TRANSACTIONS OF SOCIETY OF ACTUARIES
1958 VOL. 10 NO. 27

PENSION AND WELFARE PLANS IN CANADA
HISTORY AND TRENDS

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And all sway forward on the dangerous flood
Of history, that never sleeps or dies
And, held one moment, burns the hand.—W. H. AUDEN.

TODAY in Canada it is hard to find an organization of any size whose employees are not covered by a group life insurance plan. A majority of companies, employing an even larger majority of employees, have established formal and funded pension plans. A large and growing proportion of employees are covered to a greater or lesser degree against hospital, medical and surgical expenses and loss of income due to disability. New developments in pensions, major medical coverage, supplementary unemployment benefits, hospital plans, and profit-sharing are in the news. Although pension plan facilities in Canada have been available for over 50 years, group life contracts for 40 years, and group annuities for 30 years, much of the development is amazingly recent. Further, in the last decade, all these plans of group security have been tremendously expanded, both in coverage and in the amount of benefits. As regards coverage of employees, we may be within sight of saturation in some fields—as regards the amount of benefits, there appears to be no foreseeable limit.

A backward look at the way pension and welfare plans developed in the past helps to show the current trends in better perspective. This paper outlines briefly the history of employee benefits or "fringe benefits" in Canada, taking employee benefits to mean generally all the varied plans for financial relief against the hazards of death, sickness and accident, and old age, which are organized on a *group* basis. An attempt is then made to obtain a bird's-eye view of the whole vast field at the present time, and to estimate certain indexes of the total coverage.

By 1900 a number of large companies had established pension plans. The Grand Trunk Railway, now a part of the Canadian National Railways, set up what is believed to be the first industrial pension plan in Canada in 1874. The first Civil Service retirement plan was introduced in 1870, and the present Public Service Superannuation Act was passed in 1924. Even before this, pensions were no doubt paid on an informal basis to certain employees and widows in what were thought deserving cases; and war pensions are of some antiquity. It was a great step forward for those times when the Pension Fund Societies Act, 1887, enabled employees to set up pension funds to which the employer might or might not contribute. Nine years later the Railways Act was amended to allow railway retirement plans to be formed without the need for special legislation in each case.

It is remarkable that seven employers, *excluding* the railways and governments, report that they have pension plans in force which were established prior to 1900. Six are financial institutions and one a manufacturing company.

It is of interest to remember that in those days the life insurance industry was comparatively young and unsophisticated. The first Canadian insurance company, the Canada Life, was founded in 1847 (only four years after the Mutual of New York). In 1900 the population of Canada was $5\frac{1}{4}$ million and the total volume of insurance in force was only $431 million. (Today the population is nearly 17 million, and insurance in force exceeds $34 *billion*.) Group insurance, group annuities, family income and disability clauses in insurance policies, government old age pensions, the Government Annuities Branch, prepaid medical and hospital plans and many other now familiar features, were all in the future.

Five Canadian life insurance companies were established before 1875, these being the Canada Life (1847), Confederation Life (1871), London Life (1874), Mutual of Canada (1870), and Sun Life (1871). They were followed by the second wave of new insurance companies, including the Continental (1899), Crown (1901), Dominion (1889), Dominion of Canada General (1887, but did not commence life insurance until 1924), Excelsior (1890), Great West (1892), Imperial (1897), Manufacturers (1887), Montreal (1910), Monarch (1906), National (1899), North American (1881), Northern (1897), Sauvegarde (1903), and Sovereign (1903).

A number of British and U.S. companies had been operating in Canada for many years before 1900, such as London and Scottish, North British and Mercantile, Royal, and Standard (British companies), and Aetna, Equitable of U.S., Metropolitan, Mutual of New York, New York Life, and Travelers (U.S. companies). Several fraternal societies were also active from about 1880, including the Artisans, Independent Order of Foresters, and Maccabees.

The first trust company to be founded was the Toronto General in 1882, and the Trust Companies Act was passed in 1914. Canada differs from the United States in that, by the terms of the Bank Act, banks cannot accept appointments as trustees, and hence when a corporate trustee is needed this function is taken over by the trust companies. The Royal Trust Company (1899) was trustee of pension funds from 1915, but generally the trust companies did not actively seek pension business until about ten years ago. Within the last ten years several trust companies have established pension divisions, appointed pension trust officers, and actively sought the trusteeship of pension funds and of the funds for other employee benefit plans.

The facilities for underwriting and administering pension plans, which were developed by the trust companies, insurance companies and Government Annuities Branch, all contributed to the growth of pension plans. A favorable climate was created by income tax concessions, as outlined in the Dominion Bureau of Statistics Reference Paper 1950, from which we quote.

> Since 1919, income tax legislation has gradually given special consideration to pension plans. In that year a section added to the Act exempted from income tax any amounts deducted by the employer from the employee's wages in connection with pension funds. The amount deductible under that provision was in 1936 limited to $300. The first provision exempting employer contributions to a pension fund came in 1938, in respect of employer payments into a pension fund for an employee's past services. Deductions for employer contributions for future services were first allowed in 1941. In 1945, an amendment to the Income War Tax Act allowed deduction from taxable income of an employer's contributions for future services up to $900 for each employee in any one year, plus a specified amount of contributions for past services; an employee's contributions were made deductible up to $900 for future services and up to the same amount for past services.[1]

The Statutory Limit of $900 referred to in this quotation was raised to $1,500 in 1954.

[1] There is considerable doubt as to whether the government has in fact made *any* tax concessions to *employers* regarding pension plan contributions. Prior to 1941, employers' contributions were considered deductible as a general expense of doing business, and the 1941 Income Tax amendment was passed for greater certainty (deductions then being limited to amounts "wholly, exclusively and necessarily" expended—words which have since been removed from the Act). It would seem possible for an employer to write off all his pension contributions under the general rule that they are "for the purpose of gaining or producing income" and are "reasonable in the circumstances"—whether or not the pension plan were registered or the contributions were within the $1,500 limit. Further to this line of argument, if deduction of contributions were otherwise prohibited, but the pension plan were registered, the employer could deduct his contributions up to the statutory limit. This question has not been tested by the Courts, but the point is that the employer is no better off under the specific pension legislation than he would be by deducting pension contributions under the general provisions, as reasonable expenses for the purpose of producing income.

Health and welfare benefits also gained from the development of suitable contracts by the insurance industry and from the establishment, province by province, of Blue Cross and prepaid medical plans some fifteen years ago.

In the last ten years the progress in Canada has been very rapid and varied. We may mention the first deposit administration contracts, about 1950; the Old Age Security Act which became effective in 1952; the first union-negotiated pension plans in 1950; an amendment to the Income Tax Act permitting terminal funding of pension plans in 1952; the establishment of pooled or multiple pension trust funds, and the first Supplemental Unemployment Benefit Plans, both in 1955; Registered Retirement Savings legislation and the Dominion-Provincial Hospital Plans in 1957.

Let us now examine the development of the main employee benefits in a little more detail. Throughout this paper, dates have been given for the more important developments, but in some cases these are difficult to check and may depend on the exact definition of the particular benefit or feature. Chronological accuracy in this subject is not attainable—who, for example, can give a date to the first emergence of the principle of life insurance?

GROUP LIFE INSURANCE

The first life insurance contracts in North America clearly on the group principle were issued in 1911 and 1912 by the Equitable Life Assurance Society of the United States to Pantasote Leather Company and to Montgomery Ward and Company. The start of group life insurance in Canada is described in the Sun Life *President's Book* as follows:

> The adoption of group assurance in Canada was delayed for several years as a result of a ruling by the Superintendent of Insurance, who took the view that the terms of the Canadian Insurance Act did not permit it. Following some discussion by The Canadian Life Insurance Officers Association, an attempt was made to formulate definite proposals, but the intervention of the war caused the abandonment of the project for the time. In 1919, however, interest was revived by the activities of United States companies in soliciting group assurance in Canada. The Superintendent then altered his position and ruled that the practice was permissible. The Sun immediately entered this new field, being the first Canadian company to do so.

Group life insurance increased steadily until 1945 and the growth thereafter has been spectacular. High taxation and the wage freeze during the war, and the inflation and union action after the war, contributed to the growth. Perhaps another reason is that employers are more willing to grant group life than other fringe benefits since it is an attractive benefit and relatively inexpensive. *Canadian Life Insurance Facts* states that while all types of life insurance have grown, group life insurance has increased at the greatest rate (from 11% of total life insurance in force in 1945, to 26% in 1956.)

A Dominion Bureau of Statistics Survey in 1947 showed that 6,141 employers (excluding the railways) then had group insurance contracts covering 635,000 employees. A further 44 firms with 43,000 employees had insurance plans, without using group contracts. In 1955 there were in force 16,000 group contracts covering 5,049,000 individuals for $6,124,000,000 of insurance with annual premiums of $53,350,000, and about 84% of this business is said to relate to employees. The

TABLE 1

Group Life			Group Life Plans in D.B.S. Survey, 1947	
Year	Sums Assured ($ Million)		Year Established	Number of Plans
	Effected	In Force		
1925	$ 33	$ 141	Before 1920	75
1930	59	482	1920–1929	1,701
1935	17	509	1930–1939	1,562
1940	27	729	1940–1947	2,323
1945	58	1,064	Date unknown	480
1950	243	2,583		
1955	597	6,124	Total	6,141
1956	953	7,562		

other 16% includes a growing volume of creditor's group life insurance and insurance on trade associations and professional associations, although the development of this business has not been as outstanding as in the United States. The number of certificates is nearly equal to the Canadian labor force, including those in agriculture and self-employed, although no doubt there must be very considerable duplication of coverage. Thus, on the face of it there does not appear to be too much room left for increasing the number of covered employees, but the average amount of group insurance is only about $1,200 in spite of the growing demand for higher maximums. Not all group insurance is on the standard one-year renewable basis. However, other types, such as level premium plans, group life income and group permanent, account for only a small part of the total. Some indication of the very rapid growth is given by Table 1.

INSURANCE COMPANY GROUP ANNUITY CONTRACTS

Kenneth Black in his book *Group Annuities* states: "The first group annuity contract in this country (U.S.A.) was issued by the Metropolitan Life Insurance Company on December 25, 1921, to William E. Rudge, Inc. Prior to this date, companies had been asked to prepare proposals, but nothing definite had developed from the negotiations."

In Canada, the Sun Life wrote its first group annuity contract in 1923, although its second was not until 1928. The Confederation Life covered a large group of Municipal Hydro Electric employees in Ontario by a group annuity plan in 1929, (this plan should be not confused with the Ontario Hydro-Electric Power Commission Plan, which is trusteed, *i.e.*, "self-administered"). The Canada Life wrote its first group annuity contract in 1931. Probably, therefore, the general acceptance of the group annuity principle in Canada should be dated towards the end of the 1920's. According to the Dominion Bureau of Statistics Survey, 607 companies reported (in 1947) that they had pension plans established prior to 1930. A number of these plans were probably informal and unfunded, the others using individual insurance or government annuity contracts, or being trusteed. It appears that the larger employers were the first to establish pension plans, many of which were trusteed. Medium and small sized firms followed later and the majority of these are insured.

An insurance company pension proposal made in 1930 is interesting, as it was practically on a deposit administration basis, with $3\frac{1}{2}\%$ interest guaranteed and $5\frac{1}{2}\%$ "expected." There were no surrender charges. The proposal states: "You can at any time withdraw all your deposits, plus all interest credited to these deposits, less only the actual money applied to annuities on which payments to the employees have already commenced. This means that the proposition must not only be the best to start with, but must always be the best or you can withdraw your money and buy elsewhere."

As the competition has grown, more emphasis has been placed upon participation in profits, experience rating formulas and rate discounts. Also much work has been done with the object of making the contracts more flexible. Following this trend, a form of group annuity contract known as deposit administration was introduced into Canada about 1950: under it, the insurance company accepts deposits and credits a guaranteed rate of interest thereon, but does not apply the funds to purchase of annuities until an employee retires or the contract is discontinued.

The rapid progress since 1930 is shown in Table 2 by the figures for group annuities (deferred and vested) in force in Canada (000's omitted).

In 1955 the employer and employee contributions to group annuity plans were $79,679,000. At the end of that year there were 3,045 plans in force, and the actuarial reserves are estimated to be $550,000,000. Some insured plans are for employees of large firms, but there are a great many small plans. The average plan covers under 100 lives and

TABLE 2

Year End	Individual Certificates	Annual Annuity Payments
1930.........	9	$ 2,380
1940.........	42	24,856
1950.........	159	151,574
1955.........	285	317,475
1956.........	316	370,318
1957.........	357	447,397

TABLE 3

GROUP ANNUITIES IN CANADA

Year End	New Contracts	New Certificates	Contracts in Force	Certificates in Force (Deferred)	Estimated Reserves, Including Vested ($ Million)
1950..........	299	11,470	1,580	153,046	....
1951..........	226	20,945	1,798	181,233	....
1952..........	238	15,727	2,026	207,839	$336
1953..........	286	11,193	2,297	226,500	398
1954..........	312	13,519	2,595	246,370	462
1955..........	474	11,492	3,045	270,512	550
1956..........	607	21,706	3,621	299,367	....
1957..........	....	....	4,355	338,440	....

the new plans effected in 1956 averaged only 36 lives. A recent trend has been to allow quite small groups to come under group annuities, where formerly an insured pension trust would be used (Table 3).

GOVERNMENT ANNUITIES

The Canadian Government entered the annuities business under the Government Annuities Act of 1908 "for the encouragement of thrift and the affording of greater facilities for protection in old age." The Alberta Government began to sell annuities in 1951 but the volume sold has been small. Originally, Canadian Government annuities were issued only for maturity over age 55, up to a maximum of $600 per annum. The administration costs are paid by the government and the premium rate bases have been as shown in Table 4.

Group contracts on a formal basis were allowed from about the end of 1938, although no doubt groups were covered by collections of individual contracts before that time. The pooled accounting system, which operates on a similar principle to an insured deposit administration contract, arose about three years later.

The old Canadian Government 4% contracts, issued until April, 1948, were generally regarded as "bargains," and many pension plans were underwritten by means of Government Annuities, with insurance policies to provide for any pension in excess of $1,200 per annum. The

TABLE 4

Date of Contract	Maximum Annuity	Interest and Mortality Basis
Sept. 1908—June 1913......	$ 600	4% 1893 Annuitants Table
June 1913—May 1920......	1,000	4% 1893 Annuitants Table
May 1920—Aug. 1931......	5,000	4% 1893 Annuitants Table
Aug. 1931—Sept. 1936......	1,200	4% 1893 Annuitants Table
Sept. 1936—Jan. 1938......	1,200	Interim rates as above, loaded 15%
Feb. 1938—Apr. 1948......	1,200	4% $a(m)$ and $a(f)$ rated down 1 year
Apr. 1948—Apr. 1952......	1,200	3% $a(m)$ and $a(f)$ rated down 3 years
Apr. 1952—Apr. 1957......	1,200	3½% $a(m)$ and $a(f)$ rated down 3 years
Apr. 1957——............	1,200	4% 1949 Annuity Table, Projection C

disadvantage of Government Annuities is the lack of cash values if the annuity exceeds $10 per month; the $1,200 maximum annuity; and a certain lack of flexibility. In 1951, a Bill to amend the Government Annuities Act, which would have increased the limit to $2,400 and extended cash values, was opposed by the insurance industry for a number of reasons, and ultimately failed to pass. Many people, of course, believe that the Government ought not to be in the business of selling annuities at all; but, begging this question, if the $100 a month limit was appropriate in 1931, it would appear that a higher limit is appropriate today, in keeping with the cost of living and rising level of industrial pensions, provided that the rate basis is not such as to impose a loss on the taxpayers. The question whether cash surrender values on government annuity contracts should be allowed raises very fundamental issues and is even more controversial.

Up to March 31, 1957, 1,061 corporations and other bodies had entered into group contracts with the government; and 179,434 employees or members were covered under these contracts, and 21,036 had been retired on pension. Individual government annuity contracts are used in about 400 pension plans covering 7,500 employees.

The receipts for the last fiscal year were $64,421,000, of which "more than 60% comes from pension plans." The fund on March 31, 1957, stood at $989,286,000. The reserve in respect of pension plans is probably about $600 million. The reserve does not consist of investments, but is a charge on the Consolidated Revenue Fund.

TRUSTEED (SELF-ADMINISTERED) PENSION PLANS

It is particularly difficult to obtain reliable estimates on trusteed pension plans. (Throughout this paper the words "trusteed plan" refer to a self-administered trust fund and not to an insured pension trust.) We can only summarize some of the surveys that have been made in the past, and attempt to form an opinion on the present day position. Statistics from past surveys of pension plans are shown in Appendix I, and unfortunately few of these surveys indicate the method of underwriting.

The Department of Labour in 1954 reviewed the progress thus:

> In 1936–37 a survey by the National Employment Commission found that 8% of Canadian establishments had a pension plan. Shortly after the war, in 1947, the Dominion Bureau of Statistics estimated the proportion to be almost 25%. By 1951, according to the Economics and Research Branch survey the proportion had risen to 37% and in 1954 to 45%.

The survey makes it clear that large firms are much more likely to have pension plans than small firms. In the establishments surveyed, it was found that 70% of the employees worked for employers which reported having pension plans of all types. An unpublished Department of Labour survey in 1957 showed that in the establishments surveyed 78% of the employees are in establishments with pension plans. Of course a great many of these employees have not met the conditions for membership or coverage.

The rapid growth is due to the favorable tax legislation mentioned earlier; to increased "security consciousness" following the depressed 1930's; and to the use of fringe benefits as a substitute for wage increases during the war. Further, a new force was felt after 1950 when the first noncontributory pension plans were negotiated as part of union contracts. These union negotiated plans have a set standard which cannot be ignored, even by firms that do not, as yet, negotiate on pensions. The first negotiated plans provided pensions of around $60 per month, and $80 to $100 is common today (in the automobile industry the pensions are

$2.25 per month for each year of service, plus a supplement originally designed to integrate with the government Old Age Benefit).

The majority of union plans are trusteed, particularly those using the so-called "terminal funding" system which was allowed in 1952 by an Income Tax Act amendment. However, deposit administration contracts are now available from insurance companies which offer great flexibility and appear to be gaining in favor. Variable annuity plans have been much discussed but have not become established in Canada, except in isolated cases. On the other hand, some notable industry-wide pension plans have come into effect, negotiated by unions with a group of employers in a particular industry and area.

As a medium for smaller trusteed pension plans, the Montreal Trust and Canada Trust Companies each established pooled or multiple funds in 1955, designed to provide a diversified portfolio and higher interest yields. Other trust companies followed, and pooled funds have grown to several million dollars. A common fund is set up in which a number of pension funds, in whole or in part, are invested. Each participating pension fund has a number of units in the common fund and investment or withdrawal is in units, the value of which varies with stock market prices. There is, of course, no implication that the plan should provide "variable annuities." Both common stock and fixed interest pooled funds are available and an employer may, if he wishes, divide his fund between them in any proportion.

In the next year, 1956, the investment restrictions of the Income Tax Division on trusteed pension plans were lifted and unlimited investment in common stocks allowed. Formerly the limitations in the Canadian and British Insurance Companies Act were applied to pension trust funds and in particular the investment in common stocks was not allowed to exceed 15% of the total fund. At present, practically the only restriction is against investment in the employer's own notes, stocks, bonds or other obligations. This new investment freedom has been used cautiously and only a few trust funds have above 30% in equities.

The Dominion Bureau of Statistics "Survey of Trusteed Pension Funds, 1953" estimated the position in 1953, under the three main methods of underwriting, to be as given in Table 5. While the figures for insured contracts include all group contracts, and the Government annuities include all group and individual contracts used in pension plans, the trust funds surveyed by the Bureau of Statistics excluded some important employee groups, particularly governments and Crown Corporations, as noted in Appendix I. Thus the figures are not strictly comparable, those for insured plans being understated, and those for trusteed plans even more so.

A trusteed pension plan may have a corporate trustee (trust company) or private trustees (individuals). A few trust companies have the great bulk of the pension business in which a corporate trust company is appointed trustee. Leading the field in the amount of assets under trusteeship are the Royal Trust, Montreal Trust, National Trust, Canada

TABLE 5

Method of Underwriting	Number of Plans	Number of Covered Employees	Contribution Income ($ Million)	Assets or Reserves ($ Million)
Insured contracts........	2,297	226,507	62	398
Trust funds.............	260	391,422	117	835
Government annuities....	1,375	158,700	44	400*

* My rough estimate from Government Annuity Reports.

TABLE 6

Pension Funds with Noncorporate Trustees	Number of Employees Covered	Assets Invested ($ Million)
(1) Banks—generally under Pension Fund Societies Act with privately held fund..................	24,000	$ 275
(2) Insurance companies staff pension funds which are not under group annuity contracts..............	26,000	90
(3) Railways and airlines (some plans not fully funded)	230,000	490
(4) Industrial concerns ($300 million is known to be privately held for employees of ten large firms in Canada)...................................	150,000	400
	430,000	$1,255

Trust, and Toronto General Trust. Enquiries from these and other trust companies indicate that they hold assets at the end of 1957 of approximately $700,000,000, relating to roughly 680 pension funds. The annual contribution income approximates $130,000,000. Statistics are not kept of the number of employees involved, but the indications are that roughly 400,000 employees are covered.

In the private sector the total assets in the hands of noncorporate trustees are very considerable. The estimates in Table 6 are believed reasonable but make no pretense to accuracy.

The Public Service Superannuation Fund to which nearly 160,000 federal civil servants contribute stands in the books at about $920 million, but this is a "paper fund" and is not invested. As regards provincial governments, municipalities, fire brigades, police forces, the teaching profession and other public service organizations (over 350,000 employees) great variety exists, with some pension plans unfunded, some insured, some under Government Annuities and some trusteed. Undoubtedly the great majority of the employees are in trusteed plans—for example, about 100,000 teachers are in unfunded plans, or in trusteed plans which had invested assets of $200 million in 1957. We are not in a position to make any estimate for this public service group—some small part of the assets has been included in other places in this study—but for the sake of completeness, we might guess the additional funds

TABLE 7

	Number of Employees Covered	Assets or Reserves ($ Million)
Insurance company reserves (group contracts and individual policy trusts, eliminating duplicates)	300,000	$ 800
Government Annuities pension plans	190,000	600
Trusteed pension plans		
Administered through trust companies	400,000	700
Held by private trustees	430,000	1,255
Total nongovernment	1,320,000	$3,355
Public Service Superannuation Fund	160,000	920
Teachers' pension funds	100,000	200
Provincial, municipal, etc.	250,000	300
	1,830,000	$4,775

other than for teachers to be in the order of $300 million. In this survey we have excluded pensions for the Armed Services under the Department of Defence.

ALL PENSION PLANS—COVERAGE AND RESERVES

In summary, the employee coverage and the assets or reserves for Canadian pension funds, at the end of 1957, may very tentatively be estimated to be, in millions, as shown in Table 7. Hence the total, excluding the Civil Service, other government employment and Armed Services is over $3\frac{1}{4}$ billion, all invested, except $600 million in the Government Annuities Branch. Including government employment, except the Armed Services, the total is $4\frac{3}{4}$ billion of which $1\frac{1}{2}$ billion is in "paper funds." This relates to over $1\frac{1}{4}$ million *covered* nongovernment employees, and the total, including government employees, would probably be over $1\frac{3}{4}$ million persons.

Satisfaction at this fine achievement in the private provision for old age must be tempered by deep concern at the depreciation of our currency, due to inflation. The primary purpose of all pension systems is to provide food, shelter and other necessities—that is, a suitable standard of living—and even the best pension plans could be cruelly disappointing, if inflation is not controlled.

HOSPITAL, MEDICAL, SURGICAL AND SICK PAY PLANS

Group plans for the protection against the hazards of sickness and accident take a great variety of forms and it is beyond the scope of this paper to survey the field in any great detail.

Sickness or accident gives rise to an immediate need for money to pay medical bills and to compensate for loss of earnings. As the wages of industrial workers leave little margin for such contingencies, relief

TABLE 8

Benefit	Units Reporting Plans	Employees on Payroll (Thousands)	Employees Covered (Thousands)
Wage Loss	3,800	918	593
Cash Medical and Hospital	2,571	480	276
Medical Care	1,864	420	227
Hospital Care	4,615	880	424

through group arrangements was sought early. Fraternal Societies were active before 1900 and originally concentrated on providing weekly cash benefits in the event of disability. Gradually they came to offer other types of sickness benefits and life insurance. We may note that Workmen's Compensation developed after World War I on a provincial basis, the Ontario Act in 1915 being the first. Insurance companies began to write group health policies shortly before World War I, but it was during and after World War II that the business increased with great rapidity.

A survey in 1939 reported that 1,676 establishments employing 240,000 persons had sickness insurance plans, but the type of benefits was not specified. The Dominion Bureau of Statistics Survey of Pension and Welfare Plans in Industry, 1947, showed the following coverage, railways being excluded (Table 8). It is clear from the survey that wage loss plans arose earlier than plans for compensation against hospital and medical expenses. Most plans were supported by joint contributions of the employer and the employee. Where this was not the case, the employer usually paid the whole cost of wage loss plans, and by contrast the employee usually paid the whole cost of medical and hospital plans.

The distribution of coverage under *insured* group accident and sickness is summarized annually by the Joint Committee on Health Insurance (set up by the Canadian Life Insurance Officers Association and All Canada Insurance Federation), based on the returns of insurance companies (Table 9).

Insured hospital, surgical and medical plans have all more than doubled in the last six years. The over-all coverage under insured plans has been increasing recently at just about the same rate as coverage under the "nonprofit" organizations. The weekly indemnity, accidental

TABLE 9

INSURED GROUP PLANS FOR ACCIDENT AND SICKNESS IN CANADA IN 1956

Type of Benefit	Contracts	Coverage (Including Dependents) (Thousands)	Premiums in Year (Millions)	Claims in Year (Millions)
Accident and Health (Weekly Indemnity)	11,846	1,168	$27.0	$18.9
Accidental Death and Dismemberment	6,584	683	1.9	.8
Hospital Expense	10,894	2,726	33.6	32.2
Surgical Expense	11,308	2,755	20.5	15.3
Medical Expense	8,896	1,820	6.4	5.1
Comprehensive or Major Medical	169	233	3.0	1.9
All Types	....	....	$92.4	$74.2

death and dismemberment, and major medical plans are almost entirely underwritten by insurance companies and fraternals. However, several self-administered weekly indemnity plans are known to exist. The growth of major medical insurance (which usually includes hospital bills not otherwise covered, as well as doctors' bills) is very significant, since this coverage was unknown in 1950. Progress in major medical depends to some extent on whether the public can be educated to accept the necessity for the deductible amount and the coinsurance. These plans vary widely but are based on the sound premise that the real need is for substantial protection against medical catastrophe, rather than the payment of numerous small claims.

The origin of Blue Cross Hospital Plans has sometimes been traced back to a school teacher in Dallas, Texas, who, in 1929, was unable to pay her hospital bill. As a result, 1,500 local teachers formed a mutual benefit society which provided cash sickness benefits. Soon, other groups in the city became members of a "group hospitalization plan" and similar plans arose in other parts of the U.S.A. The American Hospital Association drew up a set of standards and the plans which conformed were allowed to use the Blue Cross emblem.

The first nonprofit hospital plan in Canada was formed in 1939 in Manitoba. This was soon followed by hospital plans in Ontario 1941, Quebec 1942, Maritimes 1943, and Alberta 1948. The Blue Cross Plan in British Columbia was formed in 1944 but was discontinued in 1949 when the British Columbia Government Hospital Plan came into effect.

Blue Cross Plans were successful from the beginning and 4 million individuals were covered by the end of 1957. Their success is largely attributed to the principle that usually "care" (that is, specified hospital services) is provided, instead of "indemnity" (that is, cash payments which may or may not cover the whole hospital bill). Soon after the Blue Cross movement started, many thousands of people left the Armed Services where they had been accustomed to have all their hospital and medical needs met automatically, and further, organized labor was successfully demanding and obtaining fringe benefits from employers. Another reason for their success is the fact that Blue Cross would underwrite groups without any employer contribution, a practice rarely followed by insurance companies. Generally, this period saw a remarkable growth of security and insurance consciousness among Canadian citizens.

The Ontario Blue Cross Plan has more than half the Blue Cross coverage in Canada, and its history is illuminating. At the outset, only group contracts were available. For 21 days of standard ward care in any year, the monthly subscription was 50¢ for a single person, and $1.00 including dependents. The Standard Ward Service contract now costs $1.65 single, and $4.70 family. The plan accumulated a surplus and "dividends" in the forms of extra days of hospitalization and extra services were granted. In 1949 individuals, subject to a health questionnaire, were offered contracts at considerably higher premium rates than the group rates. Contracts for "Semi-private" and "Comprehensive," and "Medical in Hospital" coverage were also introduced. In 1948 the upward trend in hospital charges and utilization forced the first subscription increase, and since then rates have risen rapidly. This steady rise in rates has been, of course, a source of criticism of both Blue Cross and prepaid medical plans.

Prepaid medical plans are of even more recent origin than Blue Cross hospital plans. In 1945 the great majority of areas had no plan available and under 100,000 persons were enrolled in Canada. As with Blue Cross, the development was on a provincial basis, since health services are a provincial responsibility under the constitutional clauses of the British North America Act. It was not until 1951 that the Trans-Canada Medical Plans organization was formed as a guiding and co-ordinating body. TCMP now includes 11 member organizations, which have a total enrolment, including dependents, of about 3,100,000, and which pay claims of some $49 million a year.

Dr. S. A. Orchard, Chairman of Trans-Canada Medical Plans, in a speech in June 1957, stated:

> About 7 million Canadians had secured voluntary insurance against hospital expenses at the end of 1956. At the same time, about 6,400 thousand were insured against surgical expenses and about 5,400 thousand had medical insurance. In the past six years, the number of Canadians having voluntary hospital insurance has increased by 50%. On the other hand, the number having surgical insurance has increased by 150%, while the number having medical insurance coverage has increased by approximately 200%.
>
> This voluntary coverage has been provided by the insurance companies, by Blue Cross hospital plans in eight provinces and by medical care plans, sponsored by the medical profession. It has also been available through insurance co-operatives, fraternal benefit societies and employee benefit associations. In all instances, the selection has been on a voluntary basis to meet personal needs and considerations both for groups of people in industry and on an individual basis.

The largest single welfare plan in Canada came into effect on January 1, 1957 for nearly 400,000 persons, being nonoperating employees in the Canadian National Railway, Canadian Pacific Railway, and three other railways, and their dependents. Compared with railroads in the United States, the Canadian railways are relatively free from government control in matters of pensions and welfare. There is nothing in Canada corresponding to the United States Railroad Retirement Act, although the Canadian National Railway is a Crown Corporation answerable to parliament. Under the railway welfare plan, group insurance and weekly indemnity benefits were insured by a group of six insurance companies. Hospital benefits in the seven Eastern provinces were provided by Blue Cross Plans; medical and surgical benefits were provided through prepaid medical plans. In the three Western provinces, government or municipal hospital plans made basic hospital coverage unnecessary and so extra medical benefits were given in lieu. In the case of each benefit, special negotiations were conducted and the contracts differ from those normally available in many details. One lesson learned is that provincial differences in hospital and medical plans cannot be avoided under present conditions.

Hospital insurance, through Blue Cross or otherwise, will be profoundly affected by the federal-provincial agreement on hospital plans. Alberta, British Columbia, Newfoundland and Saskatchewan already have plans which can easily be adapted to receive the federal subsidy. At the time of writing, Ontario, Nova Scotia, Prince Edward Island and Manitoba are setting up new provincial government plans, and the other two provinces, Quebec and New Brunswick, are likely to follow eventually. Basic hospital coverage at the standard ward level will be provided by the provincial governments, and Blue Cross or insurance company contracts will have to be discontinued or amended to provide supplementary benefits or some form of major medical. There is no immediate threat of provincial government plans for medical or surgical expenses, but this certainly cannot be ignored as a possibility in the not distant future.

SUPPLEMENTAL UNEMPLOYMENT BENEFIT PLANS

The idea of a guaranteed annual wage had been under discussion for several years when Murray Latimer, in 1952, prepared a brief to the U.S. Wage Stabilization Board for the Steelworkers. His "Guaranteed Wage Plan" limited the employees covered, the number of weeks of benefit and the employer's maximum liability, and also integrated benefits with state unemployment insurance. Shortly afterwards at its 1953 convention, the UAW adopted a resolution which indicated a similar line of thinking. This change in the attitude of these two large unions paved the way for what we now call Supplemental Unemployment Benefit Plans. The purpose is to provide, for a limited period, and with restrictions on the total cost to the employer, an income to laid-off employees of up to 65% of normal earnings, including unemployment benefits.

The first of such plans were negotiated in 1955 by the UAW with the Ford Motor Company and by the USW with American Can Company and Continental Can Company. The plans with the Can Companies, which became effective in October 1955, included certain employees in Canada, and they were followed by the first UAW plan in Canada, which was with General Motors of Canada Limited. Subsequently, further plans were established in the automobile, steel and other industries.

National unemployment insurance is compulsory for all employees under contract of service earning under $4,800 per annum, and for all hourly, daily or piecework employees, unless they are in noninsurable employment, such as agriculture, fishing, government service, domestic service, etc. Weekly contributions depend on earnings and are shared equally by employees and employers, the maximum contributions being 60¢ plus 60¢, if earnings are $57 per week or over. Generally, unemployment benefit is payable to those with 30 contributions in the last two years (of which 8 must be in the last year), who are capable of, and available for, but unable to obtain suitable work. The unemployment benefit varies with average earnings to a maximum of $23 weekly for a single person, or $30 weekly for a person with dependents, and is payable for 15 to 36 weeks.

In Supplemental Unemployment Benefit plans, the *amount* of benefit depends upon regular earnings, the national unemployment benefit received and the level of the trust fund. The *duration* of benefits depends upon the employee's credit units, his seniority and the level of the trust fund. As a very rough rule, the maximum benefit is $25 per week, payable for a maximum of 26 or 52 weeks, but there is a bewildering variety of special restrictions and additional payments which may apply.

Benefits first became due to laid-off workers in the fall of 1956. In an important decision, the Unemployment Insurance Commission ruled that SUB payments from the specific plans submitted to them are not "earnings" for purposes of unemployment insurance. No general rules have been made and new plans must be individually submitted for approval. Also the Income Tax Act was amended to provide for SUB Plans. The employer may deduct his contributions, the earnings of the trust fund are not taxable, employees are not taxed on employers' contributions *into* the fund but, of course, are taxed on benefits paid *out of* the fund.

At the time of writing, about 20 firms in Canada have SUB plans, including Ford, General Motors, Chrysler, Massey-Harris-Ferguson, Dunlop, and Dominion Steel and Coal. The funds are relatively small but growing rapidly; at this early stage an estimate of the total would not have much significance. With unemployment in Canada at its highest for many years, some of the plans may be severely tested in the coming months.

GOVERNMENT ACTION IN THE FIELD OF PENSION AND WELFARE PLANS

The Old Age Pension Act of 1927 inaugurated a comprehensive system of financial aid to needy persons over age 70, on a Dominion-Provincial basis. From January 1952, a universal pension of $40 per month to all persons aged 70 or over, subject only to a 20-year residence test, was provided under the Old Age Security Act. Old Age Assistance is available between age 65 and 70, subject to a means test. The Old

Age Benefit was raised to $46 in July 1957, and in November 1957 the amount became $55 and the residence qualification 10 years. Pensions are also available for blind and disabled persons, on a means test basis.

At present the Government is considering an "actuarially sound" national contributory pension plan, supposedly following the principles of U.S. Social Security, to be superimposed on the present noncontributory pensions. The present Canadian system has been criticized for giving money regardless of other income, so that some people receive it who do not need it, for failing to make adequate provision for widows (especially those with children), for having a means test up to age 70, and for ignoring differences in income and standard of living. However, the proposed double-barreled plan raises many serious problems which have not yet been properly studied.

Family Allowances commenced in 1944. Monthly payments of $5 to $8 depending on the child's age are paid normally to the mother for each child under age 16, and persons with eligible children have a smaller income tax exemption for such children.

Income tax rules regarding pension plans have been amended from time to time. The tax relief on pension contributions has been mentioned in the first Section. In 1952, "terminal funding" of approved (now registered) pension plans was allowed by an amendment to the Income Tax Act. Under the new Section, the employer may provide the lump sum cost of an individual employee's annuity in the year he retires or becomes eligible to retire, and the full cost may be written off by the employer in that year. Thus, theoretically, the liability for pensioners is at all times funded, but no provision is made for the liability of those below retirement age. The annuities must, of course, be determined under a pension plan which meets the other requirements for registration by the government. Terminal funding has been widely used in union negotiated pension plans.

In 1954, the Statutory Limit of $900 on allowable pension contributions which applies separately to employer and employee contributions was raised to $1,500. Legislation on deferred profit-sharing plans was rewritten in 1956, but the new rules are quite complicated and much less favorable than in the United States. As a result, *deferred* profit-sharing plans have been discouraged, although profit-sharing *pension* plans, which are taxed quite differently, have continued to progress. In the same year virtually all the investment restrictions on trusteed pension funds were removed, except that no investment may be in the notes, stocks or other securities of the employer, or of a parent company or a subsidiary company.

It was also announced that the *Blue Book* of Principles and Rules for approval of Pension Plans would be revised. The *Blue Book* is not law, nor even regulation, but is a statement of the general principles and rules that the Minister of National Revenue proposes to follow in exercising his function of accepting pension plans for registration under the Income Tax Act. There is very little said in the Statutes as to what constitutes a registered pension fund. Thus the *Blue Book*, which was published by the Department of National Revenue, is merely a guide to the public on how the Minister will use the wide discretion given him under the Act regarding registration of pension plans. The present position is that officially the old *Blue Book* has been withdrawn but no new *Blue Book* has been issued and this has resulted in considerable uncertainty as to the policies of the Department of National Revenue.

Last year, it became certain that Federal-Provincial Hospital Plans would come into force in most Canadian provinces. The Ontario Government will have "exclusive occupancy of the basic hospital field" and a great many Blue Cross or insured hospital contracts will have to be wound up or changed.

Commencing in the year 1957, Registered Retirement Savings Plans allow individuals to save for their old age on a tax free basis. This legislation may affect employer-employee pension plans and may even be used as a substitute for registered pension plans by some small employers.

The maximum yearly contribution is $2,500 if the individual is not covered by a pension plan, or $1,500 inclusive of his own pension contributions if the individual's employer is contributing to a registered pension plan on his behalf, or 10% of earnings if smaller. The contracts must provide annuities commencing not later than the individual's seventy-first birthday and may not be surrendered for cash or used as security for a loan. Each contract must be individually registered by the government and issued by an approved underwriter, generally an insurance company, the government annuities branch, a trust company or a mutual fund. About 32,000 individuals took advantage of the new legislation and registered their old or new contracts before the end of 1957.

In our lifetime there has been a social revolution in the responsibility assumed by governments for the welfare of their citizens. More and more, we expect the government to provide a "cradle to the grave" security—Sir William Beveridge's "Freedom from Want"—on a scale and at a level that would have been completely impracticable last century. There is a fundamental difference between isolated measures of poor law or emergency relief, with strong incentives for the individual to get off benefit and back to "normal," and the conception that the state has the duty of ensuring a "decent minimum," not merely a subsistence, living standard for all. Of course our social security system is still developing and we have not yet reached the welfare state "ideal," but we have moved a very long way towards it.

The means by which we try to achieve financial security may be classified broadly into *individual* insurance and savings, *group* insurance and *social* insurance. The government has encouraged individual provision, for example, by the Government Annuities Act and Retirement Savings legislation, and also by the government supervision of insurance which, with the wholehearted cooperation of the insurance industry, has resulted in the present high standards and public confidence in insurance practices. Group plans have been encouraged mainly through taxation concessions to employers and employees, such as the income tax reliefs for pension plans and deferred profit-sharing plans mentioned above.

Social insurance includes the federal government plans for Family Allowances and Old Age Benefits. Provincial governments, with federal subsidies, provide benefits subject to means tests for the blind, the disabled and those aged 65 to 69. Perhaps Unemployment Insurance and Workmen's Compensation should be mentioned here. Again, most provincial governments have set up or are setting up hospital plans which will qualify for the federal subsidy.

Adequate social security for the great mass of the population would seem to require both private and public plans. For indigents and transient workers, public plans may be the only protection against destitution. For those who are not entirely dependent on the public purse, the state benefits form a floor upon which the individual or his employer may build. The danger to be guarded against is that the public plans, instead of supplementing private provision, will positively discourage it, as can happen if an increase in personal income reduces means test benefits by an equal amount, or if government benefits are fixed so high as to discourage personal effort.

The Progressive Conservative party, which won a large majority in the Canadian federal election in March 1958, has suggested an extension of the Old Age Security system by adding a contributory supplement. As a first step, Doctor R. M. Clark has been appointed by the government "To make an enquiry into the facts relating to the old age security systems presently in effect in Canada and the United States of America, with particular reference to those features of the Old-Age and Survivors Insurance program in the United States of America which make it possible for higher benefits to be paid covering a wider range of contingencies at an earlier age than is provided under present legislation."

Whatever the political decisions on the extent of the plan and the level of benefits, we, as actuaries, should be vitally concerned that sound financial principles are followed—that the public is made aware of the costs, that private savings and private pension plans are not discouraged, that the money goes primarily to those in real need and that the economy is not injured by an uncontrollably rising outgo of pensions.

APPENDIX I

Surveys of Canadian Pension Funds

(1) A National Employment Commission survey, carried out in 1936–37, found 722 firms with a total employment of 386,677 reporting pension plans. Of these, 107 firms with 30,423 employees had only informal plans. Both trusteed and other forms are included.

(2) A Dominion Bureau of Statistics Survey in 1947 (which excluded an estimated 90,000 public servants covered by pension plans) covered 14,452 employing units and 1,800,000 employees. Out of this group it reported 3,425 pension plans of employers with 915,709 employees, of whom 472,066 employees were covered. In addition, 181,788 railway employees were covered by pension plans.

For what it is worth, the administration of the pension plans was analyzed as follows:

Administration	Number of Plans	Covered Employees
Employer, or employer and employees (presumably trusteed)	1,304	285,703
Commercial company (presumably insured)	931	71,428
Government Annuities	800	50,490
Voluntary nonprofit agencies	67	5,691
Other and not stated	443	58,754
	3,545	472,066

(3) The Department of Labour Study of Industrial Pension Plans in 1954 reported that out of 1,824,000 employees, 1,260,000 were in establishments which had pension plans (but were not necessarily covered). In general, only units employing 15 or more persons were included in the study. The percentage of employees who were in establishments which reported having pension plans (April, 1954) was analyzed by industry groups:

Industry Group	Non-office	Office	All Employees
Mining	59%	77%	61%
Manufacturing	59	72	62
Transportation and Communications	91	95	92
Public Utilities	94	97	95
Wholesale and Retail Trade	75	80	76
Finance, Services and Others	62	75	68
All industry groups	67%	78%	70%

We quote from this Survey:

In 1936–37 a survey by the National Employment Commission found that 8% of Canadian establishments had a pension plan. Shortly after the war, in 1947, the D.B.S. estimated the proportion to be almost 25%. By 1951, according to the Economics and Research Branch survey, the proportion had risen to 37% and in 1954 to 45%.

The survey results indicate clearly that larger firms are more likely than smaller ones to have pension plans. Less than half the establishments in the survey (45%) reported that they had pension plans. However, this minority of establishments employed 70% of the workers covered by the survey.

An unpublished survey, on similar lines, of the status in April 1957 indicated that about 50% of employers reported pension plans, and these units employed 78% of the employees.

(4) A discussion of Old Age Benefits by Mr. W. M. Anderson is reported in *TSA* II (March, 1950).

He pointed out that the coverage under various self-insured pension plans is extremely difficult to estimate, since the statistical information is very meager. Canada has a gainfully occupied population of slightly over five million persons. About 55% of this total are employees of business enterprise, about 15% are employees of governments and nonbusiness organizations, and about 30% are self-employed, or unpaid family workers. In the case of employees of business organizations, it has been estimated that roughly one-third (*i.e.*, about 900,000 persons) are covered under pension plans of various kinds. About one-quarter of these persons would be members of insured pension plans and about three-quarters members of self-insured plans. In the case of persons employed by governments, etc., there are probably as many as 400,000 who are members of pension plans, practically all of which are self-insured. Accordingly, about one-quarter of the labor force, or roughly 1,300,000 persons, probably are members of pension plans of one kind or another.

(5) None of the above authorities attempted an over-all financial assessment. The Dominion Bureau of Statistics Survey of Canadian Trusteed Pension Funds, 1953, was specifically made to obtain some facts on receipts, disbursements and assets of trusteed pension funds.

The survey was restricted to incorporated companies. It excludes associations, charitable, religious and educational bodies, governments, government agencies and crown corporations. The survey included 260 funds of which 232 were funded trusts and 28 were pension fund societies. In 1953, 391,422 employees were covered by these funds and contributions aggregating $117 million were made by employers and employees.

The position in 1953, as shown in this Report, is:

Method of Underwriting	Number of Plans	Number of Covered Employees	Contribution Income ($ Million)		Assets or Reserves ($ Million)	
	1953	1953	1952	1953	1952	1953
Insured......	2,297	226,507	52	62	336	398
Trust Fund..	260	391,422	98	117	717	835
Government Annuity...	1,375	158,700	42	44	....	400*

* My rough estimate from Government Annuity Reports.

NOTE.—Excluded from Trust Fund group are governments, associations, crown corporations, etc.

Excluded are pension plans using individual insurance company contracts.

Excluded are informal, or unfunded plans.

(6) The Income Tax Statistics show that in 1955 (the last year for which information is published) individual taxpayers claimed $178 million in deductions from income for pension fund contributions. Fully-tabulated companies which made tax returns also charged $132 million of pension contributions as expenses (plus $22 million of group insurance contributions). From the National Accounts and the Income Tax Statistics it is estimated that federal, provincial and municipal governments contributed at least $105 million, after deducting employee contributions. Also the pension contributions of employees who filed tax returns but were not taxable is estimated to be $16 million. The total 1955 contribution income of all pension funds in Canada must therefore appreciably exceed $431 million, since contributions of not fully-tabulated companies and unincorporated companies as well as individuals not making tax returns are excluded.

APPENDIX II

Glossary of Certain Terms Which May Be Met with in Connection with Canadian Pension and Welfare Benefits

These definitions and notes are intended to supplement and widen the excellent glossary in Mr. D. C. Bronson's paper "Pensions—1949" (*TSA* I, 243). Generally the terms and definitions relate specifically to the position in Canada. Duplication with Mr. D. C. Bronson's list has been avoided, since his glossary is applicable in Canada except in the obvious cases where U.S. government benefits or Bureau of Internal Revenue rulings are involved.

(1) *Approved Pension Fund*—See Registered Pension Fund or Plan.

(2) *Automatic Means Test*—An indirect means test through the operation of income tax. An example is Family Allowances, where the income tax exemption for an eligible child is $250, but for a child who does not qualify is $500. Thus if the taxpayer's income is high enough, the whole of the Family Allowance is taxed away.

(3) *Blind Persons' Allowances*—Allowances up to $55 per month paid by the provinces on a means test basis to registered blind persons. The federal government reimburses 75% of the cost.

(4) *British North America Act, 1867 (B.N.A. Act)*—The Act which established Canadian federal state and sets out the division of legislative and executive authority between Canada and its Provinces. Following the Statute of Westminster, 1931, Canada obtained autonomy and equality of status with the United Kingdom and other Commonwealth nations under the Crown.

(5) *Canadian Life Tables*—Population mortality tables published by the Dominion Bureau of Statistics based on the Canadian Census and the deaths for a three-year period around the census date. The most recent table is the Canadian Life Table 1951, (D.B.S. Reference Paper No. 50).

(6) *Crown Corporation*—A corporation owned by and responsible to the Crown through the government. Examples are the Canadian National Railways, Atomic Energy of Canada, Polymer Corporation, Central Mortgage and Housing, Canadian Arsenals and Trans-Canada Air Lines.

(7) *Deferred Compensation*—An individual arrangement, usually between a company and an executive, by which he is promised certain benefits on death or retirement, if he meets certain future conditions. The executive is taxed only on the benefits as and when received.

(8) *Deferred Profit-Sharing Plan*—A plan under which the profits allocated to employees (contingently or absolutely) are accumulated in a fund to be paid out in cash as and when specified in the plan. These plans and stock purchase plans are governed by Section 79 of the Income Tax Act.

(9) *Disabled Persons' Allowances*—Allowances up to $55 monthly paid by provincial governments to permanently and totally disabled persons on a means test basis under the Disabled Persons' Act. The federal government pays 50% of the cost of the program, which became effective in January 1955.

(10) *Dominion Bureau of Statistics* (*D.B.S.*)—The statistical office of the government which publishes, *inter alia*, census reports, population mortality tables and special surveys on pensions and welfare.

(11) *Employer's Certificate*—Certificate of the employer, required by the Department of National Revenue, that the information supplied to the insurer or the actuary concerning the employees covered by a pension plan is correct.

(12) *Family Allowances* (*Baby Bonus*)—Allowances paid normally to the mother in respect of children under age 16. The monthly allowance is $5 to $8 for each child, depending upon the child's age. These allowances are not taxable but persons with eligible children have a lower income tax exemption for such children than persons whose children are not eligible.

(13) *Form T 510*—Form of application for registration of a pension fund to be signed by the employer and submitted to the Department of National Revenue with supporting documents.

(14) *Government Annuities*—Annuities issued under the Government Annuities Act by the Annuities Branch of the Department of Labour. Contracts for immediate and deferred annuities on one or more lives are available. The maximum annuity is $100 per month.

(15) *Life Officers Association* (*CLIOA*)—The Canadian Life Insurance Officers Association which acts as an information center and as spokesman for the life insurance industry.

(16) *Mothers' Allowances*—Provincial allowances to a maximum of $25 to $69.50 depending upon the province, payable on a means test basis to widows with children or other mothers for whom the breadwinner does not provide support.

(17) *Old Age Assistance*—Pensions up to $55 per month payable by the provinces (which receive subsidies from the Government of Canada) to persons over age 65 but under age 70, with ten years residence in Canada, on a means test basis. The total income including Old Age Assistance cannot exceed $80 per month for an unmarried person and $135 per month for a married couple.

(18) *Old Age Benefit*—The government pension under the Old Age Security Act, payable without means test to all persons over age 70 who meet a Canadian residence qualification. (In March 1957 the monthly benefit was $55 subject to a ten-year residence qualification.)

(19) *Old Age Exemption*—An extra $500 income tax exemption allowed to taxpayers aged 65 or over.

(20) *Past Service Certificate*—Actuary's certificate, required by the Department of National Revenue, of the past service liability of a pension plan with a recommendation for its liquidation. The past service liability includes generally all unfunded liabilities or deficits not provided for by current service contributions.

(21) *Pension Fund Society*—A society established under the Pension Fund Societies Act for the provision of pensions to members. The employer may or may not contribute to the society.

(22) *Pooled, Multiple or Classified Pension Funds*—A fund set up by a

trust company in which the pension funds of several employers are commingled. Each pension fund has a proportionate share of the pooled fund, expressed in units which vary in value with the total market value of the pooled fund investments.

(23) *Prescribed Manner*—This is an income tax regulation setting out how the Statutory Limit of $1,500 on employer contributions to a pension plan will be applied. The average *future* service contribution rate is determined as a percentage of total incomes, and the employer may write off contributions on all salaries up to $1,500 divided by this rate.

(24) *Principles and Rules respecting Pension Plans*—Sometimes referred to as the "*Blue Book.*" The "Statement of Principles and Rules respecting Pension Plans for purposes of the Income Tax Act" issued by the Department of National Revenue. This booklet has not the force of law nor of regulation, but is a guide to the public on the conditions for registration of pension plans.

(25) *Profit-Sharing (Deferred)*—See *Deferred Profit-Sharing Plan.*

(26) *Profit-Sharing Pension Plan*—A registered pension plan under which the employer's contributions and the pensions are dependent on profits. This differs from a deferred profit-sharing plan in that pensions (not cash) must be provided at retirement, no withdrawal is allowed while in service, and investment in the employer's securities is not allowed.

(27) *Provincial Pension Supplements*—Supplements up to $20 per month paid by certain provinces to recipients of Old Age Benefit, Old Age Assistance, or pensions to the blind or disabled. Currently Alberta, British Columbia, Saskatchewan and Ontario are provinces paying such supplements.

(28) *Provincial Registration of Pension Plans*—Registration with the provincial government in order to qualify for relief from provincial income tax. Once a pension plan is registered with the federal Minister of National Revenue, provincial registration is usually automatic upon making proper application.

(29) *Railway Welfare Plan*—The union-negotiated plan for the nonoperating employees of five Canadian railways, and their dependents, effective January 1, 1957. The plan provides group insurance, weekly income, hospital, medical and surgical benefits. The cost is paid half by employees and half by the railways.

(30) *Registered Pension Fund or Plan*—Defined in Section 139(1)(ahh) of the Income Tax Act as "an employees' superannuation or pension fund or plan accepted by the Minister for registration for the purposes of this Act in respect of its constitution and operations for the taxation year under consideration." Formerly known as an "approved pension fund or plan."

(31) *Registered Retirement Savings Plans*—A plan under Section 79B of the Income Tax Act by which an individual may deduct from taxable income his contributions to a pension contract within certain limits.

(32) *Reinstatement in Civil Employment Act*—One of the provisions of the Act is that an employee reinstated after being in the Armed Services must be credited with his previous service for purposes of his employer's pension plan.

(33) *Social Security Integration*—Payment of a higher monthly amount until age 70 to an employee retiring before age 70, and a lower amount thereafter,

so as to produce a level income inclusive of the government Old Age Benefit which is now $55 monthly from age 70. Integration may be automatic under the terms of the pension plan, or employees may have an option of integrating their normal level pension.

(34) *Statutory Limit*—The maximum annual contribution (formerly $900, now $1,500) in respect of an individual which may be written off for income tax purposes. The limit applies separately to employers' future service contributions (determined in a prescribed manner), to employees' future service contributions, and to employees' past service contributions.

(35) *Stock Option—Taxation*—A gain realized under a Stock Option is taxed at a percentage rate which is 20% less than the employee's *average* (not the *top bracket*) percentage rate of tax in the three previous years.

(36) *Terminal Funding*—Funding a pension plan by purchasing or providing the full cost of an annuity as each employee retires or becomes eligible to retire without any funding previous to normal retirement date. Section 11(1)(h) of the Income Tax Act permits the employer to deduct for tax purposes the full single premium thus paid if the plan provides in its terms that terminal funding will be used.

(37) *Trans-Canada Medical Plans*—An organization set up in 1951 by the nonprofit prepaid medical plans in various provinces, to provide information, guidance and coordination. It now has eleven member organizations.

(38) *Trust Company* (*Corporate Trustee*)—A company set up under the Trust Companies Act with the power to act as trustee of estates, pension funds and other trusts. In Canada, the Bank Act prohibits banks from being trustees. Sometimes trust companies act as agents for the personal trustees of a fund.

(39) *Voluntary Contributions*—Extra contributions of employees into a pension fund made to increase their pensions. Since, in Canada, pension contributions are a deduction before tax, voluntary contribution clauses are popular.

(40) *Veterans Allowances* (*Burnt-out Pensions*)—Pensions to war veterans disabled by injury or disease, normally subject to a means test. Pensions to widows of deceased veterans are also paid.

TRANSACTIONS OF SOCIETY OF ACTUARIES
1958 VOL. 10 NO. 27

DISCUSSION OF PRECEDING PAPER

DONALD R. ANDERSON:

Mr. Coward deserves a great deal of credit for having prepared such an ambitious paper as the one he has laid before us today. As can be judged from the bibliography of his paper, very few studies have been made of pension plans in Canada.

Details of the operations of the pension plans of most Canadian employers are known only to the employers and to persons in the confidence of the employers. Information on pension plans covering teachers and employees of federal, provincial and local governments can be obtained only by persistent research into the accounts of these governments.

Mr. Coward has estimated the assets or reserves of pension plans in Canada at $4\frac{3}{4}$ billion. He does not make clear just what is meant by "assets or reserves," but I presume that he means assets if known, otherwise reserves. In the field of teachers' and provincial government employees' pension plans it seems to me that a more appropriate criterion would be assets or reserves, whichever is higher.

I found Mr. Coward's figures difficult to check and I could not help but wish that he had given more details of his figures. He estimates the assets of teachers' pensions funds in Canada at $200 million as of December 31, 1957. The assets of teachers' pensions funds of six provinces projected to December 31, 1957 were as follows:

Alberta	$ 14,000,000
British Columbia	38,000,000
Manitoba	8,000,000
Nova Scotia	13,000,000
Ontario	133,000,000
Saskatchewan	12,000,000
Total	$218,000,000

I could obtain no information concerning assets or reserves in the other provinces of Canada, but I suspect that the pensions are provided on a pay-as-you-go basis in most cases. In New Brunswick, the provincial auditor states that no actuarial valuation of liabilities has been performed for many years, and I suspect that a similar situation prevails in some of the other provinces.

Mr. Coward's remarks concerning the distinction between "paper funds" and invested funds in public pension plans may be largely a matter of bookkeeping distinctions in many cases. For example, the Province of Ontario Teachers' Pensions Fund consists largely of long-term interest-bearing notes issued by the Province of Ontario. When a public pension plan of this sort is almost entirely limited in its investments to the securities of its own government, the distinction between paper and invested funds becomes rather hazy.

In fact, there may be a rather hazy distinction between a public pension plan having "paper" or "invested" assets and a plan having no assets whatsoever. In either case the government assumes responsibility for the liabilities of the fund regardless of whether these are greater than the assets. Thus the size of a public pension plan should be measured in terms of its liabilities rather than its assets.

The December 31st 1954 actuarial report on the Ontario Teachers' Pensions Fund showed a net unfunded accrued liability of $178 million. We could obtain no information regarding Quebec. Disregarding the deficits of other provinces and disregarding the increase in the Ontario deficit between 1954 and 1957, the total assets or reserves of teachers' pensions funds in Canada would be $396 million, nearly twice the figure shown in Mr. Coward's paper.

Mr. Coward suggested that the assets or reserves of provincial government and municipal pension funds might be in the neighborhood of $300 million. A brief perusal of the public accounts of the Canadian provincial governments reveals the following figures, projected to December 31, 1957.

Alberta Civil Service	$ 7,864,000
British Columbia Civil Service	46,700,000
Manitoba Civil Service	18,444,000
New Brunswick	2,300,000
Ontario Hydro	84,078,000
Ontario Public Service	53,824,000
Prince Edward Island	290,000
Quebec Hydro	10,420,000
Quebec Pensions Act	16,813,000
Total	$240,733,000

In the field of municipal superannuation, research is much more difficult. British Columbia has a superannuation fund embracing substantially all municipalities, whose assets are $31,400,000. A brief survey of the pension plans of major Ontario municipalities as reported to the Department of Municipal Affairs shows assets of about $55 million, so it is likely that Canadian municipal pension funds now exceed $100 million.

It seems that Mr. Coward's estimate of $300 million for municipal and provincial government plans is not excessive.

Mr. Coward's glossary of terms contains much that is valuable, but could stand a bit of polishing. For example, although banks in the United States often have trust departments, I am sure that the term "trust company" does not need definition to any American actuary. There are plenty of trust companies in the United States.

Mr. Coward implies that the term "prescribed manner" is widely used in the sense he defines. Perhaps it is so in his firm, but I doubt whether it merits a definition in a glossary such as this one.

I am glad Mr. Coward wrote this paper since it has encouraged me to do a bit of research. In doing this research I discovered that information on the subject is often very difficult to obtain, and I am led to the conclusion that further papers expanding our knowledge of Canadian pension plans, both public and private, are very much needed.

(AUTHOR'S REVIEW OF DISCUSSION)

LAURENCE E. COWARD:

I should like to thank Mr. Anderson for his comments and his figures on the assets and reserves of the pension funds for teachers and government employees. Evidently there is room for more investigation in this area. As Mr. Anderson says, further papers expanding our knowledge of Canadian pension plans are very much needed—particularly at this time when amendments to the Canadian Social Security System are being discussed.

The estimates of "assets and reserves" in my paper include only the *invested* assets plus the Government Annuities Branch reserve plus the Public Service Superannuation Fund reserve. While it might be more useful to know the total of the assets or reserves, whichever is higher in the case of each government plan, this figure would be very difficult to obtain since many provincial pension plans are not regularly valued or are unfunded.