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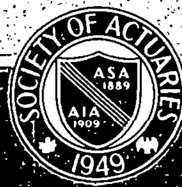

The Newsletter of the Society of Actuaries
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THE Actuary

Financing the U.S. Military Retirement System

by A. Haeworth Robertson

The United States military retirement system has been the focus of considerable attention in recent months, particularly as a result of rising government expenditures and the continuing debate over federal budget deficits.

In fiscal year 1986, the system paid $17.6 billion in benefits to some 1.5 million retirees and survivors. These expenditures amounted to 6.3% of the total military budget of $281.4 billion and 50% of basic payroll. Benefit expenditures have risen steadily over the years, but the system is relatively mature and expenditures are projected to stay in the range of 47% to 54% of basic payroll during the next 75 years.

Revised Financing Procedure

Until fairly recently, the military retirement system was operated on a "current cost" basis; that is, with annual appropriations for the Department of Defense budget equal to projected expenditures for the year. Public Law 98-94, enacted in September 1983, changed this procedure and provided that effective October 1, 1984, the military retirement system would be advance funded by the annual payment to a newly established retirement fund of the normal cost plus an installment to amortize the unfunded accrued liability.

The Board of Actuaries appointed by the President to oversee the financing of the system has determined that the normal cost is 51.3% of basic pay for FY 87 (the fiscal year

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A Comparison of Actuarial Practice in the U.S. and U.K.

by J. Phillip Turner

The actuarial profession in the U.K. is a more tightly-knit community than the fragmented profession in the U.S. Given the relative size of the two countries and the ease of travel to London from the other U.K. cities, this is not surprising. The Institute of Actuaries in England and Wales and the Faculty of Actuaries in Scotland are the only bodies which set examinations and professional standards for actuaries in the U.K.

The Institute's principal meetings take place in the evening at the venerable Staple Inn Hall, which has been home to the Institute library and administrative offices for exactly 100 years. It is a comfortingly familiar professional home to most U.K. actuaries. An Institute meeting is typically devoted to the discussion of a paper presented by a member. Although the paper may deal with a specialty subject, the attendance is not usually confined to actuaries practicing in that field, so there is a good deal of intermingling between the different specialties.

In recent years there has been a weakening of the traditional ties to London. Many insurance companies have moved their principal offices out of London, and regional societies, such as the Yorkshire Actuarial Society, have become increasingly important as professional forums. In 1986, for the first time, the Institute held a two-day convention similar in format to typical Society meetings here in the U.S. The meeting, held in Birmingham, dealt with life insurance issues. A similar meeting is planned this year to deal with pension issues.

As an actuarial student, I found the organization of the Institute's correspondence courses for the actuarial examinations extremely helpful. The courses for the actuarial examinations are presented as a series of lessons, each followed by a test. Each student is assigned a tutor who will mark each test and return it, together with model solutions and comments. There is a strong correlation between students who complete these tests and students who are successful on the exams. This system requires a

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week to a handful of members, enable the student to experience the preparation of an entire valuation by hand on one large sheet of paper using amazingly antiquated 19th century sickness tables, no more recent tables being available.

When I first moved to the U.S., I was surprised by the extent of reliance on the statutory basis in life insurance company valuations. My current impression is that the development of the role of the valuation actuary here in the U.S. has made the responsibilities of U.S. life actuaries more similar to those of their U.K. counterparts, while new policy forms and the increasing use of profit-testing techniques in the U.K. have made product development in the U.K. more similar to the development of new products in the U.S.

I believe it would be a fair summary to say that, although there are differences between the actuarial professions in the U.K. and the U.S., the underlying trends in many areas are convergent. To our increasingly internationally minded clients and a public long confounded by the mysteries of actuarial science, this must be most welcome.

My wife claims that it makes no difference whether she is in the U.S. or the U.K.; she can recognize an actuary a mile away. It would seem that certain professional characteristics have converged already!

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Military Retirement Cont'd.

ending September 30, 1987) and that it will decline gradually to the ultimate rate of 40.3% in FY 2016 and later as an increasing proportion of participants become covered by the reduced benefits applicable to those entering service on or after August 1, 1986. (Benefits were reduced approximately 17% for such entrants.)

Moreover, the Board has determined that the initial unfunded accrued liability, as of October 1, 1984, is $528.7 billion and that it is to be amortized by the payment on October 1 of each year of approximately 29% of basic pay for such year. This will result in the amortization of the unfunded liability in about 60 years. Accordingly, the contribution to the retirement fund during each of the next 60 years is projected to be in the range of 70% to 80% of the active duty basic payroll.

N.B.: Since basic pay is approximately 76% of "total pay" (basic pay plus a quarter's allowance and a subsistence allowance, and the federal tax advantage accruing to such allowances since they are not subject to federal income tax), the percentages cited should be multiplied by 76% to yield approximate figures expressed as a percentage of total pay. For the remainder of this discussion, however, all costs will be related to basic pay in order to be consistent with the usual practice of the Department of Defense.

Effect of Funding

When the system was operated on a current-cost basis, the entire cost was paid from the Department of Defense budget. Under the new advance-funding procedure, the normal cost is paid from the Department of Defense budget, but the payment to amortize the unfunded liability is made by the Treasury. The normal cost is projected to decline gradually from 51.3% of basic pay in FY 87 to an ultimate level of 40.3%, while the actual benefit expenditures are projected to increase gradually from 49.7% in FY 87 until they peak at 53.8% in FY 2005. Thereafter, benefit expenditures are projected to decrease until they reach an ultimate level of 47.1% in 2052. Therefore, future retirement benefit expenditures from the Department of Defense budget will generally be somewhat less under the new procedure than under the old procedure (except for the years 1987-88, when normal costs are expected to be slightly higher than projected expenditures).

Any excess of benefit expenditures over the normal cost will be met from the trust fund which will accumulate as the unfunded accrued liability is amortized. These figures do not tell the whole story, however, since the assets of the trust fund are required by law to be invested in Treasury securities and since the Treasury payment to amortize the unfunded accrued liability can arise from either of two entirely different sources. For example, additional taxes can be collected currently in an amount equal to the amortization payment. In this event, the nation's current taxes will increase; the current deficit will decrease, the total national debt will be unchanged; the portion of the national debt held by the public will decrease; and the portion held by the government will increase. This procedure will clearly result in a change in the national economy, a change that presumably will strengthen the economy and make the payment of future benefits more secure.

An alternative way to "fund" the accrued liability is to issue new Treasury securities and place them in the retirement fund. In this event, the nation's current taxes will be unchanged; the current deficit will be unchanged, the total national debt will increase; the portion of the national debt held by the public will be unchanged; and the portion of the national debt held by the government will increase. This procedure will not result in a change in the national economy and thus will not make the

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AERF Request For Proposal

There is a need for a monograph on the intellectual foundations of the actuarial profession. A great deal of soul searching has gone on within actuarial circles seeking to define the unique expertise of an actuary. The answers will come, in large part, by defining the intellectual foundations of the actuarial profession as a whole. To this end, the Actuarial Education and Research Fund is announcing a request for proposal (RFP) to write a comprehensive monograph on the fundamental concepts of the actuarial profession. Essentially, this project is to identify and delineate the common ideas used in all areas of actuarial practice. The need to define fundamental actuarial concepts has moved the Interim Actuarial Standards Board to promote a monograph on the intellectual foundations of the actuarial profession and the AERF to sponsor such an undertaking. The monograph is to include sections on economics of risk, time value of money, random variables, individual insurance models, conservatism, adjustments, collective or individual balance, and classification. Additional concepts are to be added as deemed appropriate. Interested parties should contact the AERF office at 500 Park Boulevard, Itasca, IL 60143 (312) 773-3010 for a detailed copy of the RFP. Proposals will be accepted until January 31, 1988. A review draft of the monograph must be completed by November 1, 1988. AERF intends to publish this work by June, 1989.

Military Retirement Cont'd.

future benefits more secure. It follows, therefore, that little will have been accomplished by thus funding the accrued liability, unless the psychological advantages of having "assets" in the retirement fund to guarantee the payment of future retirement benefits are greater than the disadvantages of creating a larger national debt.

A substantive advantage will accrue from accumulating a retirement fund consisting of Treasury securities only if it results in a strengthening of the national economy. Increased current taxes will probably strengthen the national economy; increased national debt certainly will not.

Conclusion

The new method of financing the military retirement system may appear to have advantages over the former current-cost method. First, the cost of benefits accruing for each current year of service is clearly identified and segregated from the cost of benefits accruing for past years of service. Second, provision is made for amortizing the accrued liability for prior service benefits, thus recognizing the cost of such benefits and, to a certain extent, enhancing the security of such benefits.

The real effect on the economy, however, of amortizing this past service liability will depend upon whether the amortization is achieved by increasing current taxes and decreasing the current deficit, or by merely increasing the national debt and leaving the current deficit unchanged. It should be noted that the first four amortization payments from 1984 to 1987 were achieved by increasing the national debt, and no change in this procedure appears imminent.

In short, the new financing method will not weaken the financial condition of the military retirement system, and it has the potential to strengthen its financial condition if the funding of the past service liability is handled appropriately.

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Editorial

Employee Benefits – Need for Change

by Barnet N. Berin and Robert D. Paul

(Ed. note: Robert D. Paul, not a member of the Society, is vice chairman of the Martin E. Segal Company. He is a leading pension, compensation, and employee benefits designer.)

Since the end of World War II, more and more retirees have been getting two checks, one from Social Security and one from a company pension plan. The connection between poverty and old age has been broken by an enlightened public policy that has led to the rapid growth of company sponsored and collectively bargained pension plans during this time. That policy has been to encourage the development of privately sponsored pension plans by allowing tax deductions for contributions to these plans. Taxes on these employer contributions and investment earnings are paid later when benefits are paid to retired employees.

Complexities

In 1974 Congress enacted the Employee Retirement Income Security Act, and frequently thereafter additional laws regulating employee benefit plans have been enacted. These in turn have required extensive regulations to explain their arcane provisions. Recently the Tax Reform Act of 1986 greatly increased the complexity of maintaining a qualified employee benefit program. For employee benefit plans, tax simplification has become a quagmire of obscure language, overly precise discrimination tests, and new rules that prospectively change benefit entitlements in mid-career. One inevitable result will be the creation of a second set of benefit programs outside the scope of these restrictions that may end up costing the U.S. Treasury just as much in taxes, at a later date, as is supposedly being saved now.

Objectives

We have lost sight of the original goal: the encouragement of privately sponsored employee benefit programs so that workers and their families can live in dignity in retirement.

One reason for losing sight is obvious. Trying to raise tax revenue to meet the current budget crisis, as is true of many short-run strategies, loses sight of long-term interests. Surely the encouragement of private solutions to the problem of maintaining adequate retirement income which will relieve the pressure on Social Security and other public responses to poverty in retirement is a more cost-effective solution than the modest amount of tax revenue collected now.

A second reason for losing sight of the original goal is that most of the additional complications that have been written into the law address the issue of preventing small company owners from using the employee benefit programs as a tax shelter rather than as a systematic way of providing for life insurance, health insurance and pensions for their employees. In a small company, the principal owner's salary is almost always disproportionate when compared with the other employees; it cannot be otherwise. Because benefits are usually salary-related, disparities are unavoidable and apparent. Rather than tackle this subject directly, a burden has been placed on all companies to satisfy a variety of tests to avoid the kind of discrimination that can only occur in a small company. Reporting and disclosure are extensive and complex. Although larger companies have little difficulty meeting the rules, the cost of administering the programs grows larger and larger. Benefit design now turns on questions of compliance rather than on what is good practice. Many companies are reconsidering their commitment to defined benefit plans because of the excessive paper work and other costs of compliance.

Consequences

The complications created by this plethora of laws are so great that the Internal Revenue Service is having considerable difficulty dealing with

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