

**TRANSACTIONS OF SOCIETY OF ACTUARIES
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EXPENSE RATES AND OFFICE METHODS

- A. In view of improved mortality and increased costs of obtaining business, what types of changes, if any, have been made in:
 - 1. Nonmedical rules?
 - 2. Schedules of remuneration of medical examiners?
 - 3. Underwriting safeguards?
- B. What changes have been made in recent years to expedite year-end valuation? What further changes are being considered?
- C.
 - 1. What recent innovations have been made in the use of punched card machines in life insurance calculations?
 - 2. What recent progress has been made in reduction of expense and storage space through the use of microfilming?
- D. What are the advantages of Sales Offices (with Home Office or Central Offices for collections) in comparison with combined sales and collection offices? Does the former method result in lower cost to the policyholder?

MR. W. A. MERRIAM, in discussing section A, spoke of the recurrent demands by examiners for higher fees. He said that the Metropolitan had met these several times by increasing the scale of fees. The latest such change was made in December 1950. At that time extensive revisions were also made in nonmedical rules for ordinary business. As a result, examiners receive more, on the average, for an examination but less of these are ordered. The changes can be broadly summarized as a new scale of medical fees, new nonmedical limits and new application forms with specific rules for the field as to what examinations may be ordered.

The new scale of medical fees starts at \$5.00 as before, but now \$5.00 is paid only for the brief medical report obtained on certain cases within the nonmedical limits. Depending on the amount of insurance, fees of \$7.50, \$10.00 and \$12.50 are paid for examinations on applications falling beyond the nonmedical limits. As a result, the average fee has gone up about one-third. The new nonmedical limits go to \$10,000 at ages 10 to 35, and are \$5,000, \$2,500 and \$1,500 for age groups 36 to 40, 41 to 45, and 46 to 50, respectively. Married women will be accepted nonmedically up to \$2,500 at ages 40 and under.

Agents are required to use the nonmedical application form for amounts below the nonmedical limits and they may not order examinations for such cases unless authorized by the district office. The district office reviews each nonmedical application and decides in accordance with specific rules whether a medical examination is needed. Any examination so ordered is the brief report mentioned above.

These specific requirements for medical examinations replaced rules under which agents had freely ordered examinations. One immediate result has been an increase in the proportion of nonmedical applications on adults, from about 25 percent to over 65 percent. Part of this increase would be due to the higher nonmedical limits but most of it is probably a result of the stricter rules for examinations.

A most important result of all these changes is a reduction in expenditures for medical fees. Some of this saving will go for additional mercantile reports and some of it will be needed to meet extra mortality. However, it is estimated that there will still be a saving.

Mr. Merriam stated that in the industrial field the Metropolitan increased medical fees from \$2.00 to \$3.00 and also raised nonmedical limits. All industrial applications on white females and on most males may now be submitted nonmedically. There was little opportunity here for saving because over 90 percent of industrial applications were already being submitted nonmedically.

MR. J. E. MATZ pointed out that for a considerable number of years the John Hancock has written Ordinary business on a nonmedical basis for ages 40 and under where the amount of insurance, including any previously written on a nonmedical basis, does not exceed \$5,000 on male risks. Somewhat smaller amounts have been accepted on female risks. Larger amounts have been accepted on both classes where the company has had the benefit of a medical examination on new business within a year. Studies of their nonmedical mortality indicate that this is a reasonably satisfactory basis.

For a number of years this company has had a graded scale of fees for Ordinary insurance examinations, under which a larger fee is paid for the larger amounts of insurance. During the past year this scale of medical fees was carefully studied and increased approximately 50%. Mr. Matz then stated that the increased cost of inspection reports had led the John Hancock to give considerable study to the requirements for their completion, particularly in connection with the smaller applications. For many years the company had permitted assistant district managers to complete an inspection report in connection with business where the amount did not exceed \$5,000. During the past year their practice was changed so that in all cases where the agent was experienced and had received approval, he would complete an inspection report where the amount of insurance was less than \$2,500. In connection with other amounts a commercial report is purchased. Careful watch is kept of the work done by these agents, and from time to time test checks are made by ordering commercial reports on certain sections of their business. Instances of irregularities have been

relatively few, but he pointed out that the agents allowed to make these inspections are full time men, well known to the organization and under thorough supervision.

MR. W. J. NOVEMBER stated that the Equitable Society raised its fees to medical examiners in July 1949 from \$5.00 to \$7.50. The same rate is paid without regard to the amount of insurance applied for. At the same time the nonmedical limits were raised from \$5,000 to \$10,000 for the main range of ages but nonmedical issues within a two year period were restricted to \$5,000. Some nonmedical insurance was introduced for dependent housewives, also. The term minimum amount was increased to \$2,500 to avoid small policies with a premium which could hardly support a \$7.50 medical examination fee. The minimum premium on a quarterly or semiannual basis was also increased to \$10. The Equitable does not have a compulsory nonmedical procedure and medically examined small policies have been a problem. They therefore introduced a rule that if an application for less than \$2,500 was submitted on a medically examined basis where it was eligible for nonmedical procedure, the agent was charged with a fee of \$2.50. Their subsequent experience has been that the proportion of policies issued nonmedically increased rather significantly and is now almost 50% of total issues. In over-all effect he believes that the increased cost of the medical fees has been about offset by the savings in fees on cases now written nonmedically.

Mr. November agreed with Mr. Merriam's suggestion that some of these savings may be needed for extra mortality. However, he felt that there was an indication of the possibility of better mortality on nonmedical business in the future. Prior to this change in rules, it had always been their experience that the not-taken rate on nonmedical cases was a few points higher than on medically examined cases. Now a reversal has set in, which he thought indicates the possibility of a class change with perhaps a better averaging of the mortality.

MR. J. T. PHILLIPS said that the New York Life had recently increased its medical fee from \$5.00 to \$7.50 and the nonmedical limit to \$10,000 at ages 5 to 35, and \$5,000 at ages 36 to 40. He outlined the company's prewar nonmedical mortality experience and the manner in which nonmedical business had been curtailed as a result of unfavorable experience. However, in 1942 liberalization had started again. Their mortality statistics since then have been somewhat limited but what was available indicated that for postwar issues of 1942 to 1948 the nonmedical business has produced somewhat lower mortality than the medical. Further study suggested that male and female lives should be segregated for such a comparison. A comparison was made on this basis for issues of 1942 to 1948

and the male nonmedical experience was found to be 96% of the corresponding male medical experience. The female was 112% and the combined result was 100%. He felt that the favorable experience resulted from a broadening of the base for nonmedical business combined with better age limitations and a better job of underwriting in the field by career underwriters.

Mr. Phillips expressed concern about the great volume of business written by all companies combined on a nonmedical basis with no medical history in the picture at all. He said that when the New York Life revised their application they would consider the inclusion of the question, "How much insurance do you have on your life on a nonmedical basis?" In the meantime, where they get an application for \$5,000 or \$10,000 from a man who has a large amount on his life, they may check to see how much is nonmedical. He felt that age 40 is close to the critical age at which large amounts of nonmedical business can be safely written.

MR. P. H. KNIES, speaking on section B, outlined the group method of valuation employed by the Metropolitan to produce the life reserve on Ordinary insurances. Preliminary valuations are made on the previous December 31 in-force, on the June 30 in-force and in certain cases on the September 30 in-force (all adjusted for policies scheduled to mature or expire during the balance of the year). This spreads the calculations over the calendar year and avoids any concentration of the valuation work at the year-end. In all of these valuations the reserves are computed as of December 31. The valuation based on the previous December 31 in-force is utilized in the Gain and Loss Reserves Released calculation. In the course of the valuation work, premium-paying and fully paid limited payment policies are treated under one scheme, while single premium, non-forfeiture paid-up and extended insurance are handled by separate but similar approaches.

Large policies of \$100,000 and over are excluded from all preliminary valuations and from the approximate in-force work for December 31. They are valued seriatim at the end of the year.

The objective of the preliminary valuations is the derivation of average factors for broad groups of policies that express the reserve as of December 31 per thousand dollars of insurance in force, and that will be applicable to the in-force as of the same date. For premium-paying and full paid limited payment policies, average factors are computed for life, endowment and term subdivisions of each year of issue. As an example of the volume of business which is valued by this method, the life subdivision for policies issued in 1944 currently consists of 195,000 policies totaling \$450 million of insurance. The endowment subdivision comprises 57,000

policies involving \$105 million of insurance while the term subdivision includes 8,000 policies covering \$57 million of insurance.

The complexity of the preliminary valuations for a given block of business depends upon the size of the reserve involved, on the stability of the in-force being considered and on the simplicity required to obtain maximum use of punch card methods. An appropriate scheme of preliminary valuation can be developed for each large group of policies. However, different treatments for many groups are to be avoided. The greater the number of different schemes, the greater the need for supervision, and the less the chance of fully realizing the benefits of punch card procedures.

As a result of these preliminary valuations over 99% of the Ordinary Life reserve is valued by approximately 650 multiplications at the year-end. When last tested in 1947, this method of valuing \$12 billion of insurance on $5\frac{1}{4}$ million standard ordinary policies produced a statement reserve which was within 0.02 of 1% of the reserve involved.

The December 31 in-force to which these average reserve factors are applied is constructed specifically for valuation purposes to enable commencement of the final year-end calculation without waiting for the completion of the December classification work. The November 30 in-force is classified into the broad valuation groups for which averages have been prepared. Similarly the policy transactions of November are classified into these valuation groups separately for deaths, maturities, surrenders for cash, changes to nonforfeiture term insurance and several other types of transactions. This groundwork is completed prior to the year-end. During the month of December the transactions of the month are summarized for deaths, maturities, etc., and, when the month is complete, the totals are distributed among the valuation groups according to the November experience for each type of transaction. These distributed policy transactions are combined with the November in-force to bring it to a year-end status. The policies issued during December are distributed exactly. For each branch of business the December 31 in-force so constructed is exact in total and approximate only in its distribution among the valuation groups. Tests indicate that this approximate in-force introduces an additional error into the reserve of the magnitude of 0.005 of 1% with the deviations mixed as to overstatements and understatements.

The use of this approximate method enables the valuation in-force to be obtained about five working days after December 31 and the bulk of the life valuation to be completed within several additional days. Furthermore, since many of the other reserves—the accidental death benefit reserve, the active life disability reserve, the reserve for extra mortality on group conversions, etc.—are valued in detail earlier during the year and

are related to the amount of life insurance, they also may be computed at the year-end as soon as this approximate life in-force becomes available.

These methods are subject to periodic checks to determine their continued accuracy. As indicated above, the valuation groups, particularly those for the larger branches of the business, include a large number of policies so that averages are quite stable and may be used with comparatively little error.

MR. W. H. KELTON described The Travelers valuation system. They use the attained age method with punch cards and obtain year-end reserves by a system of master cards. A master card is maintained for each basic valuation group—that is, for each year of birth, mortality table, interest rate, and valuation key. The ten valuation keys subdivide the file to single life, joint life, standard, substandard, life, endowment, and term. As soon as convenient during the early part of each year new detail cards are punched for changes in status, and maturities and expiries for the current year are eliminated. Master cards are adjusted and reduced to the basic minimum of about 2,000 cards. These master cards in force January 1 are then valued as of December 31. New business, other issues, and cancellations are separately valued in three valuation periods: first half year, third quarter, and fourth quarter. Detail cards are punched on new business and other issues, and tabulations are made of these and the cancellations. Master cards are punched for each basic valuation group for each of the nine sections. The results are combined and accumulated to produce the year-end reserves. Shortly after December 31 all the original 2,000 master cards and the master cards from the three valuation periods are combined and valued as of December 31. This valuation involves about 12,000 cards and is checked with the accumulations from the three valuation periods. Extensive use is made of the calculating punch in connection with the valuation.

An independent valuation is made by the Connecticut Insurance Department, which maintains a duplicate file of attained age punch cards. The difference between the two valuations as of December 31, 1950 was only \$86 on over \$1,300,000,000 of reserve.

Mr. Kelton then pointed out that The Travelers have made recent changes in their year-end working calendar intended to spread work, reduce pressure, and eliminate overtime so far as possible. The key change has been the postponement of the annual stockholders' meeting by about five weeks. These changes resulted in the elimination of practically all overtime, with the exception of the four Saturdays in January.

MR. Z. I. MOESSON expressed the opinion that in the absence of any spectacular changes in the method of performing the valuation the chief

sources of potential advantage are in increased use of mechanical means and in the proper scheduling of operations. The Prudential has in the last few years made several improvements in scheduling. For example, in the valuation of weekly premium industrial policies it is the practice to punch summary cards for the in-force at the end of September and then again at the year-end. Formerly the individual transaction cards of the fourth quarter were used to get from one in-force to the other. Now preliminary summary cards for transactions are punched periodically during the fourth quarter. This has helped to take a great deal of work away from the year-end and put it back in the fourth quarter.

He gave other examples of changes in scheduling to avoid a year-end peak load. One was an earlier calculation of the expiry date of extended term insurance during the last quarter. Another was the use of original records on claims and surrenders for the preparation of valuation data during the last few weeks of the year.

He thought that the maintenance of the in-force is really the major part of the valuation problem, perhaps as much as 90 percent. The discovery of a new method for getting the reserves from the in-force is therefore of far less importance than a constant effort to simplify the maintenance of the in-force. It is in the latter direction that we should look for improvement.

MR. W. H. SCHMIDT observed that the high speed of the electronic calculator has permitted the Mutual to achieve more accurate year-end valuation in about the same time as the former approximate methods. Last year-end they used a group valuation method on a December 31 in-force. This coming year they expect to use a December 15 in-force for group valuation, together with a seriatim valuation for the last two weeks' terminations and issues. In addition, they have for the first time prepared reserve factor cards for disability and double indemnity benefits and were therefore able to get an accurate group valuation as of December 31, 1950 on all benefits. This resulted in a fairly sizable decrease in the reserve liability since the former approximate methods involved a relatively large degree of overstatement on endowment and odd limited payment life plans.

MR. G. C. THOMPSON described the valuation method of the Security Mutual. Although a small company, they were one of the early companies to mechanize their valuations since they are located next door to the main plant of I.B.M. The life valuation of premium paying business is done in four divisions, January in-force, eleven months' transactions, December transactions and issues of the year. The paid-up valuation is done entirely on an attained age method. They have their annuities and supplementary contracts completely on punch cards.

Mr. Thompson stated that the New York Department was at the present time, on an experimental basis, maintaining duplicate files of five small companies valuing on a seriatim basis. He thought that they were planning in the near future to set up the same mechanism for the smaller companies valuing on a group basis. He thought that this would expedite and improve the department's verification of the reserve.

MR. J. C. DAVIDSON explained that the Confederation Life Association values its main policy benefits by means of the Karup attained age method, using a 602-A type I.B.M. Calculating Punch. Every week in December as the movement is received the reserves are calculated on a seriatim basis with the result that very little calculation work remains to be done after the closing of the books. Summary cards are prepared from the seriatim cards for December which are used to adjust summary cards up to the end of November. He thought that, in spite of the increased time of the calculating punch to carry out the Karup calculation, this is a much faster procedure to handle the December movement than if a group method of valuation, which requires a tremendous number of reserve factor cards, were used. By the maintenance of separate files for extra benefits such as disability, D.I. and extra premiums, the valuation is made as at December 1 with estimated adjustments from then to the year-end. Hence this work is completed and out of the way before getting into the final work for the main policy benefit valuation.

MR. W. H. SCHMIDT speaking on subsection 1 of section C pointed out that both the electronic calculator and the I.B.M. electronic statistical machine have the feature of logical comparison, which will permit their application to a great number of clerical operations. One such job, on which the Mutual recently has used this feature, was the Intercompany Disability Mortality Study, where they used the calculating punch to correct the exposure cards by conversion of the date of disability to the date of disablement, as requested by the Mortality Committee. This operation was done in one run through the machine without disturbing the order of the cards, regardless of the type of clause or waiting period. On the same run, the disability claim cards were audited to eliminate those claims which had been incurred after the 1950 anniversary and which, therefore, should be excluded. A similar logical comparison was recently done in computing managers' compensation for the year 1951. One factor of the compensation formula calls for the amount of first year commissions paid to each individual field underwriter above a certain minimum and up to a given maximum. The calculating punch was easily able to split each agent's earnings in accordance with the formula.

MR. J. C. DAVISON said that the Confederation Life Association is

now running mortgage amortization schedules using a 602-A calculating punch. The bulk of the mortgages fall into two types: (a) those for a fixed period such as 10, 15, or 20 years and (b) those that require a rounded-off payment each month; for example \$8 monthly per thousand. By using the so-called interest accumulation procedure, one method is satisfactory for both types. On the I.B.M. card is punched one month's interest at the required rate to 8 significant figures and the theoretical monthly payment is punched to five significant figures. This is normally accurate enough to amortize, within 2 or 3 cents, a \$100,000 mortgage over 20 years. In addition, the monthly payment paid by the mortgagor is punched on the card and it is this payment which is used when calculating the credit to interest for accounting purposes. As a result, even though the mortgagor's monthly payment may be in error by a cent or so, the error is thrown into interest where it properly belongs and still the schedule is amortized over the required term.

MR. J. H. BRADDOCK referred to a system for calculating dividends and entering the results on premium notices and on dividend history cards for individual policies, which has been designed at the New York Life though not yet put into practice. He thought that although in theory a punch card system is ideally suited for applying a dividend scale to individual policies, in practice there is, or was until recently, a very basic difficulty in such a system resulting from the practical necessity of maintaining at home office an individual year-by-year dividend record for each insurance policy. If it is necessary to maintain not only a card for dividend calculations but a history card as well, the work of keeping the records up-to-date is virtually doubled, and this seriously reduces the advantages of the mechanical system.

The answer to the problem of maintaining a dividend history card is found, he believes, in a new accounting machine which prints 10 letters or numbers to the inch, typewriter style, instead of the usual 6. This equipment makes available sufficient space for printing on dividend history card all the information needed to determine the dividend, and they plan to list each year any such information which has changed since the last dividend calculation. It will then not be necessary to maintain the history cards from day to day, since it is sufficient to indicate the policy status once a year, when a dividend is calculated.

Mr. Braddock then spoke of future possibilities. With developments now being pioneered in electronic equipment, insurance companies may before very many years have a single file of all their policies, on magnetic tape, and they may use this file to calculate dividends, write premium notices, calculate year-end policy reserves, determine deferred premiums,

etc. It is quite possible that such electronic equipment, custom-built for individual companies, will be available much sooner than we may think. But such a prospect need not deter any company from proceeding with punch card installations, since a punch card record or its equivalent would be needed in any event to construct the original magnetic tape file.

MR. J. T. KVERNLAND indicated some of the situations in which punch card machinery is being used by the Prudential. In recent major change in rates, values and dividends, they made greater use of punch card equipment than previously, resulting in the almost complete mechanical calculation of the regular ordinary branch tabular cash, paid-up and extended insurance values for standard as well as substandard and the mechanical calculation of the projected dividend scale for new issues in that branch. He felt that, in view of the large number of calculations involved, considerable savings in time and expense were realized. One interesting by-product of these calculations was the production, from the punch cards, of extensive tables of values and dividends in neat and relatively permanent form for home office use, as well as the rapid production of printing copy, in legible and orderly form, for tables included in rate books, policy forms, net cost payment manuals, etc.

He then explained the use of punch card machinery to produce extensive tables of cash values and extended insurance values each year for their weekly premium and intermediate monthly premium branches. The appropriate values at integral durations, including paid-up additions and termination dividends, are first key punched on cards. They then perform mechanically the interpolation for values at intermediate durations, list the results in appropriate form directly on Multilith plates by means of the I.B.M. type 407 tabulating machine and use the resulting plates to produce the desired number of copies. The type 407 machine produces copy approximately the size of standard typewriter from a regular punch card. This saves the cost of making Multilith or photo-offset plates by the more expensive photo reduction process involved when full size I.B.M. tabulator machine listings are utilized.

Mr. Kvernland mentioned the recent conversion of the premium billing and accounting procedures of their ordinary branch from a manual to a mechanical system. He pointed out that the new system is tied in with mechanical dividend and commission procedures, the production of valuation punch cards, the production of agency synopsis punch cards for use in agency management compensation and a new method for determining the deferred premium asset item. They have been studying a more complete mechanization of their ordinary issue procedure. He mentioned many other uses which the Prudential makes of punch card machines, but

warned that we must be on guard against the use of mechanized procedures in operations where, because of size, frequency or some other characteristic of the job, manual operations are less expensive and faster in the long run. It must be remembered that mechanized procedures are a long time in the planning and "setting-up" stage and tend to put rigidity into operations where flexibility may be desirable.

MR. HENRY KINZLER pointed out that the past few years have seen a change in punch card machines away from the one operation at a time type of equipment into the programming types which permit a series of operations to be performed automatically at one time. Most innovations which have occurred in recent years seem to stem from this basic change in the character of the machines themselves. He mentioned many actuarial calculations now carried out with these machines by the Metropolitan, such as premium rates, policy values, and fund calculations. He expressed the opinion that calculations of this type, while very interesting, are not very significant when thinking in terms of over-all cost control. A large bulk of the operating cost arises in connection with policy service—that is, in the cost of paying dividends, in the collecting of premiums and loan interest, in the paying of surrender values, maturities and death claims and the like. While the Metropolitan has not actually installed punch card methods for handling such policy transactions, they have given it a good deal of study. One study disclosed that given a punch card record of each policy in force it was possible, from a single machining of the cards, to calculate the dividend to pay, the amount of the additional insurance purchased by the annual dividend and the amount accumulated to date, the amount of dividends left to accumulate at interest, the loan interest and the amount of loan with interest capitalized (if amount due is not paid), the amount to pay at maturity, the new premiums to charge if the premiums change in accord with a policy provision and the classification totals for actuarial use. Another study demonstrated that the annual premium for a group life contract could be developed automatically from previous year's premium totals and a punch card record of the lives which changed the in-force during the year.

MR. F. B. GERHARD, in reference to subsection 2, said that microfilming is essentially a duplicating and recording process. Although improvements such as automatic feeders for high speed operation and equipment to photograph simultaneously both sides of documents have reduced the cost of microfilming, studies indicate that there are many instances where microfilming is not justified solely for the purpose of reducing floor space and equipment requirements. Factors to be considered are the physical condition of the material to be photographed, the amount of prepara-

tion required, the permanency of the file sequence, how readily the file lends itself to indexing, and the type and volume of reference activity. He felt that the "live" records (*e.g.*, records on policies in force, loans in force) are not suitable for microfilming because of: (1) file sequence not permanently established, (2) additional items posted from time to time to the record, (3) frequent reference to the file, and (4) information needed by several divisions to complete the transaction so that data must be copied onto a top sheet or a photographic enlargement of the image must be made to accompany the case. Some records of completed transactions (*e.g.*, canceled loans, canceled policies) may satisfy all of the foregoing requirements and still not be suitable for microfilming because they are either (1) retained for limited periods of time, or (2) stored in relatively low cost locations. One notable exception would be the microfilming of canceled checks so that these checks could be destroyed after certain established retention periods. Limitations on the admissibility in certain states of photographic evidence where the original document has been willfully destroyed have so far made the Prudential hesitate to adopt this procedure, but recent changes and passage of some new legislation on the subject have led to reopening the question.

Examples of the Prudential's use of microfilming to accomplish certain savings are:

1. Intermediate Life and Lapse registers for the years 1928-1939 were microfilmed during the war at a cost of about \$46,000 to release needed space and equipment, with estimated annual savings of \$7,900
2. Long lists showing policy number, name and address of each premium payer for states requiring "affidavits of mailing" are now obviated by microfilming the premium notices, with resultant savings of \$12,000 a year
3. Industrial Life and Lapse registers for the years 1875-1902, which had deteriorated so far as to require reproduction, were microfilmed at a cost of about \$22,000, with estimated saving in the use of equipment valued at \$3,600 and annual savings in typing, space and maintenance of \$12,500

MR. H. B. WICKES, in discussing section D, referred to the work of a committee, of which he had been a member, set up by the Agency Management Association to study these questions. The results of their study were published about a year ago in a report entitled "Central Collection Offices, A Study of Their Use in Servicing Renewal Business" File No. 740 of the A.M.A. He stated that definite answers to these two questions could not be obtained even after the Committee's review of the voluminous data submitted that formed the basis of the report, but recommended that anyone interested communicate with the L.I.A.M.A.

MR. L. M. DORN said that the New York Life, which for years had central collecting offices in large cities, is now in the course of doing away with such offices. The company operates exclusively under a branch office system. Most of the branch offices have all along been combined sales and collection offices. However, about the turn of the century, the company established central collection offices in a number of large cities where it had several sales offices operating in the same area. The central collecting office was used for renewal premium collections and other transactions after the first policy year. The sales offices in the same area handled only first year premiums and other new business transactions. It was thought at the time that (1) the centralization of renewal collections might reduce unit costs because of the volume, (2) it would be advantageous, both for the policyholder and the company, to have all the policies of a policyholder on record at a single office after the first policy year, and (3) central offices might enable development of trained specialists and thus give better service to policyholders.

With the passing of time, the volume of the company's new business and outstanding business has greatly increased. There has not been anything like a proportionate increase in the number of branch offices, with the result that today their branch offices with very few exceptions are units of rather substantial size. On the average, each branch office collects about 55,000 premiums each year. As a result of a careful review of the situation, the company began several years ago gradually to eliminate central renewal offices. It is anticipated that in the near future the company will have entirely eliminated such offices, with the result that every branch office will be both a sales and a renewal office. The changed attitude has come about not only because of the increased size of the individual offices but also for the following reasons:

(a) With the company's emphasis on professional career agents, the relationship between the agent and the policyholder is increasingly a personal professional one. The big growth in the use of settlement options is an illustration. The policyholder is looking more and more to the agent to render service, and not so much to salaried office personnel.

(b) In rendering such service it is more convenient for the agent to have the policy kept on record at his own branch office.

(c) A better job could be done of keeping agents informed of developments in regard to policies in which they are interested, with branch offices handling both sales and renewals.

(d) The elimination of central renewal offices would also serve to decentralize records, which would be an advantage in event of enemy attack.

The transfer of renewal collections from central offices to individual branch offices will, of course, involve expense. However, after the transfer it is expected that the new arrangement will involve little, if any, additional expense, and there may be some economies.

MR. J. B. WALKER expressed the opinion that a central collection office would not have any adverse effect on persistency since he felt that persistency is largely determined at the time of writing the business. Furthermore, in a large office it is practicable to employ specialists in conservation work. He also stated that a central collection office is a useful tool when opening up a new territory since collection duties in a new branch would make it necessary to employ a minimum staff of two clerks rather than one, if the policyholder were to be assured of proper service. He gave a comparison of renewal costs based on a detailed cost analysis in the Canada Life. The cost per \$1,000 of premium paying business for their Toronto central collection office is \$0.35 compared with an average cost of \$0.50 for all other Canadian business. Both of these figures include the cost of all services rendered in connection with death claims, changes, payment of disability claims and surrender values. He thought that this was a fair comparison since the Toronto office services most of the province of Ontario and hence covers a reasonable cross section of both metropolitan and regional branches.