

Treading into the Thicket: Federal Income Tax Implications of Principles-Based Reserves

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While there are many who complain that the Internal Revenue Code is incomprehensible, there are some few who revel in the intricacies of its labyrinthine composition. But those who take delight in such pursuits and who also understand the mystic processes of establishing reserves in the life insurance industry are an even rarer specie of the ornithological world. Such are the vagaries of assignments, however, that it has fallen to the lot of this panel to decide a case where the two sciences conjoin. We therefore tread into the thicket with some trepidation.¹

The section 801 [life insurance reserve] definitions encompass efforts to accommodate changing industry practices and developing actuarial concepts with the gloss of prior judicial decisions and to combine the mixture with static principles of taxation. As a result, the section 801 definitions embody an idiom peculiar to a specialized business and administrative practice and ambiguities that stem from draftsmanship by accretion. The definitions combine the 'labyrinthine composition' of the tax law with the 'mystic processes' in life insurance reserves; they were not 'written for ordinary folk.'²

The reader will perhaps be less disappointed if he is warned in advance that he is about to be taken on a ramble through the actuarial countryside and that any interest lies in the journey rather than the destination.³

¹ Mutual Benefit Life Insurance Company v. Commissioner, 488 F.2d 1101 (3rd Cir. 1973).

² Central National Life Insurance Company of Omaha v. United States, 574 F.2d 1067, 1074 (Ct. Clms. 1978).

³ F. M. Redington, *Review of the Principles of Life-Office Valuation*, SOCIETY OF ACTUARIES MONOGRAPH M-AS99-2, 1 (1999).

TABLE OF CONTENTS

Introduction.....	4
Part I: Federal Income Tax Issues for Life Insurance Reserves	6
Recognition of Income and Expense and the “All Events” Test.....	8
Section 816: Life Insurance Reserves Defined	10
Reserves and Inside Buildup	10
Early Definitions: McCoach and Maryland Casualty	11
The Emergence of “Technical” Actuarial Reserves.....	12
Revenue Act of 1942: Codification of the Definition of Reserves.....	16
Section 816 under the 1984 Act.....	18
The UNUM Case: The Government Argues for a Broad Reserve Definition.....	19
Reserve Factors Other than Mortality and Interest	21
Expenses	23
Dividends and Nonguaranteed Elements	24
Gross Premium Valuations under Revenue Ruling 77-451.....	25
Treatment of Contingency Reserves under Revenue Ruling 67-435	27
Section 807(d): Deduction of “Economic” Reserves	28
Tax Reserve Method	30
PART II: Life Insurance Reserves.....	32
Principles-Based Reserves for Life Products Model Regulation.....	33
Deterministic Reserves	35
Stochastic Reserves	35
Margins.....	36
Net Premium Reserves	36
Equivalence of Retrospective and Prospective Net Premium Reserves.....	37
Commissioners’ Reserve Valuation Method.....	38
Gross Premium Valuations	39
Mathematics of a Gross Premium Valuation	39
Reserves and Accounting.....	42
American Academy of Actuaries Twenty-Year Term Example	44
Unlocking of Assumptions	49
Part III: Federal Tax Issues in the Implementation of Principles-Based Reserves	52
Treading into the Thicket	52
Do CRVM-PBR reserves qualify as life insurance reserves under section 816 to determine qualification as a life insurance company?	52
What is the definition of CRVM under section 807 as it applies to principles-based reserves?.....	53
What effect does the inclusion of factors other than interest and mortality have on the status of the reserves? What is the effect of the introduction of nonguaranteed elements and expenses?.....	55
Are the stochastic reserves likely to be considered nondeductible “solvency” or contingency reserves?	57
What is the effect of company-specific mortality assumptions?.....	58

Treading into the Thicket:
Federal Tax Implications of Principles-Based Reserves

4/19/2007

3

What is the prevailing state assumed rate?	61
What are the implications of including margins in the valuation assumptions?.....	62
How will reserve increases and decreases that result from changes in assumptions be treated?.....	63
Conclusion.....	64

Introduction

A change in the way in which statutory life insurance and annuity reserves are determined in the United States is heading toward adoption. Currently the Actuarial Opinion and Memorandum Regulation (AOMR) combines formulaic factor-based minimum reserves with reserve adequacy testing. The American Academy of Actuaries (Academy) is working with the National Association of Insurance Commissioners (NAIC) to finalize the basic framework of a principles-based reserve (PBR) methodology, based on a gross premium valuation, for life insurance products. The NAIC Life and Health Actuarial Task Force (LHATF) has also been considering Actuarial Guideline VACARVM that would introduce a PBR method for the valuation of variable annuity contracts. In December 2006 LHATF exposed for comments a proposed PBR method for reserve setting for life insurance policies developed by the Academy's Life Reserving Work Group (LRWG). The proposal includes a Model Regulation that contains the core components (basic modeling methodology), while actuarial guidelines would deal with setting assumptions, determining assumed margins, and disclosure.

The change from the current formulaic reserve (with the additional reserve, if any, required by the AOMR) to a cash-flow based reserve is intended to reflect more accurately the underlying economics of the insurance transaction, perhaps leading to a more accurate measurement of economic income. The introduction of PBR will significantly change the competitive landscape for U.S. life insurers. Some products will have lower reserves and higher capital. Others will see higher reserves and lower capital.⁴ However, the move to a principles-based approach is consistent with global trends in accounting and enterprise risk management of life insurance companies and the widespread use of economic capital models in setting of reserve and surplus requirements.

Valuation is the process of computing the aggregate reserve for a group of life insurance policies. Valuations generally involve the projection of future net cash flows using methods and assumptions consistent with the accounting system under which the valuation is made. Currently, in the United States, there are two principal accounting systems applicable to life insurance companies: statutory accounting principles (SAP) and generally accepted accounting principles (GAAP), each with its own reserve methodology. Statutory accounting, which falls under the state insurance departments, and indirectly the NAIC, has solvency, the ability of the insurance company to meet future liabilities to policyholders, as its principal focus. By design, SAP has historically tended to establish liabilities that provide for most, but not all, of the likely future variation in risk under the block of business being reserved for. As a result, statutory valuation systems have tended to defer the recognition of profit; this is in part for solvency concerns and in part to provide a margin for adverse experience or to pay dividends. GAAP accounting falls under the Financial Accounting Standards Board

⁴ Elinor Friedman & Hubert A. Mueller, *A Principles-Based Reserves and Capital Standard*, TOWERS PERRIN EMPHASIS 2006/3, 10.

(FASB) and the Securities and Exchange Commission (SEC). Under GAAP, the earnings of any accounting period are the result of matching the revenues of the period to the corresponding costs. Thus, SAP can be said to be balance sheet oriented, whereas GAAP is focused on the income statement.

The treatment of life insurance reserves has always been a significant element in the Federal income taxation of life insurance companies. Life insurance reserves serve a dual function under the Internal Revenue Code (Code). First, the amount of life insurance reserves determines if an insurance company is taxed as a life insurance company under Part I of Subchapter L of the Code or as a non-life company under Part II of Subchapter L. Second, they are used to identify reserves that are required to be recomputed for tax purposes under the specific rules set forth in section 807(d). In fact, the reserve deduction is typically the single largest expense of most life insurance companies. Discussions of the nature of what are considered to be deductible "life insurance reserves" go back to the very beginnings of the income tax in the United States. Like all reserves, tax reserves defer the recognition of income, creating a natural source of tension between the taxpayers and the tax authorities. When tax reserves are less than statutory reserves, taxable income emerges earlier than statutory income, creating a deferred tax asset.

A key challenge in the transition to a PBR methodology is to determine whether such an approach can coexist with the current structure of the Internal Revenue Code as it relates to the deductibility of life insurance reserves. The very elements that make PBR appealing, including the reliance on actuarial judgment and the use of more sophisticated financial modeling tools, create challenges in a tax valuation system. The inclusion of not only future benefits, but also future expenses and nonguaranteed elements, which are not generally deductible until they are paid, is likely to raise concerns among tax authorities. Similarly, the introduction of company-specific assumptions and margins, rather than industry-wide standards, is also likely to be of concern in determining the appropriate reserve deduction. Moreover, statutory reserves under the proposed PBR system are likely to be more volatile than under the current system, particularly given lower minimum reserves and annual unlocking of assumptions, leading to higher volatility of annual income, which will affect the timing of income and losses. Finally, the more complex computations required under PBR may create issues related to the auditability of the results by the IRS.

Some commentators have noted that "adoption by the NAIC, and ultimately by the states, of a new reserve system that contained features in conflict with the federal tax rules could well prompt the Treasury Department (the Treasury) to ask Congress to revisit and rewrite those rules, in turn leading to unpredictable and potentially adverse consequences for the life insurance industry."⁵ Even if it is assumed that the current tax

⁵ Joseph F. McKeever III, John T. Adney, & Lori A. Robbins, *The Federal Income Tax Consequences of Adopting a Principles-Based Reserve System*, TAXING TIMES, May 2006, at 1. They go on to note "[a]s shown by the 1984 and 1987 changes in the tax law's reserve rules, the objective of Congress is to allow life insurers to deduct reserves that capture the economic risks associated with their contracts but not to allow a deduction for any excess or redundant reserves that insurers choose to hold. ... Hence, barring a significant decline in tax receipts from the industry, neither the

reserve system under section 807(d) will remain unchanged with the implementation of PBR, there are significant tax issues to consider in the transition, not the least of which is the role of statutory reserves as a limitation on tax reserves.

The paper is organized into three parts. Part I is a discussion of Federal income tax issues related to life insurance reserves and the definition of "life insurance reserve," tracing the development of the reserve deduction. Part II addresses reserve systems generally and principles-based reserves in particular. Part III addresses potential Federal income tax issues created by the implementation of a PBR system.⁶

One commentator has observed "the frequent difficulty which lawyers have in understanding actuaries."⁷ This paper is written from an actuarial perspective, despite the extensive citation of cases and administrative pronouncements. We apologize to any attorneys who might read this for venturing so deeply into the law, but we would point out the irony in the fact that a Supreme Court Justice originally authored the current definition of "life insurance reserves" now found in section 816 of the Internal Revenue Code.⁸

Part I: Federal Income Tax Issues for Life Insurance Reserves

Insurance companies in general and life insurance companies in particular present challenges in the measurement of income. Historically the tax laws applying to life insurance have been among the most complex in the Code. As life insurers face the same tax rates as other corporate taxpayers, the unique features of life insurance company taxation involve the definition of taxable income. The special life insurance provisions are found in Subchapter L of the Code. Although the tax rules applicable to life insurance companies have gone through significant changes over the years, it has been a fundamental concept that a life insurer should not be taxed on income that is set aside to meet future contingent benefit liabilities. Consequently legislation, litigation, and administrative actions of the Internal Revenue Service (Service) have all served to define life insurance reserves under the Internal Revenue Code. In 1942 statutory language codified the definition that had previously emerged through the courts and Regulations. Today's definition, in section 816, is largely unchanged from the 1942 definition.

Where life insurance premiums have been recognized as income, the change in life insurance reserves has been generally deductible: that is, Congress has always recognized that amounts set aside to pay future claims should be excluded from the tax

Treasury nor Congress should feel compelled to rewrite the federal tax rules on account of the adoption of principles-based reserves."

⁶ The authors would like to acknowledge the contributions of those who reviewed earlier drafts, including John T. Adney, JD, and James F. Reiskytl, FSA, MAAA, whose suggestions were both invaluable and greatly appreciated by the authors. However, the opinions expressed in this paper are strictly those of the authors.

⁷ 11 Mertens Law of Fed. Income Tax'n, 44A 49, 10.

⁸ Maryland Casualty v. United States, 251 U.S. 342 (1920).

base of a life insurance company, on the theory that reserves represent amounts effectively held for the benefit of policyholders, derived from premiums paid by those policyholders.⁹ Similarly, when the tax base has been investment income, the interest earned on life insurance reserves has been allowed as an offset. At the same time, as the deduction for life insurance reserves is congressionally granted, Robbins and Bush note that an insurance company “has the burden of proving its deduction for reserves is allowable, even if the government’s disallowance of the deduction is arbitrary and unreasonable.”¹⁰

Under the 1984 Tax Act, life insurance companies are permitted to deduct the increase in a “Federally prescribed reserve” (FPR), enabling the insurer to offset premium income by some measure of their expected future benefits. Under current law, section 807(c)(1) allows a deduction for life insurance reserves as defined in section 816(b)(1), in amounts described in section 807(d).¹¹ Section 816 defines life insurance reserves “which are set aside to mature or liquidate . . . future unaccrued claims.” If more than 50% of its total reserves qualify as life insurance reserves under section 816(b), then the insurance company is a life insurance company.

The tax rules applied to life insurance reserves have been a constant source of tension between taxpayers, who seek to maximize reserve deductions, and the tax authorities, who are concerned with generating tax revenues. State valuation laws have as their purpose the protection of the solvency of the insurance company and are primarily focused on the balance sheet, not the period-by-period income. The operation of the statutory reserve system is neither intended nor designed to reflect accurately the economic income flowing through a life insurance company. Therefore, not every item allowed by state authorities as a reserve is necessarily deductible.

Much of the litigation that has arisen over the years with respect to life insurance reserves deals with the definition of what items can be considered as deductible reserves, given that the general rule in the Code is to disallow reserve deductions. Ultimately the definition was codified. It is now found in section 816. What emerged was a definition that focused on the “scientific” actuarial present value of amounts “reserved” from premiums for the payment of future benefits. From a tax policy viewpoint, a few long-standing principles can be identified from the lines of cases and administrative rulings as they apply to the definition of life insurance reserves:

1. Life insurance reserves must be peculiar to the life insurance business (i.e., “technical actuarial reserves”) and established for the payment of a

⁹ However, *see* Commissioner of Internal Revenue v. Monarch Life Insurance Company, 114 F.2d 314, 324 (1940). “The test is not whether the reserve ‘belongs’ to the company or to the insured, but whether it is that sort of gross income which Congress considered should be treated as net income for tax purposes. This depends on whether the income is available for the general purposes of the company.”

¹⁰ EDWARD L. ROBBINS & RICHARD N. BUSH, U.S. TAX RESERVES FOR LIFE INSURERS (Society of Actuaries 2006), 35 citing *Time Insurance Co. v. Commissioner* 86 T.C. 298 (1986).

¹¹ ROBBINS & BUSH at 38.

benefit.¹² The reserve is the amount, accumulated out of premium payments, attributable to and representing the value of the insurance element of the policy. Because the reserve deduction is specific to insurance companies, it must by definition relate to insurance liabilities. Solvency reserves or contingency reserves are generally not deductible.

2. Life insurance reserves must be computed (or be capable of being computed) by using morbidity and mortality tables and assumed rates of interest. Arguably, life insurance reserves must also be computed using a net premium method as they are held for future unaccrued claims, and not for future expenses.
3. Not all reserves required by state statutes or state officials are necessarily deductible for determining taxable income. The method determined for tax purposes should not vary deductible additions to reserves depending on whether a company has used liberal or conservative assumptions, or their own company's actual or projected experience assumptions, in establishing deductible reserves. To do otherwise would permit life insurance companies to determine their own tax liabilities.¹³
4. Factors other than mortality and interest may be included in the calculation of life insurance reserves, but these factors generally relate to the expected future benefits provided, and not to policy-related expenses or nonguaranteed policy elements.

Recognition of Income and Expense and the "All Events" Test

The ability of life insurance companies to reflect reserves in determining taxable income is perhaps the defining feature of life insurance company taxation. Since the inception of the income tax, the reserves recognized for tax purposes have been based on SAP reserves, as accounting methods for state regulatory purposes generally apply to insurance company taxation to the extent they are not inconsistent with Federal accounting rules. Section 811(a) provides that "to the extent not inconsistent with [an accrual method of accounting] or any other provision of this part, all such computations shall be made in a manner consistent with the manner required for purposes of the annual statement approved by the National Association of Insurance Commissioners."¹⁴

Corporate taxpayers, including insurance companies, are accrual-basis taxpayers. Generally this causes income to be recognized in the period in which it is earned and expenses to be deducted in the period in which they are incurred, regardless of the

¹² This includes life insurance, annuities, and accident and health benefits.

¹³ In theory, the use of FPR under current tax law imposes similar assumptions for all companies. However, the introduction of both the cash value floor and the statutory "cap" do provide for a degree of company-by-company variation.

¹⁴ See Code section 811 (a).

timing of the actual receipt of the income or the payment of expenses. Difficulties in the timing of recognition of income and expense can occur in three instances, where

1. There is uncertainty as to whether an amount has been received or paid
2. An amount is received before it is earned or
3. An obligation to pay is fixed before the payment is actually made.

Notably, it is issues related to the latter two that have led to special tax rules applicable to insurance companies being added to the Code.

Under the accrual method of accounting, a deduction is not allowed for a liability until the "all events" test is met.¹⁵ The "all events" test is the rule in accrual accounting in the Internal Revenue Code for determining whether items of expense can be recognized or deducted in determining taxable income in any period. The statutory definition provides that the "all events" test is met if "all events have occurred which determine the fact of liability and the amount of such liability can be determined with reasonable accuracy."¹⁶ The "all events" test dates to the early years of the Federal income tax.¹⁷ However, it does "not apply to any item for which a deduction is allowable under a provision of this title which specifically provides for a deduction for a reserve for estimated expenses."¹⁸

One of the consequences of the accrual method of accounting is that taxpayers generally are not entitled to deduct currently amounts set aside to cover anticipated future expenses. Overall, the effect of reserve accounting is to accelerate the deduction for a contingent obligation into the earliest tax year in which the liability can be quantified, by reducing the income otherwise reportable by the amount of the reserve. The Supreme Court has noted that a "reserve based on the proposition that a particular set of events is likely to occur in the future may be an appropriate conservative accounting measure, but does not warrant a tax deduction."¹⁹ In fact, reserve accounting is generally inconsistent with the goal of the tax system, which is the generation of tax: that is, the "all events" test does not permit businesses to deduct expenses until the tax year in which the liability is established in fact and the amount is reasonably determined.

In general, in determining their Federal income taxes, insurance companies have been allowed a deduction for at least some portion of the increase in life insurance

¹⁵ See Code sections 461(h)(4) and (5).

¹⁶ IRC section 461(h)(4). *See also* Regs. 1.451-1(a).

¹⁷ The "all events" test originated in a 1926 case related to the deduction of a tax on a manufacturer's profits from the sale of munitions during the First World War. The manufacturer preferred to deduct the tax on its 1916 sales against its 1917 taxable income, because of the higher tax rate. The Supreme Court held the tax was properly deductible in 1916 under the "all events" test. *See United States v. Anderson*, 269 U.S. 422 (1926).

¹⁸ IRC section 461(h)(5).

¹⁹ *United States v. General Dynamics*, 481 U.S. 239, 246 (1987).

reserves, or the earnings on those reserves. However, this treatment is an exception to general tax principles, as the Code does not generally permit reserve deductions. Subchapter L provides some of the few instances in which the Code authorizes the use of reserve accounting. Notably, the “all events” test does not apply to insurance reserves:²⁰ that is, with the exception of insurance companies, reserve accounting is generally not permitted in determining a corporation’s taxable income, even when the liability may relate to an insurance-type benefit. Moreover, in the case of insurance companies, the reserve deduction is specifically limited to insurance-related liabilities. In other words, it is the form of the corporation as an insurer, and not the type of liability being reserved for, that determines the deductibility of reserves.

Section 816: Life Insurance Reserves Defined

Section 816 defines whether a company qualifies as an insurance company and, further, whether an insurance company is a life insurance company. Section 816(b)(1) provides that life insurance reserves are amounts

- Which are computed or estimated on the basis of recognized mortality or morbidity tables and assumed rates of interest and
- Which are set aside to mature or liquidate, either by payment or reinsurance, future unaccrued claims arising from life insurance, annuity, and noncancellable accident and health insurance contracts (including life insurance or annuity contracts combined with noncancellable accident and health insurance) involving, at the time with respect to which the reserve is computed, life, accident, or health contingencies.

Section 816(b)(2) provides the further requirement that the reserves must be required by law.

Reserves and Inside Buildup

For as long as there has been an income tax in the United States, life insurance death benefits paid to the beneficiary have been free of Federal income tax. In addition, increments in the cash surrender value of life insurance contracts have not been currently includible in the taxable income of policy owners. This benefit is called *the tax-deferred inside buildup*, or simply *the inside buildup*. It could be argued that the need for a reserve deduction arises from life insurance accounting. While other financial institutions, like banks, are not allowed to deduct reserves, neither are they required to reflect deposits as revenue. However, because life insurance companies combine

²⁰ HOUSE WAYS AND MEANS COMMITTEE, H.R. REPT NO. 98-32, 1256. Note, however, that only insurance companies may deduct life insurance reserves. “If the ‘all events’ test permitted the deduction of an estimated reserve representing claims that were actuarially likely but not yet reported, Congress would not have needed to maintain an explicit provision that insurance companies could deduct such reserves.” See *United States v. General Dynamics Corp.*, 481 U.S. 239, 246 (1987).

insurance and savings elements to varying degrees in their policies, premiums are included in income, and some measure of reserves is allowed as a deduction, either directly or through the exclusion of interest credited to reserves.

Taxable Income	Current Law	Reserves Not Deductible	Inside Buildup Taxable
<i>Insurance Company</i>			
Investment Income	100.0	100.0	100.0
Increase in Reserves	(100.0)		(100.0)
Net Income	0.0	100.0	0.0
Tax @ 35%	0.0	(35.0)	0.0
After-Tax Income	0.0	65.0	0.0
<i>Policyholder</i>			
Cash Value Interest	100.0	65.0	100.0
Tax @ 35%	0.0	0.0	(35.0)
After-Tax Income	100.0	65.0	65.0

A deduction for life insurance reserves is a key element in providing inside buildup, as it allows an insurance company to provide a pre-tax rate of return on life insurance. Were the increase in reserves not allowed as a deduction, it would effectively tax the inside buildup: that is, failure to allow a reserve deduction would impose a “proxy tax” on the income earned inside a life insurance policy. If the insurer were required to pay tax on the investment income without a reserve offset, it could only provide an after-tax return to the policyholder, placing the policyholder in the same position as if the inside buildup were taxable (assuming the same tax rate applied to both the insurance company and the policyholder). The concept of the reserve as “belonging to the policyholder” has been a key element in the treatment of life insurance reserves since the beginning of the income tax.

Early Definitions: McCoach and Maryland Casualty

The Revenue Act of 1909 allowed a deduction for “the net addition, if any, required by law to be made within the year to reserve funds.” The legislative history described the “legal reserve plan” noting that insurance companies “collect enough from their policyholders to lay aside a legal reserve, which, if the policy be continued according to its terms, will pay out when the event happens against which the insurance is written.”²¹

²¹ SEIDMAN’S LEGISLATIVE HISTORY OF FEDERAL INCOME TAX LAWS, 1013–1014. Note that the 1909 Act was not an income tax, but an excise tax, with income being the measure of tax. Act of August 5, 1909, c. 6, 38, 36 Stat. 11, 112; Act of October 3, 1913, c. 16, 38 Stat. 114, 172, 173; Act of September 8, 1916, c. 463, 39 Stat. 756, 765–768; Act of February 24, 1919, c. 18, 40 Stat. 1057, 1075–1079. Under all these acts, the companies were allowed to deduct the amount paid on policies (except as dividends) and the amount required by law to be added to their reserves.

Identical language is included in the 1913 Act. E. E. Rhodes explains that “[t]he ‘net addition to reserves’ required by law to be made within the year to reserve funds will be the difference between the reserve . . . at the end of the year for which the return is made, and the corresponding reserve at the end of the previous year”²² (see 1913 Act Section II(G)(b); Treasury Reg. 33, art. 147(d)). As insurance reserves were deductible, this naturally led to litigation over the definition of reserves. The Supreme Court defined the term as “having reference to the funds ordinarily held against the contingent liability on outstanding policies,” cautioning that “[t]he act of Congress, on the other hand, deals with reserves not particularly in their bearing upon the solvency of the company, but as they aid in determining what part of the gross income ought to be treated as net income for tax purposes.”²³

In *McCoach* and similar cases, the Supreme Court established a standard that “the net addition required by law to be made within the year to reserve funds does not necessarily include whatever a state official may so designate; that reserve funds has a technical meaning . . . as something reserved from premiums to meet policy obligations at maturity.”²⁴ In *Maryland Casualty* the Court provided a further definition of the term “reserve”:

The term “reserve” or “reserves” has a special meaning in the law of insurance. While its scope varies under different laws, in general it means a sum of money, variously computed or estimated, which, with accretions from interest, is set aside—“reserved”—as a fund with which to mature or liquidate, either by payment or reinsurance with other companies, future unaccrued and contingent claims, and claims accrued, but contingent and indefinite as to amount or time of payment.²⁵

Maryland Casualty also provided the basis for the definition of “life insurance reserves” found today in section 816.

The Emergence of “Technical” Actuarial Reserves

Because it was generally recognized that life insurance premiums “were not true income but were analogous to permanent capital investment,”²⁶ under the Revenue Act of 1921, Congress established a special system of taxation applicable to life insurance companies.²⁷ With some urging from the insurance industry, by 1921 Congress was

²² E. E. Rhodes, *The Income Tax Law of the United States, as It Affects Life Insurance Companies*, TRANSACTIONS OF THE SOCIETY OF ACTUARIES, VOL. XIV, PT. II, NO. 50, 201, 204.

²³ *McCoach v. Insurance Company of North America*, 244 U.S. 585, 589 (1917).

²⁴ *Edwards v. New York Life*, 271 U.S. 109, 119 (1926).

²⁵ *Maryland Casualty v. United States*, 251 U.S. 342, 350 (1920).

²⁶ *Helvering v. Oregon Mutual Life Ins. Co.*, 311 U.S. 267, 269 (1940).

²⁷ Under the 1921 Act, like Caesar’s Gaul, the insurance industry was divided into three parts: life insurance companies, mutual insurers, and other insurance companies. The ratio of life insurance

persuaded that this treatment did not accurately reflect the nature of the life insurance enterprise, since life insurance is often a form of savings for policyholders, similar in some respects to a bank deposit.²⁸ Recognizing that premium receipts are not true income because such a large part of them must be reserved and set aside to meet future death claims, the Revenue Act of 1921 changed the tax treatment of life insurance companies from a “total income” approach to a “free investment income” method.²⁹ The legislative history noted, “the tax is in the form of an income tax, but it is imposed on net income defined with special reference to the peculiar conditions of the business of life insurance.”³⁰ Reserves were important under the new system because they were used to first determine whether an insurance company was a life insurance company, and then to determine the offset to investment income for reserve interest to arrive at the “free investment income.”

Under section 242 of the Revenue Act of 1921, a life insurance company was “an insurance company engaged in the business of issuing life insurance and annuity contracts (including contracts of combined life, health, and accident insurance), [for which] the reserve funds held for the fulfillment of such contracts comprise more than 50 per centum of its total reserve funds.”³¹ Under section 245(a)(2), a life insurance company was allowed a deduction for “4 per centum of the mean of the reserve funds required by law” in determining its taxable income. Under Reg. 62, art. 681, for purposes of sections 242 and 245(a) of the 1921 Act, (1) life insurance reserves had to be required by state law and (2) only reserves peculiar to insurance companies were to be taken into consideration.

Shortly after enactment of the 1921 law, a dispute arose with taxpayers as to whether reserves that were required by state law, but not actuarially computed, would be treated as life insurance reserves for purposes of the qualification ratio (and by

reserves to total reserves was used to measure qualification, with 50% rather arbitrarily chosen as the dividing line.

²⁸ See HEARINGS ON H. R. 8245 BEFORE THE SENATE COMMITTEE ON FINANCE, 67TH CONG., 1ST SESS., 83 (1921) (testimony of Dr. T. S. Adams, Tax Adviser to Treasury Department).

²⁹ The Senate Finance Committee recommended in 1918 the plan later included in the Act of 1921, namely, that the basis of the tax on life insurance companies be changed to include only the investment income, and that the deductions should be similarly limited. SENATE REPORT, 65TH CONG., 3RD SESS., NO. 617, p. 9. In presenting the bill, Senator Simmons stated that it had been framed after consultation with many representatives of the life insurance companies. 57 CONG. REC. 254. The plan was adopted by the Senate, but was abandoned in conference. The Revenue Bill of 1921 (42 Stat. 227), as introduced in the House, contained the plan of taxation that had been adopted by the Senate in 1918. HOUSE REPORT, 67TH CONG., 1ST SESS., NO. 350, p. 14. It was stated to the Senate Finance Committee “all the life insurance companies are behind that scheme and are satisfied with it.” HEARINGS BEFORE THE SENATE COMMITTEE ON FINANCE, 67TH CONG., 1ST SESS., on H.R. 8245, September 1–October 1, 1921, p. 84. See also SENATE REPORT, 67TH CONG., 1ST SESS., NO. 275, p. 20 See *National Life v. United States*, 277 U.S. 508 (1928).

³⁰ SENATE FINANCE COMMITTEE 65TH CONG., 3RD SESS., S. REPT 617 at Seidman 877.

³¹ SEIDMAN at 876.

implication eligible for the required interest deduction). Litigation concerning “reserves” and qualification as a “life insurance company” typically involved two issues: (1) whether the reserve was required by law and (2) whether the reserve was peculiar to the life insurance business – a “technical” life insurance reserve.

Case law and Regulations restricted the allowable deduction to “technical” insurance reserves, that is, amounts (1) directly pertaining to insurance, as opposed to “solvency” reserves not peculiar to insurance companies, (2) computed based on mortality or morbidity tables and assumed rates of interest, and (3) related to unaccrued and contingent claims.³² Because of the developments, two types of liabilities came to be identified. “Technical actuarial reserves” held for future unaccrued life insurance liabilities, which were eligible for the exclusion of 4% of mean reserves under the 1921 Act, and “reserves in relation to the solvency of the company,” or “solvency reserves,” which were not eligible for the reserve exclusion.³³

In the early 1930s the definition of “reserve” set forth in *Maryland Casualty* was incorporated into the Treasury Regulations, which defined reserve funds as

In general, the reserve contemplated is a sum of money, variously computed or estimated, which with accretions from interest, is set aside (reserved) as a fund with which to mature or liquidate, either by payment or reinsurance with other companies, future unaccrued and contingent claims. It must be required either by express statutory provisions or by rules and regulations of the insurance department of a State, Territory, or the District of Columbia when promulgated in the exercise of a power conferred by statute, but such requirement, without more, is not conclusive.³⁴

Thus, cases under the 1921 (and subsequent) Tax Acts continued the development of the “technical definition” of life insurance reserves, with the Supreme Court commenting in *Helvering v. Inter-Mountain Life Insurance Company*:

As the act does not permit corporations other than insurance companies to make [interest on reserve] deductions of the kind here under consideration, reserve funds may not reasonably be deemed to include values that do not directly pertain to insurance. In life insurance, reserve means the amount, accumulated out of premium payments, which is attributable to and represents the value of the life insurance elements of the policy contracts.³⁵

³² See *Phoenix Mutual Life Insurance Company v. Commissioner*, 96 T.C. 497, 514 (1991).

³³ *Helvering v. Inter-Mountain Life Ins. Co.*, 294 U.S. 686, 689 (1935).

³⁴ See TREAS. REG. 86, art. 203(a)(2)-1 (Revenue Act of 1934) and TREASURY DEPARTMENT REGULATION NO. 94, ARTICLE 201(a)-1.

³⁵ *Helvering v. Inter-Mountain Life Ins. Co.*, 294 U.S. 686, 690 (1935).

A year later, the Supreme Court denied a deduction for a “survivorship investment fund” feature of a company’s policies as the “reserves in respect of the coupon liability were not essentially insurance reserves which alone constitute the base on which deduction is computed.”³⁶ These decisions established “a rule that life insurance companies would not be allowed reserve deductions . . . for funds which were held primarily for the profit of the policyholder, rather than for the protection of the beneficiary.”³⁷

In denying *Massachusetts Mutual* a deduction for reserves for dividend accumulations, the Court of Claims accepted the position of the Commissioner of Internal Revenue that the reserves were not required by law within the meaning of section 245(a)(2) of the Revenue Act of 1921, noting that “reserve” has a “technical and special meaning in the law of insurance,” and that “the calculation of the reserve is an actuarial function.” The court went on to hold that the amount of the reserve is that part of the assets of the company which, according to a specified table of mortality, with interest at the assumed rate, must be set apart to meet or mature the company’s obligation to the insured on his death or upon the surrender or cancellation of his policy. Citing *McCoach*, the Court went on to say that “all reserves required by state statutes or state officials are not reserves required by law within the meaning of the federal statutes, and only those may be considered reserves required by law which aid in determining what portion of the gross income constitutes the net income of a life insurance company for the purpose of the federal statutes.”³⁸

In *Continental Assur. Company v. United States*,³⁹ the Court of Claims listed four factors that it viewed as characterizing life insurance reserves:

1. Accrued liabilities are not the subject of the reserve fund deductions granted by Congress in any of the revenue acts
2. The reserve contemplated by the statute is “that fund which when added to the present value of future net premiums is equal to the present value of future death claims (the mathematical equivalent of the obligation incurred by the company to pay the sum insured on the death of the policyholder [insured] or upon the surrender and cancellation of the policy)”
3. The reserve contemplated in the Federal statutes is calculated upon the basis of a selected table of mortality plus an assumed rate of interest and that reserves not so calculated, whether required by state law or by a state officer, are not reserve funds required by law within the meaning of the Federal statute and

³⁶ *Helvering v. Illinois Life Ins. Co.*, 299 U.S. 88, 89 (1936).

³⁷ 11 Mertens Law of Fed. Income Tax, 44A:49, 4.

³⁸ *Massachusetts Mutual v. United States*, 74 Ct. Cl. 162, 56 F.2d 897, 899 (1932).

³⁹ *Continental Assur. v. United States*, 79 Ct. Cl. 756, 8 F. Supp. 474 (1934).

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4. The reserve does not include “solvency” reserves required to be maintained by state law or a state officer to keep the company in sound financial condition.⁴⁰

In 1940, in considering whether certain reserve items were eligible for exclusion, the First Circuit Court of Appeals posed a two-part test:

1. Are the reserves technical actuarial reserves?
2. Must reserves be technical actuarial reserves in order to come within the deduction allowance allowed by section 203(a)(2)?⁴¹

The Court defined “technical actuarial reserves” as relating directly to insurance and calculated “upon the basis of an experience or actuarial table applicable to the nature of the risk involved, with an interest assumption used in the calculation.” The Court went on to note that “the reserves which courts have denominated as ‘solvency’ reserves are sums set up to pay losses, or known, liquidated claims, and ordinary business expenses to which every business is subject.”⁴²

The Board of Tax Appeals provided a similar definition:

The word “reserve” has many meanings. Accounts creating reserves are set up in almost every line of business and funds evidenced by the book entries are held for many and widely different purposes. As the Act does not permit corporations other than insurance companies to make deductions of the kind here under consideration, “reserve funds” may not reasonably be deemed to include values that do not directly pertain to insurance. In life insurance, the reserve means the amount, accumulated by the company out of premium payments, which is attributable to and represents the value of the life insurance elements of the policy contracts.⁴³

Revenue Act of 1942: Codification of the Definition of Reserves

Unlike the cases above, in a case involving a Texas assessment company, the 5th Circuit reversed a Tax Court decision requiring life insurance reserves be “actuarially computed according to recognized tables of mortality with an assumed rate of interest.” The Court held that the defining characteristic of a reserve was simply an amount “irrevocably dedicated to the payment of claims arising under the policies,” and that “the statute did

⁴⁰ Continental Assur. v. United States, 8 F. Supp. 474, 483–484.

⁴¹ Commissioner of Internal Revenue v. Monarch Life Insurance Company, 114 F.2d 314, 319 (1st Cir. 1940).

⁴² Commissioner of Internal Revenue v. Monarch Life Insurance Company, 114 F.2d 314, 324.

⁴³ Penn Mutual Life Insurance Company v. Commissioner, 32 BTA 876, 879 (1935).

not require that the reserve be actuarially computed” for an insurance company to qualify under the 50% reserve test.⁴⁴

Perhaps as a reaction to the court challenge to the regulatory definition of reserves, Congress defined the term “life insurance reserves.” Section 203(a)(2) was added to the 1939 Code by the Revenue Act of 1942. It provided companies that qualified as “life insurance companies” with a deduction for all “reserve funds required by law.” The definition was substantially that contained for many years in the Regulations with the addition that the reserves were to be based on recognized mortality or morbidity tables.⁴⁵ This definition of life insurance reserves was carried forward first to section 801(b)(1) and then to section 816. Writing with respect to section 801(b), one commentator has noted:

Life insurance reserves were first defined in the income tax laws in the Revenue Act of 1942. The 1942 Act codified, with minor changes, the definition of life insurance reserves that had existed in the regulations and paralleled the definition that had been developed by the courts in litigation under earlier revenue acts. The definition under the 1942 Act was substantially the same as that presently contained in Section 801(b) of the Code [and continued in Section 816(b)]. Accordingly, the older court decisions dealing with the definition of life insurance reserves under the early revenue acts remain valid precedents in determining whether certain reserves may qualify as life insurance reserves under Section 801(b) [now Section 816(b)].⁴⁶

The legislative history of the 1942 Revenue Act explained, “the statutory definition of life insurance reserves being adopted was based on a pre-existing definition in the Regulations, with certain additional requirements.”⁴⁷ Courts have suggested that the definition of life insurance reserves was broadened by the codification of the definition:

⁴⁴ *General Life Ins. Co. v. Commissioner*, 137 F.2d 185, 189–190; (5th Cir. 1943); *rev’g* 1 TC 555, 561 (1943). However, *see* *Group Life and Health Insurance Company*, 660 F.2d 1042, 1056 in which the 5th Circuit Court noted *General Life* “was decided on the basis of the Code in effect before the 1942 Code revision which required that the calculation of life insurance reserves be made on the basis of mortality and morbidity tables. In *General Life*, the question was whether a fund computed by applying a percentage of 60% to the assessments of policyholders was a life insurance reserve. The Court held that a reserve need not be actuarially calculated under the 1936 Code. That 1936 Code was amended in 1942 to include today’s present requirements of computation or estimation based on mortality tables at an assumed rate of interest. That case is no longer authority for *Group Life*’s position.”

⁴⁵ S. REP. NO. 1631, 77TH CONG., 2ND SESS.

⁴⁶ Ernst & Ernst, *Federal Income Taxes Life Insurance Companies*, 1977, 50.

⁴⁷ S. REP. NO. 1631, 77TH CONG., 2ND SESS. 145 (1942-2 CUM. BULL. 504, 612); H.R. REP. NO. 2333, 77TH CONG., 2ND SESS. 109 (1942-2 CUM. BULL. 372, 454).

The legislative history of the 1942 Act reveals that the definition of the term “life insurance reserves” . . . was intended to encompass the previously developed scope of technical reserves. Even this development of life insurance reserves, however, was expanded beyond the narrow scope of technical reserves alone, so that the definition also covered some noncontingent claims, none of which was included in the definition of technical reserves. This broadening of coverage evidences Congressional intent not to restrict the new provisions to the previous narrow area. Indeed, the wiser interpretation of the 1942 revisions . . . would seem to be that Congress intended to eliminate the complex problems resulting from the technical reserve concept.⁴⁸

Section 816 under the 1984 Act

In TAM 200427204 the Service commented on the interpretation of section 816 as it affected the taxpayer’s variable annuity contracts under the 1984 Act:

[T]he definition of life insurance reserves in section 816(b)(1) is the same as that provided in former section 801(b)(1). In general, where a provision from prior law was carried over by the 1984 Act, Congress intended the new provision to be interpreted in a manner consistent with the prior law provision. Therefore, the regulations, rulings, and case law under former section 801(b)(1) may provide interpretative guidance for purposes of determining whether Company’s statutory reserves for deferred variable annuity contracts qualify as life insurance reserves under section 816(b)(1), and therefore whether or not Company is a life insurance company under 50 percent reserve ratio test under section 816(a)(1). *See* H.R. Rep. No. 432, 98th Cong., 2d Sess., Pt. 2, 1417 (1984); S. Prt. No. 169, 98th Cong., 2d Sess. 524 (1984).

According to the 1984 Act Blue Book, “[t]he statutory listing of items to be taken into account in computing the net increase or net decrease in reserves refers to life insurance reserves ‘as defined in section 816(a).’”⁴⁹ Life insurance reserves subject to recomputation are those defined in Section 816(b).⁵⁰ In this regard, it has been suggested that

⁴⁸ *United States v. Occidental Life Insurance Company of California*, 385 F.2d 1, 6 (9th Cir. 1967). *See also* *Consumer Life v. United States*, 430 U.S. 725, 753 FN 38 (1977): “The definition of life insurance reserves now appears in 801(b), and which originated with the 1942 Revenue Act, substantially replaced the problematic concept of technical reserves developed in *McCoach*.”

⁴⁹ STAFF OF THE JT. COMM. ON TAX’N, 98TH CONG., GENERAL EXPLANATION OF THE REVENUE PROVISIONS OF THE DEFICIT REDUCTION ACT OF 1984, 598 (Comm. Print 1984). The reference, however, should have been to Section 816(b) both in the Blue Book and in the Committee Reports.

⁵⁰ The Notice of Public Hearing for Proposed Regulation 1.801-4(g) noted, “increases in life insurance reserves as defined in section 816(b) are taken into account under section 807(c)(1). In

Since only life insurance reserves must be recomputed, the Service can be expected to adopt a broad interpretation of life insurance reserves to require recomputation under the new Federal standards. Under prior law, the Service had frequently taken a narrow view of life insurance reserves to limit the benefits companies obtained from such classification.⁵¹

While statutory reserves are used to determine whether an insurance company is a life insurance company under the section 816 definition, the treatment under section 816 may not determine the reserve treatment under section 807. The legislative history indicates:

The statutory listing of items taken into account in computing the net increase or decrease in reserves refers to life insurance reserves "as defined in section 816(a)." Section 816(a) requires the proper computation of reserves under State law for purposes of qualifying as a life insurance company. This cross reference is intended merely to identify the type of reserve for which increases and decreases should be taken into account and is not intended to superimpose the requirement of proper computation under State law for purposes of allowing increases in such reserves to be recognized.⁵²

The UNUM Case: The Government Argues for a Broad Reserve Definition

In 1989 the UNUM case found the government arguing a broad definition of life insurance reserves, a departure from earlier cases in which the Service had generally adopted positions taking a narrow and technical view of life insurance reserves. In *UNUM Life Ins. Co. v. United States*,⁵³ the First Circuit Court of Appeals held that reserves maintained by the taxpayer to satisfy its liabilities under deposit administration contracts were not "pension plan reserves" within the meaning of (pre-1984) section 805(d) because section 801(b) (now section 816(b)) required that life insurance reserves must actually be calculated using mortality tables. The district court had ruled that "the plain meaning of section 801(b) required nothing more than mechanical compliance with its terms."⁵⁴ Judge Breyer, writing for the Court of Appeals, rejected the government's argument that the annuity purchase guarantees in UNUM's deposit administration contracts create a mortality risk, and because UNUM calculated those *rates* using

addition, life reserves as defined in section 816(b) are considered part of a nonlife company's unearned premiums under section 832(b)(2)."

⁵¹ Mark H. Kovey, Peter H. Winslow, & Stephen D. Hooe, *New Law Revamps Life Insurance Company Computation of Reserves and Income*, 62 J. TAX'N NO. 5 292, 295 (May 1985).

⁵² H.R. REP. NO. 432, 98TH CONG., 2ND SESS., PT. 2, 1414 (1984).

⁵³ *UNUM Life Insurance Company v. United States*, 897 F.2d 599 (1st Cir. 1990).

⁵⁴ *UNUM Life Insurance Company v. United States*, 709 F. Supp. 13, 17 (1989).

recognized mortality tables, that UNUM *must also* have computed its *liabilities* under these contracts using mortality tables.”

The court stated that the language of the statute focuses on the way the reserve is calculated, noting “section 801(b)(1)(A) defines life insurance reserves solely in terms of how a company in fact computes a particular amount. It refers to amounts . . . which are computed or estimated on the basis of recognized mortality tables. It does not speak of amounts that might be, or in principle could be, or for greatest accuracy ought to be, computed in that way.” Judge Breyer went on to say, “To call an amount a life insurance reserve simply because it creates a certain kind of mortality-based risk of loss would be to prove too much.”⁵⁵

Robbins and Bush note that, under the 1984 Act, “a company cannot avoid life reserve treatment, for purposes of computing the amount of tax deduction for reserve increases under sections 807(c)(1) and (d) by calculating the statutory reserve for a benefit that has a life contingency, by using a method that does not use a mortality table or assumed rate of interest.”⁵⁶ In a 1992 letter ruling, the Service commented that “the amount of the deduction allowable or income includable in any tax year is determined without regard to the method employed in computing state statutory reserves.”⁵⁷

Proposed Reg. 1.801-4(g)(1), which was never adopted provides that, “if an insurance company does not compute or estimate its reserves for certain contracts on the basis of mortality or morbidity tables and assumed rates of interest, then the taxpayer or the Commissioner may recompute those reserves on the basis of mortality or morbidity tables and assumed rates of interest.” Recomputed reserves under the proposed Regulation would satisfy the 816(b) definition, and would therefore be life insurance reserves.

In TAM 200427024 an insurer held separate account reserves for variable annuity contracts that were equal to the aggregate cash surrender values. Citing *UNUM*, the company argued that it “must actually compute its reserves for such contracts on a tabular basis using recognized mortality or morbidity tables and assumed interest rates in order for such reserves to qualify as life insurance reserves.” The Service disagreed, noting that to satisfy minimum state law reserve requirements, the insurer could not simply establish such reserves based on the current cash surrender values, but first had to determine that the current cash surrender values were at least equal to the minimum formula reserves required by CARVM. The Service went on to comment:

While a literal application of CARVM would seem to require an insurance company to individually value each guaranteed benefit at each future duration, actuaries have recognized that, in applying CARVM, it is often possible to determine in advance which benefit stream will have the highest present value,

⁵⁵ 897 F.2d 599, 607.

⁵⁶ ROBBINS & BUSH at 53.

⁵⁷ PLR 9209029 (February 28, 1992).

thus eliminating the calculation of all but a few benefits. (See Tullis & Polkinghorn, *Valuation of Life Insurance Liabilities*, 68 (3d ed., 1996).)

The Service concluded that the statutory reserves, to the extent of the amounts required by CARVM, were “computed or estimated on the basis of recognized mortality or morbidity tables and assumed rates of interest,” and thus qualified as life insurance reserves under section 816(b).

Reserve Factors Other than Mortality and Interest

In 1965 the Supreme Court defined life insurance reserves as “that fund which, together with future premiums and interest will be sufficient to pay future claims [of policyholders].”⁵⁸ Courts have generally permitted factors other than interest and mortality to be recognized in the calculation of life insurance reserves, but have tempered that view by adding, “We do not believe that Congress intended to permit an insurance company to exclude any amount it saw fit from its taxable income by creating reserves.”⁵⁹

In *Mutual Benefit Life Insurance Company v. Commissioner of Internal Revenue*, the Tax Court recognized additional reserves set up for the cost of life settlement options (beyond the policy face amount) that were computed using assumed interest, mortality, and a rate of election of the option. In allowing the reserves, the Tax Court commented:

Respondent [the Commissioner of Internal Revenue] does not suggest that some other method would produce a different result. Rather, the respondent argues that the method itself goes beyond the use of recognized mortality tables. If such judgments were not an integral part of the computation of insurance reserves, we would hardly have the need for actuaries.⁶⁰

The Service did not acquiesce to the *Mutual Benefit* decision, arguing:

Although Congress allowed the life insurance industry reserve accounting, this was limited to estimates based on mortality tables; i.e., the date of payment of a fixed liability, the death proceeds. The instant reserve involved estimates of the number of beneficiaries electing life annuities, a circumstance which could not be predicted with any degree of accuracy in that the rate of election was governed by many speculative factors including the state of the national economy. Congress contemplated allowing reserve accounting only for those amounts set aside to pay future death claims whereas the instant reserve, in essence, was an accounting

⁵⁸ United States v. Atlas Life Insurance Co., 381 U.S. 233, 236 n. 3. (1965).

⁵⁹ Union Mutual Life Insurance Company v. United States of America, 570 F.2d 382, 397 (1978).

⁶⁰ Mutual Benefit Life Insurance Company v. Commissioner, 58 T.C. 679, 688 (1972).

device to charge currently a future estimated theoretical loss should a beneficiary elect a life annuity rather than receipt of the death proceeds.⁶¹

However, in 1973 the Third Circuit rejected the Service's arguments and upheld the Tax Court's position that the use of factors in computing reserves other than a mortality table and an assumed rate of interest did not disqualify reserves from being considered life insurance reserves:

The fact that the computation for the reserve included elements other than mortality tables and assumed rates of interest is not sufficient to disqualify the "additional reserve." There is nothing in the statute, which states that these two elements are the only factors, which are permissible, and that all others must be excluded. In the factual context present here, we can perceive no considerations which would require us to adopt a construction of the Act so narrow as to mandate the exclusion of circumstances which would tend to make the calculation of the reserve more accurate.⁶²

In *Union Mutual Life Insurance Company v. United States*,⁶³ while upholding the basic principle that additional factors may be used in computing reserves, the First Circuit tempered the range of permissible assumptions. In *Union Mutual* the district court had examined the issue of whether a group conversion reserve computed using three assumptions: "(1) an assumed rate of interest of 2 1/2 percent; (2) assumed mortality calculated on the basis of the 1958 CSO mortality table, the NAIC table for 'ordinary,' and (3) an assumed 100 percent rate of exercise of the options," qualified as a life insurance reserve.⁶⁴ In arguing that the reserves did not qualify as life insurance reserves, the Government contended that "no reserve can be included as a life insurance reserve within the meaning of Section 801(b) [now 816(b)] unless it is based solely on recognized mortality tables and assumed rates of interest," concluding that the reserves were not life insurance reserves because the taxpayer included in this calculation the nonactuarial assumption that 100% of the unexpired options would be exercised. The district court disagreed, observing that the statute "does not prohibit use of non-actuarial assumptions such as that made by the taxpayer in this instance in the calculation of life insurance reserves." However, on appeal, the First Circuit disallowed the reserves based on the 100% election assumption noting, "it is difficult for us to give any meaning to this part of the statute if the taxpayer is permitted to write into the

⁶¹ Internal Revenue Service (I.R.S.) Action on Decision IN RE: MUTUAL BENEFIT LIFE INSURANCE COMPANY Distributed: October 26, 1972.

⁶² 488 F.2d 1101, 1107 See also *Lincoln National Life v. United States*, 217 Ct. Cl. 515, 585 F.2d 579 (1978).

⁶³ *Union Mutual Life Insurance Company v. United States of America* 420 F.Supp. 1181 (1976); 570 F.2d 382 (1st Cir. 1978).

⁶⁴ 420 F.Supp. 1181, 1202 (1976).

computation a factor as unsubstantiated as the company's assumption that it will be necessary to establish reserves for every possible contingency which any option-holder might elect to exercise at several future dates."⁶⁵

In *Central National Life Insurance Company of Omaha v. United States*,⁶⁶ the Court of Claims considered the issue of whether credit life reserves computed using a gross unearned premium method were life insurance reserves under section 801, where the estimate was based on gross unearned premiums "for reasons of business convenience and economy," the method was acceptable to the Nebraska Insurance Department, and the reserves held "were not less than the reserves which would have been computed on the basis of the mortality tables specified in the insurance contracts."

In holding that the reserves were "life insurance reserves," the Court of Claims stated:

Section 801(b) permits a life insurance reserve to be an amount "computed or estimated." The use of alternative descriptions of the method by which an acceptable reserve may be determined has historical recognition. Each term was purposefully included and each is to be given meaning. "Computed" signifies a more precise methodology and a more exact mathematical calculation. "Estimated" permits greater flexibility in method and reasonable approximations in the result.⁶⁷

Expenses

Maryland Casualty established the principle that reserves were funds "set apart as a liability in the accounts of a company" to pay future claims, but that "provision for the payment of ordinary expenses was not intended to be provided for and included in 'reserve funds' as the term is used in the acts of Congress."⁶⁸

The recognition of gross unearned premium reserves as life insurance reserves was rejected by the district court in *Union Mutual*, which stated: "The use of the loading in calculating reserves thus introduces an element computed with reference to expenses other than reserve liabilities. To allow loading to be included in the calculation of reserves would be contrary to the language of section 801(b)(1)."⁶⁹ However, the court permitted a recalculation of the reserves noting "the obvious fact that the reserves computed on a gross-premium basis necessarily included as a portion thereof, reserves

⁶⁵ 570 F.2d 382, 396 (1978).

⁶⁶ 574 F.2d 1067 (1978).

⁶⁷ 574 F.2d 1067, 1080 (1978). Ironically, the Court of Claims in *Central National* cited *General Life Insurance Co. v. Commissioner*, 137 F.2d 185, 189 (1943) for the proposition, a case which the 5th Circuit itself rejected as precedent once the statutory definition of "life insurance reserves" was added to the Code in 1942. See *Group Life and Health*, 660 F.2d 1042, 1056 (1981).

⁶⁸ *Maryland Casualty*, 251 U.S. 342, 351-52 (1920).

⁶⁹ *Union Mutual Life Insurance Company v. United States*, 420 F.Supp 1181, 1205 (1976).

computed on a net-premium basis.”⁷⁰

A similar result was reached in *Idaho Mutual Benefit Association v. United States*, where the court held that a benefit fund used “for the payment of claims arising out of policies or certificates issued by the association, costs and expenses of litigation arising out of contested claims, and taxes and assessments which may involve such funds not to be life insurance reserves.” The Court noted that the Code is “explicit in providing that life insurance reserves are to be used exclusively for the payment of claims and not subject to any other use.” While conceding that the company had followed state insurance requirements, the Court went on to say “in order to claim the benefit of the federal statute for income tax purposes, the fund had to be maintained as provided by that [i.e., Federal income tax] statute.”⁷¹

Regulations 1.801-4(e)(5) would also appear to specifically exclude expenses from inclusion in reserves. Like the basic reserve definition, the language originates in Justice Clarke’s opinion in *Maryland Casualty*. Defining “reserve,” the opinion goes on to note that “it has nowhere been held that ‘reserve’ in this technical sense, must be maintained to provide for the ordinary running expenses of a business, definite in amount, and which must currently be paid by every company from its income if its business is to continue, such as taxes, salaries, reinsurance, and unpaid brokerage.”⁷²

Dividends and Nonguaranteed Elements

Section 805(a)(3) allows life insurance companies to deduct “policyholder dividends (determined under section 808(c)).” However, the amount in any taxable year is limited to the dividends paid or accrued during the taxable year, and dividends paid or accrued in other periods are not deductible in the current tax year. Section 808 adopted a broad definition of “policyholder dividends” to include any distribution to a policyholder that is the “economic equivalent” of a dividend (i.e., nonguaranteed policy elements). “Dividends” include excess interest, premium adjustments, and experience-rated refunds, as well as those amounts paid or credited to policyholders where the amounts are not fixed in the contract but are dependent upon the experience of the company or the discretion of management. “Excess interest” is defined as any amount in the nature of interest paid or credited to a policyholder in his or her capacity as such and determined at a rate in excess of the prevailing state-assumed interest rate for such contract. A “premium adjustment” is defined as any reduction in the premium under an insurance or annuity contract, which would have been required to be paid under the

⁷⁰ 420 F.Supp. 1181, 1206 (1976).

⁷¹ 262 F.Supp 222, 224 (1966) See also *Commissioner of Internal Revenue v. National Reserve Insurance*, 160 F.2d 956 (9th Cir. 1947) reversing *National Reserve Insurance v. Commissioner*, 6 T.C. 473 (1946).

⁷² 251 U.S. 342, 350 (1920). Compare to 1.801-4(e)(5), which excludes “reserves required to be maintained to provide for the ordinary operating expenses of a business currently paid by every company from income if its business is to continue, such as taxes, salaries and unpaid brokerage.”

contract. An “experience-rated refund” means any refund or credit based on the experience of the contract or group involved.

In *North Central Life v. Commissioner*, the Tax Court allowed a deduction for amounts actually paid under retroactive rate credit agreements but not the retroactive rate credit reserve. The taxpayer argued, “since the reserve is calculated in the manner required by the NAIC, changes in the reserve must be taken into consideration for the proper calculation of its commission deductions.” The Tax Court noted:

In evaluating the reserve at issue, we must distinguish it from those reserves which are peculiar to the insurance industry (hereinafter, “insurance-type reserves”). Insurance-type reserves are those that are necessary to account properly for the amount of premium income which will be recognized during the taxable year and that provide for losses which are expected to result from the risk attendant to that premium income (i.e., the risk that the insured will become sick or die during the term of the insurance). . . . Insurance-type reserves are necessary to avoid taxing premiums before they are earned and to assure the ultimate payment of claims.⁷³

*Gross Premium Valuations under Revenue Ruling 77-451*⁷⁴

In Revenue Ruling 77-451, which is discussed further in GCM 37209,⁷⁵ the taxpayer established reserves for life insurance contracts issued as group conversion policies. The reserve had three elements:

1. A “standard” reserve computed in the same way as other standard life policies, based on a recognized mortality table, an assumed rate of interest and using a net-premium method
2. A deficiency reserve for the excess, if any, of the valuation net premium over the gross premium and
3. An “additional” reserve, equal to the excess of a “substandard” reserve determined using a gross premium valuation (GPV) over the sum of (1) and (2).

The substandard reserve was computed using a gross premium valuation, recognizing the expected higher mortality of the converted policies, as well as their expense structure, which unlike standard policies incurred no commissions or underwriting costs. The issue in the Ruling was whether the “additional” reserve, which remained after subtracting the other two elements, was a life insurance reserve under section 801(b).

⁷³ *North Central Life Insurance Company v. Commissioner of Internal Revenue*, 92 T.C. 254, 278 (1989).

⁷⁴ 1977-2 C.B. 224.

⁷⁵ 1977 WL 46162.

The GCM defines a gross premium valuation to be a calculation of a reserve liability “that is based on an estimated mortality table closely equivalent to the company’s experience and realistic interest and expense assumptions, together with annual gross premiums payable less probable expenses,” and identifies the “substandard” reserve calculation as a gross premium valuation. It goes on to observe that the requirement that “life insurance reserves must be computed or estimated on the basis of recognized mortality tables and assumed rates of interest” implies that the Code requires a specific method for computing life insurance reserves. The Revenue Ruling states, “a particular life insurance policy at any given point in time, given a recognized mortality table and an assumed rate of interest, must have one reserve, which will be the same amount, regardless of how the reserve is viewed.” Thus, because the substandard reserve was computed using a gross premium method, the additional reserve derived from subtracting the other reserve elements was also not a life reserve.

The GCM elaborates on the conclusion of the Revenue Ruling in saying, “We think we are bound to conclude that the Code section 801(b) definition of life insurance reserves describes a net-premium valuation method,” explaining:

However, the Code requires life insurance reserves to be computed on the basis of recognized mortality tables, which by their nature are tabular and theoretical, and not on the basis of the actual experiences under policies sold; and the reserves must be computed at assumed rates of interest, not the actual rate of return on investments. Accordingly, we think that Code section 801(b), by its language, requires a reserve computation which reflects only factors that are actuarially related to the risk insured against, and the theoretical mortality and interest assumptions. There is no indication in the Code or the legislative history that a life insurance reserve computation can also take into account factors which are unrelated to the risk, such as the business experience or expense savings of the company. If the Code did allow life reserves to reflect factors that are actuarially unrelated to the insured risk, there would be no way to ascertain the proper size of the reserve, making the definition of life insurance reserves useless for purposes of determining whether an insurance company is a life insurance company, under Code section 801(a).

The Revenue Ruling also comments that the view that life insurance reserves must be determined by a net premium valuation is “assumed by the exclusion of deficiency reserves from the term life insurance reserves.”⁷⁶ This conclusion can be derived from the basic mathematics of life insurance reserves (assuming identical assumptions for basic and deficiency reserves), where A_{x+t} is the present value of future benefits, NP is the valuation net premium, GP is the gross premium, and \ddot{a}_{x+t} is a life annuity at age $x+t$:

$$\text{Basic reserve} = A_{x+t} - NP \times \ddot{a}_{x+t},$$

⁷⁶ See Code section 816(h). Treatment of deficiency reserves.—For purposes of this section and section 842(b)(2)(B)(i), the terms “life insurance reserves” and “total reserves” shall not include deficiency reserves.

$$\text{Deficiency reserve} = (NP - GP) \times \ddot{a}_{x+t},$$

$$\text{Total reserve} = A_{x+t} - GP \times \ddot{a}_{x+t}.$$

Note that, like a gross premium valuation, a deficiency reserve recognizes the present value of the premium “deficiency” relative to the valuation assumptions at issue.

It could also be argued that section 807(d)(3)(C) implies that the tax reserve method is a net premium method. Deficiency reserves are defined in terms of the Federally prescribed reserves. The section goes on to say: “Nothing in any reserve method described under this paragraph shall permit any increase in the reserve because the net premium (computed on the basis of the assumptions required under this subsection) exceeds the actual premiums or other considerations charged for the benefits.”

In 1934 the Board of Tax Appeals found that deficiency reserves were not “life insurance reserves,” holding that deficiency reserves did not fall “within the technical and special meaning of reserves in the law of insurance.” The Board went on to observe: “This abstract computation is entirely actuarial and thus theoretical, . . . but here, where the actual premium charged is less than the net premium upon which the legal reserve and therefore the deduction is mandatorially based, [it] merely provides a guarantee that the reserve . . . shall be maintained by providing a source, [the extra reserve] certain, from which the mathematical net and the actual premium charged shall be made up.”⁷⁷

Despite the views of the Board, the exclusion of deficiency reserves in the 1959 Act was based more on political grounds than theoretical ones. One commentator has noted, “If the industry . . . had so desired and acted accordingly, we probably could have had the law drafted so that deficiency reserves would have been treated as allowable reserves.”⁷⁸

*Treatment of Contingency Reserves under Revenue Ruling 67-435*⁷⁹

In Revenue Ruling 67-435 the Service held that “a reserve computed on “the basis of a percentage of life insurance reserves” is not a life insurance reserve under section 801(b). In the ruling the Service commented:

Abnormal mortality, depreciation, and losses on assets owned by the company are purely speculative. The prospect of such speculative losses would, in all likelihood, be a solvency concern of the states in which the company does

⁷⁷ North American Reassurance v Commissioner, 29 BTA 683, 689 (1934) rev'd 21 BTA 92 (1934).

⁷⁸ BUIST M. ANDERSON, CONCERNING THE LIFE INSURANCE COMPANY INCOME TAX ACT OF 1959, Connecticut General Life Insurance Company (1959), 6. He went on to comment, “The disadvantage would be that such reserves existing December 31, 1957 would, in time, come back through earnings and therefore be taxed under Phase II. The assumption is that deficiency reserves will be of less and less importance in the future because of the adoption of the new mortality table [the 1958 CSO] and that such reserves will, generally speaking, decrease, and in time, disappear.”

⁷⁹ 1967-2 C.B. 232.

business. In the event that abnormal excessive claims do materialize, any difference between what was provided for on the basis of recognized mortality and morbidity tables and assumed rates of interest for the normal certain claims and the actual claims would be made up out of the surplus of the company. To provide therefore the states may and do require that a portion of the surplus be earmarked in special contingency, mortality fluctuation, mandatory securities valuation reserves, etc., to which the instant reserve is analogous but such requirements of the states for solvency purposes have no bearing on "what part of the gross income ought to be treated as net income for purposes of taxation."

Case law reaching a similar result can be traced back to the 1920s. In *Old Line Insurance Company v. Commissioner*,⁸⁰ the Board of Tax Appeals refused to recognize a "mortality fluctuation" fund equal to 10% of the net value of its policies "to provide against possible anticipated excessive mortality losses due to the influenza epidemic," commenting: "That the losses anticipated would result was speculative. Future liability on outstanding policies, on the other hand, is relatively certain and it is this liability for which a reserve is required." In *Standard Industrial Life Insurance Co. v. Commissioner*,⁸¹ the Board of Tax Appeals found "solvency" or "business" reserves rather than life insurance reserves to exist when the taxpayer based its reserves on a percentage of the reserves required under the mortality table.

Section 807(d): Deduction of "Economic" Reserves

Under the 1959 Act, Code Section 810(c) (Phase II) permitted a deduction for "life insurance reserves (as defined in section 801(b))." In effect, life insurance reserves held for state regulatory purposes were deductible, provided they met the "technical actuarial reserve" requirement that had developed through litigation and regulation. This allowed life insurance companies to use assumed interest and mortality rates that were more conservative than were required to meet the minimum state law reserve standard in computing their reserves provided that they actually held the higher reserves.⁸²

Even in 1958, Congressional tax writers recognized that the "difficult problem in determining an equitable tax base" for life insurance companies was clearly related to reserve deductions:

Various methods have been used, or suggested, as devices for measuring the appropriate size of the reserve deduction. Probably the most obvious would be to permit each company to deduct its own additions to reserves. This has not been used in any of the [free investment income] formulas which have been applicable

⁸⁰ 13 B.T.A. 758 (1928).

⁸¹ 42 B.T.A.1011 (1940).

⁸² Section 818(c) also allowed insurers to restate their reserves from a preliminary term method to a net level reserve method using an approximate revaluation formula.

in the past presumably because the portion of the reserves which are built up through the use of investment income (as distinct from the portion that are built up through premiums) is, in part at least, a matter within the control of the individual insurance company. Thus, it is stated that to permit an insurance company to deduct its own additions to reserves would in effect let such a company to a large extent determine its own tax liability. . . . The experience with varying formulas for determining reserve requirements has suggested to many that an individual company basis for determining needs is desirable, but only if some method is determined which for tax purposes does not vary additions to reserves depending on whether a company has established its reserves on a liberal or conservative basis.⁸³

Tax authorities came to see deductions for state law-based additions to reserves as exceeding the amounts economically necessary to cover expected future liabilities, resulting in a distortion of income and a significant deferral of tax. The congressional intent to allow a deduction for no more than “economic” reserves first manifested itself in the 1984 enactment of section 807(d), which sets forth specific rules for computing the deductible amount of life insurance reserves. The legislative history indicates:

Under present law, a company’s reserves are based on its statutory reserves, which are computed using assumptions under State law. The result is a significant overstatement of liabilities in comparison to those measured under realistic economic assumptions. The committee concluded that a more accurate measure of liabilities for tax purposes can be achieved by imposing specific rules for the computation of tax reserves which approximates the least conservative (smallest) reserve that would be required under the prevailing law of the states.⁸⁴

In Congressional testimony in 1983, John E. Chapoton, Assistant Secretary (Tax Policy), explained that the use of state law reserves allowed “life insurance companies to accelerate deductions for additions to reserves.” He went on to comment:

We [Treasury] suggest that for tax purposes, the highly conservative state regulatory assumptions result in an undue acceleration of deductions. Moreover, we question whether life insurance companies should ever be allowed to compute reserves under assumptions more pessimistic than the state regulators require to be used.⁸⁵

⁸³ REPORT ON THE TAXATION OF LIFE INSURANCE COMPANIES, SUBCOMMITTEE ON INTERNAL REVENUE TAXATION, COMMITTEE ON WAYS AND MEANS, December 31, 1958, 4-5.

⁸⁴ H.R. REP. NO. 98-432, PT. 2 AT 1397 (1984 ACT HOUSE REPORT).

⁸⁵ TAX TREATMENT OF LIFE INSURANCE, HEARINGS BEFORE THE SUBCOMMITTEE ON SELECT REVENUE MEASURES OF THE COMMITTEE ON WAYS AND MEANS, 98TH CONG., 1ST SESS., SERIAL 98-39, 50 (1984).

Under the 1984 Act, the rules for computing tax reserves were intended to permit life insurance companies to deduct the minimum statutory reserve under the Standard Valuation Law, or the net surrender value of the contract, if greater. Section 807(d)(1) imposes a two-part system for the deduction of life insurance reserves. First, the amount of life insurance reserves is the greater of (1) the net surrender value of the contract or (2) the reserve according to section 807(d)(2). Second, the reserve is capped at "the amount which would be taken into account with respect to such contract as of such time in determining statutory reserves." Section 807(d)(6) defines the term "statutory reserves" as "the aggregate amount set forth in the annual statement with respect to items described in section 807(c)."

In a Technical Advice Memorandum holding that the taxpayer "may not use the very conservative reserve method required only by Connecticut that it used to compute its statutory reserves for Minimum Guaranteed Death Benefits associated with deferred variable annuity contracts," the Service discussed the tax policy underlying the use of Federally prescribed reserves:

In general, the life insurance reserve rules of section 807(d)(2) are intended to limit the amount of an insurance company's reserves for purposes of computing increases and decreases to the minimum reserve which most states would require to be set aside with respect to a contract, unless the net surrender value of the contract is greater. . . . By relying on the reserving methods recommended by the NAIC, the life insurance reserve rules seek to minimize state-by-state variations in the methods used by insurance companies to calculate deductible reserve additions. Thus, under prior law, a company's reserves were based on its statutory reserves, which were computed using assumptions under state law. The result was a significant overstatement of liabilities in comparison to those measured under realistic economic assumptions. Congress concluded that a more accurate measure of liabilities for tax purposes can be achieved by imposing specific rules for the computation of tax reserves that result in a reserve that approximates the least conservative (smallest) reserve which would be required under the prevailing law of the States. Congress was afraid that "[r]eliance on state law reserves to determine deductions or exclusions from income could create the potential for companies with greater available assets to establish larger reserves and thus obtain a tax advantage vis-à-vis companies with smaller amounts of surplus assets." Statutory accounting for reserves is the "abuse" Congress sought to avoid by dictating the use of a Federally prescribed reserve method [citations omitted].⁸⁶

Tax Reserve Method

Under Section 807(d)(2), the amount of the reserve for any contract is determined using the tax reserve method applicable to the contract, the greater of the applicable Federal or state assumed rate of interest, and the Commissioners' standard tables for mortality and

⁸⁶ TAM 200448046.

morbidity adjusted as appropriate to reflect the risks (e.g., substandard risks) incurred under the contract that are not otherwise taken into account. Except for the designated tax reserve method, interest rate, and mortality table, the FPR must be computed using the same actuarial basis as the statutory reserve. For Section 807(d) purposes, the "tax reserve method" varies depending on the type of contract at issue. For life insurance contracts, the tax reserve method is the Commissioners' Reserve Valuation Method (CRVM).

The rules for computing the amount of life insurance reserves taken into account in computing a life insurance company's taxable income "require the insurance company to compare the net surrender value of the contract, the FPR for the contract, and the statutory reserve for the contract."⁸⁷ Section 807(d) requires these two comparisons to be made on a contract-by-contract basis. As a result, the allowable reserve necessarily falls in a range bounded by the net surrender value (a floor) and the annual statement reserve (a ceiling). The limitation based on the annual statement reserve is commonly referred to as the "statutory cap." Thus, if the statutory cap falls below the Federally prescribed reserve, the cap becomes the deductible amount.

Except for the Federally prescribed items, the methods and assumptions employed in computing the Federally prescribed reserve are consistent with those employed in computing a company's statutory reserve. The prescribed rules for computing tax reserves were intended to allow companies to recognize at least the minimum reserve that most states would require them to set aside, but no more unless the net surrender value is greater. However, the use of the applicable Federal interest rate (AFIR) starting in 1988 saw the end of this intention.

As a general rule, the interest rate to be applied in determining the amount of the life insurance reserves for any contract is the greater of the applicable Federal interest rate or the prevailing state assumed rate for the calendar year in which the contract is issued. Thus, the rate for determining life insurance reserves with respect to any contract cannot be lower than the prevailing state assumed rate for the calendar year for which the contract was issued. The term "prevailing state assumed rate" means the highest assumed interest rate permitted in computing life insurance reserves for insurance or annuity contracts (as the case may be) under the insurance laws of at least twenty-six states. The effect of nonforfeiture laws of a state on interest rates for reserves is disregarded. The prevailing state assumed rate is determined as of the beginning of the calendar year of contract issuance. For life insurance contracts issued in calendar year 2006, the AFIR is 3.98%, while the life insurance statutory valuation interest rates vary from 4.00% to 4.50%, depending on the guarantee duration of the underlying contract. Thus, the interest rates presently applicable under section 807 are the prevailing state assumed rates.⁸⁸

In general, the term "prevailing commissioners" standard tables means the most recent commissioners' standard tables prescribed by the NAIC permitted to be used for reserve computations (for the type of contract at issue) under the insurance laws of at

⁸⁷ ROBBINS & BUSH at 63.

⁸⁸ Rev. Rul. 2006-25, 2006-20 I.R.B. 882.

least twenty-six states upon contract issuance. If there are no commissioners' standard tables for a contract (when issued), the mortality and morbidity tables used for Section 807(d)(2)(C) are to be determined by Regulations. If, with respect to a category of risk, there are two or more tables (or two or more options under one or more tables) meeting the requirements of Section 807(d)(4)(A) (or, where applicable, Section 807(d)(4)(B) or (C)), the table (or option there under) generally yielding the lowest reserve is to be used for purposes of Section 807(d)(2)(C).

PART II: Life Insurance Reserves

When a life insurance policy is sold, the expected future cash flow is made up of four components: premiums, expenses, benefits (including amounts returned to policyholders as dividends or other nonguaranteed elements), and profits. Generally the policy cash flows do not occur uniformly over the expected life of the policy. Under a level premium policy, in the early policy years the premiums are more than is needed to cover the mortality cost, while in later policy years the mortality costs exceed the premiums. Consequently insurance companies establish reserves to provide for mortality costs in excess of the premiums collected in later years. Expenses are usually greater in earlier policy years, so a reserve system that incorporated expenses would typically capitalize the acquisition costs and recover them against future premiums (i.e., as a negative liability or an asset).

There are many types of valuations. A best-estimate liability is one that has no margin for the risk of an adverse deviation from the valuation assumptions. A best-estimate liability may be used to measure profits, determine the capital required by a block of business, measure the adequacy of reserves held, or allocate resources. Other valuations may incorporate implicit or explicit margins. Viewed broadly, a reserve is simply the excess of the present value of future policy benefits and expenses over the present value of future premiums. Reserves may be computed either by using a net premium, where the present value of the future net premiums equals the present value of future benefits at issue, or simply by using the gross premiums in the valuation. A generalized life insurance reserve system can be thought of as having three components:

1. A benefit reserve, which will generally be positive (i.e., a liability)
2. An expense reserve, which will generally be "negative" (i.e., an asset) and
3. A profit component, which may either be positive or negative depending on the product profitability and the margins built into the reserve system.

The proposed principles-based approach to reserving is described in a Model Regulation and two related Actuarial Guidelines: AG PBR-VAL, providing requirements for setting valuation assumptions, and AG DIS, on disclosure requirements. The proposal modifies the current benefits-based net premium reserve system with a methodology based on the present value of future policy cash flows. The Regulation applies the principles of risk management, asset adequacy analysis, and stochastic

modeling in the setting of statutory reserves. The cash flow models project the premiums, benefits, expenses, and other revenue items, as well as net investment earnings, to compute asset and liability cash flows. Nonguaranteed elements are included in the cash flow models.

The December 2006 draft excludes Credit Life, Industrial Life, Pre-need, and Final expense policies, as well as group life, except for individually underwritten certificates. Once adopted, the new reserve requirements will be incorporated into a Valuation Manual for adoption by the NAIC. However, the effective date for this to apply to reserves is likely to be some time in the future. Currently it is anticipated that PBR will initially apply only to future new business, with the possibility of extending this to in-force business as regulators and companies become comfortable with the results (and the resolution of potential tax issues). It is anticipated that the effective date of the Valuation Manual, implementing PBR, may occur in 2009 or 2010.

Principles-Based Reserves for Life Products Model Regulation⁸⁹

The Principles-Based Reserves for Life Insurance Model Regulation describes the PBR method to calculating statutory reserves and capital requirements for insurance companies as incorporating the following concepts:

1. Captures all of the identifiable, quantifiable and material financial risks, benefits, and guarantees associated with the contracts, including the “tail risk” and the funding of the risks.
2. Utilizes risk analysis and risk management techniques to quantify the risks and is guided by the evolving practice and expanding knowledge in the measurement and management of risk. This may include, to the extent required by an appropriate assessment of the underlying risks, stochastic models or other means of analysis that properly reflect the risks of the underlying contracts.
3. Incorporates assumptions and methods that are consistent with, but not necessarily identical to, those utilized within the company’s overall risk assessment process. Company risk assessment processes include but are not limited to experience analysis, asset adequacy testing, GAAP valuation, and pricing.
4. Permits the use of company experience, based on the availability of relevant company experience and its degree of credibility, to establish assumptions for risks over which the company has some degree of control or influence.
5. Provides for the use of assumptions, set on a prudent best-estimate basis, that contain an appropriate level of conservatism when viewed in the

⁸⁹*Principles Based Reserves for Life Insurance Products Model Regulation, Draft* December 7, 2006, www.naic.org.

aggregate and that, together with the methods utilized, recognizes the solvency objective of statutory reporting.

The Model Regulation also describes six “guiding principles,” which “should be followed when applying the methodology defined by this regulation and analyzing the resulting reserves:”

1. *Principle 1:* The reserve is based on a prospective valuation that appropriately captures all material risks underlying the product being valued, including the magnitude of material tail risk, the revenue to fund the risks, and the effect of any risk mitigation techniques.
2. *Principle 2:* A deterministic reserve approach may be sufficient for certain products, depending on the nature of the risks, and a stochastic approach may be necessary for other products.
3. *Principle 3:* For risks that the company has some control over, assumptions should reflect a blend of company experience and the prescribed assumptions. For risks that the company has no control over, prescribed assumptions or methods for setting the assumptions should be used.
4. *Principle 4:* Assumptions that are not stochastically modeled should incorporate margins for uncertainty.
5. *Principle 5:* Assumptions are not locked in at issue, but are updated as expectations of future experience and economic conditions change.
6. *Principle 6:* Even a stochastic model is only a model, so the valuation actuary must take the model’s limitations into account in setting the methodology and the appropriateness of reserve levels.

The Model Regulation redefines the CRVM for life insurance policies to which the Regulation applies as the minimum valuation standard under “a principles-based approach for certain individual life products.”

Under the current proposal, the minimum reserve as of the valuation date, the reported reserve, is the greater of the Deterministic Reserve and the Stochastic Reserve (or, equivalently and better stated, the Deterministic Reserve plus the excess, if any, of the Stochastic Reserve over the Deterministic Reserve):

- The Deterministic Reserve is a seriatim (policy-by-policy) reserve using a single scenario and a set of Prudent Best Estimate assumptions, which is no less than the policy cash surrender value (or zero, for a non-cash value product) and
- The Stochastic Reserve equals the amount determined by applying a prescribed contingent tail expectation (CTE) level to a range of Scenario Reserves over a broad range of stochastically generated scenarios and Prudent Best Estimate assumptions for all assumptions not stochastically modeled.

Scenario Reserves are the reserves for all policies on an aggregated basis for a given scenario. Note that the calculation of principles-based reserves ignores Federal income taxes.⁹⁰

Deterministic Reserves

A deterministic projection is a model of cash flows based on a set of assumptions for the model parameters representing one view of the future. The deterministic reserve is intended to be based on a single set of realistic “best-estimate” assumptions, with margins to provide a level of conservatism. Deterministic reserves are based on a gross premium valuation methodology computed by projecting (1) future benefits for each policy, including death benefits, cash surrender benefits, and nonguaranteed benefits, including policyholder dividends; (2) future expenses for each policy, including commissions, general expenses, and premium taxes (but excluding Federal income tax); and (3) future gross premiums and other applicable revenue. The deterministic reserve for each policy is equal to the discounted value of future benefits and expenses less the present value of future gross premium payments. The discount rates are based on the earnings rates used for the asset segment corresponding to the liabilities, “in a manner that reflects a single path of U.S. Treasury yield curves for general account products.” The total Deterministic Reserve is the sum of the per policy reserves as of the valuation date. The purpose of the Deterministic Reserve is to “produce a reserve that is adequate to cover the product benefits and expense, reflecting future revenue, under a Single scenario.”

Stochastic Reserves

The deterministic reserve is not designed to capture “tail risk.” The Model Regulation defines “material tail risk” as arising when “the scenario reserve for one or more scenarios is significantly higher than the scenario reserves for the rest of the scenarios.” A stochastic projection uses model parameters based on random variables, where a distribution of results is generated by multiple projections. The stochastic reserve arises from a multiple-scenario analysis designed to capture the risk of embedded options in the block of business that cannot be estimated by a single path or scenario, using the concept of a “contingent tail expectation” as the measure. For example, a CTE (65) involves ranking stochastically generated scenarios (i.e., from the smallest present value to largest) and taking the average of the 35% falling in the (worst) tail of the distribution. CTE (0) is simply the average of all scenarios. The stochastic reserve “provides for all material risks of a group of policies, including material tail risk, arising from sensitivities to changing economic conditions.”

The purpose of the Stochastic Reserve is to produce a reserve that is adequate to cover the product benefits, revenue, and expenses over a broad range of stochastically generated Scenarios. It is meant to capture all material risks, including tail risk. It may

⁹⁰ See Edward L. Robbins, *Treatment of Taxes in Principles-Based Reserves*, ACTUARIAL PRACTICE FORUM, SOCIETY OF ACTUARIES, October 2006.

not be necessary to stochastically model plans for which it can be demonstrated, based on standards set forth in the Model Regulation, that the Stochastic Reserve will never be greater than the Deterministic Reserve.

Margins

Called a “prudent best estimate,” the valuation assumptions are developed by applying a margin for uncertainty to best-estimate assumptions. Best-estimate assumptions are defined as “the actuary’s most reasonable estimate of future experience for a risk factor given all available, relevant information about the contingencies being valued.” The margin is “an amount added to, or deducted from, the best-estimate assumption to account for estimation error and adverse deviation.” Margins are to be determined by the valuation actuary using professional judgment, subject to guidance established by actuarial standards of practice and the NAIC, which may prescribe limits, caps, or ranges on permissible margins. Each margin should serve to increase the reserve that would otherwise be held. The purpose of the deterministic reserve is to produce a reserve “adequate to cover the product benefits and expense, reflecting future revenue, under a single scenario.” The prudent best-estimate assumptions are intended to be at “the conservative end of the best estimate confidence interval.”

The LRWG has indicated that the overriding objective in achieving the proper level of conservatism in statutory reserves is the effect of margins in assumptions on the total reserve, and not the appropriateness of individual margins on each assumption. Thus, it is the aggregate impact of margins on the reported reserve that should be the primary focus when assessing the conservatism of the resulting reserves. The LRWG is currently recommending that LHATF explore the concept of a “prescribed minimum level of aggregate margin.” The margin effect would be quantified by a “margin ratio,” which relates the aggregate margin to the required capital using a cost of capital method. The prescribed minimum would be the “Margin Ratio,” equal to

$$\frac{\text{Reported Reserve} - \text{Best Estimate Reserve}}{\text{PV of Risk-Based Capital (RBC)}}$$

The Best Estimate Reserve is a deterministic reserve computed with all of the margins removed.

Net Premium Reserves

When the reserve calculation involves net premiums of uniform amounts and is based on the mortality and interest assumptions used in computing the net premium, the resulting reserve is known as a net level premium reserve.⁹¹ Elizur Wright is said to have championed a net premium system in part as a reaction to the practice of British life insurers in recognizing the present value of future gross premiums, but not the

⁹¹ CHESTER W. JORDAN, JR., SOCIETY OF ACTUARIES’ TEXTBOOK ON LIFE CONTINGENCIES, 96 (2nd Ed. 1967).

 present value of future expenses, in setting reserves. When a policy is issued, the net level premium is calculated to make the present value of the net premiums exactly equal to the present value of the benefits. However, this relationship holds only on the issue date. At any time thereafter, the present value of the remaining net premiums is less than the present value of the future benefits. The difference between the respective present values is a "reserve" fund that the insurance company must have on hand if it is to remain solvent.⁹² Where P is the net level premium, the net level reserve is computed as the difference between future benefits and future net premiums:

$${}_tV_x = A_{x+t} - P \times \ddot{a}_{x+t}.$$

Under a net premium reserve, while higher interest rates result in lower reserves, higher mortality does not necessarily translate to higher reserves, as "the reserve also depends on the slope (rate of increase) of expected deaths and the premium pattern."⁹³ Since the valuation premium is defined by the present value of benefits using the valuation assumptions, it varies accordingly.

Equivalence of Retrospective and Prospective Net Premium Reserves

One characteristic of a net premium valuation is that the retrospective reserve is at all times equal to the prospective reserve.⁹⁴ The retrospective reserve is equal to the accumulated value of past net premiums less the accumulated value of insurance benefits. The prospective reserve is equal to the present value of future benefits less the present value of future net premiums. The equivalence of the retrospective and prospective reserves results from the fundamental equation used in determining the net premium:

$$(Value\ of\ Future\ net\ premiums\ at\ issue) = (Value\ of\ Future\ policy\ benefits\ at\ issue).$$

When both sides of the equation are accumulated with interest and survivorship to any future date, it equals

$$(Value\ at\ reserve\ date\ of\ all\ net\ premiums) = (Value\ at\ reserve\ date\ of\ all\ policy\ benefits).$$

The value of all net premiums and benefits may each be separated into two parts: the accumulated value of benefits and premiums before the reserve date and the present value of premiums and benefits after the reserve date:

$$(Accumulated\ value\ of\ past\ premiums) + (Present\ value\ of\ future\ premiums) =$$

⁹² WALTER O. MENGE & JAMES W. GLOVER, AN INTRODUCTION TO THE MATHEMATICS OF LIFE INSURANCE, 1935, 74.

⁹³ ROBBINS & BUSH at 7.

⁹⁴ JORDAN at 101, MENGE AND GLOVER at 80-81.

(Accumulated value of past benefits) + (Present value of future benefits).

By transposing terms, it can be shown that

(Accumulated value of past premiums) – (Accumulated value of past benefits) = Retrospective reserve,

(Present value of future benefits) – (Present value of future premiums) = Prospective reserve.

Thus,

Retrospective reserve = Prospective reserve.

Commissioners' Reserve Valuation Method

The difference, if any, between the valuation net premium and the gross premium is the "loading," the amount of the premium available to fund policy expenses. When a net level reserve is the basis for a valuation, the loading available for expenses is a level percentage of the gross premium. "Modified" reserve systems adjust the net premium to provide a higher loading in the first policy year, to better recognize the incidence of acquisition costs. To avoid a negative reserve, the first year net premium must be at least equal to the cost of insurance provided. A full preliminary term method uses a one-year term premium in the first policy year, combined with a net level premium computed as if the policy had been issued at the beginning of the second policy year for subsequent years.

The current statutory valuation system is a net premium system described in the Standard Valuation Law (SVL), which sets forth minimum standards of mortality and interest to be used in the determination of statutory reserves. Under the current SVL, once a valuation basis has been established for a given issue year, it remains in effect throughout the life of the policy (subject to any additional reserves established under the AOMR). Expenses and surrender benefits are not taken into account in setting of the reserves, although the CRVM is a "modified" reserve method, similar to a full preliminary term method, although limited for payment forms with higher premiums:

Basically, the CRVM reserve is a one-year term reserve for the first policy year and a net level premium reserve calculated as though the policy were issued in the second year and the CRVM reserve at the end of the first policy year is zero (or nearly zero). Thus, the CRVM approach permits a lower net premium in the first contract year and a commensurately higher net premium in renewal years.⁹⁵

CRVM is described as a prospective calculation based on the present value of future policy benefits less the present value of future valuation net premiums, (i.e., α , a one-year term premium in the first year, and β , a net level premium for an age one year older than the insured's age at issue):

⁹⁵ ROBBINS & BUSH at 5.

$${}_tV_x = A_{x+t} - \beta x \ddot{a}_{x+t}.$$

The principal focus of statutory accounting is on the balance sheet, as state regulatory authorities are concerned that insurance companies will have sufficient assets to pay benefits promised to policyholders (claims and cash surrender values). Statutory accounting can be thought of as being conservative with respect to the treatment of expenses, as all expenses are reflected when they are incurred. As the cost of writing new business generally exceeds the first-year premium, acquisition costs in excess of the first-year premium must be financed from surplus, although some relief is provided by the use of modified valuation systems, like CRVM.

Mathematically the CRVM reserve can be shown to equal a net level reserve less an expense allowance that is amortized over the premium-paying period of the policy. However, this is not the same as establishing an explicit expense reserve component, as it does not recognize the actual policy expense, but is completely defined by the policy benefits, the assumed interest rate and mortality table, and the CRVM definition of the pattern of first-year and renewal net premiums.

Gross Premium Valuations

The proposed PBR valuation method uses a Gross Premium Reserve (GPR), equal to the present value of future benefits and expenses (excluding Federal income tax) less the present value of future gross premiums. Under a gross premium approach, reserve assumptions are determined for all material risks, including not only mortality and interest, but also expense, lapse, and premium payment pattern. Nonguaranteed elements, including policyholder dividends, are also reflected. Depending on the intended purpose of the valuation, assumptions may be based on the actuary's best estimate, or may include a margin for adverse deviations. The discount rate applied to determine present values is pre-tax, based on the company's asset portfolio and reinvestment strategy.

Mathematics of a Gross Premium Valuation

A GPV measures the present value of projected future policy cash flows. Such valuations have been used for many years to determine the value of blocks of life insurance policies.⁹⁶ GPVs are commonly used to measure the value of a block of life insurance policies, often in the context of the adequacy of the reserves, or as a part of an actuarial appraisal related to a sale or acquisition. At any time a GPV measures the

⁹⁶ A gross premium valuation is commonly used in both the life and health insurance business when there is a concern that reserves for a block of business are inadequate. The difference between the gross premium valuation and the statutory reserve is a measure of the actuarial surplus or deficit of the business. It is also viewed as a simplified method of cash flow testing. A gross premium valuation may also be used in GAAP where the GPV is less than or equal to the net GAAP liability, which may require an immediate recognition of the expected loss to the extent of the deficit.

present value of the projected future premiums against the present value of future projected policy benefits and expenses:

$$GPV = NPV_{\text{Gross Premiums}} - NPV_{\text{Policy Benefits}} - NPV_{\text{Policy Expenses}} .$$

When the GPV produces a negative result (i.e., projected future benefits and expenses exceed projected future gross premiums), the negative is established as a gross premium reserve. A gross premium reserve can be thought of as the “negative” of the present value of future cash flows, excluding interest and Federal income taxes. Consequently a GPR is simply the difference between the present value of future benefits and expenses and the present value of future gross premiums. When used in a solvency context, the result of a gross premium valuation is compared to the statutory reserves, and additional reserves are typically established for the excess of the gross premium reserve (NPV of future benefits and expenses less the NPV of future gross premiums) over the statutory reserve (including deficiency reserves, if applicable). In a gross premium valuation, the results are compared to the applicable reserve (statutory or GAAP) as of the valuation date. If the stated reserve exceeds the GPR, then the reserve is sufficient, along with the present value of future premiums, to provide for future benefits and expenses. If it is less, then a strengthening of reserves may be required:⁹⁷

$$GPR = NPV_{\text{Policy Benefits}} + NPV_{\text{Policy Expenses}} - NPV_{\text{Gross Premiums}} .$$

As the present value of future benefits and expenses is offset by the full gross premiums, a profit or loss is recognized at issue equal to the present value of future net cash flows. Tullis and Polkinghorn observe, “Most or all future profits and losses are reflected in the equity of a gross premium valuation balance sheet as of the date of valuation.”⁹⁸ By definition, the GPR recognizes all future gains and losses of the block of business for which the value is computed. However, a gross premium valuation is cash flow based and does not recognize the timing of the emergence of distributable earnings, which are a function of the statutory reserves and required surplus. When the present value of future premiums exceeds the present value of benefits and expenses, the reserve is in theory a negative liability or an asset. Note, however, that the current draft of the PBR Model Regulation would floor the reserve at zero (or the policy cash surrender value).

Analyzing the gross premium valuation formula, it can be observed that the gross premium reserve is made up of three components: a benefit element, an expense element, and a profit element, which for participating policies represents future contributions to surplus (assuming that future projected dividends are included as

⁹⁷ David V. Smith, *Gross Premium Valuation Reserves: What Are They and How Are They Computed?* SMALL TALK 11 (November 2004).

⁹⁸ MARK A. TULLIS & PHILIP K. POLKINGHORN, *VALUATION OF LIFE INSURANCE LIABILITIES* 5 (3rd Ed. 1996).

policy benefits). Similarly, at issue, the gross premium can be allocated among the same three components, and separate reserve elements (natural benefit reserve, natural expense reserve, and profit reserve) computed:

$$GPR_{Policy\ Benefits} = NPV_{Policy\ Benefits} - Benefit\ \% \times NPV_{Gross\ Premiums},$$

$$GPR_{Policy\ Expenses} = NPV_{Policy\ Expenses} - Expense\ \% \times NPV_{Gross\ Premiums},$$

$$GPR_{Profits} = (1 - Benefit\ \% - Expense\ \%) \times NPV_{Gross\ Premiums}.$$

The Benefit % and the Expense % represent the NPV of Benefits or Expenses, as applicable, divided by the NPV of Gross Premiums at issue. Note that the sum of $GPR_{Policy\ Benefits}$ and $GPR_{Policy\ Expenses}$ equals the so-called natural reserve, while the addition of the profit component produces the gross premium reserve.⁹⁹ Pharr describes natural reserves and natural reserve premiums as follows:

A natural reserve premium is a level percentage of the gross premium. It is exactly sufficient, with net investment income on accumulations of natural reserve premiums (less related benefit costs and expenses) to pay benefits and expenses as they accrue based on realistic actuarial assumptions (inherent in the gross premium structure) as to interest, mortality, withdrawal, and expenses. A natural reserve is calculated using the natural reserve premium and is (1) the accumulation with net investment income of the natural reserve premium over benefit and expense payments (a retrospective view) or (2) the amount which, with future natural reserve premiums, is exactly sufficient to pay benefits and expenses as they accrue (a prospective view) or (3) the prospective gross premium reserve plus the present value of the profit component in the gross premium—a gross premium reserve being the present value of future benefit costs and expenses, less the present value of future gross premiums.¹⁰⁰

Note that the allocation of the natural reserve into components as described by Pharr and others implicitly assumes that assumptions do not change over the life of the policy, as the gross premium is divided into “natural” net premiums, thus allowing individual components of the reserve to be identified and computed. When assumptions change, the natural “net” premiums will also change, thus requiring a recalculation of

⁹⁹ Natural reserves have been used as a theoretical measure of cash values. See Paul H. Knies, *Natural Reserves Revisited*, THE ACTUARY 3 (April 1972): “By using a hypothetical non-profit premium based on ‘most likely’ assumptions with regard to mortality, interest and expenses, the natural reserve indicates the level of cash value that can be provided under such assumptions without gain or loss on surrender. Under a natural reserve system, if actual experience equals that assumed, profits will emerge as a level percentage of gross premiums.”

¹⁰⁰ Joe B. Pharr, *The Natural Reserve Concept and Life Insurance Earnings*, TRANSACTIONS OF THE SOCIETY OF ACTUARIES, 1971, VOL. 23, PT. 1, NO. 66 AB, 963, 95.

the reserve components. Under PBR, the reserve is computed in the aggregate, so the individual components are not specifically identified.

Reserves and Accounting

The actual cash flows from a block of life insurance policies are independent of the policy reserve. Reserve systems are a function of the accounting system on which they are based. Redington observes, "The basis of valuation does not directly affect the present value of the surplus which will ultimately accrue, but merely the incidence of the emergence of surplus. . . . [A] strong valuation basis dams up the surplus and provides a deeper reservoir."¹⁰¹

An insurance reserve system has two functions, which often conflict. The first is to ensure that sufficient funds are set aside so that the insurance company can meet its obligations to its policyholders. The second is to control the emergence of profit, and thereby the growth of surplus. The objectives and operation of a reserve system will change depending on the relative importance of the two functions. For example, a solvency-based system is better served when valuation assumptions are changed to reflect current conditions, whereas an earnings-based system generally looks to more stable valuation assumptions.

The fundamental role of an accounting system is to quantify the financial state of a business enterprise through the balance sheet, a statement of assets, liabilities, and equity, and to track the period-by-period changes in that condition through the income statement. In general, a reserve system is at its heart an accounting device that adjusts the flow of accounting income: that is, in general terms, the policy reserve system can be considered a timing mechanism, which determines the emergence of reported earnings on the books of a life insurer.

For life insurance companies, Horn points out

It is perhaps more straightforward to think of the policy reserve system as deferring current income. This approach would define the costs of a given period as actual mortality (less reserves released) plus actual surrender values paid (less reserves released) plus actual expenses paid. The period revenues would then be the excess of gross premiums over valuation premiums, plus actual investment income, less required interest, plus the provision for mortality, surrender benefits, and expenses released from the policy reserve system in the period.¹⁰²

The parameters of the reserve system will determine how profit emerges from the accounting system (e.g., accelerated or deferred). One commentator has observed:

Some would say that "control" of profit recognition by an accounting device sounds a bit suspicious. But any reserve system "controls" the emergence of profit.

¹⁰¹ Redington at 8.

¹⁰² Richard G. Horn, *Life Insurance and the Release from Risk Policy Reserve System*, SOCIETY OF ACTUARIES FINANCIAL REPORTING MONOGRAPH, M-AS99-1 34 (1999).

One cannot argue with the concept of using reserves to control profit recognition unless one is prepared to do away with reserves and make do with cash flow.¹⁰³

In general, there are two forms of adverse (or positive) deviations from expected results: chance variations or statistical fluctuations around the expected experience, and variations in the expected experience itself. The inclusion of a “margin” in the reserve assumptions to provide for the risk of “adverse deviation” of the actual assumptions from those assumed causes the reserve system to recognize profits in proportion to the release of risk for adverse deviations: that is, the profit component of the policy emerges as the risk passes.¹⁰⁴ One commentator has suggested that reserves can be seen as being made up of two components:

The element of the reserve relating to expected values, herein called the “expected value reserve,” represents advanced funding of deferred excess costs, and the other element, herein called a “contingency reserve,” is necessary to protect shareholders, in the case of a stock company, from financial loss that would otherwise result.¹⁰⁵

The benefit reserve will generally be positive (i.e., a liability, as future benefits exceed future premiums), while the expense and profit components will generally, but not always, be negative (i.e., a negative liability or an asset.)¹⁰⁶ The expense component can be analogized to the capitalization and amortization of acquisition costs, as expenses for individual life insurance companies are typically heavier in the early policy years. Note that in a limited or single-pay contract, the expense component will be a liability, as the NPV of gross premiums is zero after the premium payment periods. Pharr points out:

Expense natural reserves are usually negative during the premium-paying period. On a limited-pay policy, however, the expense natural reserve becomes positive near the end of the premium-paying period. This positive amount represents the provision for maintenance-type expenses (and possibly, termination expenses caused by death or lapse) beyond the premium-paying period.¹⁰⁷

¹⁰³ ROBERT POSNAK, GAAP: STOCK LIFE COMPANIES, Ernst & Ernst, 71 (1974).

¹⁰⁴ This is true in a “full GPV” system so long as the margins do not cause the present value of future benefits and expenses to exceed the present value of future premiums. In that event an immediate liability for the excess will be recognized at issue.

¹⁰⁵ Richard G. Horn, *Life Insurance Earnings and the Release from Risk Policy Reserve System, Discussion of Clayton A. Cardinal*, SOCIETY OF ACTUARIES FINANCIAL REPORTING MONOGRAPH M-AS99-1, 36 (1999).

¹⁰⁶ Expense natural reserves are generally negative (i.e., a net asset) during most of a policy’s premium payment period.

¹⁰⁷ Pharr at 103.

American Academy of Actuaries Twenty-Year Term Example

The American Academy of Actuaries Life Reserve Working Group developed examples of the operation of principles-based reserves on a twenty-year term plan, accompanied by a spreadsheet “to assist regulators and interested parties understanding of the Principles-Based Reserve Approach and in particular the impact margins have on the level and emergence of reserves.”¹⁰⁸ The LRWG worksheet demonstrates the impact of margins on various assumptions on the resulting deterministic reserve calculation; it does not demonstrate the impact on stochastic reserve calculations. The reserve patterns illustrated are a direct result of allocating a level percentage of the gross premium to the benefit and expense components. If the reserve system is modified to allocate more of the gross premium to expenses in the early years (e.g., as in a preliminary term reserve system), a different pattern of reserves will emerge. The PBR proposal does not include any allocation of the reserve to components. Thus, the analysis is simply illustrative.

Examples 1–4 examine the emergence of profit from the LRWG examples:

- Example 1 uses the LRWG “best-estimate” assumptions (assuming that the company experience mortality is 100% credible). Example 1 is “theoretical,” in that the reserves are allowed to be “negative” (i.e., create a net asset).
- Example 2 limits Example 1 to a net liability; that is, the reserve is not allowed to be negative.
- Example 3 illustrates the effect of statutory reserves on Example 1.
- Example 4 is based on additional mortality margins, to create a positive first-year liability.

The PBR can be seen to be the net of two items: a benefit reserve, which is always positive, and an expense and profit reserve, which is at all times a net asset. As Example 1 illustrates, the theoretical PBR is “negative” (i.e., an asset) in the first four policy years, until the benefit reserve exceeds the expense asset. In all future years, the PBR is always less than the pure benefit liability because of the effect of the expense and profit reserve component (which serves to offset tax benefit liabilities).

¹⁰⁸ Life Reserves Working Group, *Margin Examples Using a 20-Year Term Plan Based on Male 45, Best Class*, March 2006 PowerPoint Presentation. See www.actuary.org/naic/life.asp.

Trading into the Thicket:
Federal Tax Implications of Principles-Based Reserves

4/19/2007

45

Policy Year	Example 1 -- Emergence of Annual Pre-Tax Profit -- Best Estimate GPV										
	Premiums	Expenses (BOY)	Expenses (EOY)	Death Benefits	Net Cash Flow	Change in Reserve	Interest	Net Profit	Reserve	Benefit Reserve	Expense & Profit Asset
Res. Factor		34%		64%				2%			
ROR	5.8%										
Total	16,593	4,229	(45)	14,101	(1,692)	234	1,926	234	(234)	-	234
1	1,415	3,420	(64)	202	(2,143)	2,276	(133)	-	(2,509)	760	3,269
2	1,316	70	1	275	969	(896)	(74)	-	(1,614)	1,422	3,035
3	1,217	65	1	328	823	(797)	(26)	-	(817)	2,000	2,817
4	1,137	61	1	362	713	(728)	15	-	(89)	2,519	2,608
5	1,063	57	1	383	622	(673)	50	-	583	2,993	2,410
6	999	53	1	489	456	(538)	82	-	1,121	3,340	2,219
7	938	50	1	508	379	(485)	106	-	1,606	3,641	2,035
8	881	47	1	526	307	(433)	126	-	2,040	3,898	1,858
9	836	45	1	554	237	(380)	143	-	2,419	4,104	1,684
10	794	42	1	609	142	(298)	156	-	2,717	4,230	1,513
11	753	40	1	648	65	(233)	168	-	2,950	4,297	1,347
12	715	38	1	733	(57)	(121)	178	-	3,072	4,256	1,185
13	678	36	1	813	(171)	(12)	183	-	3,083	4,110	1,026
14	643	34	1	897	(289)	107	182	-	2,977	3,848	871
15	610	32	1	958	(381)	205	176	-	2,771	3,491	719
16	578	31	1	1,032	(486)	322	164	-	2,450	3,020	570
17	548	29	0	1,090	(572)	425	147	-	2,025	2,448	423
18	519	28	0	1,163	(672)	547	125	-	1,478	1,756	278
19	491	26	1	1,232	(767)	671	96	-	807	942	135
20	463	25	7	1,300	(868)	807	62	-	-	-	-

In Example 1 the present value of premiums can be divided into three components: the present value of benefits, which accounts for 64% of the PV premiums; the present value of expenses, which accounts for 34%; and the present value of net profits, which accounts for 2%. The expected net cash flows discount to zero at 5.8%. If the reserves are established using best-estimate assumptions, and experience emerges in accordance with those assumptions, the operation of the reserve system is such that all of the profits are recognized at issue. Similarly, if the present value of benefits and expenses exceeds the present value of premiums, then the full amount of the loss is recognized at issue. The immediate recognition of the present value of future losses is the reason that gross premium valuations are commonly used in loss recognition calculations. The at-issue surplus is what Redington would label "capitalized surplus," as it represents the present value of future profits. Since there is no future net profit flowing from the reserve system, any adverse deviations would have to be absorbed from this or other surplus.

Example 2 does not permit the net reserve to be "negative," so a reserve does not emerge until the benefit reserve exceeds the expense and profit "asset." In this case the PBR is zero until policy year 5, as the benefit and expense components net. Thus, it defers the recognition of profit, spreading it over the first five policy years. However, once the full reserve is recognized, the emergence of profit is identical to that in Example 1. In effect, the capitalization of expenses is limited to the benefit reserve component.

Treading into the Thicket:
Federal Tax Implications of Principles-Based Reserves

4/19/2007

46

Note that Example 2 produces higher earnings than Example 1, as there is no “negative” interest credited to the expense asset.¹⁰⁹

Policy Year	Example 2 -- Emergence of Annual Pre-Tax Profit -- Best Estimate GPV (Capped)								
	Premiums	Expenses (BOY)	Expenses (EOY)	Death Benefits	Net Cash Flow	Change in Reserve	Interest	Net Profit	Reserve
ROR					5.8%			10.5%	
TOTAL	16,593	4,229	(45)	14,101	(1,692)	-	2,228	457	-
1	1,415	3,420	(64)	202	(2,143)	-	-	(2,143)	-
2	1,316	70	1	275	969	-	-	969	-
3	1,217	65	1	328	823	-	-	823	-
4	1,137	61	1	362	713	-	-	713	-
5	1,063	57	1	383	622	(583)	55	94	583
6	999	53	1	489	456	(538)	82	-	1,121
7	938	50	1	508	379	(485)	106	-	1,606
8	881	47	1	526	307	(433)	126	-	2,040
9	836	45	1	554	237	(380)	143	-	2,419
10	794	42	1	609	142	(298)	156	-	2,717
11	753	40	1	648	65	(233)	168	-	2,950
12	715	38	1	733	(57)	(121)	178	-	3,072
13	678	36	1	813	(171)	(12)	183	-	3,083
14	643	34	1	897	(289)	107	182	-	2,977
15	610	32	1	958	(381)	205	176	-	2,771
16	578	31	1	1,032	(486)	322	164	-	2,450
17	548	29	0	1,090	(572)	425	147	-	2,025
18	519	28	0	1,163	(672)	547	125	-	1,478
19	491	26	1	1,232	(767)	671	96	-	807
20	463	25	7	1,300	(868)	807	62	-	-

Example 3 illustrates the emergence of statutory profits. Statutory reserves are based on the 2001 CSO, male nonsmoker, with a twenty-five-year select period. The pattern of earnings that emerges under the current statutory method results in significant additions to reserves in the early policy years, creating losses in the first seven years, and significant gains in later years as the reserves are released.

The statutory reserves are approximately three times higher than the benefit component of the PBR, and more than five times higher than the net PBR. The conservative valuation assumptions, Redington’s “deeper reservoir,” provide a cushion against adverse deviations in assumptions. The margins are implicit, however, and not based on actuarial judgment.

¹⁰⁹ Since the expense element is reported as a part of a liability, it is a negative amount (i.e., an asset), and the interest component is also negative. Flooring the liability at zero increases the profit, as there is no “negative interest” component on the excess of the expense asset over the benefit liability. In Example 1, where the reserve is allowed to be negative, the benefit reserve does not offset the expense and profit asset until the fifth policy year.

Trading into the Thicket:
Federal Tax Implications of Principles-Based Reserves

4/19/2007

47

Policy Year	Example 3 -- Emergence of Annual Pre-Tax Profit -- Statutory								
	Premiums	Expenses (BOY)	Expenses (EOY)	Death Benefits	Net Cash Flow	Change in Reserve	Interest	Net Profit	Reserve
ROR					5.8%			5.4%	
TOTAL	16,593	4,229	(45)	14,101	(1,692)	-	9,393	7,701	-
1	1,415	3,420	(64)	202	(2,143)	-	(119)	(2,262)	-
2	1,316	70	1	275	969	(3,077)	72	(2,035)	3,077
3	1,217	65	1	328	823	(2,602)	241	(1,538)	5,678
4	1,137	61	1	362	713	(2,163)	378	(1,073)	7,842
5	1,063	57	1	383	622	(1,798)	485	(691)	9,640
6	999	53	1	489	456	(1,405)	569	(380)	11,045
7	938	50	1	508	379	(1,014)	629	(7)	12,059
8	881	47	1	526	307	(801)	667	173	12,860
9	836	45	1	554	237	(498)	689	428	13,358
10	794	42	1	609	142	(215)	694	620	13,573
11	753	40	1	648	65	101	701	868	13,472
12	715	38	1	733	(57)	446	696	1,085	13,026
13	678	36	1	813	(171)	704	674	1,206	12,322
14	643	34	1	897	(289)	907	637	1,256	11,415
15	610	32	1	958	(381)	1,161	592	1,373	10,254
16	578	31	1	1,032	(486)	1,458	534	1,506	8,795
17	548	29	0	1,090	(572)	1,763	461	1,652	7,033
18	519	28	0	1,163	(672)	2,070	372	1,770	4,963
19	491	26	1	1,232	(767)	2,366	269	1,868	2,597
20	463	25	7	1,300	(868)	2,597	151	1,879	-

Example 4 illustrates the effect of the addition of mortality margins to the reserve calculation, increasing the NPV of expected death benefits by 43% and margins as a percentage of gross premiums by almost 20% of premium. (Note that the actual policy cash flows have not changed, only the margins assumed in the PBR.) In Example 4 the reserves are always positive, and an initial reserve is required to be established at issue. The reserves resulting from PBR Model Regulation can be characterized as a form of a generalized “release-from-risk” reserve system, where profits emerge in part as the margins for adverse deviations are released.

Treading into the Thicket:
Federal Tax Implications of Principles-Based Reserves

4/19/2007

48

Policy Year	Example 4 -- Emergence of Annual Pre-Tax Profit -- Additional Margins										
	Premiums	Expenses (BOY)	Expenses (EOY)	Death Benefits	Net Cash Flow	Change in Reserve	Interest	Net Profit	Reserve	Benefit Reserve	Expense & Profit Asset
Res. Factor	34%			92%		-26%					
ROR	5.8%					1.0%					
TOTAL	16,593	4,229	(45)	14,101	(1,692)	(2,944)	5,479	842	2,944	-	(2,944)
1	1,415	3,420	(64)	202	(2,143)	(3,776)	56	(5,862)	831	1,146	314
2	1,316	70	1	275	969	(1,062)	121	28	1,893	2,185	292
3	1,217	65	1	328	823	(1,000)	174	(4)	2,893	3,164	270
4	1,137	61	1	362	713	(922)	222	14	3,815	4,065	250
5	1,063	57	1	383	622	(832)	264	54	4,647	4,878	231
6	999	53	1	489	456	(689)	301	67	5,337	5,548	212
7	938	50	1	508	379	(570)	328	137	5,906	6,100	194
8	881	47	1	526	307	(449)	348	206	6,356	6,532	176
9	836	45	1	554	237	(329)	361	269	6,684	6,844	159
10	794	42	1	609	142	(208)	366	299	6,893	7,035	142
11	753	40	1	648	65	(93)	373	345	6,986	7,112	126
12	715	38	1	733	(57)	72	377	392	6,915	7,025	110
13	678	36	1	813	(171)	208	373	409	6,706	6,801	95
14	643	34	1	897	(289)	327	361	399	6,379	6,459	79
15	610	32	1	958	(381)	482	344	445	5,898	5,962	65
16	578	31	1	1,032	(486)	725	318	558	5,173	5,223	50
17	548	29	0	1,090	(572)	945	282	655	4,228	4,264	36
18	519	28	0	1,163	(672)	1,177	234	739	3,051	3,072	21
19	491	26	1	1,232	(767)	1,413	174	820	1,637	1,645	8
20	463	25	7	1,300	(868)	1,637	103	872	-	-	-

In commenting on the pattern of reserves for the Twenty-Year Term examples, the LRWG observed:

While the illustrated reserves under PBA [principles-based approach] were generally lower than current formulaic reserves, concerns were expressed because the early duration reserves under the PBA were higher than current formulaic reserves. Upon review, the issue turns on the level of margin included in each reserving assumption under the PBA, and the way those margins affect the reserve. Under the current formulaic net premium approach, the effect of reserve margins is dampened in early durations because any margin that increases the present value of benefits also increases the present value of net premiums. Under the PBA, the effect of reserve margins is not dampened in this way because gross premiums replace net premiums in the calculation, and gross premiums do not change with reserving assumptions. So any margin in reserving assumptions increases the reserve in early durations to a greater degree under PBA than under the current formulaic approach.¹¹⁰

Where there is “loss recognition” at issue because of the addition of margins, the reserve at the end of the first year is generally much lower than the “initial” reserve just before

¹¹⁰ Report on Modeling of Principles-Based Reserves for 20-Year Level Premium Term Insurance from the American Academy of Actuaries’ Life Reserves Work Group (March 2006).

issue. This reflects the payment of acquisition expenses, which reduces the present value of future expenses that must be included in the reserve at the end of the first year. In many cases the decline can result in the minimum reserve (the cash value floor) coming into play. With respect to the setting of margins, the LRWG observed that for policies that are expected to produce a reasonable profit, margins that equate the present value of benefits and expenses with the present value of premiums "would be most consistent with the market price for risk."¹¹¹

Unlocking of Assumptions

There are similarities between the Model Regulation Method and GAAP for traditional life insurance products set forth in Statement of Financial Accounting Standards No. 60 (SFAS 60) issued by the FASB. These principles were first published in Audits of Stock Life Insurance Companies (Audit Guide) issued by the American Institute of Certified Public Accountants (AICPA) in 1972 and later codified. Unlike the "integrated" approach under the Model Regulation, the mechanisms by which matching of revenue and expense is accomplished under SFAS 60 include the deferral and amortization of certain (deferrable) policy acquisition costs (DAC) in relation to premium revenue. DAC is reported as a balance sheet asset, representing the outstanding balance of deferrable acquisition costs. FAS 60 provides net level premium (prospective) reserves for policy benefits, including death and surrender benefits, based on best-estimate assumptions with provisions for adverse deviation. However, FAS 60 is a "passive" valuation system with the initial assumptions "locked in" unless they are changed as the result of a loss recognition event or a sale of business.¹¹² By contrast, the Model Regulation describes an "active" valuation system based on an annual resetting, or "unlocking," of assumptions. Under the "active" valuation system described in the Model Regulation, the division of life insurance company assets into liabilities and surplus will be different from that resulting from the current system of statutory accounting.

As a result, the emergence of profit under a GPR system is fundamentally different from that under a net level reserve system. A key characteristic of the GPR system is that the present value of future profits is recognized at issue.¹¹³ The initial valuation of a block of policies "capitalizes" the difference between the pricing assumptions and the valuation assumptions, while subsequent valuations capitalize the difference in valuation assumptions: that is, a GPV system effectively "fronts" the

¹¹¹ Id.

¹¹² In cases where loss recognition does not apply, some companies interpret FAS 60 to indicate that lapse rates, if significant, can be unlocked with a resulting set of new DAC and reserve factors.

¹¹³ For example, an embedded value calculation, which has many elements in common with a gross premium valuation, is intended to show the present value of all amounts that will be distributable to shareholders based on best-estimate assumptions. The present value of gains or losses from the sale of a block of policies will be recognized in the year in which the policies are sold.

present value of gains and losses. A continual “unlocking” of assumptions “capitalizes” the effect of the assumption change (either positive or negative) instead of releasing the differences as they are realized against the original valuation assumptions (“locked in”). Redington characterizes this as an “active” valuation policy, in contrast to a “passive” valuation policy where valuation assumptions are unchanged once established. A passive valuation policy provides a more consistent pattern of income and is more appropriate to a valuation system focused on the emergence of earnings. An active valuation system is more appropriate to solvency. In this respect, Redington observes, “when we turn to the question of solvency there is no word to be said in favor of a passive policy; it is only an active policy, paying full regard to existing (and estimated future) experience that has any significance.”¹¹⁴ Commenting on the effect of a change in valuation assumptions, Redington notes:

In my opinion, it is essential to keep a clear distinction between two aspects of surplus, which for convenience I shall call “revenue surplus” and “capitalized surplus.” An explanation of these terms is best given by an illustration. Let us suppose that the mortality experience, while showing the usual variations from year to year, discloses a declining trend over a long period. A time may come when we decide that the basis of mortality employed in valuation in the past must be lightened. Although the facts move gradually and certainly, the decision is both sudden and speculative. The change to a lighter mortality basis in valuation will have an immediate effect on surplus in the year in question—let us suppose a release. The release should be described as capitalized surplus. It is due, not to the favourable experience during the inter-valuation period, but to the decision to change the valuation basis for future expected experience, thus anticipating surplus that would otherwise have accrued in the future.¹¹⁵

Conceptually the deterministic reserve consists of five components, while surplus consists of both “revenue” and “capitalized” amounts,” as shown in the table below:

1. Best Estimate Benefit Reserve—a reserve for policy benefits computed using best-estimate assumptions; it is always positive (i.e., a liability)
2. Best Estimate Nonguaranteed Element Reserve—a reserve for the present value of nonguaranteed policy elements, including dividends and excess interest; it is generally positive

¹¹⁴ Redington at 13. He goes on to effectively describe the philosophy underlying the statutory reserve system that has been in place in the United States, noting, “The broad picture which emerges from these considerations is that a passive valuation system is desirable in the interests of equity, and the maintenance of central reserve funds at a reasonable level is an economical way of holding additional reserves which may be required to demonstrate solvency in changing conditions.”

¹¹⁵ Redington at 11.

3. Best Estimate Expense Reserve—a reserve for policy expenses computed using best-estimate assumptions; it is generally, but not always, negative (i.e., an asset)
4. Margin for Adverse Deviations—the excess of the deterministic reserve computed using prudent best-estimate assumptions over the best estimate reserve
5. Excess Cash Value Reserve—the excess of the cash value floor over the deterministic reserve computed using prudent best estimates
6. Excess Stochastic Reserve—the difference between the stochastic reserve and the deterministic reserve
7. Capitalized Surplus—borrowed from Redington, it is the surplus created (or destroyed) from differences in valuation assumptions, (i.e., the “active” element of the valuation system)
8. Revenue Surplus—also borrowed from Redington, it is the surplus that flows from the “passive” operation of the valuation system, typically from the release of (past) margins.

Paid-in Capital (+)	Free Surplus (+) or (-)
Revenue Surplus (+)	
Capitalized Surplus (+) or (-)	Required Surplus (+)
Excess Stochastic Reserve (0) or (+)	Excess Stochastic Reserve (0) or (+)
Excess Cash Value Reserve (0) or (+)	Deterministic Reserve (0) or (+)
Margin for Adverse Deviations (+)	
Best Estimate Deterministic Expense Reserve (-) or (+)	
Best Estimate NGE Reserve (+)	
Best Estimate Deterministic Benefit Reserve (+)	

Part III: Federal Tax Issues in the Implementation of Principles-Based Reserves

Treading into the Thicket

It is clear that changes are needed, and are indeed coming, in the way in which statutory reserves are computed. Thus, some measure of peaceful coexistence must be found between the state insurance commissioners, whose “object is to exercise abundant caution to maintain the [life insurance] companies in a secure financial position,” and the tax authorities, who view the deduction of life insurance reserves “not particularly in their bearing upon the solvency of the company, but as they aid in determining what part of gross income ought to be treated as net income for purposes of taxation.”¹¹⁶

While some might argue it is better to wait for the Treasury to have its say with respect to the tax treatment of principles-based reserves, answers to some of the questions posed above seem fairly obvious, given the long history of the tax treatment of life insurance reserves, while other issues seem to cry out for guidance. Thus, the authors now set off to tread into the thicket, or perhaps throw themselves into the briar patch, in attempting to answer the questions posed.

Do CRVM-PBR reserves qualify as life insurance reserves under section 816 to determine qualification as a life insurance company?

Under section 816(b), a life insurance reserve must satisfy the following four criteria:

1. Held with respect to a life insurance, annuity, or noncancellable (or guaranteed renewable) accident and health contract
2. Held to liquidate or satisfy future unaccrued claims
3. Computed or estimated on the basis of recognized mortality or morbidity tables and assumed rates of interest
4. Required by law.

The Revenue Act of 1909 allowed a deduction for “the net addition, if any, required by law to be made within the year to reserve funds.” In *McCoach* and similar cases, the Supreme Court established a standard that “the net addition required by law to be made within the year to reserve funds does not necessarily include whatever a state official may so designate; that reserve funds has a technical meaning . . . as something reserved from premiums to meet policy obligations at maturity.”¹¹⁷ In *Maryland Casualty* the Supreme Court provided a further definition of the term “reserve,” which still serves the basis for the definition of “life insurance reserves” found today in section 816.¹¹⁸

¹¹⁶ *McCoach v. Insurance Company of North America*, 344 U.S. 585, 589 (1917).

¹¹⁷ *Edwards v. New York Life*, 271 U.S. 109, 119 (1926).

¹¹⁸ *Maryland Casualty v. United States*, 251 U.S. 342, 350 (1920).

It could be argued that PBR satisfy at least some of the section 816 criteria. They would be held with respect to the required types of contracts, and they would be required by law. However, given both the history of the development of the technical definition of life insurance reserves, and the Service's rulings position with respect to gross premium reserves, the authors believe it is highly unlikely that either the deterministic or stochastic elements of the PBR will qualify in their entirety as life insurance reserves under section 816. Thus, the key challenge is to determine what might qualify, given that it is in the interest of the Treasury that life insurance companies continue to be taxed under the part I section of Subchapter L. Some element of PBR may be used to measure qualification under 816, requiring disclosure of elements of the reserve. Alternatively, the Treasury may revisit proposed Regulation 1.801-4(g) and require revaluation of PBR as "traditional" CRVM.

What is the definition of CRVM under section 807 as it applies to principles-based reserves?

The proposed CRVM PBR methodology is not a net premium valuation method, but uses actual gross premiums received from the policyholder as revenue in the cash flow projection. Both the stochastic reserve and deterministic reserve calculations require the use of cash flow models, which project the premiums, benefits, expenses, and other applicable items to be used in the reserve calculations. In addition, the model is to reflect the impact of all material product features, including both the guaranteed and nonguaranteed elements of the policies. Nonguaranteed elements include debits or credits to a policyholder's account value, policy benefits, or consideration that may be adjusted at the discretion of an insurance company, including policyholder dividends for participating policies.

Section 807(d) defines the three critical elements that go into the computation of Federally prescribed reserves: the methodology (CRVM), the interest rates (the greater of the applicable Federal interest rate or the prevailing state assumed rate), and the mortality table (the prevailing Commissioners' Standard Table). The PBR Draft Model Regulation describes the principles-based reserve system as "the Commissioner's Reserve Valuation Method (CRVM) for policies to which this regulation is applicable." If, as the legislative history suggests, Congress adopted "the general guidelines recommended by the NAIC and adopted by a majority of states" to "avoid State-by-State variations," then the tax authorities could well conclude that the CRVM PBR is a net premium method. A literal reading of section 807(d) would lead to the conclusion that if the NAIC were to adopt the Model Regulation in its present form, it would be the basis for computing the Federally prescribed reserve. However, the method proposed in the Model Regulation is a significant departure from the generally accepted actuarial definition of the current CRVM method.

Robbins and Bush point out

Under the basic rules of statutory construction, Congress is presumed to have employed terms according to their legal significance at the time of the enactment of the particular provisions in which they are used. Section 807(d)(3)(B) refers to

CRVM and CARVM as of the date of issuance of the contract, thus lending support to the idea that the NAIC is free to change the definition. It is clear, however, that the reference to CARVM or CRVM is meant to refer to changes in interpretation or application of CARVM or CRVM rather than to the basic concept that underlies these terms. That is, if the NAIC designates a reserve as CARVM or CRVM and the computation of that reserve is consistent with such designation, the designation is respected under the Code. If there is a “gross misuse” of the designation, state law does not control. For example, if the NAIC were to adopt a definition of CRVM that was essentially a net level premium reserve, it is likely that it would be a “gross misuse” of the term as it was understood in 1984.¹¹⁹

Dealing with the characterization of an organization as a building and loan association, which was not taxed, or as a bank, which was taxed, Justice Holmes said, “They must be taken to accept what the States are content to recognize unless there is gross misuse of the name. . . . Very possibly the company has strained its privileges to the near limit, but we are not prepared to condemn the nomenclature adopted by the State.”¹²⁰

In drafting the Model Regulation, did the NAIC “grossly misuse” the term “CRVM” in the Model Regulation or simply strain it to the “near limit”?¹²¹ The answer may depend on how much authority Congress conferred on the NAIC. Read broadly, the answer may be a great deal, but moving from a narrow “technical” net premium reserve to a reserve incorporating not only future benefits but also future expenses and dividends (broadly defined under section 808) as well as the present value of future profits and losses that emerge from a gross premium valuation method may be asking too much, and would seem on its face to be inconsistent with both sections 808 and 811.¹²² While the proposed system may better reflect the realities of the underlying liabilities, it remains focused on the balance sheet. Within the constraints of the cash surrender value as the minimum reserve, the proposed CRVM-PBR system flows all of the future gains and losses under a block of policies into income in the period in which they arise. This is fundamentally inconsistent with accrual accounting under the Code as expressed by the “all events” test, which restricts the timing of the recognition of deductions.

Some might argue that characterization of PBR as CRVM is irrelevant because of the circularity inherent in the section 807(d)(3) definition of reserve method. For life insurance contracts, the tax reserve method is “CRVM in the case of contracts covered by CRVM.” For other contracts, the method is “the reserve method prescribed by the

¹¹⁹ ROBBINS & BUSH at 93 (citations omitted).

¹²⁰ United States v. Cambridge Loan & Building Co., 278 U.S. 55, 59 (1928).

¹²¹ “How many legs does a dog have if you call the tail a leg? Four; calling a tail a leg doesn’t make it a leg.” Abraham Lincoln.

¹²² Section 811(a) provides that “to the extent not inconsistent with [an accrual method of accounting] or any other provision of this part, all such computations shall be made in a manner consistent with the manner required for purposes of the annual statement approved by the National Association of Insurance Commissioners.”

National Association of Insurance Commissioners which covers such contract (as of the date of issuance).” Thus, it may be the prescription of the method by the NAIC and not the label applied that may be relevant. In practice, characterization of PBR as other than CRVM may make it easier for Treasury to accept all or some of the elements of PBR to be treated as FPR under section 807(d).

What effect does the inclusion of factors other than interest and mortality have on the status of the reserves? What is the effect of the introduction of nonguaranteed elements and expenses?

One view is that tax reserves are fully defined by the Federally prescribed reserve in section 807(d). Another view is that courts have generally permitted factors other than interest and mortality to be recognized in the calculation of life insurance reserves, but have tempered that view by adding: “We do not believe that Congress intended to permit an insurance company to exclude any amount it saw fit from its taxable income by creating reserves.”¹²³ Thus, some factors, including lapse rates, appear to be permissible in the calculation of tax reserves, but it may be tempered by the admonition in *Union Mutual* concerning the reasonableness of the assumptions, as well as the commentary in Revenue Ruling 77-451 and GCM 37209 that there is “no indication in the Code or the legislative history that a life insurance reserve computation can also take into account factors which are unrelated to the risk, such as the business experience or expense savings of the company.”¹²⁴ The use of additional factors in the calculation of tax reserves may also result in differences in reserve deduction among taxpayers, depending on the assumptions. At a minimum, guidance is needed from Treasury as to what additional factors may be considered and what limitations may be placed on the factors, in establishing tax reserves.

As discussed in Part I, *Maryland Casualty* established the principle that reserves were funds “set apart as a liability in the accounts of a company” to pay future claims, but that “provision for the payment of ordinary expenses was not intended to be provided for and included in ‘reserve funds’ as the term is used in the acts of Congress.”¹²⁵ Regulations 1.801-4(e)(5) would also appear to specifically exclude expenses from inclusion in reserves. Like the basic reserve definition, the language originates in Justice Clarke’s opinion in *Maryland Casualty*. Defining “reserve,” the opinion goes on to note that “it has nowhere been held that ‘reserve’ in this technical sense, must be maintained to provide for the ordinary running expenses of a business, definite in amount, and which must currently be paid by every company from its income if its business is to continue, such as taxes, salaries, reinsurance, and unpaid brokerage.”¹²⁶

¹²³ *Union Mutual Life Insurance Company v. United States of America*, 570 F.2d 382, 397 (1978).

¹²⁴ 1977-2 C.B. 224; 1977 WL 46162.

¹²⁵ *Maryland Casualty*, 251 U.S. 342, 351-2 (1920).

¹²⁶ 251 U.S. 342, 350 (1920). Compare to 1.801-4(e)(5), which excludes “reserves required to be maintained to provide for the ordinary operating expenses of a business currently paid by every

It has been observed that so long as future expense premiums exceed future expenses, the consideration of expenses will reduce reserves.¹²⁷ This is true, although the effect of expenses on the PBR will vary, depending on the pattern of premiums and expenses:

1. Where future expense premiums exceed future expenses, which is typically the case for level premium policies, the “expense component” of the PBR will generally reduce the reserve. In effect, a negative liability (i.e., an asset) is created as the reserve system capitalizes and amortizes early-year acquisition costs.
2. Where expenses are levelized with respect to expense premiums (i.e., a constant percentage of premiums), the expense component of the PBR has no effect.
3. Where future expenses exceed future expense premiums, as in a single premium or limited payment policy, the expense component will increase the PBR.

It should be noted that, because of the recognition of some portion of future gross premiums as an offset, the expense component of PBR is not entirely analogous to a reserve for future expenses. However, to meet Reg. 1.801-4(e)(5) it may be necessary to show that no part of the reserve represents a reserve for future unaccrued expenses, or that some portion of the PBR is nondeductible. Others have suggested that expenses could be recognized in PBR to the extent that they decrease reserves. This would create a “heads I win, tails you lose” effect in favor of the Treasury.

One effect of the PBR system is to incorporate an expense-capitalization element into the statutory reserves, creating the likely result of a double capitalization of acquisition costs. It could be argued that such double-capitalization already exists because of the expense allowance under the CRVM method, but the PBR system would directly capture an insurer’s acquisition costs. While the Treasury might not object to the “voluntary” payment of additional taxes, it might be worth noting that in 1990 Congress rejected a GAAP-type capitalization system for acquisition costs, adopting instead the proxy system in section 848:

As described in the House Report regarding current section 848, the committee carefully considered such an amortization method but rejected it for several reasons. The committee determined that it would be extremely difficult to provide well-defined rules that would provide certainty and would provide uniform treatment of similarly situated taxpayers. The committee was also concerned that such an amortization method would be inordinately complex. In addition, it

company from income if its business is to continue, such as taxes, salaries and unpaid brokerage.”

¹²⁷ The Model Regulation itself does not allocate gross premiums to various components of PBR. The discussion assumes an “expense premium” as a level percentage of the gross premium.

would impose costly recordkeeping burdens on many insurance companies and would cause difficult administrative and enforcement problems.¹²⁸

By netting the expense and benefit components, the PBR Model Regulation may have created a “non-level playing field” between plans with cash values and those with no cash values. In this respect the GAAP practice of separating the benefit and expense components of the reserve into asset and liability components might prove more efficient for taxation, as well as allow a capitalization benefit for permanent policies in the statutory reserves. At a minimum, separation of the benefit (reserve) and the expense (asset) components of the reserve would remove the effect of double capitalization from the statutory cap. This may be another argument for separation of the reserve components in the annual statement.

Are the stochastic reserves likely to be considered nondeductible “solvency” or contingency reserves?

Historically deductions have been allowed for “technical actuarial reserves” and not “solvency reserves.” Values based on a CTE methodology capture only the “tail” of the distribution, not the expected value. Moreover, uniformity by company has been a long-term goal of the various methods of reserve taxation.¹²⁹ The description of the stochastic element of the reserve might lead some to conclude that it was a contingency reserve or “solvency reserve,” but not a life insurance reserve. In addition, the “extra reserves” resulting from the allocation procedure (whereby the individual policy-level reserve is equal to the deterministic reserve plus an allocation of the excess of the stochastic reserve over the deterministic reserve as a percentage of the deterministic reserve) has been consistently characterized by the Service and the courts as not meeting the definition of a life insurance reserve. Similarly, any “additional reserves” added to potentially qualify for an exemption to the stochastic reserves requirements are also likely to be treated as a “solvency” reserve.

The fact that the stochastic reserve by its nature is based on an average of a percentage (depending on the placement point for the contingent tail expectation) of the “worst case” scenarios, and not on the expected value of an amount “set aside to mature or liquidate . . . future unaccrued claims,” makes the stochastic reserves (or at least the excess of the stochastic reserve over an “embedded” life insurance reserve) appear to be a “solvency reserve” as the term has been applied in cases and rulings, particularly Revenue Ruling 67-435.¹³⁰

¹²⁸ H.R. REP. 101-881 October 16, 1990, 2300.

¹²⁹ For example, section 818(c), enacted in the 1959 Act, was arguably an effort to provide an equivalent reserve deduction among companies. It permitted companies holding modified reserves an approximate recalculation to a net level basis in determining deductible reserve amounts.

¹³⁰ 1967-2 C.B. 232.

While the “technical actuarial reserve” may have been broadened since the enactment of the definition of reserves in the Revenue Act of 1942, it is still a useful concept to illustrate the premise that a deduction for the increase in a reserve is only permitted if it pertains to life insurance benefits.

What is the effect of company-specific mortality assumptions?

Under the PBR Model Regulation, company-specific mortality is used in reserves to the extent that it is credible. Valuation mortality is based on the current Commissioners’ Standard (CS) mortality table used for the class of business being valued, based on company experience, adjusted for both the credibility of the experience and the addition of a margin. On its face, this approach is inconsistent with the current view of the Service as it has been expressed in Technical Advice, which interprets the statute as only permitting adjustments to the prevailing table for “risks not otherwise taken into account.”

Rather than mandating minimum mortality standards, the Model Regulation permits the use of company experience, based on the availability of relevant company experience and its degree of credibility, to establish assumptions for risks over which the company has some degree of control or influence. It provides for the use of assumptions, set on a prudent best-estimate basis, that contain an appropriate level of conservatism that when taken together with the methods utilized recognizes the solvency objective of statutory reserve reporting under “moderately adverse” conditions. For risks that the company has some degree of control over (e.g., mortality), assumptions should reflect a blend of company experience and prescribed assumptions (or methods for setting the assumptions), with the relative weightings of each dependent on the credibility of company experience.

The proposal would modify the current system of standard tables promulgated by the NAIC.¹³¹ The valuation mortality rates used in the reserve calculation will equal the current CS mortality table for the class of business being valued based on company experience, adjusted for the credibility of the experience. The company’s actual mortality data are to be used in determining experience mortality curves, although industry experience curves can be used where little or no experience exists. The effects of risk selection and underwriting practices not reflected in the underlying experience may also be reflected when supported by relevant published medical and clinical studies. The company tables are adjusted for “credibility” by blending the insurer’s company-specific experience mortality curves with Industry Tables. (The currently specified industry mortality table is the 2001 Valuation Basic Table or other tables adopted by the NAIC for this purpose adjusted in a manner approved for use by the NAIC to reflect the most recent Society of Actuaries intercompany study approved for use by the NAIC.)

¹³¹ There are two types of tables that would be approved by the NAIC: Commissioners’ Standard (CS) tables and Industry Mortality Tables. The CS tables are valuation tables (e.g., the 2001 CSO) that include valuation margins. Industry Tables, and associated adjustments, reflect experience prior to the addition of margins. These tables, as well as adjustments to the Industry Tables for recent industry experience, will also need to be approved for use by the NAIC.

The process outlined in Actuarial Guideline PBR-VAL is as follows:¹³²

- a. Develop experience mortality rates based on either a company's own available experience or other relevant experience.
- b. Using industry mortality experience, blend the experience mortality [with an Industry Mortality Table] to reflect the credibility of the experience
- c. Adjust the mortality rates to include a reasonable margin
- d. Adjust the valuation mortality rates produced in step (c) for impaired lives or to reflect any reasonable expectation that policyholder behavior will likely lead to mortality results which vary from underlying valuation table as determined in step (c), for example, to reflect increased mortality due to high lapses following a significant increase in policyholder costs
- e. Choose the CS table that produces an aggregate seriatim reserve closest to, but not less than, the aggregate seriatim reserve calculated using the adjusted experience mortality curves produced in (d).

Under the Model Regulation, the concept of the prevailing commissioners' table will change, as individual state adoption will be replaced by NAIC promulgation of tables. Section 807(d)(5)(A) defines the term to mean "the most recent commissioners' standard tables prescribed by the NAIC which are permitted to be used in computing reserves . . . under the insurance laws of at least 26 States when the contract was issued." If the Standard Valuation Law is changed to allow PBR, then new tables may literally be permitted in all states upon adoption by the NAIC. Further, the expectation is that, ultimately, a large number of approved tables will be available, and frequently updated with emerging intercompany experience. In setting reserves, a company will select that NAIC table that best "maps" to their blended mortality curve.

There are two Federal tax issues related to the choice of mortality tables. One relates to the definition of "recognized mortality table" under section 816, while the other is the definition of "prevailing commissioners' standard tables" under section 807. The section 816 requirement dates back to the codification of the reserve definition in the Revenue Act of 1942.¹³³ However, the term "recognized mortality table" was never defined in the Code or in Regulations. GCM 33183 suggested a rule that a "mortality or morbidity table which is based upon actuarial principles, i.e., the giving of mathematical values to the probabilities of death or disabilities of death or disability through the

¹³² *Actuarial Guideline PBR-VAL: Determining Valuation Assumptions for Principles-Based Life Insurance Products*, December 2006 Draft, www.naic.org.

¹³³ Although the House version of the bill provided that the reserves had to be based on "recognized experience tables," the Senate version, which was enacted, changed the requirement from recognized experience tables to "recognized mortality or morbidity tables" to eliminate any possibility of excluding reserves that were based on sound tables that were not compiled from actual experience. See H.R. REPT NO. 2333, 77TH CONG., 1ST SESS. (1942), 1942-2 C.B. 372, 454, and S. REPT NO. 1631, 77TH CONG., 2ND SESS. (1942), 1942-2 C.B. 504, 612.

application of the laws of probability to valid mortality or disability statistics or data will be considered to be recognized for purposes of section 801(b)(1)(A)."¹³⁴ GCM 37594 adds that "the test forces the taxpayer to project scientifically the probabilities of death and disability."¹³⁵ It goes on to say that a multiple of a mortality table "constitutes the appropriate basis for computation of net valuation premiums and reserves whenever a group of lives can be expected to experience mortality equal to a percentage or multiple of a standard table," noting "the committee reports underlying congressional adoption of the term 'recognized' in the 1942 Act appear to encompass 'experience' in the determination of "recognized mortality tables." However, it also cautions that "recognized tables are by their nature theoretical and tabular," and "we have real trouble concluding that a 'recognized' mortality table could be based on the actual experience of the business sold."

However, even if company experience is recognized under section 816, it does not necessarily follow that company-specific experience can be used to compute deductible reserves under section 807. The Federally prescribed reserve requires the use of the prevailing commissioners' standard tables for mortality and morbidity adjusted as appropriate to reflect the risks, such as substandard risks, incurred under the contract, which are not otherwise taken into account.¹³⁶ Under section 807(d)(5), reserve mortality is based on the prevailing commissioners' standard tables defined as the most recent commissioners' standard table prescribed by the NAIC that is permitted to be used in computing reserves for that type of contract under the insurance laws of at least twenty-six states when the contract was issued. For many years the 1980 CSO was the prevailing commissioners' standard table.¹³⁷ Since its adoption by the NAIC in December 2002, the 2001 CSO is now the most recent standard table prescribed by the NAIC. It became the prevailing table in July 2004 after adoption by twenty-six states.

In technical advice memoranda, the Service has considered circumstances under which an insurer may adjust the underlying mortality table. In TAM 200416009, the Service held that an insurer "may not adjust the applicable mortality table in connection with its immediate and supplementary annuity contracts." The Service observed that the company "did not perform any study or analysis that would identify a characteristic of its annuitant population associated with greater risk or a characteristic not identified with the characteristics of the mortality table pool in general," and "the only analysis performed by the Taxpayer was an analysis of mortality." The conclusion was based on the argument that the proposed adjustments to the table were for risks incurred that were taken into account in computing the applicable prevailing commissioners'

¹³⁴ 1966 WL 15822.

¹³⁵ 1978 WL 43736.

¹³⁶ Section 807(d)(2)(C) provides that an appropriate adjustment may be made to the tables to reflect risks (such as substandard risks) incurred under the contract that are not otherwise taken into account. *See also* Regs. 1.807-1(b).

¹³⁷ Rev. Rul. 87-26, 1987-1 C.B. 158, defined the Commissioners' 1980 Standard Ordinary male or female table, as appropriate, without select factors as the prevailing table.

standard mortality table and, therefore, were not risks “incurred under the contract, which are not otherwise taken into account.” The Service took the view that in order to adjust a mortality table, an insurer must “show that its policyholders have risk characteristics that differ from the typical risk characteristics of the population” measured by the underlying mortality table (examples being poor health, living in a dangerous country, or not underwritten) and that the table does not take these atypical risk characteristics into account.¹³⁸ In an earlier TAM the Service permitted an insurer to adjust the 1964 Commissioners’ Disability Tables (1964 CDT), where “after an extensive study of the disability risks, an independent actuary advised the taxpayer that the experience data which served as the basis for the table differed significantly from the disability benefit provisions in Taxpayer’s policies.”¹³⁹

Section 807(d)(5)(E) provides if there are two or more tables, or options under one or more tables, which are “prevailing,” then the table that “generally yields the lowest reserves” is to be used. This determination is made on an industry-wide basis. How that will be done in the multitable environment anticipated by the Model Regulation remains to be determined. It may require a strengthening of the tie between company experience and the industry tables used to compute reserves.

What is the prevailing state assumed rate?

In determining the Federally prescribed reserve for a life insurance contract, section 807(d)(4) mandates an interest rate, determined at the time the contract is issued, equal to the greater of (1) the AFIR or (2) the “prevailing State assumed interest rate” (PSR). The AFIR is published annually by the IRS, computed as a five-year average of the Federal midterm rates. The PSR is the “highest assumed (valuation) interest rate permitted to be used in computing reserves for the contract under the insurance laws of at least twenty-six states at the time the contract is issued.

The Model Regulation contemplates the use of a Treasury yield curve in the projection of asset cash flows and net investment earnings for both starting assets and reinvestment assets. The path of Treasury rates used to determine the deterministic reserve will begin with the market yield curve on the valuation date and grade to an ultimate yield curve derived from a historical distribution of Treasury rates. Earned rates, which are used to discount reserves, are based on a projection of net investment earnings, using returns from an initial asset portfolio and a modeled reinvestment strategy. For the stochastic scenarios, Treasury rates will be modeled using an interest rate generator, provided by, or applying, parameters specified by, the NAIC.

Despite the changes outlined in the Model Regulation, the NAIC will still need to produce a valuation-type interest rate, as the standard nonforfeiture law defines minimum cash surrender values in terms of an interest rate that is equal to “one hundred twenty-five percent (125%) of the calendar year statutory valuation interest rate for such policy as defined in the standard valuation law, rounded to the nearer one-

¹³⁸ TAM 200416009 (December 15, 2003).

¹³⁹ TAM 9251005 (September 9, 1992).

quarter of one percent ($\frac{1}{4}$ of 1%).” Thus, even when the valuation rate is delinked from the nonforfeiture rate, the NAIC will still be required to compute and publish the assumed state interest rates.¹⁴⁰ Even were the NAIC to discontinue the PSR, the AFIR would still be available.

What are the implications of including margins in the valuation assumptions?

It can be expected that the relative conservatism in assumptions will vary from company to company, and with it the ability of companies to influence the level of tax reserves, particularly in those instances where reserves are set by the statutory cap. Principles-based reserves are to be computed using “best-estimate” assumptions, with margins added to each “risk factor.” The best-estimate assumption is “the actuary’s expectation of future experience for a risk factor given all available, relevant information pertaining to the assumption being estimated and set in such a manner that there is an equal likelihood of the actual value being greater than or less than the expected value.” If reliable and credible, company experience is used to establish the best-estimate assumptions. To the extent that company experience is not available or credible, industry experience or other data can be used to establish the best-estimate assumption, making modifications as needed to reflect the actuary’s expectation of the risk. Each risk factor has a “margin” to provide for “adverse deviations and estimation error as a result of influences which the actuary does not anticipate.” The margin does not take into account the possibility of catastrophe or other major adverse deviations, which are “implausible in usual operations.”

From a tax perspective, margins are problematic in two respects. First, as noted above, the “best-estimate” assumptions represent the expected value of policy benefits and expenses, while the effect of the margins is to create a “contingency reserve,” which has historically not been deductible. Second, under the gross premium valuation method, the effect of the margins is to create an immediate deduction (at issue) for the difference between the “best-estimate” reserves and the reserves with margins included. In analyzing the sample Twenty-Year Term reserves, the LRWG commented, “Upon review, the issue turns on the level of margin included in each reserving assumption under the PBA.” That is the case in tax as well. The fundamental question is whether a reserve that includes an express or implied provision for adverse deviation, is a deductible insurance reserve, or is instead a nondeductible solvency reserve. GCM 37594 notes the Service’s view that “we do not believe that mere solvency reserves, whether or not directly or indirectly based on mortality tables, and whether or not required by state

¹⁴⁰ The prevailing state rate is also needed for the calculations under the pro-ratio rules. Section 812 provides the mechanism to calculate the life insurance company’s and policyholders’ respective shares of net investment income. Revenue Ruling 2003-120 (2003-2 C.B. 1154) indicates that required interest under section 812(b)(2)(A) equals the sum of products obtained by multiplying (1) the mean of the beginning-of-year and end-of-year reserves under section 807(c)(1)-(6) (other than section 807(c)(2)) by (2) the applicable interest rate (the prevailing state assumed interest rate, the applicable Federal interest rate, or another appropriate interest rate).

law or regulation, can ever qualify as life insurance reserves within the meaning of section 801(b)."¹⁴¹

Historically Congress has always expressed concern over company-specific reserve deductions. Discussing the "free investment income" component of Phase I of the 1959 Act, the legislative history notes:

Your committee did not believe that it was desirable, however, to use the exact reserve deduction made by individual companies, because these vary from company to company, based on whether the company followed a liberal or conservative policy in establishing its reserves. Moreover, these reserves can be increased or decreased by individual companies as they see fit. To prevent taxes from varying disproportionately in accordance with the varying reserve requirement assumptions, the bill provides a uniform procedure to be followed by each company in determining for tax purposes the investment income considered as being set aside for reserve requirements.¹⁴²

If the Treasury used an "embedded reserve" approach as described in *Mutual Benefit*, it may require disclosure of the "best-estimate" benefit component of the PBR. In any event, it is unlikely that a company's PBR would be accepted as tax reserves without some disclosure of margins. Whether the Treasury would accept some element of margin, or look only to a best-estimate valuation is an issue to be resolved.

How will reserve increases and decreases that result from changes in assumptions be treated?

Section 807(f) addresses the treatment if there is a change in basis of computing reserves. In general, the total effect of the basis change (i.e., the reserve increase or decrease) is spread over ten years, based on the difference in the reserves between the reserves on the old basis, and those on the new basis, determined at the end of the current tax year.

According to the legislative history of the 1959 Act:

A special spread rule is applied where a company decides that its reserves require strengthening and additions are therefore made to its reserves. If no limitation were imposed in these cases, a company could take a substantial additional deduction in computing in computing gain or loss from operations. To spread the effect of such adjustments, the bill provides in the case of reserve strengthening, deductions relating to the additions in reserves are to be taken into account ratably over a 10-year period instead of entirely in the year of the change. Conversely, in the case of reserve weakening, the increases in income relating to the reductions in reserves are to be taken into account over a 10-year period.

¹⁴¹ 1978 WL 43736.

¹⁴² LIFE INSURANCE COMPANY INCOME TAX ACT OF 1959, REPORT OF THE COMMITTEE ON WAYS AND MEANS TO ACCOMPANY H.R. 4245, 5 (1959).

The DEFRA Blue Book provides that “the rule for a change in the basis in computing reserves will be applied to life insurance reserves only if there is a change in basis in computing the Federally prescribed reserve (as distinguished from the net surrender value).” Changes in the net surrender value are not subject to the ten-year spread because, “apart from its use in determining the amount of life insurance tax reserves, the net surrender value is not a reserve but a current liability.”¹⁴³

Unlike the current valuation system, which “locks in” valuation assumptions as of the contract’s issue date, a principles-based system adjusts assumptions each year. If principles-based reserves are used as tax reserves, it is likely that a dual valuation will be required whenever the assumptions change, and the difference would be subject to the ten-year spread.

It is not clear that a change in the calculation of statutory reserves, when the tax reserves are based on the statutory cap, is subject to the ten-year spread. In Non-Docketed Service Advice, IRS counsel argued that Section 807(f) applied to a change in the reserves resulting from a change in the statutory cap, noting that “[t]he statute by its terms applies without regard to whether the tax life insurance reserve equals the amount determined under section 807(d)(2), or is instead limited by the statutory cap imposed by section 807(d)(1).”¹⁴⁴ Application of section 807(f) to the statutory cap, which is by definition “unlocked” each year, could create a “computational and auditing nightmare,” particularly where the stochastic scenarios are concerned, as a company might be required to run a dual valuation each year to determine the spread amount under section 807(f).

Conclusion

It is clear that changes are needed, and are indeed coming, in the way in which statutory reserves are computed. Therefore, the march to a principles-based reserve system seems destined to continue. While it is clear that some reserve deduction will be permitted, the treatment of principles-based reserves under Federal tax law is far from settled. Tax practitioners seem to fall into three categories. There are some who believe that under the 1984 Act Congress gave the NAIC the authority to set tax reserves by designating a reserve method, and consequently PBR qualify in their entirety as tax reserves. Others believe that while Congress did not delegate unlimited authority to the NAIC, at least some portion of the deterministic reserves should be deductible because they can be shown to have characteristics similar to CRVM. A third group believes that PBR generally do not meet either the 816 or 807 definitions and are not likely to be the basis for either qualification as a life insurance company or recognized as Federally prescribed reserves. The authors tend toward this third view.

¹⁴³ STAFF OF J. COMM. ON TAX’N, 98TH CONG., GENERAL EXPLANATION OF THE REVENUE PROVISIONS OF THE DEFICIT REDUCTION ACT OF 1984, at 604 (Comm. Print 1984) (the “DEFRA Blue Book”).

¹⁴⁴ 1999 IRS NSAR 0673.

A basic principle of tax law is that persons or companies with equal incomes should be taxed equally. In concept, section 807(d) provides all taxpayers the same reserve deduction for identical products, thus achieving the equity principle.¹⁴⁵ Were PBR to be recognized as the method of determining Federally prescribed reserves, different reserve deductions will result for each company based on its risk profile (e.g., by the use of different risk mitigation strategies, including hedging and reinsurance) and the risk assessment and assumptions selected by the valuation actuary.

The authors also acknowledge that both the LRWG and the tax authorities share a similar goal, namely, "a more accurate statement of the policyholder liabilities of life insurance companies."¹⁴⁶ It is also in the interest of the tax authorities for life insurance companies to be taxed under the life insurance provisions of Subchapter L rather than as nonlife insurance companies. Thus, some measure of peaceful coexistence must be found between the state insurance commissioners, whose "object is to exercise abundant caution to maintain the [life insurance] companies in a secure financial position," and the tax authorities, who view the deduction of life insurance reserves "not particularly in their bearing upon the solvency of the company, but as they aid in determining what part of gross income ought to be treated as net income for purposes of taxation."¹⁴⁷ The hope that the Treasury will simply regulate a favorable answer adopting PBR as the basis for tax reserves seems highly unlikely, despite the optimism of some practitioners. Thus, some other common ground must be found.

The view of the authors is that the best solution may also be the easiest for the Treasury to accept. Perhaps the simplest approach would be to revisit Proposed Reg. 1.801-4(g)(1), and require that PBR policies have their reserves recomputed under the current CRVM net premium method for purposes of determining qualification under section 816, as well as the tax basis reserves under section 807. All of the key elements of the calculation, including the concept of industry-wide tables and the prevailing state interest rate, would continue to exist. However, were the industry to pursue that approach, additional guidance would be needed on two key issues. The first is the treatment of PBR in the so-called statutory cap. Under section 807(d)(1), the tax reserve cannot exceed the statutory reserve. The logic of the statutory cap is that a taxpayer must limit the deduction for increases in reserves to the amounts actually reported on the annual statement. Thus, if the PBR is less than the corresponding CRVM reserve, the statutory cap will apply. Clarification that the annual statement reserve, however determined, is the applicable statutory limitation would be helpful. It would also be helpful to know how the stochastic element of the reserve would be treated, and whether an allocation of the stochastic reserve to individual policies would be considered a part of the statutory cap. A related issue is whether a change in the statutory reserve, where the cap determines the tax reserve, is a change in basis for

¹⁴⁵ In practice, the cash value floor would allow companies with higher cash values a greater reserve deduction. Further, the annual statement cap also introduces a company-specific element to the reserve.

¹⁴⁶ McKeever, Adney, & Robbins.

¹⁴⁷ *McCoach v. Insurance Company of North America*, 344 U.S. 585, 589 (1917).

purposes of the ten-year spread. This is necessary because of the annual “unlocking” of assumptions.

While there are many unresolved questions with respect to the tax treatment of PBR, perhaps the most critical of these is the practical effect on the Federal income tax paid by life insurance companies. To this end, the authors are not aware of any modeling of the tax reserve effects of various proposals for the treatment of PBR, either on individual products, companies, or industry-wide. Such analysis is critical to discussions with tax authorities.

In closing, we would advise those working on the details of the PBA system to be proactive in their consideration of tax issues. To those readers who have had the stamina (and perhaps the caffeine) to read this paper, we offer the words of Richard J. (Dick) Baxter and James N. Cohen:

Are there any lessons or principles of general import to be drawn from this lengthy and exhausting trip through the vagaries of some of the more obscure provisions of the Internal Revenue Code? Certainly, we have demonstrated that life insurance company taxation is a “conspiracy in restraint of understanding,” but we doubt that further proof of that point was needed. We have demonstrated that [life insurance reserve, in our case] concepts have their own internal logic and tax history and departure from that logic and history creates new thickets of uncertainty.¹⁴⁸

¹⁴⁸ Richard J. Baxter & James N. Cohen, *Special Tax Provisions for a Special Industry: The Interaction of General Tax Principles and Life Insurance Company Taxation Creates a “Conspiracy in Restraint of Understanding,”* 17 CONN. L. REV. 477, 523-524 (1985).