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EDITORIAL

THE quotation from Sir Francis Bacon which forms the motto of the Institute of Actuaries is particularly apt. There is another Baconian quotation which would form advice to the actuary, equally apt. It is as follows:

> "Reading maketh a full man; conference a ready man; and writing an exact man."

The students would probably agree with the first clause and might suggest that the syllabus of reading makes a man full, even to repletion. The perennial extension of the syllabus practically demanded Study Notes if the student were not to be compelled to abandon all other reading in favor of actuarial reading only. We approve of the Study Notes. They have considerably lightened the reading burden of the student and Bacon admits that "Some books also may be read by deputy, and extracts made of them by others." We do not suggest any change in the list of reading, but we sometimes wistfully wonder if something has been lost in not suggesting reference to some original papers. Original papers seem to have a flavor which cannot be transferred to Study Notes and, perhaps more important, the discussions of these papers can be exercises in the art, all too little employed, of pleasantly but fundamentally disagreeing with the author. Fundamental disagreements were not always pleasant, as witness W.S.B. Woolhouse on the subject of T.B. Sprague and Graphic Graduation. Mr. Woolhouse, as every student knows, favored graduation by summation formula and he comments on the Sprague paper in Graphic Graduation thus:

> "In the perusal of this paper I am much surprised to find that Mr. Sprague should have been unfortunately led to advance such a diatribe of erroneous statements in disparagement of the method I originally devised . . . "
>
> "I have but little to say about the graphic method of graduation which Mr. Sprague so strenuously advocates. I am compelled to object to it as arbitrary, empirical, plodding, and unscientific, but I am not disposed to denounce it altogether as some operators, in common with Mr. Sprague, may have an excusable partiality for it."

Some of the references might be to papers which could properly be described as classics in actuarial literature. There are papers which broke new ground; there are papers which, because of their expository style, are a delight to read (and a model to try to follow). Perhaps the Committee on Continuing Education might have a subcommittee devoted to recognizing these classics—a Committee on Overlooked Education?

Many men—many minds. It would probably be difficult to get agreement on the worth of certain recommended papers. The more recent Fellows have not perhaps had much chance to become acquainted with some of the basic papers. The Fellows from the distant past could possibly (if they dared) recommend to the suggested subcommittee papers that they found interesting, papers that they think are basic or delightful (the two are not mutually exclusive). As one of the distant past Fellows the Editor will (rashly) recommend Henry Jackson's paper on "The Wisdom of Mutual Life Insurance" in *TASA*, XXXIII.

A.C.W.

TO BE CONTINUED

Editor's Note: This is another in the series of articles from the Committee on Continuing Education. The rule is one article to one subject to give the non-specialist in that subject up-to-date general information and to encourage further research in the subject if the reader is so minded. Comments will be welcomed by the Committee and by the Editor.

Pension Financing Concepts in Europe

by John K. Dyer, Jr.

Concepts, formulas and assumptions used by actuaries in the United States for the determination of private pension costs and liabilities have recently been under critical scrutiny by tax collectors, accountants, and proponents of pension control legislation. An increasing number of pension actuaries are becoming involved, through their multi-national clients, in the financing of pensions overseas. These unrelated facts both suggest that some knowledge of the widely divergent concepts of pension financing found in various European countries would be useful to many United States and Canadian actuaries.

United Kingdom

In the United Kingdom, where the funding of pensions on an actuarial basis originated, the American actuary finds the most familiar actuarial practices. The choice of actuarial cost methods and assumptions is solely the responsibility of the actuary, unhampered either by regulations or by "second guessing" on the part of government representatives. This situation has led to a highly developed sense of professional responsibility on the part of the actuaries. In Canada the British precedent has been followed in this respect, to a greater extent than has as yet been possible in the United States.

The Netherlands

In the Netherlands the structure of the private pension institution is similar to that of the U.S. and the U.K., but both plan design and financing are closely controlled by government authorities. Essentially the actuarial valuation requirements applicable to life insurance companies are extended, with some variations, to non-insured pension plans.

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Pensions in Europe

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Germany

In Germany there are also many private pension plans, but most of the larger ones are financed through book reserves rather than funded through insurance or segregated pension funds. Appropriations to such book reserves are tax deductible, but only subject to their being determined according to an imposed inflexible government pattern, including a minimum interest assumption of 5.5% and a level formula for reserve accruals that precludes any recognition of "past service liability." The relative lack of employee security inherent in the book reserves, together with the rarity of vesting provisions, have generated considerable criticism recently, and the situation in Germany seems to be headed towards some fundamental changes.

Switzerland

In Switzerland there are also many occupational pension plans supplementing the rather modest social security pensions. Whether insured or self-invested, pension contributions are invariably channelled through a pension foundation (analogous to the pension trust in the United States and Canada) in order to meet the basic requirement for tax deductibility that the funds be non-recoverable under any circumstances. Pension contributions and reserves are generally based upon actuarial advice, but irrevocable contributions are generally tax deductible in full regardless of their relationship to the actuarial requirements.

France

In France the concept of actuarially determined reserves for pensions was so thoroughly discredited by the runaway inflations that followed the two World Wars that even today the "capitalization" of pensions obligations is virtually unknown. The widespread multi-employer pension systems that complement the basic social security pensions for a majority of French employees are financed through a sophisticated pay-as-you-go system known as "repartition." This has worked remarkably well for a 25-year period of rising earnings and expanding employment, but still has to meet the test of real adversity. Meanwhile the French are quite content in their belief that the next generation of workers is a more dependable source of old age security than is the franc.

Sweden

In Sweden a two-tier social security system is supplemented by third tier—a uniform, collectively bargained, privately financed system, at present for salaried employees only, but to be extended to the hourly paid workers in 1973. The third tier may be funded through direct insurance, or financed by book reserves, but in the latter instance must be "reinsured" by "pension guaranty insurance." If book reserves are used they must be accumulated according to exactly the same actuarial reserve pattern as is uniformly applied for pension insurance. This inflexibility, together with the homogeneity of the Swedish population and the business structure, makes the insurance possible. Nevertheless, the company issuing the pension guaranty insurance may refuse to issue it in the case of small or apparently unstable employers, in which case they have no choice but to insure their pension obligations directly.

Other Variations

The foregoing is merely a highlight summary designed to illustrate the wide diversity of pension financing concepts found in Europe. Other variations are found in other countries, except that in Spain and Italy the few occupational pension plans that are found are usually informal and unfunded. Sources of more detailed information include papers and discussions presented at the 18th International Congress of Actuaries, the Reference Manuals published by the International Benefits Information Service (IBIS) and the Kleiler report reviewed in the October issue. □

Life Insurance and Buyer

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The purchaser may be unable to make a rational choice for the following reasons.

Selection of a suitable amount of insurance is a part of long-term financial planning for contingencies. It is difficult for most people to do such planning.

The individual buyer does not really understand the use of the product, and has not defined the need which the insurance will meet. (The business insurance buyer is usually in a much better position because the need has been well defined and quantified). He does not understand what the various different products are, and how they can serve to meet differing needs. Until the buyer understands how the product works, attempts to compare price are essentially meaningless. Further, meaningful price comparisons are difficult to make, and the knowledge and information to make them are usually not available to the consumer.

Intelligent choice is possible only for those buyers who wish to make a rational choice, and who are willing to make the effort required to develop the necessary information. It is one of the functions of the consumer movement to exert pressure so information will be made available to analyze a purchase with a reasonable amount of effort. In my opinion, there are a number of conditions which must be present in order for the buyer to be able to choose rationally:

(1) The buyer must understand the use of the product to him. It is only possible to evaluate a product in terms of the use to be made of it. An individual buying an automobile must be able to understand the use he intends to make of it, or he will be unable to choose between a sport car, a stationwagon, or a sedan. The individual buying insurance must have clear priorities in terms of death benefits at various points in time, retirement needs, etc. Until needs are well defined, it is impossible to determine whether or not they have been met.

(2) Adequate usable information must be available about the product. This information may be provided either by an outside agency, or by the seller directly. However, information provided by the seller will normally be available only because economic or other pressure has forced the seller to provide it. This information includes disclosure of price, features, and all relevant data needed to compare the product with other products which might fill the same need.

(3) The buyer must feel that the purchase is of sufficient importance for him to be willing to make the effort to investigate. He must also recognize that differences exist in the product provided by various sellers and he must feel that it is possible for him to develop the information he needs.

Where does the buyer's information come from? The most direct and simple source of information is the buyer's own experience. This is probably very helpful when choosing clothing or when mak-

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