TRANSACTIONS OF SOCIETY OF ACTUARIES
1967 VOL. 19 PT. 2 NO. 54

DIGEST OF DISCUSSION OF SUBJECTS OF SPECIAL INTEREST

INDIVIDUAL LIFE AND HEALTH INSURANCE

Individual Health

What sales, underwriting, and policy-form approaches are being employed in updating loss-of-time coverages? What steps are being taken to avoid overinsurance?

MR. ROBERT C. DOWSETT: When new forms of coverage are devised, potential replacements are, of course, a real problem in both the individual life and individual health fields. Some companies have solved this problem by indicating to their policyholders that old policies will be administered as though they contained the newer provisions. I would be interested as to whether or not any companies have found it desirable to write to all their old policyholders telling them that, for example, a new definition of disability is now going to be used instead of the definition in their contracts.

One of the new forms of coverage with which we are presently experimenting is the provision of nonoccupational coverages; under these we pay only on those claims which do not arise from the insureds' employment, instead of providing twenty-four-hour coverages for individuals in employment covered by workmen's compensation.

MR. NIELS H. FISCHER: Claims experience for individual loss-of-time coverages has been quite stable for several years. This is due in part to business prosperity and high employment and in part to conservative underwriting standards, rates, and policy provisions. However, any emphasis on loss-of-time sales involves a serious appraisal of premium structure, policy guarantees, and underwriting standards in the light of the extensions in social security disability benefits, particularily to persons in the lower-income brackets, and the the growth of long-term group and franchise plan benefits. It is difficult to provide any significant insurance benefits to an individual earning less than $500 per month which will not produce overinsurance after the social security waiting period of six months to one year. At the Aetna, we introduced a loss-of-time policy with benefits for one year to cover the social security waiting period.

The diminishing lower-income market focuses attention on providing coverage to the higher-income group. Self-employed professionals are a particularly good market, but underwriting is often a problem for two reasons: first, other individual or association franchise coverage may create overinsurance and, second, the underwriter may face difficulty in establishing what portion of the insured's total income is insurable and what portion of the insured's total income represents his regular operating costs. We must search out and underwrite all other coverages in force, and we should insure only personal income after deducting all expenses. The business expenses are most properly covered under a business overhead policy.

We recently increased our issue and participation limit to $1,200 per month for personal loss-of-time coverage. We see no justification in using an issue limit which is lower than the participation limit since we take all other coverages under consideration when determining the issue amount.

Noncancellable and guaranteed renewable sell at a relatively high cost and yet do not respond to the insured's changing insurance needs. One answer to more attractive rates is the use of a guaranteed renewable–adjustable premium type of policy. As an additional feature, a step-rate premium would insure lowest possible initial rates and make policy changes easier.

MR. WAYNE A. GILLIS: The Midland National has just announced a new disability income portfolio which, instead of providing commercial coverage, now provides noncancellable coverage for the better occupational classes and guaranteed renewable–adjustable premium coverage for the lower occupational groups.

Since almost all our health insurance is written by our life agents on life policyholders, we seemed to run into the objection, when we were considering canceling a policyholder, that this would affect the life policyholders in the area and consequently the agency's production and insurance in force. As a result, we are now collecting a premium for this "guarantee." We have provided our agents with a six-month indemnity rider to integrate benefits with social security. Long-term coverage is available for the total participation limits of the company less the expected social security disability benefits. Social security disability benefits are determined by the income and dependency status of the individual.

We have experienced poor underwriting results due to overinsurance at the low-income levels. This has become apparent through our experience in California, where employees have unemployment compensation disabil-

ity benefits. Our new program takes UCD-type benefits into account where applicable. We limited the amount of benefits paid to a female, if she is not employed outside the home at the time of disability, to one-half the amount stated in the policy in order to prevent overinsurance. Only one state has objected to the clause as originally presented, and this is the state in which we need it most—California.

We have not yet solved the problem of properly determining a farmer's income so that we can provide suitable disability income limits for him.

MR. JOHN H. MILLER: Mr. Fischer has presented some very forward-looking solutions. One point that is not covered is the creation of an over-insurance hazard as the result of injudicious underwriting by another company or of an increase in social security benefits after the policy has been issued. The group people have solved this problem rather easily by putting their policies, in many cases, on an excess basis. It seems to me that the individual policy must be written on this basis if we are going to give adequate coverage and at the same time avoid this very serious risk of overinsurance.

MR. CHARLES F. B. RICHARDSON: We recently made a study of the rate structures of the leading health companies and were quite surprised to find that every single one of these companies had made a rate change in the last eighteen months. The level of some of these rates now being brought out does frighten us a little. The limits of participation and issue being announced by some companies also seem to us to be getting dangerous.

We propose to introduce riders providing disability income for six months, twelve months, and twenty-four months in order to provide more flexible coverage and to fit in with social security disability benefits.

MR. EDWIN B. LANCASTER: Mr. Dowsett's comments stimulated me to wonder if we in the insurance business ought not to think of some kind of open-end contract on which coverage could be increased because of the changed needs of the insured and which at the same time would permit a reduction if needed because of changes in governmental programs. This would have the merit of avoiding the complications of issuing all types of policies and riders which, considering present administrative costs, are expensive.

I realize that this is a philosophical type of thing, but it does seem to me that we may seriously have to look at the traditional way in which we are doing business.

MR. WALLACE R. JOYCE: In connection with a means of avoiding overinsurance, I am interested in what new developments in the use of the relation-to-earnings clause may have been introduced recently either in Canada or the United States.

MR. GERALD T. WALKER: I know that lately several companies in the health business have been taking the earnings clause out of their long-term-income coverages, particularly for the better classes. I would like to know what the justification is for that.

MR. GEORGE W. CHALMERS: I do not know what the justification is, but there are some competitive excuses. Contracts in the United States do not sell with this clause. Very few of the real competitors use this clause, and the same thing can be said for major medical policies and duplicate coverages.

We are in a real muddle here in the United States regarding this problem, but I believe that the outlook is a little better in Canada. I was recently left with the impression that the provincial superintendents were getting together to discuss a uniform relationship-to-earnings clause for Canada. In any relationship-to-earnings clause that I have seen, the maximum benefit figure in all companies is 100 per cent of the recent average earnings.

Individual Life Underwriting

A. What changes in phraseology of conditional receipts appear to be suggested by recent court decisions? What are the advantages or disadvantages of adopting a conditional receipt which provides interim coverage up to the time of final underwriting action regardless of what the company's final action is with regard to acceptance at standard rates, acceptance at substandard rates, or declination?

B. In the light of increasing costs of medical examinations, inspection reports, and other types of underwriting information, what changes may be indicated in nonmedical limits and other types of underwriting rules and procedures?

MR. DONALD L. GAUER: Question A poses more problems. Since a life insurance contract is a legal contract in writing between parties assumed to have the capacity to contract, the features which determine when the contract takes effect are (1) the payment of a valid consideration and (2) a valid offer and acceptance by the two contracting parties. Under normal circumstances the offer is made by the applicant to the company to buy insurance of a given description at a given price. Acceptance is acceptance by the company on exactly the same terms. Normally the contract would not be considered in effect until the company had indicated its acceptance, but most insurers have voluntarily conceded that, if the applicant was insurable for a standard policy and paid the premium at the time of application, the insurance would be considered to have been in effect from that point of time.

If an applicant is subsequently determined to have been other than a standard risk, most insurers hold that the contract was never consummated. If they determine that the applicant is uninsurable, they so indicate and refund the premium. If the applicant is considered a substandard but insurable risk, the company in effect makes a counteroffer which the applicant can accept or decline. If he refuses the offer, he can, of course, obtain his money back.

The recent decisions in New Jersey and California have upset this situation by, in effect, seeming to rule that the applicant is to be considered as insured regardless of his state of insurability until the insurer has advised him one way or another of its opinion. This has left insurers with a number of sticky alternatives. One is to continue the status quo and risk adverse decisions in these two jurisdictions. Another would be to have different conditional receipts for these two states as opposed to the rest of the union. A third would be to accept the decisions as an indication of what the future will hold for all of the United States and to rewrite the receipt applicable to all states to provide interim coverage until a decision can be

made. In doing this, a company would be providing a valid benefit and hence would be justified in making a charge for this coverage regardless of the ultimate decision. Since any body of unselected applicants will include a number of substandard and declinable risks, the cost of insurance during this interim period will be greater than the cost of standard insurance, so a company would be justified in charging a higher rate during this interim period. This, however, raises obvious practical difficulties.

We have chosen a fourth alternative in order to try to retain the best features of our current practice but also to attempt to limit our losses in the event of a touchy claim. For many years we have felt that our terms of commencing coverage have been generous to both standard and substandard applicants. We have gone one step further than common practice and have assumed that any substandard applicant who died before we could communicate our decision to him would have accepted our offer. We thus have paid a reduced amount of insurance equal to the amount his payment would have purchased at the substandard rates decided upon. The conditions and amounts of payment to be made in the event of death before issue are described in the agreement at the bottom of the application and repeated on the interim receipt for the benefit of the applicant. We have a time limit of sixty days on the receipt.

We propose to continue to word our application to provide such coverage, but, to protect ourselves in California and New Jersey and other states which may follow their practice, we have now imposed a maximum liability of $100,000 to be paid under any circumstances where an applicant dies before a policy is issued. We will still attempt to require all the terms of the policy to be satisfied before any payment is made. One drawback of this change is that it restricts to $100,000 the amount which will be paid to standard risks also. This receipt has not yet received approval from all states.

MR. ARDIAN C. GILL: The adverse conditional receipt decisions in California and New Jersey advance the principle that, as a matter of equity, taking a man's money is tantamount to accepting the risk until it is declined. More recently, in a Nevada case (*Prudential* v. *Lamme*) the court substituted public policy for contract language.

We changed our receipts, in the light of the California and New Jersey decisions, not to provide full coverage immediately but to provide pro rata coverage in the event a case is rated up. With the exception of uninsurable risks, our receipt concedes the principle advanced by the courts; however, it does not accept the idea that the risk assumed is for the entire amount

applied for. Instead, it sets forth a completely equitable and reasonable formula for determining the amount of the risk accepted.

We believe that this gives us a very strong argument for enforcing the terms of the receipt, since we do all in our power to provide a reasonable basis for coverage, just as the applicant has done all in his power to put coverage into effect. It may not be accepted by the courts with respect to the uninsurable risk, and we are, therefore, quite careful to decline apparently uninsurable cases as soon as they are received.

We also apply the receipt to health insurance, but there is no prorating except for accidental death.

Our counteroffer is good for sixty days. We have rather firm controls for notifying the applicant and for refunding his money at that time. We issue for the full amount applied for and do not under any circumstances change the date of the policy. This means that there is an overcharge on any case that is accepted for the full amount, since only pro rata coverage is in effect for up to sixty days. This is a partial offset to the cost of coverage on risks who do not accept coverage. A $25,000 limit is another control on the cost. Of course, the prorating itself will, hopefully, reduce the cost in those states that follow the immediate-coverage rule. We have had two claims—one in Texas and one in California—in which we paid less than the amount applied for under the terms of this new receipt. In the California case the new receipt resulted in a clear savings over the old receipt in the view of our attorneys.

While we were revising the receipt, we took the opportunity to emphasize that we were entitled to complete our underwriting requirements in the hope that it will help us in cases such as *Simpson* v. *Prudential*, a Maryland case. The refusal to pay because of inability to complete requirements may be the major weakness in the typical conditional receipt. We decline cases in which there is an unreasonable delay to try to overcome this weakness.

MR. WILLIAM J. TAYLOR: At the Massachusetts Mutual we are staying with the conditional type of receipt, but we are revising it to clarify its intended meaning. We are planning to have the conditional receipt portion of the application in duplicate so that a signed acceptance of the terms of the receipt may be forwarded to the home office. An idea which we considered but are not implementing at this time was to make a clear distinction between interim coverage and conditional coverage by providing both types of coverage under the policy and having clear definitions of each in the interim receipt. A relatively modest amount could be provided on an interim basis, and any coverage in excess of such amount could be provided on a conditional basis.

MR. STEPHEN N. STEINIG: Is there any provision for the applicant who knows that he is a borderline risk and would like to pay, let us say, a Class A premium to insure being fully covered?

MR. GAUER: If the applicant has taken out life insurance previously with a rating and pays the full premium on the new application on the same substandard basis, we would consider that equivalent to offer and acceptance for whatever is involved, since there really is no disagreement between the company and the applicant. This assumes that we are willing to continue the same rating.

MR. DOUGLAS T. WEIR: What happens when the applicant becomes impaired but does not die? Theoretically, the agent would have to answer by saying that no changes had taken place in all the cases pertaining to conditional receipts. In our own situation we are still on the insurability type of receipt, and, in those cases where no receipt was given, if there is a substandard applicant or any change in insurability, the agent is required to ascertain that there has not been any change. This is a very difficult practical problem.

If reinsurance is required, this also presents another problem, particularly without an automatic agreement. Theoretically, the policy should be placed only to the extent of your own limits. I think a change in insurability should be ascertained on delivery so that you could then reduce the policy if reinsurance were required.

MR. SAMUEL H. TURNER: In addition to the amount limit which we have included in our receipt, there is also a limit on the time. We limit liability under the receipt, per se, to ninety days from the date Part I of the application is completed. I was wondering if any of the larger companies have used this and if the time-limit condition has been tested in a particular case.

MR. GAUER: In response to Question B, not only the cost of medical examinations but the availability of medical examiners has put pressure on insurers to seek means of reducing the dependence on medical examinations. We are currently trying to assess the relative advantages and disadvantages of using senior branch-office employees or other technicians to obtain height, weight, blood pressure, a urine specimen, and full medical history instead of requiring a regular medical examination. Preliminary studies indicate that we would miss 2–4 per cent of the impaired lives that would otherwise have been found on medical examination. The greatest

proportion of these missed impairments consists of heart murmurs and lung impairments. It would appear that the savings in medical fees would exceed the cost of extra mortality, although the samples studied to date are too small to use as a basis of action.

MR. GERALD T. WALKER: Late in 1966 we completed a study of our company's nonmedical limits in conjunction with our decision to increase medical fees from $10 to $15.

There appear to be two different viewpoints with regard to what the nonmedical limit should be; the two viewpoints depend upon a company's goal in establishing a nonmedical program:

1. If the goal of a company is to produce a maximum savings to the company from its nonmedical program, then the nonmedical limit should be the "break-even" policy size. The break-even policy size is the policy size which will produce the same cost to the company for a medical issue of that size as for a nonmedical issue of the same size. The break-even policy size is calculated by dividing the savings resulting from nonmedical issues (i.e., savings in medical fees, fees for attending physician's statements, and clerical costs) by the assumed cost per $1,000 resulting from higher mortality for nonmedical business.

This break-even policy size can be seen to produce the greatest measurable dollar savings to the company, because nonmedical issues for an amount less than the break-even policy size will result in a savings to the company while nonmedical issues which are larger will cost more in extra mortality than is saved by eliminating the medical examination and its related costs.

2. A company's goal in establishing a nonmedical program may be the elimination of as many medical issues as is possible while maintaining a total cost to the company which is no greater than the cost if all business were on a medical basis. In this case the nonmedical limit may be thought of as the size which produces an average size for nonmedical issues which equals the break-even size. This viewpoint attempts to recognize the advantages, not subject to precise measurement, of a nonmedical issue in convenience to the agent and the applicant. One should note that this limit is dependent upon the policy-size distribution of the company's sales, while the first basis is not.

In doing our study, we sorted the new issues of a one-year period into various plan, age, and amount groups. We then applied our assumed cost figures to this distribution; the cost figures are the cost per $1,000 in extra mortality for a nonmedical issue, and they vary by plan of insurance and age. We were therefore able to get an average cost per $1,000 for each of the age groups for which we vary our nonmedical limits.

These costs were compared to the savings resulting from a nonmedical issue to determine a break-even policy size for the various age groupings as shown in the tabulation at the top of page D224.

Ages	Break-even Policy Size	
	$10 Medical Fee	$15 Medical Fee
0–30	$27,700	$37,800
31–35	14,400	19,700
36–40	7,500	10,200
41–45	2,700	3,700

Also, we calculated the approximate policy size for each age group (based on *our* distribution of business) that will produce an average size equal to the break-even amount:

Ages	Approximate Limit with Break-even Average	
	$10 Medical Fee	$15 Medical Fee
0-30	No limit	No limit
31–35	$20,000	$25,000
36–40	10,000	15,000
41–45	3,000	5,000

Our current limits are as follows:

Ages	Limit
0–30	$25,000
31–35	15,000
36–40	10,000
41–45	5,000

Based on this study, we considered the following increased limits:

Ages	Nonmedical Limit
0–30	$35,000
31–35	25,000
36–40	15,000
41–45	5,000

However, we decided against such an increase at this time, because we were uncertain as to the antiselection which may be involved in or invited by nonmedical issues at these higher amounts, particularly since we were unable to find any companies with limits that were as high. We would be interested in knowing if any companies are issuing nonmedically at such levels.

MR. GILL: One has to look beyond the arithmetic, I think, in setting up nonmedical limits. One has to look into volume before separating this matter of mortality costs versus medical-fee savings.

We recently raised our nonmedical limits when we raised our examination fees to $15. We now go as high as $40,000 up to age 25. When we looked at our volume, we discovered our total cost saving would be $30,000 in medical fees. Despite the skill of our underwriters, I doubt that they are selective enough just to let through that one additional claim that will balance off the savings in medical fees.

Looking at this another way, we prefer to spend money on claims rather than on doctors' fees, but we probably also would prefer to spend money on claims in preference to agent subsidies. The extra mortality at these younger ages obviously costs very little in terms of dollars or in terms of the company's over-all mortality result. It may be money well spent to accelerate a company's flow of new business, especially to the new younger agent, because he tends to sell to the younger market. Higher nonmedical limits may help him to get a foothold in the life insurance business and thus cut down agent turnover rates.

I think that the nonmedical limit at the very young ages, say, under age 25, may well be one set by underwriters rather than actuaries.

MR. WILFORD A. LEONARD: Mr. Gauer, do you know if there would be any objection from doctors or any complications from being charged with the practicing of medicine?

MR. GAUER: Our difficulty is in finding doctors who are willing to perform medicals. I think most doctors prefer to spend their time treating sick people instead of healthy people. All we would be doing of a medical nature would be taking blood-pressure readings. We do not think that we would run into any objections from the medical profession, since no diagnosis would be involved.

MR. ANDREW F. BODINE: Our company had to change some medical examiners several years ago because the agents successfully encouraged them to suppress some negative information in order to get applicants insured. I would think that the proposed use of branch-office employees would make it much easier for agents to do this. I realize that it is not a desirable situation to have the agency force working against the company, but perhaps it is impossible to eliminate this completely.

MR. GAUER: We realize that this would be a risk. One of the additional things that we thought of was the possibility of getting together on a cooperative basis with other companies, because our volume of business would hardly support this. Certainly it would not be difficult to have someone other than a medical examiner obtain a full medical history better than the one presently obtained from a doctor. This is not, of course, always the case, but it is something that we all see occasionally.

MR. WEIR: I would like to say that we, both as underwriters and medical directors, have a great deal of respect for the attending physician's report as opposed to the medical examination, and, therefore, in view of recently increased examination fees, we have authorized nonmedical submissions of $10,000 higher than the amounts advertised if there has been a medical examination of satisfactory content within the past six months.

I think that this holds a great deal of promise for joint use in large centers, and I am rather optimistic regarding the value of lay people in taking medical histories and so forth. On one of our association plans, health questions are submitted by mail and completed by the applicant himself, and the amount of information developed is quite good.

MR. GILL: We use the Code-a-Phone or telephone system to very good advantage. This is used by the Mutual of New York principally on the West Coast, and we find that it works extremely well and are satisfied with it. The main saving is with regard to mailing time.

MR. WILL R. MULLENS: We have been using the Code-a-Phone for three or four months with good results. Within the first week of starting, we had one doctor dictate a complete medical history for twenty-five or thirty minutes. This cost us $37.50, and he, in turn, asked us for a complete transcript of what he had dictated. Incidentally, we declined the case.

MR. RALPH J. HASBROUCK: We use the telephone in connection with a request for information on larger-amount cases. The attending physician is asked to telephone a certain number that is directly connected with the medical director. We find that this has been extremely well received by the doctor. At times he declines his fee. When the medical director is unavailable, the call is routed to an answering service, so that the medical director can call back at a time convenient to both.

MR. WEIR: Is there any protective device on Code-a-Phone systems so that you know that you are getting the doctor and not his nurse or someone else?

MR. E. SYDNEY JACKSON: One protection is that we always send a transcript to the doctor. If someone else has phoned in, we assume that the doctor will then get in touch with us. We have only used this system for three or four months, but our agents are very happy with it. We are getting about 10 per cent of our replies through this means.

Reinsurance

What are the relative advantages of the yearly renewable term, coinsurance, and modified coinsurance forms of reinsurance for (*a*) established companies and (*b*) new companies?

MR. ROBERT C. DOWSETT: Let us consider the situation of a company that has just sold a large policy on some permanent plan. The amount is more than the company cares to retain at its own risk. Reinsurance coverage must be sought for a portion of this principal policy. What alternatives are available?

Yearly renewable term reinsurance involves purchase by the ceding company of one-year term insurance each year, at specified rates, for decreasing sums insured approximately equal to the amounts at risk on that portion of the principal policy which is to be reinsured.

Coinsurance involves the purchase by the ceding company of life insurance on the same plan as the principal policy—on terms very much the same as the terms under which the insured obtained his policy. This may involve the build-up of reserves over time by the reinsuring company.

Modified coinsurance is much the same as regular coinsurance except that the principal company retains the reserve on the reinsured portion—and assets to correspond—through a rather complicated transfer back of dollars from the reinsuring company; interest is effectively paid by the ceding company on these sums transferred back.

A newly formed company often has limited surplus to invest in new business, and also frequent need of reinsurance coverage, because of a necessarily low retention limit. In these circumstances, coinsurance holds many advantages, as it can be obtained with less surplus strain in the early policy years than yearly renewable term reinsurance. In the case of many principal policies sold today, the insurer's expenses in the year of issue may well be substantially greater than the associated premium income. In these circumstances, the reinsurer may even charge a negative net premium in the first policy year for the coinsurance provided, hoping—as the ceding company hopes, with respect to its retained portion—that in future years the initial investment will be repaid with interest.

There are other advantages arising out of coinsurance as opposed to yearly renewable term to the new company in addition to the help with the surplus-strain problem. Coinsurance normally gives the ceding company some protection against heavy lapse experience and poor-investment results, whereas yearly renewable term does not. Of course, the new company that can stand the surplus strain involved in using only yearly renewable term reinsurance will have larger profits in the long run if lapse

and investment experience turn out to be satisfactory—larger, that is, than the profits flowing to a similar new company using coinsurance. Through coinsurance the reinsuring company shares the fortunes—good or bad—of the ceding company to a greater degree than it does in the yearly renewable term situation.

The above discussion suggests as a corollary that the established company may well want to use yearly renewable term for reinsurance so that it can receive maximum profit arising from good lapse and investment experience in the future. The established company usually requires coverage against the mortality risk alone, and hence yearly renewable term reinsurance is sought with its fixed and foreseeable costs.

One situation may come up under which the established company may seek coinsurance rather than yearly renewable term reinsurance. Suppose the premium-rate basis of the principal policy is so liberal that the ceding company cannot afford—even over the long haul—to pay out yearly renewable term reinsurance premiums for the reinsured portion and still make a profit on the entire transaction; then the ceding company may well try to find a reinsurer who will share all the consequences of the very liberal direct policy through a coinsurance arrangement.

In these same circumstances, the established ceding company may still decide to use yearly renewable term reinsurance even though a loss may result, just to avoid the expense of dealing in a second form of reinsurance; also, it is easier. (Remember also that the large commission payment made to the agent who sold the case may have offset what would have been a loss on agent financing.)

The established company seeking large amounts of reinsurance in connection with its direct participating business may not want to be tied to nonparticipating fixed-rate yearly renewable term reinsurance, since this might cramp its style in the adoption of more favorable dividend scales in the future. If dividend increases result from mortality improvements, then the fixed mortality cost involved in the nonpar yearly renewable term reinsurance purchased has a deterring effect. To counter this, the established company may wish to adopt some form of coinsurance under which the reinsurer agrees to follow the principal company's action in the payment of dividends under the coinsurance. Alternatively, yearly renewable term reinsurance with some form of experience refund provision could be sought (and often is).

Established companies in Canada which have to seek reinsurance coverage for their own direct policies are often active as reinsurers themselves in an attempt to balance off reinsurance received amounts with reinsurance ceded amounts. If a company can achieve such a balance, then the

level of the yearly renewable term reinsurance premiums involved in one particular cession is not so important to the ceding company, provided, of course, that the characteristics of that company's total block of reinsurance received are not unlike the characteristics of its total block of ceded reinsurance.

The accompanying tabulation indicates the amounts of reinsurance assumed and reinsurance ceded for both new business effected during 1966

ANALYSIS OF REINSURANCE AMOUNTS (IN $1,000,000's)
FIFTEEN LARGE DIRECT-WRITING CANADIAN
LIFE COMPANIES

Company	1966 New Effected		1966 Year-End In Force	
	Reinsurance Assumed	Reinsurance Ceded	Reinsurance Assumed	Reinsurance Ceded
A	39.6	33.4	205.8	179.3
B	31.7	13.3	195.9	109.5
C	22.8	20.4	151.4	112.6
D	12.0	16.6	91.4	131.0
E	10.7	5.7	88.7	33.5
F	11.6	8.1	82.8	71.4
G	12.1	10.6	77.5	84.8
H	6.0	8.0	49.8	56.9
I	4.4	12.9	35.9	68.7
J	4.0	7.5	33.3	51.8
K	5.2	13.4	33.3	52.9
L	0.4	3.0	28.6	20.4
M	4.9	3.9	26.8	57.6
N	7.2	11.5	26.1	34.4
O	6.2	12.0	21.1	46.3
Total	178.8	180.3	1,148.4	1,111.1

and business in force at the end of 1966 for fifteen large Canadian direct-writing insurance companies. This table indicates that over the years there has been a substantial amount of reinsurance trading among these companies and/or active attempts on the part of these companies to balance reinsurance in and reinsurance out. The total reinsurance assumed for the fifteen companies in force at the end of 1966 is $1,148,000,000, and the corresponding ceded figure is $1,111,000,000; the comparable direct in-force total at the end of 1966 for the fifteen companies was $42,600,000,000.

Modified coinsurance has the effect of moving back to the principal company the investment risks involved in the permanent life insurance which is to be reinsured. It also has the effect of allowing the ceding company to show a larger asset growth. This may be important to the newly

established company; it can be equally important in the planning of an established company that wants to show a large percentage asset growth.

Modified coinsurance also is very helpful in certain situations in which the reinsurer is not qualified to do business in the territory where the principal company is operating and no credit will be allowed in the annual statement of the principal company for regular coinsurance ceded reserves.

MR. JEROME H. VANCE: Recent studies that we have made indicate that there is no percentage in using coinsurance at all. I would like to ask whether any of the substantial companies are still using a great deal of coinsurance.

MR. C. DAVID SILLETTO: I would like to comment on a couple of things that Mr. Dowsett said, especially in relation to the use of coinsurance for new companies. We must realize that the difference in the surplus relief in the earlier policy years between coinsurance or modified coinsurance, on the one hand, and some form of yearly renewable term, on the other, is minimal, at least in the United States where new companies make such extensive use of modified reserve systems. This is particularly true in recent years, when modified forms of yearly renewable term have been developed.

First, we now have select rates in the earlier years as well as some modified premium scales with only a symbolic premium, sometimes only a policy fee, in the first policy year. The impact on surplus of these yearly renewable term systems as compared to coinsurance or modified coinsurance is very small unless net level reserves are being held.

Second, the large strain on surplus in a new company most often arises from the large sums of money being put into agency development. Coinsurance expense allowances usually do not cover these expenses. Contractual commissions are reimbursed as well as an expense allowance that relates to allocable expenses of underwriting and issue.

Since the agency-development expenses are not generally reimbursed through coinsurance, that part of the strain on surplus cannot be avoided. Many new companies try to avoid coinsurance or modified coinsurance because of the technical complexities and because more precise scales of premiums are available for yearly renewable term.

An established company might use coinsurance on participating business if it wants the assurance that the reinsurer will follow the ceding company's dividend practices. An established company with a retention limit covering the overwhelming preponderance of its business might find

coinsurance more attractive on the jumbo risks which it would reinsure. They can assume that their field commissions and perhaps some modest expense allowances will be covered and the cash-in–cash-out idea will be preserved.

MR. DOWSETT: In my earlier remarks, I tried to bring out the point that a major problem in reinsurance is whether enough expense allowance is available to provide the necessary help to the ceding company in the earlier years. In Canada, where coinsurance is certainly being used, it definitely provides more help with the strain on surplus than is available through yearly renewable term reinsurance. Some use is being made of negative net premiums set at such a level as to put the reinsuring company in the position of truly sharing the fortunes of the ceding company. In one sense, the reinsuring company is helping to pay the agency force of the ceding company. To illustrate, consider a brand new company that acquires some good agents. In order to get off to a good start, the agents are going to sell mammoth policies, and the company wants to pay top commissions and all kinds of extras.

In this case the strain on surplus under yearly renewable term reinsurance would limit the number of large policies the small company could sell through its brand new top-level agency force. By using a type of coinsurance in which the reinsuring company is willing to put money on the line, the new company can pay its agents top commissions and can have its large policies shown as directly written policies. The reinsuring company is in effect putting surplus dollars into the whole operation, and it must look on the development of its share of the business in much the same way as a direct-writing company would.

It is in situations such as this that coinsurance has been a real help in connection with the strain on surplus of a new company.

MR. WILLIAM H. AITKEN: If the reinsurer gives a first-year commission greater than 100 per cent, presumably the renewal commission is less than normal. If the first-year commission is large enough (say, 300 per cent), the renewal commission would become negative. Hence, if the new company's development expenses are very high and if the reinsurer participates to an unheard-of extent, the new company could postpone most of its development expenses by receiving large first-year commissions and paying renewal coinsurance premiums which are greater than the gross premium.

Sales of Retirement Plans in Canada

A. What has been the sales activity in Canada for individual annuities?
B. What has been the experience of companies with registered retirement savings plans under Section 79B of the Income Tax Act of Canada with reference to:
   (1) Sales activity?
   (2) Use of special policy forms?
   (3) Other matters?
C. What is the extent of competition from trust companies and mutual funds in this area?

MR. ARCHIE R. McCRACKEN: There has been little trend in sales activity for individual annuities in Canada during the last three years. A review of annual-statement figures of a number of leading companies shows some increase in individual annuity premiums from 1964 to 1965, with 1966 dropping back to below the 1965 level. New sales measured by either number of contracts or amount of annual payment show no discernible trend over the last three years for either deferred or vested contracts.

Table 1 shows total figures for individual annuity premiums, new business, and business in force for thirteen companies. These are all of the companies that reported individual annuity premiums in Canada of $1,000,000 or more in 1965. Figures are shown for 1956 and for 1964, 1965, and 1966.

In 1966 these thirteen companies collected about $51,000,000 of Canadian individual annuity premiums. This was made up of $33,000,000 single premium, $3,000,000 first-year premium, and $15,000,000 renewal premium. I would estimate that, of the $33,000,000 single premium, probably $7,000,000 would be for deferred annuities and $26,000,000 for immediate annuities. During the last three years, average annual sales by the thirteen companies have numbered about 8,000 deferred annuities and under 2,000 immediate annuities. The average projected annual annuity payment has been about $900 for new deferred annuities and about $1,200 for new immediate annuities.

While premium income has been fairly level over the last three years, this level is about $2\frac{1}{2}$ times the premium income of ten years ago. Most of this increase has arisen from increased sales of single-premium immediate annuities. Total single premiums increased from under $7,000,000 in 1956 to over $33,000,000 in 1966. The number of new deferred annuities has declined somewhat over the ten years, while the number of new immediate annuities has increased more than fivefold.

A combination of estimates and statistics from a number of the larger

TABLE 1

ORDINARY ANNUITIES—IN CANADA

(Totals of Thirteen Companies—Premiums and Payments in Thousands)

YEAR	PREMIUMS				NEW EFFECTED				IN FORCE AT YEAR-END			
	Single	First Year	Renewal	Total	Deferred		Vested		Deferred		Vested	
					No.	Annual Payment	No.	Annual Payment	No.	Annual Payment	No.	Annual Payment
1956.....	$ 6,669	$2,008	$13,018	$21,695	8,844	$4,635	338	$ 345	63,378	$36,300	13,900	$ 6,367
1964.....	35,166	2,539	14,877	52,582	8,423	7,649	1,740	2,181	80,824	47,570	22,541	15,838
1965.....	37,133	3,155	14,674	54,962	8,418	7,254	1,732	2,138	80,848	47,272	24,301	19,456
1966.....	33,281	2,817	15,131	51,229	7,608	7,388	1,761	2,002	79,718	48,868	26,299	20,052

companies indicates that in 1966 about 17 per cent of new immediate annuity sales arose from money transferred from registered pension plans and about 13 per cent of sales arose from money transferred from registered retirement savings plans. These sources of immediate annuity business should become increasingly important in the future as increasing numbers of lives reach retirement age under plans in which the funds have been accumulated outside the life insurance companies. Slightly larger percentages of new single-premium deferred annuities arose from money transferred from registered plans. However, the volume involved here is much smaller.

When Section 79B was added to the Income Tax Act in 1957, there was a flurry of registrations of life insurance and annuity policies. Many of these early registrations were of existing policies. From 1958 to 1965, new registrations of individual policies increased more or less regularly from 5,000 to 9,000 per year, except for the year 1962, when there were 13,000. I have not been able to determine the reason for the sudden burst of activity in 1962.

Total figures for 1966 are not available, but figures from a number of companies indicate that registrations were probably about 10 per cent higher than those in 1965. In recent years there have continued to be some registrations of older policies, but the large majority of registrations have been of new policies. Of the new registered retirement savings plans issued by life insurance companies in 1964, about 5 per cent were single-premium policies under which the single premium was a transfer of money from a registered pension plan or a noninsured registered retirement savings plan. This percentage increased to about 7 per cent in each of the years 1965 and 1966.

Incidentally, not all of the single-premium annuity policies arising from transfers of funds from registered policies are issued as registered retirement savings plans. Such annuities are generally registered when they arise from other R.R.S.P.'s, but when they arise from pension plans the method of handling varies widely. I suspect that the pension plan annuities are generally registered if they are owned by the annuitant. If a trustee has retained ownership, they, of course, are not registered.

The majority of the registered retirement savings plans sold by life insurance companies have been regular insurance or annuity policies with the required R.R.S.P. endorsement. However, a number of companies have developed a special policy or rider for 79B plans. These seem to be more or less equally divided between flexible premium retirement annuity policies and flexible premium additional deposit option riders. The riders may generally be added to either insurance or annuity basic policies.

The flexibility provided in the special policies or riders is generally sufficient to permit savings deposits up to the maximum of $2,500 per year. I hope that some of you will give us more information about the special policies or riders that you are using and the success that you have had with them.

Sales of registered retirement savings plans in Canada have been much lower than many people anticipated when the legislation was passed in 1957. I have the impression that interest in the plans is considerably in excess of sales. When people understand that all benefits other than death benefits are fully taxable and that all loans and assignments are prohibited, interest frequently cools. However, to the extent that plans are sold, they seem to have been generally satisfactory. Arrangements can be made to deregister a policy, pay tax on the value, and continue the policy in force on a nonregistered basis. This facility, however, is not used to a large extent. Total voluntary terminations of registered plans by lapse, surrender, or deregistration appear to average well under 5 per cent.

Reasons for termination may be the policyholder's leaving the country or increased contributions to his employer pension plan, which restricts or eliminates the retirement savings plan contribution for which he can obtain exemption.

With legislation of this nature there are bound to be some misunderstandings and dissatisfactions. However, these appear to have been minimal. A principal source of misunderstanding is failure to realize that in most cases there is a tax payable on deregistration in excess of the 15 per cent withheld. Sometimes a person buys a registered policy and for some reason does not claim exemption. The Department of National Revenue has generally been lenient in allowing deregistration of such policies, even two or three years later, on a retroactive basis without penalty, if they are convinced that there was some misunderstanding.

Table 2 shows the number of 79B registrations in each of the years 1957 to 1965, broken down by individual insurance and annuity policies, plans with trust companies, and so forth. Individual insurance and annuity policies accounted for 35 per cent of total registrations over the nine-year period. There is one category, in the table, of association-type business with funds held by either insurance or trust companies. If we assume that half of this business is with insurance companies, we find the total insurance company share of registrations over the period to be 42 per cent.

From 1957 to 1964 trust company individual registrations accounted for 17 per cent of total registrations. In 1965 the percentage jumped to 33 per cent. It would appear that competition from this source is be-

TABLE 2

NUMBERS OF REGISTRATIONS OF RETIREMENT SAVINGS PLANS

	1957	1958	1959	1960	1961	1962	1963	1964	1965
Life insurance companies and fraternal societies..	8,065	5,124	5,520	5,853	7,482	13,005	8,764	7,965	8,862
Trust companies.....	4,317	2,935	2,858	2,463	3,131	4,201	4,868	3,807	9,756
Corporations and organizations acting through trust and insurance companies.....	4,745	1,205	3,065	3,540	1,986	2,378	3,027	3,844	5,406
*Corporations approved by Orders-in-Council...	1,171	2,325	1,557	2,127	1,701	2,584	4,173	2,493	3,068
Canadian government annuities.....	15,136	5,446	4,182	3,493	2,857	3,255	2,632	2,362	2,098
	33,434	17,015	17,182	17,475	17,157	25,423	23,464	20,471	29,190

* Includes mutual funds.

coming much more important. Mutual funds have accounted for about 10 per cent of total registrations over the period.

In 1957, the first year of the legislation, 45 per cent of total registrations were of Canadian government annuities. I am sure that a great number of these were registrations of existing policies. This percentage dropped off steadily to 7 per cent in 1965 as government annuities became less competitive.

I would like to thank the actuaries of a number of companies who cooperated in making these notes possible by completing a questionnaire that I circulated. I would also like to thank Mr. Robert Nix of the Canadian Life Insurance Association for his assistance in obtaining the figures in Table 2.

MR. CHARLES F. B. RICHARDSON: We recently made a study of the immediate annuity market in the United States. We suspected that the rather chaotic conditions in both the stock market and the bond market might have an adverse effect on total immediate annuity sales. The total of these sales in 1965 of thirty of the largest companies was virtually the same as that for the year 1966. Perhaps some people have learned the right thing from the stock market.

Pretesting the Market

What methods have been employed in pretesting the marketability of new plans of life and health insurance? What has been the success of these methods?

MR. ROBERT C. DOWSETT: Sometimes a field man will come to an insurance company actuary and say, "Look, I have a special market open to me, and I have some salesmen who can go in and sell a particular kind of coverage. Therefore, will you not give me a special quotation on a special plan at a certain number of ages and let me see what I can do with it?" We have given quotations in our company in relation to a couple of items, and this is a form of market-testing in selected areas.

If the product is a success, it ends up in the ratebook and all the other agents get to use it. We developed a plan for college students in this way, with a low premium in the first five years and permanent insurance thereafter which becomes paidup at age 65. The general agent involved has done very well with it; it has not caught on very well with the rest of our agency force to whom it is now available.

MR. WAYNE A. GILLIS: I was recently asked by our president to visit an agent in the Chicago area who was complaining about the competitiveness of our product. After a lengthy discussion, we came up with the idea for a joint life type of policy for the mortgage market which we thought would solve future problems. We are very happy with this new product and are encouraging more discussions between our actuaries and our agency force to see whether solutions can be found to their problems.