguaranteed elements are an integral part of the basic process of designing, pricing, and repricing products.

The determination and redetermination of these nonguaranteed elements must be done in conjunction with overall monitoring of experience and the allocation of experience to blocks of business. It is done in the context of the specific company's profit, return, and market position objectives. In certain jurisdictions, company board approval and state insurance department notification may be required for changes in nonguaranteed elements. Changes in nonguaranteed elements can in themselves change the underlying policyholder behavior, thus altering the experience on which the changes were proposed. Balancing these considerations creates practical considerations which vary case by case.

The readings in this section review some general methods being used to measure and allocate experience and discuss some specific applications of these methods. The NAIC Model Regulation on Sales Illustrations also addresses some of the issues regarding what may or may not be used as the basis of illustrating nonguaranteed results in the U.S. (For additional information, see the section titled Legislative and Regulatory Requirements.)

Winters, Robert C. "Philosophic Issues in Dividend Distribution," *Transactions of the Society of Actuaries* XXX (1978), p. 125–37.

This paper summarizes traditional actuarial thinking on individual policy dividends and some concerns that were current at the time it was published, many of which continue to apply today. It draws primarily on the framework of ordinary life insurance issued by a mutual company. Specific topics covered include the concept of dividend class, the effects of reserves and nonforfeiture values on dividends, terminal dividends, dividend assumptions and illustrations, early dividends, permanent contributions to surplus, and changes in dividend scales.

Level of difficulty: Basic

Pages: 13

Gustafson, Dale R., Johnston, David R., Rolland, Ian M., and Winters, Robert C. "Life Insurance Dividends in Theory and Practice," *Transactions of the Society of Actuaries* XXVI, Part II (1974), p. D597–D622.

This paper is a discussion of the report, "Philosophies in the Computation and Dissemination of Dividend Illustrations," prepared by the Society of Actuaries Committee on Cost Comparisons and Related Issues. Concepts discussed include equity, the extent to which a dividend illustration should be a projection, whether dividend interest rates should vary for new and old business, justification for paying first-year dividends, and how capital gains and losses should be handled in a dividend scale. Aspects of dividend theory and practice in Canada, the U.K., and the Caribbean islands are highlighted where different from the U.S.

Level of difficulty: Intermediate

Pages: 25

Canadian Institute of Actuaries. "Dividend Practices and Principles," *Proceedings of the Canadian Institute of Actuaries* XII, No. 1, 1980–81, p. 105–24.

The panelists comment on the positions of the American Academy of Actuaries and the Canadian Institute of Actuaries on the Society of Actuaries Committee on Theory of Dividends and Other Non-guaranteed Elements in Life Insurance's recommendations on dividend practices and principles. Differences of opinion are expressed on the issues of: splitting existing dividend classes after issue, direct per-policy recognition of policy loans, the investment generation method of determining dividend interest rates, termination dividends, and the nature of the actuarial report on the dividend scale.

Also discussed are the Canadian Institute of Actuaries' role in the area of disclosure, why formal recommendations are needed in Canada, and to whom the Canadian Institute of Actuaries' promulgated recommendations would apply.

Level of difficulty: Basic

Pages: 20

Claire, Donna R., Easton, Albert E., and Ehrlich, Selig. "Repricing the In-Force Book of Business," *Record of the Society of Actuaries* 18, No. 4B (1992), p. 1763–77.

The panel discusses practical considerations in repricing participating whole life, universal life, and annuities. Much of the discussion of determining interest rates for annuities also has applicability to life products.

Level of difficulty: Basic

Pages: 15

Kabele, Thomas G. "Universal Life and Indeterminate Premium Products and Policyholder Dividends," *Transactions of the Society of Actuaries* XXV (1983), p. 153–247.

This paper was written in the context of debates on federal income tax to demonstrate that universal life and indeterminate premium products are similar to participating plans. For federal income tax purposes, "dividends and similar distributions" are asserted to include any benefit or premium reduction that is not fixed at issue. Arguments that excess interest and indeterminate premium reductions are not dividends are rebutted. The paper challenges alternative tax treatments of excess interest credits and premium reductions and argues that "add-on" features (such as outside bond indexes and advance guarantees) do not preclude dividend treatment for tax purposes. It also investigates reserve and policyholder tax questions. The continuing utility of the paper and its discussions is in presenting a range of viewpoints on the relationship between dividends and nonguaranteed elements.

Level of difficulty: Intermediate Pages: 94

Boger, Steven, Chapman, Allan L., Slaby, Edward J., and Smith, Roger W. "Repricing Considerations—In-Force Blocks of Business," *Record of the Society of Actuaries* 14, No. 3 (1988), p. 1119–38.

The panel discusses the use of asset/liability models in setting interest rate strategies for interest-sensitive business. Consideration is also given to the development of surplus charges for the management of participating surplus.

Level of difficulty: Intermediate Pages: 19

Auger, James G., Milnes, Esther H., Neubeck, Gary F., and Rosenthal, Elliot A.; Creswell, David L., Hartz, Scott S., and Kunesh, Daniel J. "Measuring Interest Margins—Part 1—Asset Segmentation," *Record of the Society of Actuaries*, 16, No. 2 (1990), p. 735–52; and 16, No. 3 (1990), p. 1289–1304.

This session, along with the other two (Parts 2 and 3) in the three-part series, describe methods that can be used to measure profitability and set credited interest rates on interest-sensitive annuities and life insurance.

Level of difficulty: Intermediate Pages: 17 and 15, respectively

Borchardt, Frederick M., Hartz, Scott S., Milnes, Esther H., and Ogden, Sue W.; Gleeson, Thomas M., Kyle, Thomas M., Mavrogenes, Peter S., and Smith, Roger W. "Measuring Interest Margins—Part 2—Measuring Investment Results," *Record of the Society of Actuaries* 16, No. 2 (1990), p. 837–856; and 16, No. 3 (1990), p. 1477–1514.

This session (and Parts 1 and 3) describe methods that can be used to measure profitability and set credited interest rates on interest-rate-sensitive annuities and life insurance.

Level of difficulty: Intermediate Pages: 19 and 37, respectively

Corwin, Frederic W. Jr., Deakins, Peter B., Elam, Charles P., and Palmer, W. Randall; Deakins, Peter B., Rosenthal, Laura B., and Routhenstein, Alan J. "Measuring Interest Margins—Part 3—Measuring Required Interest," *Record of the Society of Actuaries* 16, No. 2 (1990), p. 919–46; and 16, No. 3 (1990), p. 1631–62.

This session (and Parts 1 and 2) describe methods that can be used to measure profitability and set credited interest rates on interest-rate-sensitive annuities and life insurance.

Level of difficulty: Intermediate Pages: 27 and 31, respectively

Dubois, Michael E., Phillips, Thomas A., Stern, Larry N., and Streck, Linda S.; Hancock, Rachel M., Klein, Ronald L., and Snow, Martin. "Revisiting the Pricing of Your In Force," *Record of the Society of Actuaries* 21, No. 1 (1995), p. 43–60 and 21, No. 2 (1995), p. 49–64.

The panelists describe several insurers' methods for monitoring in-force participating and nonparticipating business and making repricing decisions. The discussions include applicable standards of practice, evaluating mortality experience, organizing data and systems to facilitate repricing analysis and implementation, and examples of practical questions regarding equity and potential future experience impacts of in-force changes.

Level of difficulty: Basic Pages: 17 and 15, respectively

Kembler, James W. "Dividend Philosophy," *Record of the Society of Actuaries* 10, No. 2 (1984), p. 779-94.

This session deals with the exposure draft of the recommendations of the Society of Actuaries' Committee on Theory of Dividends and Other Non-guaranteed Elements in Life Insurance and Annuities; see next entry for final report. The focus of discussion is actuarial principles and practices in connection with individual contracts containing nonguaranteed charges and/or benefits, such as universal life policies, indeterminate premium policies, and excess interest contracts other than those linked to a separate account result or a defined index. The continuity principle (which was not included in the final report or standard of practice) is defined and several examples of its application are included. The concept of a *caveat emptor* policy is considered as well as what sort of disclosure should be required for nonguaranteed elements.

Level of difficulty: Basic

Pages: 16

"Report of the Committee on Theory of Dividends and Other Non-Guaranteed Elements in Life Insurance and Annuities," Itasca, Ill: Society of Actuaries, August 1985.

This is the final report of this committee on the subject of nonguaranteed elements (other than dividends) in individual life insurance and annuities. It provides additional background on the development of the principles currently found in *Actuarial Standard of Practice No. 1*. The report starts with the committee's general approach to the subject and carries through to the proposed recommendations. The evolution of life and annuity products with nonguaranteed elements and the special challenges of providing actuarial advice on these products are discussed. Emphasis is placed on the importance of a plan of operations outlining the company's (1) plan for determination and redetermination of nonguaranteed charges/benefits, (2) operating practices (such as underwriting, claims, and so on) that affect pricing and repricing, and (3) marketing and profit objectives for the specific product.

Level of difficulty: Basic

Pages: 22

Dividends and Nonguaranteed Elements in the Design and Pricing of Life Insurance

The pricing of life insurance products depends on the projection of many factors: investment yields, mortality rates, lapse rates, expenses, taxes, sales, and expected profits. It is unlikely that actual experience will evolve as originally estimated. The ability to reflect emerging experience through changes in dividends or other nonguaranteed experience elements provides some ability to maintain required margins as actual experience emerges, but does not eliminate the importance of setting initial factors as accurately as possible. Market competitiveness also plays a role in pricing.

The development of a company policy to define how dividends are to be structured and equitably determined and distributed is central to pricing participating policies; such a policy should also define the role that dividends will play in the management of the company's surplus. Company policy on how nonguaranteed elements other than dividends will be redetermined in the future should also be established at the time of initial pricing.

These references give a basic background on general pricing considerations and are not meant to be a comprehensive review of the subject.

Atkinson, David B. "Introduction to Pricing and Asset Shares," *Society of Actuaries Study Note 210-25-95*.

This study note provides a comprehensive overview of the fundamentals of pricing individual life insurance using asset shares. It discusses issues and formulas that apply to individual life insurance products in general rather than focusing on the details of particular products. Pricing assumptions and considerations, the variance of profits, sensitivity testing, and other uses of asset shares are also discussed.

Level of difficulty: Basic

Pages: 109

Atkinson, David B. "Pricing Individual Life Insurance," *Society of Actuaries Study Note 340-32-89*.

This study note presents more advanced aspects of pricing individual life insurance products, building on *Study Note 210-25-95*. It discusses the needs of life insurance companies that profit margins must satisfy as well as commonly used profit measures. Annual and nonannual pricing formulas are developed and possible refinements to these formulas are presented.

Level of difficulty: Intermediate

Pages: 122

Crowne, Joseph E., Dreyer, Robert H., Hill, Robert P., and Jay, Burton D. "Adequacy of Pricing—Considerations," *Record of the Society of Actuaries* 16, No. 4A (1990), p. 2249–65.

This discussion focuses on certain pricing assumptions (margins for AIDS, marginal pricing, and persistency) and product illustration values where pricing inadequacies have become an issue. The paper also includes an explanation of the value-added method of accounting.

Level of difficulty: Basic

Pages: 17

Cody, Donald D. "The Unification of Pricing, Valuation, and Management-Basis Financials for Participating and Nonguaranteed Element Contracts," *Transactions of the Society of Actuaries* XL, Part I (1988), p. 173–95.

Cody describes an approach for unification of pricing-, valuation-, and management-basis financials. The proposed unification is structured on the equity-capital management approach and on a variation of the level return-on-equity accounting method. Pricing is based on an ideal, generalized dividend/credits formula. A mathematical analysis is included, as well as a discussion on the treatment of dividends and a nonrefundable charge for the use of capital.

Level of difficulty: Advanced

Pages: 35

Borch, Karl. "Risk Theory & Serendipity," *Insurance—Mathematics and Economics*, January 1986, p. 103–12.

This paper presents a brief outline of a standard equilibrium model with which equilibrium premiums in an insurance market can be determined. Examples of the practical application of different models are also included.

Level of difficulty: Advanced

Pages: 9

Legislative and Regulatory Requirements

NAIC annual statement instructions require a Supplement to Schedule M of a company's annual statement that must respond to interrogatories concerning the process of dividend determination and experience factors and provide an actuarial opinion as to whether or not the dividends have been determined in accordance with actuarial principles and practices of the American Academy of Actuaries. A Supplement to Exhibit 8 solicits similar information concerning nonguaranteed elements other than dividends.

The NAIC recently developed a Model Regulation on Sales Illustrations, including illustrations of dividend scales and other nonguaranteed elements. This legislation introduces the concept of the illustration actuary, who must make various certifications to the directors of the company and state insurance commissioners regarding the company's currently illustrated scales. New York insurance law mandates maximum levels of surplus New York mutual companies may retain. Also, New York law states that policyholder dividends must be set equitably. A number of states have formal or informal requirements for filing or approval of indeterminate premiums or other nonguaranteed elements.

The Canadian Insurance Companies Act, which came into effect June 1, 1992, requires companies to file a dividend policy statement with the Office of the Superintendent of Financial Institutions, the federal supervisory agency for insurance companies. This legislation includes provisions to protect the rights of participating policyholders in respect of various matters that may affect the level of profits available for the payment of dividends to such policyholders. The law also requires the appointed actuary to confirm to the board that policyholder dividends proposed to be paid are in accordance with the company's stated dividend policy and that the allocation of investment income and expenses to participating policies is reasonable.

National Association of Insurance Commissioners. *Questions & Answers on Life Illustration Model Regulation*. Kansas City, Mo.: 1996. This document may also be downloaded from the NAIC web page: <http://www.naic.org>.

This document contains unofficial statements of the Life Disclosure Working Group providing guidance regarding certain of the Sales Illustrations Model Regulation provisions and some insight into the original intent of the drafters of the model. As of September 1996, it contained responses to approximately 100 questions on specific provisions of the regulation. This document does not cover detail regarding the assumptions to be used in the actuarial certifications required by the regulation, which are covered by *Actuarial Standard of Practice No. 24* and related practice notes.

Level of difficulty: Basic

Pages: 21

New York Insurance Department. "Guideline for Submission and Approval of Life Insurance Policies with Projected Indeterminate or Adjustable Premium Rates Less Than or Equal to Maximum Guaranteed Rates," *New York Circular Letter* 1980-18, 1980.

This letter lists a number of specific requirements for approval of indeterminate premium policies in that state.

Level of difficulty: Basic Pages:—

Insurance Companies Act, Canada Communications Group, Catalog No. YX3-1991-47, June 1, 1992.

This is the text of the law that affects companies issuing insurance policies in Canada. Pertinent sections relating to participating business are: 165 (2)(e); 165 (4).(5); 207 (d); 331 (3)(a); 456; 457; 458; 459; 460; 461; 462; 463; and 464. Section 165 is of particular interest in that it requires each company writing participating business to establish a dividend policy.

Level of difficulty: Intermediate Pages:—

National Association of Insurance Commissioners. *NAIC Annual Statement Instructions, Life, Accident, and Health*. Kansas City, Mo.: published yearly.

These instructions describe the interrogatories that must be answered and the actuarial opinion concerning policyholder dividends that must be supplied as supplements to Schedule M and Exhibit 8 of the annual statement. The actuary must describe the general procedures and experience factors used to determine dividends and respond to a number of specific interrogatories set out in the instructions. Also, the actuary must sign an actuarial opinion stating that the dividends have been determined in accordance with actuarial principles and practices of the American Academy of Actuaries.

Level of difficulty: Intermediate Pages: 6

National Association of Insurance Commissioners. *NAIC Life Insurance Illustrations Model Regulation*. Kansas City, Mo.: 1995.

This document sets out the NAIC requirements to regulate sales illustrations, including illustration of the dividend scale for traditional participating policies. The concept of the "Illustration Actuary" is introduced. The regulation was adopted in December 1995.

Level of difficulty: Intermediate Pages:—

New York Insurance Department. "Limitation on Accumulation of Surplus of Life Insurance Companies," *New York Insurance Laws, Section 4219*, p. 547.

This legislation is somewhat unique to New York and sets limits on the maximum level of surplus that New York mutual companies may retain.

Level of difficulty: Intermediate Pages: 2

New York Insurance Department. "Policyholder's Participation in Surplus of Life Insurance Companies," *New York Insurance Laws, Section 4231*, p. 594.

This type of legislation is more common among the states than the limitation on accumulation of surplus legislation.

Level of difficulty: Intermediate Pages: 10

Professional Standards of Practice

In both the U.S. and Canada, actuarial standards of practice have been developed to provide professional guidance to actuaries performing work related to dividend determination and illustration with respect to participating individual life insurance and annuity policies. The standards require a written dividend actuary's report and provide guidance as to items that should be covered in such a report.

With the development in the U.S. of a new model regulation on life insurance sales illustrations, a new standard of practice to guide actuaries in complying with such regulations has been developed. This may eventually require changes to the existing standard of practice referenced above.

Scenario testing is becoming an increasingly important aspect in the valuation of participating business in order to determine the adequacy of provisions for adverse deviation and also the impact of delays in reflecting actual experience on liabilities. A clearly defined policy for dividends or nonguaranteed elements is important to understand how dividend scales will change as experience changes and the impact on reserves. The Professional Actuarial Specialty Guide titled "U.S. Statutory—Financial Reporting and the Valuation Actuary" (*I-1-92*, Schaumburg, Ill.: Society of Actuaries, 1992) should also be reviewed for additional source material.

In Canada, the issue of explicit guidelines on reserving for participating policies has been under discussion for many years and has proven to be difficult to resolve.

The Canadian Institute of Actuaries adopted a standard for valuing participating policies in September 1996. Importantly, this requires valuing all policyholder dividends, including terminal dividends. This standard was adopted in September 1996 and became effective on January 1, 1997.

Actuarial Standard of Practice No. 1, applicable to U.S. business, specifies the types of items that should be considered in the determination and redetermination of nonguaranteed elements other than dividends. There is currently no established regulatory or professional standard or principle for these nonparticipating elements that corresponds to the contribution principle equity requirements for participating dividends. (See also the references under the heading Philosophical and Practical Issues on early attempts to develop a “continuity principle.”) However, the actuary should prepare a report describing the company’s complete redetermination policy and point out how each recommended change complies with or deviates from that policy.

Actuarial Standards Board. “The Redetermination (or Determination) of Non-Guaranteed Charges and/or Benefits for Life Insurance and Annuity Contracts,” *Actuarial Standard of Practice No. 1*, 1986.

This standard covers considerations involved in determining and redetermining nonguaranteed elements in individual life insurance and annuity policies. It applies to policies with such elements (other than variable, indexed, and participating elements) issued by U.S. stock and mutual life companies. The standard emphasizes the need for and contents of an actuarial report documenting the actuary’s recommendations. It also describes the elements to be contained in the company’s nonguaranteed element policy, which should be in place before the actuary makes recommendations. It does not place restrictions on what that policy might be.

Level of Difficulty: Basic

Pages: 9

Actuarial Standards Board. “Dividend Determination and Illustration for Participating Individual Life Insurance Policies and Annuity Contracts,” *Actuarial Standard of Practice No. 15*, Washington, D.C.: 1985.

This standard describes the basic responsibilities of the actuary in the application of actuarial principles and practices to the determination of dividends for participating individual life insurance policies and annuity contracts. It applies to dividends illustrated or distributed under the provisions of participating policies issued for delivery in the U.S. by mutual and stock life insurance companies and fraternal societies and associations. For a stock company, it also applies to transfers from any participating account to any stockholder or nonparticipating account.

Level of difficulty: Intermediate

Pages: 13

Canadian Institute of Actuaries. *Recommendations—Dividend Determination and Illustration and Explanatory Notes*, 1982.

Recommendations describes the basic responsibilities of the actuary in the application of sound actuarial principles and practices to the determination and illustration of dividends under participating individual life insurance and annuity policies issued for delivery in Canada.

Level of difficulty: Intermediate

Pages: 56

Actuarial Standards Board. “Compliance with the NAIC Model Regulation on Life Insurance Sales Illustrations,” *Actuarial Standard of Practice No. 24*, Washington, D.C.: 1995.

This standard provides guidance to actuaries in complying with Life Insurance Sales Illustrations Model Regulations.

Level of difficulty: Intermediate

Pages: 21

Canadian Institute of Actuaries. *Valuation of Participating Policy Liabilities: Valuation Technique Paper No. 10*, Exposure Draft, Ottawa, Ontario, August 1995.

This valuation technique paper discusses the basic principles for the valuation of participating policy liabilities using the policy premium method, including the determination of expected experience, treatment of dividends and provision for adverse deviations.

Level of difficulty: Intermediate

Pages: 13

Policyholder Expectations and Policyholder Perspectives

Sales illustrations can strongly influence policyholders' reasonable expectations as to the dividends or other nonguaranteed elements to be provided by their policies. Good sales illustration practices can be of considerable help to applicants in understanding the nature of the policies they are considering purchasing. They can show how the policy operates, a range of performance possibilities, and how the policy will react to changes in dividends or nonguaranteed elements.

There has been much concern in the U.S. recently about inadequate sales illustration practices and the NAIC has responded with a new Life Insurance Sales Illustrations Model Regulation. Recognizing the significance of this issue, the Actuarial Standards Board concurrently developed and adopted a standard of practice to guide actuaries in meeting their responsibilities under this proposed new regulation.

There also have been similar concerns in Canada about improper sales illustration practices. In response, the Canadian Institute of Actuaries, the Canadian Life and Health Insurance Association, and the Life Underwriters Association of Canada have jointly developed proposals to guide sales illustrations practice. Unlike the NAIC approach, the Canadian approach is not a regulatory one and does not require certification by an illustration actuary as is the NAIC approach. The Canadian approach is based on a "seal of approval" concept. Illustrations that comply with the proposed guidelines would be allowed to contain the words: This illustration complies with disclosure guidelines developed by the Canadian Life & Health Insurance Association and the Life Underwriters Association of Canada. The progress of the Canadian proposals has been slow and the outcome is somewhat uncertain; deliberations are ongoing. In the meantime, we are seeing the emergence of "duty of care" requirements on insurers at the provincial regulatory level. These require appropriate duty of care in the employment and training of agents and sales representatives. An agents' code of ethics is under development.

From another perspective, the expectations by policyholders, created by consistent dividend improvements from the mid-1940s through the mid-1980s, that dividends will continue to increase from one year to the next without fail can have an important influence on the setting and changing of dividend scales. While dividend scale reductions have become more common in recent years due to declining investment returns, policyholders often react in consternation to a reduction in the dividend scale.

Their queries can result in considerable additional administrative work. Companies thus tend to avoid making minor reductions in dividend scales or to moderate them in certain ways so as to avoid the policyholders' adverse reactions. See also the sections titled Legislative and Regulatory Requirements and Professional Standards of Practice.

"Final Report of the Task Force for Research on Life Insurance Sales Illustrations under the Auspices of the Committee for Research on Social Concerns," *Transactions of the Society of Actuaries, 1991-92 Reports*, p. 139-279.

This report provides a clear, introductory explanation of sales illustrations, the use of nonguaranteed elements in sales illustrations, and current concerns with the illustration process. Appendixes containing definition of terms and sample illustrations help make the material clear to the reader. This topic has received much scrutiny from insurance regulators and the NAIC Model Regulation on Sales Illustrations has been one result.

Level of difficulty: Basic

Pages: 23

Keller, John W. "Dividends—Illustrations Versus Histories," *Product Development News* (Newsletter of the Individual Life Insurance and Annuity Product Development Section of the Society of Actuaries), April 1990, p.6.

This paper discusses a question of whether dividend illustrations or histories are better indicators of a company's likely future dividend performance. Some of the most common ways companies have devised to enhance illustrations are presented. The paper suggests buyers should be urged to look carefully at dividend history to help determine how companies have performed in the past and how they are treating their older policyowners.

Level of difficulty: Basic

Pages: 2

Turner, Catherine R. "Life Insurance Illustrations: The Problem or the Solution?" *Journal of the American Society of CLU & ChFC*, Bryn Mawr, Pa.: March 1995, p. 46–50.

This article discusses how to use the illustrations available today to dispel much of the public misunderstanding of life insurance. Areas needing further research and improvement are also identified.

Level of difficulty: Basic Pages: 6

Bieluch, Philip J., Greving, Robert C., Guinn, Patricia L., and Spano, Anthony C. "Are Current Product Illustrations Supportable?" *Record of the Society of Actuaries* 14, No. 2 (1988), p. 757–74.

This discussion occurred as the impact of interest and dividend rate declines on policies issued in the high interest environment of the early 1980s was just being felt. It covers the types of performance comparisons commonly made using illustrations, the various possible illustration restrictions being discussed in 1988, and the actuary's professional responsibility regarding illustrations. The "range concept," which would have permitted illustrations at higher than current dividend scales, was never adopted. The NAIC Model Regulation on Life Insurance Illustrations, adopted December 1995, was the culmination of the potential regulatory changes being discussed in this panel.

Level of difficulty: Basic Pages: 18

American Society of CLU & ChFC. *Introduction to the Life Insurance Illustration Questionnaire (IQ) and Life Insurance Illustration Questionnaire*. Bryn Mawr, Pa.: 1996.

This questionnaire was designed by the CLU society to help companies educate agents on the methodology and assumptions underlying life insurance illustrations. Many companies use the form in agent training and make their responses available on request to potential clients. The questions are similar to, but more detailed than, the annual statement supplemental interrogatories to Exhibit 8 and Schedule M. As with those interrogatories, some of these questions may no longer be applicable after states adopt the new life insurance illustrations model regulation. However, many of the principles and areas for differences will continue to be relevant.

Level of difficulty: Basic Pages: 8

Canadian Institute of Actuaries. "Disclosure Guidelines For Sales Illustrations," *CIA Public Statement* produced by the Joint Canadian Institute of Actuaries, Canadian Life and Health Insurance Association, Life Underwriters Association of Canada Task Force, January 1995. Available from the Canadian Institute of Actuaries.

The Canadian Institute of Actuaries has officially endorsed the principles of the guidelines and encourages their use. However, the Institute decided it would be inappropriate for the "seal of approval" on individual sales illustrations to refer to the Canadian Institute of Actuaries due to concerns about the lack of control over sales illustration software by actuaries and to related problems in applying the Institute's disciplinary procedures under such circumstances.

Level of difficulty: Basic Pages: 10

Easton, Albert E. "Wielding the Knife with Grace: Life Insurance Dividends in the 1990s," *Contingencies* May/June 1993, p. 25–9.

This is an excellent introduction to dividend-setting policy. The article discusses the major factors affecting dividend scales in the late 1980s and into the 1990s, including interest rate trends, mortality trends, and federal income taxes. It defines intergenerational equity and offers reasons for maintaining equity in the dividend scale. Finally, it discusses ways to communicate dividend scale changes to management.

Level of difficulty: Basic Pages: 4

A.M. Best Co., Inc. "10- and 20-Year Whole Life Dividend Comparisons," *Best's Policy Reports Historical Supplement*, Oldwick, N.J.: published annually in May.

These books cover policies issued by over 100 companies and compare the dividend scale illustrated at point of issue with the scale actually paid over time. The comparison is done for policies issued 10 and 20 years ago. The books also include actual surrender value and crediting rate histories for universal life policies. Summaries are generally provided in *Best's Review*.

Level of difficulty: Basic Pages: 80

Harding, John H., Press, Alan, Soane, Bernard A., and Yau, Joseph W.S. "Illustration Wars," *Record of the Society of Actuaries* 15, No. 3B (1989), p. 1413–26.

Sales illustrations and use of dividends in illustrations of participating policies are the focus of this session. Three speakers participated in the session: an actuary who spoke of the difficulty in maintaining dividend interest credits in a period of declining interest; an agent with a stock life insurance company who described sales illustrations of universal life; and a general agent for a mutual life insurance company who talked about the practical and ethical implications of selling life insurance policies where sales illustrations cannot be maintained over time.

Level of difficulty: Intermediate Pages: 14

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