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DIGEST OF DISCUSSION OF SUBJECTS OF SPECIAL INTEREST

INDIVIDUAL LIFE INSURANCE AND ANNUITIES

Plans of Insurance

A. What have been the chief influences causing changes in the distribution of new business by plan, age at issue, and sex since World War II? What future trends in distribution might be anticipated?

B. How successful have companies been in selling policies which give the insured the right to vary the premium within specified limits? What special legal, technical, and administrative problems are involved?

MR. W. DONALD PATTERSON: At Imperial Life the volume of business on various groups of plans in 1946 compares with the corresponding volume in 1962 as follows:

	1946	1962
Whole life type	21.3%	26.2%
Other life plans	20.8	11.8
Endowments	34.9	16.6
Pension with insurance	5.3	13.2
Pension without insurance	7.9	9.0
Term	6.5	19.0
Term additions	3.3	4.2
Total	100.0%	100.0%

To me, the interesting aspects of these figures are that: (i) while whole life type contracts gained ground, the life plans in total lost some ground to term; (ii) endowments lost much more ground, only part of which was retained in the savings range by the more complex pension with insurance plans; and (iii) term plans made their gains in spite of the fact that interest rates were rising, so that saving was becoming much more attractive and was receiving much more emphasis from the company and tax advantages from the Canadian government insofar as registered personal pensions were concerned.

MR. EDWARD T. HILL: In October, 1957, North American Life introduced a deferred annuity policy which calls for a basic annual premium at one of four levels ($100, $150, $200, or $250) and permits additional premium payments up to nine times the basic premium in any policy year. Annuity conversion rates are guaranteed, and cash values are a function of the accumulation of premiums. The policy was intended for use in Canada under Section 79B of the Income Tax Act, and issue has been limited to contracts so registered.

We are satisfied that we have produced a useful tool for agents specializing in the income-tax area, and we have derived a certain amount of good will from such agents and their policyholders. However, the plan has not been very successful in terms of total sales, and indications are that, after some initial success, most of the recent issues could have been sold on the regular annuity form.

Technical and legal difficulties have arisen from the necessity of conforming to 79B. Some of the administrative complications due to the varying premium feature are as follows: commissions on additional premiums are at a rate different to those on basic premiums; premiums, while payable annually in arrears and due for all policies on January 28 (a convenience under 79B), may be received in pieces spread throughout the policy year; the great bulk of premium payments is made in January and February, at a time when the departments involved are most busy with other matters; cash values, dividends, and reserves are dependent on the actual premium-paying history, and thus normal methods of table look-up are useless; and lack of familiarity with the concept produces considerable additional head-office correspondence.

MR. MENO T. LAKE: The plan which I am going to describe does not really fit the conditions of Topic B. However, it is a plan which Occidental has decided, after a long period of study, to introduce for the following reasons.

First, competition from new stock companies as well as established United States and Canadian companies has caused the premium rate level on nonparticipating insurance to be lowered to a point where we are reluctant to give a lifetime guarantee on premium rates which are competitive in this market.

Second, this plan provides a means whereby the nonparticipating policyholders can participate in future premium-rate reductions. This, in my opinion, is the main advantage of the plan. In our company in the last twenty years, we have reduced our premium-rate level at least four or five times for new issues. At the time of these premium-rate reductions

there have been questions raised by existing policyholders as to why they could not participate in the premium-rate reductions. We have not, and neither has any other nonparticipating company to my knowledge, given the advantage of these premium-rate reductions to existing policyholders.

The plan is very simple and is completely adaptable to any plan of nonparticipating insurance currently issued. It provides for a premium provision which has the following: (1) a guarantee that if premiums for new issues on the same plan are reduced at some future date, then premiums for the policy will be reduced; (2) a guarantee that premiums for the policy will not be increased unless the premium level for new issues on the same plan is increased; and (3) a maximum premium rate beyond which the premium for the policy cannot be increased (this maximum premium is a realistic guarantee, and, while it is above the level for our current guaranteed nonparticipating premiums, it is considerably under our participating premiums and, I believe, the participating premiums of most companies).

From the standpoint of our company, we feel that we will be able to have a level of premium rates which we might not be able to live with in the absence of the special premium provision. From the policyholder's viewpoint, he has an advantage of having a premium-rate level that we would not be willing to adopt otherwise. The disadvantage to the policyholder of having a premium rate which may be increased, is, I feel, outweighed by the advantages of the plan.

Currently, we offer this premium provision only with our life paid-up at 90 plan. Also, it is currently issued only in California, although we do have approval of the premium provision in about twenty-five states. We wanted to be certain that the plan would be accepted by both our field force and the public before we introduced it in all jurisdictions where we write business. Consequently, we have limited its sales to California.

We have been issuing it for approximately two months, and so it is too early to say how successful the plan will be.

Supplementary Benefits

A. Accidental Death Benefits. What has been the trend of accidental death rates under these benefits in recent years? Have liberalization of the exclusion provisions, change from an "accidental means" to an "accidental bodily injury" type of clause, and the experience on policies for larger amounts been of special significance in the trend? Has permission to add multiple amounts of benefit to new policies reduced additions to old policies appreciably?

B. Guaranteed Insurability Benefits. What percentage of options is being elected? Is there any indication that the mortality and lapse experience on elected policies will not be in line with the underlying assumptions? Have these benefits produced any special agency problems with respect to elections and, if so, how have they been solved?

C. Automatic Inclusion of Benefits. Has the automatic inclusion of features such as waiver of premium disability and accidental death benefits been well received by the public, agents, and home-office underwriters? How does the experience on automatic inclusions compare with that arising from benefits granted on application by the insured? Has the automatic inclusion of these benefits improved persistency or led to other favorable results?

MR. FRANK H. DAVID: In 1957 Prudential changed from an "accidental means" to an "accidental bodily injury" clause in ordinary policies. We also dropped the requirement that injury must be evidenced by a wound and dropped the exclusion of death from inhalation of gas. Furthermore, we broadened the aviation coverage on passengers.

Our claim and law departments felt that the change to "accidental bodily injury" would not deprive us of an important defense against questionable claims, since other defenses are generally available if death did not result from "accidental means." We reviewed one year's claims and found that only three claims had been denied solely because of the lack of "accidental means."

Based on a sample of claims on intermediate, ordinary, and industrial policies, we estimated that the change to "accidental bodily injury" would increase claims by at most 2 per cent and elimination of the gas exclusion by about 3.5 per cent.

In policies of $10,000 or more we allow accidental death benefit up to twice the face, or even more if there are other policies in force, provided the total on all policies does not exceed twice the total face. We no longer add the benefit to in-force policies under $5,000, and all standard ordinary policies under $10,000 are now automatically issued with the benefit in an amount equal to the face.

MR. JOSEPH A. SCHWARZ: At Metropolitan we compared accidental death benefit experience for calendar years 1958 through 1962 with that

for 1953 through 1957. The policies involved were ordinary policies with the optional type of benefit and included substandard issues.

For ages under 30, the experience worsened by perhaps as much as 20 per cent over the average period of five years. For ages 30 and over, the experience improved about 5 per cent.

MR. ROBERT N. HOUSER: No significant amount of data is available on our guaranteed insurability benefit, inasmuch as it was introduced less than six years ago. However, our experience to date at Bankers Life shows 13 per cent electing the options. By next year we expect it to reach the 15 per cent assumed in our premium calculations. This upward trend, if it continues, will help guarantee the adequacy of premiums for this benefit.

The lapse rate on elected policies has been about half that for other newly issued policies, which is in line with premium calculation assumptions.

With 1,100 policy years of exposure we have had no deaths under an elected policy. In one small sample where evidence of insurability was obtained because of the addition of benefits on elected policies, 6 per cent proved to be impaired lives. This is in line with premium calculation assumptions.

We have encountered no problems in the agency area. On option elections we pay commissions to the converting agent.

We had anticipated a possible trend toward reducing the price of this benefit. Instead, we have seen somewhat the reverse, as companies have included an assortment of features and benefits, some of which have increased the cost. We had also anticipated an upward extension of available option ages, but this has not taken place to any significant degree. Our calculations show this would cause premiums for the benefit to skyrocket.

We feel that the ultimate success of this benefit hinges largely on whether its cost can be kept low in relation to the cost of term insurance.

MR. WALTER N. MILLER: New York Life's rider was first introduced in 1959. Since 1960, riders for male lives have included provision for automatic ninety-day term insurance and an alternative option date upon marriage or birth of a child under the rider.

Table 1 shows our experience on election rates from July, 1962, to September, 1963 (excluding alternative options for marriage or birth, which accounted for $6\frac{1}{2}$ per cent of total option policies). This experience is quite immature, reflecting primarily results at the first option date. Election rates will eventually reflect a large proportion of riders issued at juvenile ages. About 20 per cent of our riders are issued under age 15.

TABLE 1

Regular Option Date at Age	Proportion of Business Reaching Option Date on Which Option Is Exercised	
	By Number	By Amount
22	6.8%	6.6%
25	9.5	9.5
28	11.0	11.3
31	14.2	14.4
34	21.3	21.2
37	27.5	27.5
40	30.3	26.0
All regular option dates	11.1%	11.2%

MR. JOHN M. BOERMEESTER: Election rates could vary according to age at issue, duration from date of issue to the option date, and the number of option dates which have occurred. Election rates for the first election date may increase according to duration from issue. Thereafter, they may decrease according to the number of election dates which have occurred because of inability or unwillingness to pay for additional insurance.

John Hancock's rider, issued since 1959, provides option rights every three years from ages 25 through 40, and since 1961 allows males to anticipate election dates upon birth of a child. Our experience to date is limited to the first election date. For 1962, election rates were about 10 per cent over all, being 7 per cent for age 25 grading to 18 per cent for age 37. The experience also suggests that the rates on the first date increase with duration since issue.

Premium formulas currently used for the option probably include no factors for inability or unwillingness to pay for additional insurance or any discount for impaired lives who do not exercise option rights. Therefore, whether or not the assumptions provide adequate premiums depends not only on experience under election policies but also on the rate of election.

MR. JOHN S. MOYSE: Automatic inclusion of benefits has been well received by the public, especially on smaller policies, where the public is more interested in benefits than price. However, automatic inclusion of large amounts of accidental death benefits may delude the public into substituting this coverage for permanent life insurance.

Automatic inclusion has also been well received by agents because of (1) ease of sale owing to simplified premium calculation and inclusion of benefits in sales material; (2) more commission from the higher premium when benefits are included; and (3) more competitive total premium due to administrative expense saving on automatic inclusion and the fact that premiums for the benefits may extend beyond expiry of the benefits.

However, from the agent's point of view, automatic inclusion has the following drawbacks: (1) on large policies price is important, and the inclusion of benefits makes rates noncompetitive; (2) automatic inclusion can make savings plans noncompetitive with other forms of savings and can destroy a money-back feature; and (3) accidental death may be used as a substitute for life insurance.

Automatic inclusion has been well received by home-office underwriters, since processing of applications can be streamlined. However, benefits may have to be removed for some impairments or occupations. Problems can also arise on group and term conversions owing to evidence of insurability requirements for benefits.

Automatic inclusion should result in better experience, owing to the insuring of preferred risks who would not otherwise select benefits, but it also could result in granting some benefits which would otherwise be rated or rejected.

The presence of benefits should discourage replacement. Another advantage of automatic inclusion is ease of ratebook presentation.

MR. FREDERIC SELTZER and MR. EDWIN B. LANCASTER: Waiver of premium disability has been included automatically in all Metropolitan standard ordinary policies at ages under 60 since 1948 and has been well received. Underwriting is simplified in both home office and field. On balance, we feel the automatic inclusion is desirable.

Occasionally, in competition, we are asked to eliminate this benefit, but we take a firm position. However, we will eliminate it on business insurance and insurance purchased by one person on the life of another for $25,000 or more.

Our study covering disability experience for 1954 through 1957, excluding the first five years' experience, shows rates of disablement for nonautomatic benefit as being about 135 per cent of those for the automatic benefit.

A more recent study shows that disabled life annuity values for the optional benefit are about 155 per cent of those for the automatic benefit. The ratios are relatively constant by age in both studies.

Since 1960, accidental death benefit has been included automatically

in policies under $5,000 at ages under 70 and all family policies. There are problems involving blending of occupational extras for life insurance and accidental death ratings, but so far it has proved satisfactory.

MR. EUGENE F. PORTER: The Aid Association for Lutherans includes waiver of premium disability automatically and includes accidental death benefit automatically on policies under $10,000. The premiums for both benefits are included in the premiums shown in the ratebook for all amount sizes. Premiums for the benefits are shown in a section in the back of the ratebook. The total premium reduces as these additional benefits terminate.

Just prior to automatic inclusion, 77 per cent of eligible issues included waiver of premium benefit. The first year's operation on the automatic basis resulted in an underwriting acceptance rate of 98 per cent.

Just prior to automatic inclusion, 57 per cent of eligible issues included accidental death benefit. The first year's operation on the automatic basis resulted in inclusion on 98.5 per cent of policies under $10,000 and on 96 per cent of policies of $10,000 or greater. We feel that one reason for such wide acceptance on policies where it is optional stemmed from the inclusion of the premium in ratebook displays and sales literature.

Automatic inclusion has been well received by all. We have put much more in force at lower unit cost to the policyholder. Occasionally, the applicant does not desire these benefits, and we have permitted exclusion if a good reason exists.

MR. JOHN J. MARCUS: The Prudential has included waiver of premium disability benefit automatically since 1916. Accidental death benefit has been automatically included in intermediate and weekly premium since 1928 and in M.D.O. since 1954. Both have been automatic in our family plan since its issue in 1956. These benefits, as well as a nonoccupational vehicle accident death benefit, are now automatically included in policies of less than $10,000.

They are all favorably received by public, agents, and home-office staff. The premiums required, if all these benefits were optional, would be significantly higher.

Only life insurance is considered in underwriting policies with automatic supplementary benefits, but eyesight may be ridered out of the disability provision in case of near-blindness. The disability benefit may be excluded on large business insurance policies.

Our disability rates for waiver of premium appear lower than those presented in the "Report of the Committee on Disability and Double Indemnity," *TSA 1952 Reports*, pages 70–182.

Expenses

What has been the trend of expense rates for individual life insurance and annuity contracts over the last ten years?

MR. ARCHIE R. McCRACKEN: I would like to update to 1962 the expense ratios calculated by the Canadian Association of Actuaries and presented in Arthur Pedoe's 1961 paper in Volume XIII of the *Transactions*. Ratios are computed by two formulas. Their description is in Mr. Pedoe's paper but in brief, and ratios of actual to expected expenses are

TABLE 1

RATIOS OF ACTUAL TO EXPECTED EXPENSES

	YEAR						
	1952	1957	1958	1959	1960	1961	1962
	Formula I						
L Companies....	101%	111%	113%	114%	115%	119%	119%
S Companies....	111	123	125	129	133	135	137
	Formula II						
L Companies....	87%	97%	99%	101%	102%	105%	106%
S Companies....	91	103	106	110	114	116	118

calculated each year for ten larger Canadian companies (L Companies) and ten smaller companies (S Companies). Formula II was developed so the ratio for the twenty companies combined was 100 per cent in 1958 (Table 1).

Since salaries and commissions constitute a very large portion of a life insurance company's expenses, it is interesting to compare the trend of the expense ratios in Table 1 with the trend of personal earned income for the same time period.

Average personal earned income figures were obtained for the Canadian employed, civilian, nonagricultural labor force from figures published in the *National Accounts* by the Dominion Bureau of Statistics. They were converted into the following index numbers (1958 = 100):

	YEAR						
	1952	1957	1958	1959	1960	1961	1962
Index of earned income.......	79	97	100	102	104	106	109

The ratios of actual to expected expenses were then adjusted by dividing each ratio by the above Index for the year. The results are shown in Table 2.

TABLE 2

RATIOS OF ACTUAL TO EXPECTED EXPENSES
ADJUSTED BY INDEXES OF EARNED INCOME

	YEAR						
	1952	1957	1958	1959	1960	1961	1962
	Formula I						
L Companies....	128%	115%	113%	112%	111%	112%	109%
S Companies....	140	127	125	127	129	127	125
	Formula II						
L Companies....	109%	100%	99%	99%	98%	99%	97%
S Companies....	115	107	106	108	110	109	108

It appears that the expense rates of the life insurance companies in Canada have been increasing somewhat more slowly than the general level of wages and salaries in the country. While I do not suggest complacency, I do suggest that maybe we have been doing a better job at holding the line on expenses than might at first be thought.

MR. ERNEST J. MOORHEAD: I, too, want to bring up to date an expense study I presented as a discussion to Mr. Pedoe's paper. This was an analysis by Mr. Pedoe's method of the expenses of New England Life and seven other mutual general agency companies. The formula is for ordinary business only, including investment expenses. Ratios of actual to expected expense are as follows:

	Year							
	1955	1956	1957	1958	1959	1960	1961	1962
8 companies....	102%	103%	106%	107%	106%	111%	112%	113%

The sudden jump in 1960 has been at least confirmed by the new figures for 1961 and 1962.

Commissions

What factors and considerations enter into the relationships that exist between the commission rates: (i) On term, life, endowment, pension with insurance, and deferred annuity plans? (ii) On policies issued at very young and very old ages? (iii) On policies issued with long and short premium-paying periods? (iv) Over long and short commission-paying periods? (v) On small and large policies?

MR. L. JEFFERSON STULCE: A company must pay such commissions as to provide an incentive for the agency force to accomplish those things most desired by management. Accordingly, commission rates should reflect the relative desirability—or profitability—of the business obtained. For example, this might justify lower commissions on small policies, which require longer to amortize the initial investment.

Commission schedules should also reflect some estimate of sales effort. For example, we know that in some of our industrial markets not much effort or time or special knowledge is required to make a sale, but a new sale has to be made every time a premium is collected. This justifies a relatively lower soliciting commission and a higher servicing commission in these particular markets.

My main purpose, however, is to say that in our effort to reflect all the various factors suggested in this discussion topic we have made our commission schedules altogether too complicated, too cumbersome, and unnecessarily lengthy. It has always seemed to me a little sad to go to all this trouble and still be frustrated with the abrupt discontinuities which occur, say, between ages 50 and 51 on the endowment at 65 plan. Failure to smooth commission scales must inevitably be reflected in distortions either in the premium schedules, in dividends, or in surplus contributions.

Actually, there are only two kinds of premium dollars which we collect. These are premium dollars for *protection* and premium dollars for *savings*. Perhaps we might replace these lengthy commission schedules with just two solitary figures—a commission rate for protection dollars and a different, lower commission rate for savings dollars. These two rates by themselves would produce smoother results, and more consistent results, between most of the various plan and age categories than the typically monstrous commission schedules now in use.

Several years ago I did some experimenting along this line. In essence, I attempted to divide the premiums for all plans into three parts: (1) a rough estimate of the *loading for expenses* (including the policy fee), on which portion I felt a commission rate of zero per cent was appropriate;

(2) the portion providing *permanent protection*—and for this purpose I simply used the whole life premium at the particular issue age (unless the plan involved was a term plan, in which case its own premium was used) and subtracted from this the amount of the whole life (or term) expense loading; and (3) the portion of the premium which represents the policyowner's *savings*. (This remaining element was obtained simply by subtracting the "protection" premium and the loading from the specific plan's own premium rate.)

The commission rate paid on the portion of premium providing *permanent protection* is a matter which I believe the insurance industry (and the individual company) can decide for itself, without any overly solicitous regard for the practices of other businesses or industries. After all, our industry is the only one in the business of providing life insurance protection, and, so long as our practices are sound and do not adversely affect the public welfare, we need not relate them to the practices of other, very different industries. In my own experiments I used a first-year commission rate of 70 per cent for "permanent protection" premium dollars.

The appropriate commission rate for *savings* seems, at least to me, quite a different thing. There are other savings media, and competition for the savings dollar is intensely keen. A lower rate of commission on savings is justified for several reasons, including the practical one of competitive considerations.

What we need to do here is strike some happy balance—if one exists—between the need to compete to attract consumer savings and the need to attract (and hold) an agency force. For purposes of illustrating this two-element formula, I assumed a first-year commission rate of 20 per cent on savings dollars.

My simplified formula for first-year commissions consisted of just two terms and was written this way:

$$0.20(A - B) + 0.70(B - \$1.00S),$$

where A = total gross premium for policy, before adding policy fee; B = total gross premium for a whole life policy of equal amount (or A, if smaller), before adding policy fee, but substituting the age 50 rate for any age higher than age 50; and S = policy size in thousands.

Note that no commission is paid on the policy fee or on the additional premium loading (which we assumed for all plans to be simply $1.00 per thousand). Also, if the issue age is above 50, the premium portion to which the higher commission rate applies is limited to the age 50 premium, and any excess premium by reason of advanced age is compensated for on the same basis as the savings portion. Other simple modifications, if desired,

can be easily added. Electronic hardware need not be particularly sophisticated to handle this calculation.

Table 1 shows the commissions (in dollars) which would be paid using this set-up for selected plans and issue ages. It also shows the commissions expressed as percentage rates of the gross premiums for selected policy amounts for those who wish to approach this subject from the traditional point of view. These calculations were based on representative nonparticipating premium rates incorporating a $10 policy fee.

TABLE 1

FIRST-YEAR SOLICITING COMMISSIONS

Consisting of (*a*) 20 per cent of Savings Dollars; (*b*) 70 per cent of Protection Dollars; (*c*) 0 per cent of Premium Loading ($1.00 per Thousand, plus $10 Policy Fee)

Plan	Age	First-Year Commission (per $1,000)	Commission Expressed as Percentage of Gross Premium		
			$3,000 Policy	$10,000 Policy	$20,000 Policy
Whole life	25	$ 8.14	51.0%	59.7%	62.0%
	45	18.27	60.0	65.0	66.2
	65	29.67	41.3	42.7	43.0
20-pay life	25	9.95	39.8	43.9	44.9
	45	20.21	50.4	53.5	54.2
	65	30.68	39.9	41.2	41.5
20-year endowment	25	13.96	31.0	32.7	33.1
	45	22.08	44.6	46.8	47.3
10-year term	25	2.11	28.7	42.0	46.7
	45	6.62	48.0	57.8	60.5

The figures themselves have the following characteristics: (1) The commission for a given plan and age does not vary by amount, since no commission is payable on the premium loading. This means that the commission *rate* increases with increasing policy size. (2) The over-all commission *rate* decreases in plans which incorporate a savings element, and this decrease reflects the proportion of the savings element. The lowest commission rate would of course apply to annuities. (3) Commission rates are lower for term plans than for whole life, because the premium loading constitutes a bigger part of the total premium. (4) Commission rates are lower for young ages for the same reason as specified in (3) immediately above, and commission rates reduce above age 50 because of the formula modification which we have imposed where the issue age is above 50.

Now I do not seriously propose that this simple two-element scheme

can handle all possible situations. What I am saying is that this simple principle can be used to simplify greatly and to shorten the complex commission schedules which are now in vogue; it can help to smooth out the discontinuities and to bring the final figures closer to the fundamental objectives. Particular modifications, or special adjustments, can be easily added on to this basic scheme without doing violence to the general principle involved.

One possible modification would be to have a lower commission rate apply to *term* protection as opposed to *permanent* protection. This, of course, would have the effect of producing even lower commission for endowment plans.

It may be desirable to vary the premium-loading factor for some plans or some ages. Even where this is not particularly logical, it may still be used as an artifice to modify commissions upward or downward where the company desires this effect.

MR. MORRIS W. CHAMBERS: In view of recent changes in some of the agency contracts of my company, the London Life, I have a few comments that may be of interest. We feel that it is possible to produce contracts with short commission-paying periods that are roughly equivalent to those with longer commission periods, provided the persistency of the business does not change materially. Some years ago we introduced a two-year contract for ordinary agents which paid a high first-year commission and a second-year persistency commission. The first- and second-year rates of commission were calculated to give approximately the same return to the agent as commissions over a longer period, taking interest and persistency into account.

In making a calculation of this nature, it becomes rather a problem to determine appropriate persistency factors. The question arises whether the payment of commissions over a shorter period will tend to increase termination rates. If so, lower persistency rates would need to be used. In considering this problem, we felt that it was very important that persistency should not suffer through a change in contract, and we believed that safeguards could be introduced to maintain a low level of terminations. Some of these safeguards included careful selection of agents and adequate training and supervision, but probably the most effective one was an incentive contained in the manager's contract. The manager does not receive any remuneration in respect of policies with less than two years' premiums paid. This has a very substantial effect on early termination rates. There is also a system of replacement charges of 100 per cent at the ninth anniversary, grading down to nil at the twelfth

anniversary, so that the agent does not profit from rewriting policies in the early years.

Our ordinary agents can operate under either the two-year contract or the ten-year renewal commission contract, and, since both have been in force for a number of years, we have been able to assess their relative advantages. In the study of termination rates under the two contracts we have found that for the most successful men there is little difference in persistency between the two. It is excellent for both. This indicates that successful high-caliber men will have good persistency records regardless of the type of contract under which they operate.

For the average producer a two-year contract by itself will not have sufficient incentive to assure satisfactory persistency. With adequate safeguards, however, a relatively favorable persistency can be obtained, and, what is probably of equal importance, the telescoping of commissions for the average producer will improve agent's survival rates. With an adequate remuneration in the early years the agent is more likely to remain with the company in a successful capacity. On the other hand, selection is likely to be more severe, and the unsuccessful agent will be terminated at an earlier date.

In view of the success we have had with the ordinary agent's two-year contract, we took a major step about two years ago in our industrial operations. We introduced a three-year contract which paid a first-year commission, a second-year persistency commission, and a third-year persistency commission for both debit and regular ordinary business. The rates of commission were the same for both debit and regular ordinary, the commission in each case being based on the annual premium regardless of whether the premiums were paid weekly or monthly on the debit, or annually, semiannually, or quarterly or monthly on regular ordinary. The manner of payment of commissions was also the same for both debit and regular ordinary.

The factors used in developing the new contract with a three-year commission-paying period were quite similar to those used in developing the earlier contract—interest, persistency, and adequate safeguards to assure a low termination rate. In addition to the incentives for good persistency contained in the manager's contract, we introduced a graded commission to the agent during the first year. No commission is payable unless three months' premiums are paid, and the rate of commission then grades up until the maximum rate is paid for a policy remaining in effect for twelve full months. The new contract has been in effect now for two years and appears to be giving excellent results. It has given a spur to sales, and early lapses have shown considerable improvement.

Markets

A. What are companies doing to analyze the markets they are attempting to reach with their sales programs? What has been learned from these analyses?

B. In order to enter new markets through the establishment of new agencies or branches,

1. What is the extent and incidence of the investment involved?
2. How can companies make satisfactory projections of earnings to justify with confidence the investment involved in undertaking market extensions? What special problems are involved for small companies?

MR. MELVIN D. BENNETT: In analyzing the markets we are covering, we produce studies at the Prudential for each agency each year. Sales are broken down by sex, age, occupation, income level, and ownership of previous insurance in our company, as well as such items as policy size and kind and premium amount. By comparing his agency's performance with that of other agencies, with company and industry averages and with trends from past periods, the agency manager can isolate the market segments which his men are covering and those to which more effort might profitably be devoted.

Our ability to direct agents' efforts toward specific markets is, however, somewhat questionable. This spring we produced training aids and sales-promotion material which were supposed to help agents to make sales to members of a half-dozen selected professions. Everyone thought that the material was excellent. As far as we can see so far, however, there has been no increase in the sales to these professions.

In considering the opening of an ordinary agency to operate more territory or to operate territory more intensively, we first determine the effective buying income of the area from Sales Management's *Survey of Buying Power*, an annual publication. In doing this, we use only households with annual income after taxes of $4,000 or more, and eliminate counties where the population is so sparse that we could not expect to develop at least $100,000 of insurance production per year on the basis of our previous experience. We then develop our "market share" for the area under consideration by applying a factor to the effective buying income. The factor is developed periodically and is the average of the ratios of our actual sales to effective buying income, for the 15 per cent of the counties in the United States where our ratio has been highest.

Some factors, which on the surface appear to be important, have not been included in the "market share" calculation. We have been unable to establish that area variations in such factors as age distributions, average family size, willingness to buy (as measured by retail sales data),

city size, educational levels of the population, or occupational distributions, exert enough independent influence on insurance sales to justify adjusting for them in the measure.

We also determine ratios of actual production to "market share" semiannually for existing agencies. Such ratios give an indication of the effectiveness of field management.

If our "market share" suggests that room for a new agency exists, our agency executives make estimates of the staff of agents, clerks, and management personnel which would be transferred to the new agency or hired. They also estimate the salaries for this staff, the amount of business which they would expect in the first year, and the volume of in-force business which would be transferred to the new agency. Various ratios based on previous company experience are then applied to these estimates to arrive at an expected first-year cost for the proposed agency. This figure includes salaries of management and clerical personnel, subsidy under our new agent's financing plan, cost of employee benefits, travel, telephone, postage, furniture, and incidentals, plus a more or less realistic amount for rent.

This expected cost figure, which might be categorized as a refined guess, is then compared with our "standard cost" for such an agency as determined from our previous experience. If the comparison is satisfactory, considering the effect on nearby existing agencies, we may decide to move ahead.

MR. JAMES G. BRUCE: It is very important to define what you mean by a "projection." You must be particularly careful not to present it as a "forecast."

The important point is that, in presenting a projection, it must be clearly indicated that this projection is valid only if each of the assumptions underlying it holds true. You must make sure that the executives of the company, that is, the top management, know exactly the conditions underlying the projection.

You can awaken the investment department to the importance of its efforts, with regard to your projection, by showing it the tremendous effect of a difference of as little as one-quarter of 1 per cent in interest earnings. You can also drive your point home to the agency department by showing the effect upon your projections of a change in expenses, all other factors being equal.

We have a responsibility to make people aware that basically, in our actuarial projections, all we are doing is arithmetic, and we want them fully to understand the conditions underlying these projections.

MR. A. T. HAYNES: One gets all sorts of projections which seemed reasonable enough at the time they were made, but, by the time the projections take effect, the whole background has changed, and one never knows for sure how those projections held up.

In recent years we have had the interesting experience of opening up branches overseas. When we were operating solely in the British Isles, we could open up new branches without really knowing our total investment. All the figures for new and old branches were put together in one total, and, unless we analyzed far more deeply than normal, the cost of setting up the new branch was never really evident.

Four or five years ago we expanded into Australia, and in Australia one has to have a separate statutory fund. This statutory fund has to be subsidized for a considerable number of years, and it is all too obvious that the investment is a very long-term project. The more successful you are in expansion, the longer it is before the fund becomes positive, let alone become sufficient to cover the necessary reserves. It then comes home to you that all the elements of expansion in the home territory had the same features but that these features were masked and never came to light.

You can follow this argument on and ask whether you should have expanded at all, and then, of course, comes the question of whether you should have ever done any new business at all, and you get into a hopeless circle. As a mutual society, we have to come back to the thought that the founders of the mutual society intended that we continue to grow and prosper. Therefore, some form of expansion on the hope of long-term prosperity seems to be called for.

We have to adopt a prudent approach to try to insure that we are not acting, when expanding, on any wild impulse but rather that our expansion is based on sound reasoning and will prove profitable at the end of time.