

**TRANSACTIONS OF SOCIETY OF ACTUARIES
1951 REPORTS**

**SECTION II. CONVERSION UPON TERMINATION
OF GROUP MASTER POLICY**

CONVERSION of group term life insurance to a permanent ordinary or individual life insurance policy upon termination of employment has generally been permitted for more than 30 years. However, the extension of this right to instances where the group insurance terminates upon cancellation of the group master policy and employment continues is a comparatively recent development. The insurance law of New York was changed in 1940 to require that all new group life insurance policies permit the conversion of up to \$2,000 of insurance by employees insured under the policy for five years or more in the event of termination of the master policy.

Studies of the mortality and withdrawal experience under individual policies arising as a result of conversion have been made at various times in the past, the most recent having been published as Section II of the Committee's report in *TASA XLIX*. In carrying out this last study, the small amount of data with respect to master policy termination conversions was included along with the experience on conversions after termination of employment. While a separate analysis of the postconversion mortality and withdrawal experience of master policy termination conversions is not feasible because of the paucity of data, proposals to change the statutory requirements with respect to such conversions made it desirable to accumulate and analyze such data as could be obtained in regard to master policies which had terminated and conversions arising thereunder.

This report, giving the results of such a study, has been divided into the following sections: I. Source of Experience; II. Characteristics of Terminated Master Policies; III. Characteristics of Converted Policies; and IV. Cost of Conversions.

I. SOURCE OF EXPERIENCE

The following companies contributed to this study: Aetna Life Insurance Company, Connecticut General Life Insurance Company, Continental Assurance Company, Equitable Life Assurance Society, John Hancock Mutual Life Insurance Company, Metropolitan Life Insurance Company, Prudential Insurance Company of America, Sun Life Assurance Company of Canada, and The Travelers Insurance Company. The companies were asked to contribute data on all master policies terminated on or after January 1, 1947 under circumstances which, in accordance

with the provisions of the policy, or the determination of the contributing company, gave rise to a right or privilege of conversion. The information requested is shown in Appendix A, and the codes for classifying the terminated master policy as to reason for termination and limitations on conversion are given in Appendix B.

Data were contributed on 800 terminated master policies and 1,490 conversions, of which 482 were converted prior to and 1,008 on or after the date of termination of the master policy. The limited period covered by the data and their smallness should be kept in mind.

II. CHARACTERISTICS OF TERMINATED MASTER POLICIES

The distribution of terminated master policies by number of completed years in force is shown in Table I.

TABLE I
DISTRIBUTION OF MASTER POLICIES BY NUMBER OF YEARS COMPLETED PRIOR TO TERMINATION

NUMBER OF YEARS	NUMBER				AMOUNT*
	Group I— Statutory Limitation Policies	Group II— Statutory Limitation Policies	No Limita- tion Policies	All Policies	All Policies
0.....			5	5	\$ 395
1.....			6	6	190
2.....			7	7	379
3.....			7	7	446
4.....			5	5	177
5.....	124	88	7	219	32,718
6.....	93	70	4	167	31,451
7.....	52	67	7	126	24,990
8.....	42	37	2	81	18,310
9.....	17	19	3	39	7,170
10.....	5	6	3	14	4,188
11.....	4	5	1	10	4,030
12.....	4	7	5	16	3,661
13.....	3	3	3	9	2,964
14.....	4	3		7	2,975
15-19.....	14	15	5	34	7,297
20-24.....	17	4	13	34	5,003
25 and over..	6	3	5	14	5,991
Total.....	385	327	88	800	\$152,335

* Amount in force at termination in thousands of dollars.

In this and subsequent sections of this study, the master policies have been divided by reason of termination into two similar groups. Group I consists of: Code 1, policyholder going out of business; Code 5, insurance company exercises right of nonrenewal; and Code 6, any other reason, including nonpayment of premium. Policies terminated for these reasons tended to decrease in size prior to termination presumably as the business declined, and generally the coverage was not replaced. Group II includes Codes 2, 3 and 4 covering instances where control of the policyholder company was acquired by other interests or where there was a transfer of insurance to another carrier. For these cases the terminated coverage was generally replaced and there is a presumption of continued business activity on the same basis as before the change.

The statutory limitations on conversion apply to 712 of the 800 policies, either in accordance with the contract or as voluntarily permitted by the insurer. Of the 712, 385 are in Group I and 327 in Group II.

Under the remaining 88, the full amount of insurance was convertible and the privilege of conversion was not restricted to policies in force at least five years or to employees who were insured for at least that long. Most of this experience was submitted by one company which permitted these conversions beyond the statutory requirements for administrative reasons.

It should be noted that there is a concentration of groups terminated after 5 to 8 years in force. While this reflects the fact that master policy termination conversions have only been allowed comparatively recently, even in a stationary situation the tendency for a greater proportion of the groups to terminate at early durations would be evidenced.

Table II shows for the 712 terminations to which statutory limitations applied, the trend in numbers of lives in force during the five years prior to termination. The pattern is markedly different for Groups I and II policies. For Group I, the number of lives in force decreased steadily and at termination was only 63.1% of the number in force five years earlier. For Group II the number of lives remained essentially level.

Table III presents an analysis of the rate of conversion separately by lives and amounts. The contributing companies were asked to report conversions taking place during the year prior to termination as well as those effective on and after the actual date of termination of the master policy. This was done because in a large number of cases, such as the ones included in Group I, termination is not an abrupt process. It comes about instead after a gradual drop in the number of employees covered over a period of time, such as would accompany a reduction in business activity by virtue of the employer's straitened circumstances or for other reasons. The

decrease in the number of employees produces a higher than normal rate of termination of employment for some time prior to the date when the group policy is finally canceled, bringing about an increased number of conversions on termination of employment. These conversions under policies such as in Group I are, however, basically not much different from those that take place on or after cancellation of the master policy and in any case they are a part of the terminal financial strain upon the insurer arising out of conversions. The on-and-after-termination conversions are shown in relation to the in-force at termination and the conversions during

TABLE II
TREND IN NUMBER OF LIVES IN FORCE PRIOR TO TERMINATION
(Policies with Statutory Limitations Only)

PERIOD PRIOR TO TERMINATION	GROUP I		GROUP II	
	Number of Lives in Force	Ratio to In-Force Five Years Prior to Termination	Number of Lives in Force	Ratio to In-Force Five Years Prior to Termination
At Termination	34,807	63.1%	51,963	108.5%
3 mos.	37,775	68.4	49,948	104.3
6 mos.	39,802	72.1	51,343	107.2
1 year.	43,285	78.4	52,069	108.7
2 years.	47,664	86.3	54,383	113.6
3 years.	49,692	90.0	50,995	106.5
4 years.	52,069	94.3	47,153	98.5
5 years.	55,203	100.0	47,889	100.0

the year preceding termination in relation to the average in-force during that period.

The rate of conversion during the year prior to termination is .81% for Group I and .30% for Group II by amounts, and .68% and .29%, respectively, by lives. Thus the rates of Group I are two and one-half times those for Group II. Since the rates for Group II may be regarded as approximating a normal annual conversion rate, the conversions during the year prior to termination under Group I policies constitute about two and one-half years' normal conversions.

The difference between the rates of conversion for Groups I and II is even more marked on and after termination. By amounts, the rates are 2.29% for Group I and .18% for Group II, and by lives 2.23% and .22% respectively. The smallness of the figures for Group II reflects the fact that in these cases part or all of the insurance of the employees was con-

tinued with the same or a different insurance carrier. Even so, the Group II conversions on or after termination of the master policy may be said to represent approximately two-thirds of a year's normal conversions. In the same way, the conversions on or after termination for Group I are in excess of seven years' normal conversions.

The conversions for the subgroup of policies where the conversion right was not limited by the statutory requirements were high throughout, reaching the extreme rate of 5.49% by amounts and 5.80% by lives for the

TABLE III
RATES OF CONVERSION

CLASSIFICATIONS ON CONVERSIONS	NUM- BER OF POLI- CIES	AMOUNTS			LIVES		
		In Force (Thou- sands)	Converted	Rates	In Force	Con- verted	Rates
Conversions on and after Termination Date							
<i>Group I</i>							
Statutory	356	\$39,416	\$ 547,450	1.39%	29,317	426	1.45%
Voluntary Statutory	29	5,332	193,500	3.63	5,490	170	3.10
None	81	8,923	489,547	5.49	5,087	295	5.80
Total	466	\$53,671	\$1,230,497	2.29%	39,894	891	2.23%
<i>Group II</i>							
Statutory	315	\$87,928	\$ 137,078	.16%	47,804	94	.20%
Voluntary Statutory	12	8,722	15,200	.17	4,159	10	.24
None	7	2,014	30,250	1.50	1,347	13	.97
Total	334	\$98,664	\$ 182,528	.18%	53,310	117	.22%
Conversions during the Year Prior to Termination							
<i>Group I</i>							
Statutory	356	\$44,850	\$ 302,587	.67%	33,833	170	.50%
Voluntary Statutory	29	5,635	29,000	.51	5,717	28	.49
None	81	14,230	192,550	1.35	8,213	127	1.55
Total	466	\$64,715	\$ 524,137	.81%	47,763	325	.68%
<i>Group II</i>							
Statutory	315	\$85,249	\$ 248,800	.29%	47,284	132	.28%
Voluntary Statutory	12	8,463	24,200	.29	4,283	15	.35
None	7	2,183	11,000	.50	1,694	10	.59
Total	334	\$95,895	\$ 284,000	.30%	53,261	157	.29%

Group I conversions on and after termination date. The Group I conversions after termination where statutory limitations were granted voluntarily show higher rates of conversion than under those policies where statutory limitations were a matter of contract, by amounts 3.63% and 1.39% respectively, and by lives 3.10% and 1.45% respectively.

As might be expected from general reasoning, the rates of conversion with respect to the Group II policies where the coverage was not definitely known to be replaced by the same or a different carrier (Code 2), while not shown separately, were found to be somewhat higher than for the remainder of Group II.

III. CHARACTERISTICS OF CONVERTED POLICIES

Because the policies were in force only a little more than two years on the average and because of the relatively small number of conversions submitted for this study, it was decided not to attempt to investigate the postconversion mortality and withdrawal experience under these policies. However, since excess mortality under group conversions has been found to increase markedly with the age at conversion the contributing companies were asked to submit data with respect to that factor.

Table IV sets forth the tabulation of converted policies by age at conversion in decennial age groups for Group I and Group II. As will be seen in the following section of this report, these ages are significantly older than under conversions in usual circumstances. Separate figures are shown for conversions after termination and conversions during the year preceding termination. The amount of insurance in force prior to conversion appears, as well as the amount of insurance actually converted. The age distributions for conversions under master policies where statutory limits did not apply were similar to those for conversions where statutory limitations were applicable. Consequently, the table was not subdivided further.

The amount of insurance eligible for conversion and the effect of any limitations thereon depend on the level of the benefits stipulated in the insurance plan in the master policy. Thus a liberal plan will provide larger amounts of insurance, and a minimum plan considerably less. It is possible, however, to use the data submitted for this study as a small sample, from which some indication may be obtained of the variation in amount eligible for conversion arising from different maximum limitations. The total of the insurance in force prior to conversion subject to a maximum of \$2,000 for all of the policies included in this study is \$2,138,877. The same total subject to a maximum of \$3,000 is \$2,497,477, or an increase of 17%, which percentage is a measure of the effect of changing the limit on conversion from \$2,000 to \$3,000. In the same way, a maximum of \$4,000

results in a total of \$2,665,477, or an increase of 25% over the total with a \$2,000 maximum. The total for all policies without regard to maximum is \$2,881,877.

IV. COST OF CONVERSIONS

Because of the excess mortality experienced under group conversions, they constitute a strain on the ordinary business. Consequently, it is the practice of the companies to transfer to the ordinary branch at the time of conversion an amount estimated to be sufficient on the average to cover the excess losses to be anticipated thereafter by the ordinary branch. The amount to be transferred is arrived at after extensive calculations involving plan of insurance, mortality, withdrawal, and expenses, in which the savings in expenses as compared with regular ordinary issues are used as a partial offset to excess mortality losses. Such calculations are usually car-

TABLE IV
AGE DISTRIBUTION OF CONVERTED POLICIES

AGE AT CONVERSION	GROUP I			GROUP II		
	Number of Lives	Amount Converted	Amount in Force Prior to Conversion	Number of Lives	Amount Converted	Amount in Force Prior to Conversion
Conversions on and after Termination Date						
Under 30.....	17	\$ 17,195	\$ 22,800	4	\$ 5,027	\$ 9,000
30-39.....	66	97,900	114,400	19	26,100	54,686
40-49.....	202	299,300	402,400	29	50,951	67,744
50-59.....	315	467,452	611,700	35	64,700	106,900
60-69.....	209	265,650	384,300	19	23,250	39,750
70-79.....	73	76,500	114,150	11	12,500	12,500
80 and over.....	9	6,500	7,500			
Total.....	891	\$1,230,497	\$1,657,250	117	\$182,528	\$290,580
Conversions during the Year Prior to Termination						
Under 30.....	22	\$ 35,625	\$ 42,625	27	\$ 44,000	\$ 48,000
30-39.....	39	61,962	69,625	24	54,500	56,000
40-49.....	88	150,000	179,025	38	93,800	96,800
50-59.....	93	166,400	189,900	35	58,500	75,900
60-69.....	65	92,650	114,400	23	26,100	36,672
70-79.....	18	17,500	18,500	8	6,100	6,400
80 and over.....				2	1,000	1,200
Total.....	325	\$ 524,137	\$ 614,075	157	\$284,000	\$320,972

ried out for several ages at conversion or in age groups, since the excess losses increase materially with age. In practice, however, the amount transferred to the ordinary branch per \$1,000 of insurance converted is usually a weighted average based upon age and plan derived to correspond approximately to the average anticipated loss at conversion.

These calculations are made periodically and are brought up to date from time to time. The contributing companies were asked to supply the results of their most recent calculations by age groups. The figures supplied by the six companies which were able to do so appear in the accompanying graph (Chart 1).

A set of figures was derived from these to represent the average costs for all six companies. These were obtained from the individual company figures by weighting them by the amount of group life insurance in force on December 31, 1949. The curve of average costs is also plotted on the graph and the figures themselves appear in Table V for decennial ages.

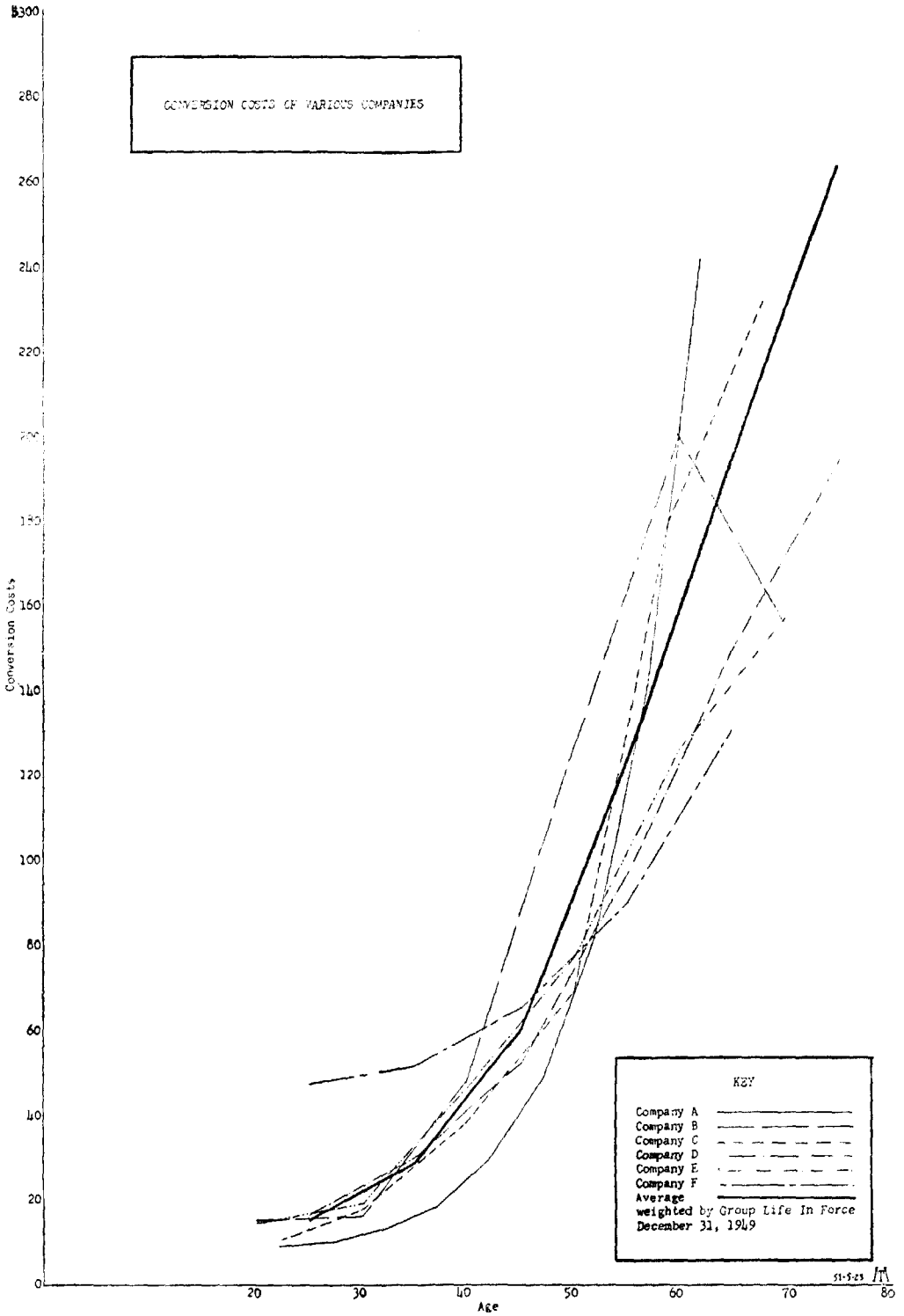
The companies also reported the average charges now actually being used. Three companies reported \$65 per \$1,000, one \$70 per \$1,000, and two \$75 per \$1,000. Weighted by the in-force as of December 31, 1949 for these companies, the over-all average cost in use becomes \$69.

The average conversion costs in Table V were applied to the age distributions in Table IV; the results are shown in Table VI. For Group I policies, both the conversions on and after termination and those during the year prior thereto produce average charges per \$1,000 substantially in excess of those for Group II. For conversions on and after termination, the average charge is \$124 per \$1,000 for Group I as against \$108 for Group II. For conversions during the year prior to termination, the average charges are \$104 and \$78 for Groups I and II, respectively. Thus the average age at conversion for Group I is materially higher than that for Group II.

Furthermore, the figures in Table VI may be compared with the over-all average cost of conversion used by the six companies of \$69 per \$1,000. The substantial agreement between this figure and that of \$78 per \$1,000 for the conversions during the year prior to termination under Group II is not surprising. The conversions in this category are essentially normal conversions on termination of employment and may reasonably be expected to exhibit about the same average cost. For the Group I policies, however, the cost per \$1,000 of conversions during the year prior to termination is 51% greater.

With regard to conversions on and after termination date, the cost is greater than normal for both Group I and Group II. In the case of the former, the additional cost is 80% and for the latter 57%.

CHART 1



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Table VI also shows the results of applying the average cost by age factors to the amounts of group insurance in force prior to conversion on the lives who converted. The average costs resulting are about the same as for the amounts actually converted. In other words, the two age distributions are essentially the same.

A more complete indication of the financial effect of these conversions upon the companies may be obtained by relating the conversion costs to the average amount of insurance in force during the year prior to termination. In this way, the rates of conversion are also taken into account and the over-all effect of the higher than normal conversion rates and the advanced ages at conversion is measured. For Group I policies the total strain of conversions in the last policy year is \$3.20 per \$1,000 of average amount of insurance in force during the last year, of which \$0.84 is represented by conversions taking place during the last year and \$2.36 by the

TABLE V
WEIGHTED AVERAGE CONVERSION COSTS FOR DECENNIAL AGES AT CONVERSION

Age	Average Cost per Thousand	Age	Average Cost per Thousand
25.....	\$15	65.....	\$193
35.....	29	75.....	263*
45.....	60	85.....	333*
55.....	124		

* Obtained by extrapolation.

TABLE VI
AVERAGE CONVERSION COST OF POLICIES CONVERTED UNDER TERMINATED MASTER POLICIES

GROUP	CONVERSIONS ON AND AFTER TERMINATION DATE			CONVERSIONS DURING THE YEAR PRIOR TO TERMINATION		
	Number of Lives	Average Cost per Thousand		Number of Lives	Average Cost per Thousand	
		For Amounts Actually Converted	For Amounts in Force Immediately Prior to Conversion		For Amounts Actually Converted	For Amounts in Force Immediately Prior to Conversion
Group I.....	891	\$124	\$127	325	\$104	\$104
Group II.....	117	108	103	157	78	83
Groups I and II	1,008	\$122	\$123	482	\$ 95	\$ 97

conversions on or after termination date. These figures are \$0.44, \$0.23 and \$0.21, respectively, for Group II.

Some indication of the extent to which these figures increase when limitations on conversion are removed entirely can be obtained by considering the figures for the subgroup where no limitations were invoked. For Group I policies in this subgroup, the terminal conversion cost calculates to be \$5.68 per \$1,000, of which \$1.41 is for the conversions during the last year and \$4.27 for those on or after termination. For Group II in this subgroup, the figures are \$1.89, \$0.39 and \$1.50, respectively.

APPENDIX A

DATA REQUESTED FROM CONTRIBUTING COMPANIES

1. The date of termination of the master policy.
2. The number of completed years the policy had been in force.
3. The number of lives and amount of group life insurance in force immediately prior to termination, and approximately 3 months, 6 months, and 12 months prior to such termination.
4. The number of lives insured approximately 2, 3, 4 and 5 years prior to termination (the data as of policy anniversaries may be supplied in lieu of the comparable figures for anniversaries of the date of termination, if necessary).
5. An individual listing setting forth for each individual life insurance policy issued in conversion of the group life insurance under such terminated master policy within a period of one year prior to the termination of the latter:
 - a) the effective date of the converted policy,
 - b) the amount of group life insurance last in force prior to conversion,
 - c) the amount of the converted policy or policies, and
 - d) the age at which the converted policy was issued.

APPENDIX B

CLASSIFICATION OF TERMINATED MASTER POLICIES

<i>Primary Code</i>	<i>Reason for Termination</i>
1	Policyholder going out of business.
2	Control of policyholder company acquired by other interests. Group coverage not known to be replaced with same or different carrier.
3	Same as (2) but group coverage known to be replaced by policy with same or different carrier.
4	No change in control of policyholder company but group coverage transferred to a different carrier.
5	Insurance company exercises right of nonrenewal for underwriting reasons, such as poor participation, etc.
6	Any other reason (including nonpayment of premiums) or no known reason.

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Secondary Code

Limitations on Conversion

- (a) Statutory limitations included in policy (not more than \$2,000 per employee insured for at least 5 years).
- (b) Statutory limitations applied voluntarily by insurance company.
- (c) Other limitations as to amount or duration of coverage imposed by insurance company.
- (d) No limitations as to amount or duration of coverage.