TRANSACTIONS OF SOCIETY OF ACTUARIES 1991-92 REPORTS

REPORT OF THE LIFE INSURANCE MARKETING AND RESEARCH ASSOCIATION, INC.

I. 1988–89 LONG-TERM ORDINARY LAPSE SURVEY IN THE UNITED STATES*

PREFACE

This report was prepared by the Financial Research Department of the Life Insurance Marketing and Research Association, Inc. LIMRA has given the Society of Actuaries permission to reproduce this study as part of the Society's expansion of its experience studies. Discussions of this report as well as of any experience study are encouraged. LIMRA and the Society intend to work together to expand this report and seek additional data contributors. The 1989–90 version of this study appears as Part III; the 1988–89 Canadian version of this study appears as Part IV. Part V is "A Long-Term Look at Yearly Renewable Term Lapsation in the United States, 1987–1990 Experience."

INTRODUCTION

Annual Survey

This annual long-term lapse study examines the lapsation of ordinary insurance in the U.S. between 1988 and 1989 policy anniversaries. It is designed to assist companies with developing new products and in monitoring marketing and product performance.

Lapse rates in this report are percentage of face amounts and policies in force at the beginning of 1988 policy anniversaries that lapse on or before 1989 policy anniversaries. (See Appendix A for the definitions used in this study.)

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Lapse rates by face amount and number of policies are measured for seven types of ordinary insurance plans:

- Traditional whole life
- Interest-sensitive whole life
- Individual pension trust
- Graded-premium whole life—Type 1 (traditional-type premium)
- Graded-premium whole life—Type 2 (yearly renewable term (YRT) type premium)
- YRT
- Level face amount term (excluding YRT).

Lapse rates are measured for policy years 1, 2, 3–5, 6–10, and 11 and over. These policy years correspond to issue years 1988, 1987, 1986–1984, 1983–1979, and 1978 and earlier.

In-Depth Survey

The report also includes an in-depth look at lapse rates for YRT based on:

- Number of policies
- Face amount
- Annualized premium.

For each of these measures, the in-depth section shows lapse rates for specific issue ages by policy year. Issue ages include 20–29, 30–39, 40–49, 50–59, and all issue ages combined. Policy years include individual years 1–10 and combined policy years 11 and over.

This section of the report also looks at trends among a constant group of companies that participated in this year's and last year's studies.

ABOUT THE SAMPLE

Thirty companies participated in this study. Twenty-nine of these companies provided both face amount lapsing and the number of policies lapsing; one company provided only face amount lapsing. Table A shows the total face amount in force at the beginning of the 1988–1989 policy year; Table B shows the total number of policies in force at the beginning of the 1988–1989 policy year.

TABLE A
FACE AMOUNT IN FORCE (BILLIONS) ON 1988 ANNIVERSARIES
(30 COMPANIES)

	Traditional	Interest- Sensitive	Individual Pension	Graded- Premium	Graded- Premium	Level	Term
Issue Year	Whole Life	Whole Life	Trust	Type 1	Type 2	YRT	Other
1988*	\$ 44.0	\$17.1	\$ 2.6	\$ 1.8	\$ 3.6	\$ 50.7	\$ 9.0
Before 1988	245.9	71.3	11.3	8.8	21.9	148.3	26.7
Total In Force	\$289.9	\$88.4	\$13.9	\$10.6	\$25.5	\$199.0	\$35.7

^{*}For issue year 1988, amounts in force on 1988 anniversaries correspond to amounts sold during that year.

TABLE B

Number of Policies In Force (Thousands) on 1988 Anniversaries
(29 Companies)

	Traditional	Interest-	Individual Pension	Graded- Premium	Graded- Premium	Level	Term
Issue Year	Whole Life	Whole Life	Trust	Type 1	Type 2	YRT	Other
1988*	892	257	56	15	17	307	103
Before 1988	14,792	1,099	324	154	132	1,025	_590
Total In Force	15,684	1,356	380	169	149	1,332	693

^{*} For issue year 1988, amounts in force on 1988 anniversaries correspond to amounts sold during that year.

LAPSE RATES BY PRODUCT TYPE

Table C summarizes median face amount lapse rates by policy year. Table D summarizes median policy count lapse rates by policy year.

TABLE C
PERCENTAGE OF FACE AMOUNT LAPSING BY PRODUCT TYPE
(30 COMPANIES)

	Traditional	Interest- Sensitive	Individual Pension	Graded- Premium	Graded- Premium	Leve!	Term
Issue Year	Whole Life	Whole Life	Trust	Type 1	Type 2	YRT	Other
1	17.3%	16.9%	14.5%			17.5%	17.4%
2	11.5	16.0	16.7	Marin		19.4	17.2
3-5	8.8	8.7	12.5		17.0%	17.1	15.3
6-10	9.4	9.2	12.7	10.8%	16.4	13.7	12.1
11 and Over	7.3		11.1	7.1		11.4	9.7

⁻ Insufficient data.

TABLE D
PERCENTAGE OF POLICIES LAPSING BY PRODUCT TYPE
(29 COMPANIES)

	Traditional	Interest- Sensitive	Individual Pension	Graded- Premium	Graded- Premium	Level	Term
Issue Year	Whole Life	Whole Life	Trust	Type 1	Type 2	YRT	Other
1	17.5%	17.1%	17.3%		_	17.5%	18.2%
2	10.9	14.1	18.9			19.0	18.3
3–5	7.5	9.1	16.5		21.5%	16.8	15.7
6-10	7.9	8.4	14.7	10.4%	17.8	13.7	11.7
11 and Over	5.3		12.6	5.1		11.1	8.6

⁻Insufficient data.

FACE AMOUNT AND POLICY COUNT LAPSE RATES

Figure 1 shows median lapse rates by face amount and number of policies for traditional whole life. Lapse rates by number of policies are lower than lapse rates by face amount in all but the first policy year. Lapse rates by face amount range from 17.3 percent in the first year to 7.3 percent in policy years 11 and over. Lapse rates by number of policies range from 17.5 percent in policy year 1 to 5.3 percent in policy years 11 and over.

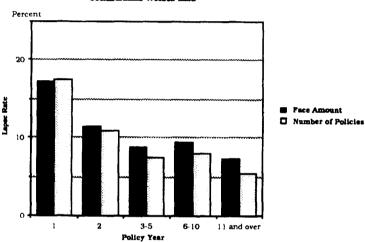


Figure 1 — Median Lapse Rates for Traditional Whole Life

Figure 2 shows median lapse rates by face amount and number of policies for *interest-sensitive whole life*. Lapse rates for policy years 11 and over are not shown because of limited data in this duration. Lapse rates by policy count decrease through years 1–10, beginning with a 17.1 percent rate in policy year 1 and ending with an 8.4 percent rate in policy years 6–10. Face amount lapse rates exceed 16 percent in the first two years. In policy years 3–5, the lapse rate by face amount is 8.7 percent, and in policy years 6–10, the rate is 9.2 percent.

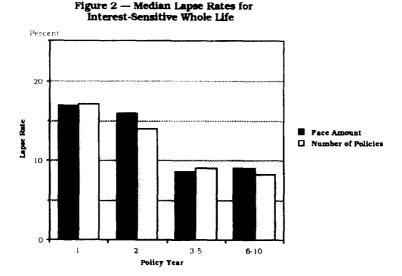


Figure 3 shows median lapse rates by face amount and number of policies for *individual pension trust*. Lapse rates by number of policies peak in policy year 2 at 18.9 percent and gradually decrease to 12.6 percent in policy years 11 and over. Face amount lapse rates range from 16.7 percent in policy year 2 to 11.1 percent in policy years 11 and over.

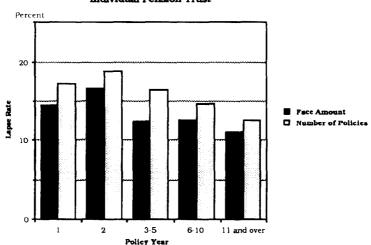


Figure 3 — Median Lapse Rates for Individual Pension Trust

Figure 4 shows median lapse rates by face amount and number of policies for graded-premium whole life—type 1. Because of insufficient data in the first five policy years, data are shown only for policy years 6 and over. Lapse rates by number of policies are lower than rates by face amount. Lapse rates by face amount are 10.8 percent in policy years 6–10 and 7.1 percent in policy years 11 and over; lapse rates by number of policies are 10.4 percent and 5.1 percent in these durations.

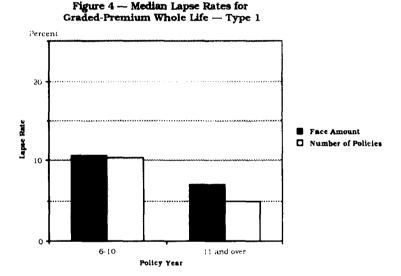


Figure 5 shows median lapse rates by face amount and number of policies for graded-premium whole life—type 2. Data are shown only for the middle durations because of limited data in the earlier and later years. The lapse rates for policy years 3-5 by face amount and number of policies are 17.0 percent and 21.5 percent, respectively. For policy years 6-10, rates by face amount and number of policies are 16.4 percent and 17.8 percent, respectively.

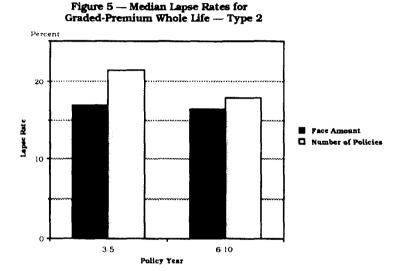


Figure 6 shows median lapse rates by face amount and number of policies for *yearly renewable term*. Among the products included in this study, YRT insurance has the highest lapse rates; lapse rates exceed 11 percent in all policy years. Lapse rates by both measures peak in policy year 2 and gradually decrease by policy years 11 and over. Both face amount and number of policies lapse rates are close, beginning at 17.5 percent in the first year and ending at approximately 11.2 percent in policy years 11 and over.

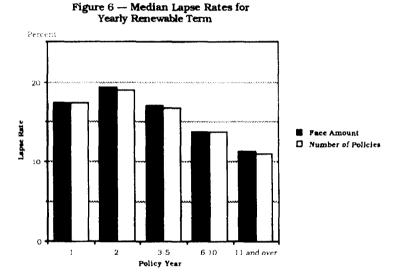
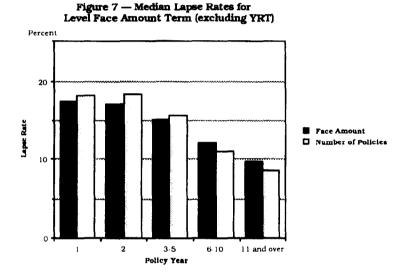


Figure 7 shows median lapse rates by face amount and number of policies for *level face amount term (excluding YRT)*, which includes products such as five-year renewable term and 10-year renewable term. Lapse rates by face amount are close to 17.3 percent in the first two policy years and decrease to 9.7 percent by policy years 11 and over. Lapse rates by policy count are approximately 18 percent in the first two years, and range from 15.7 percent in policy years 3 to 5 to 8.6 percent in policy years 11 and over.



AVERAGE FACE AMOUNT PERSISTING AND LAPSING

Table E shows average face amount persisting and lapsing for traditional whole life and yearly renewable term. For whole life, the average face amount persisting is lower than the average face amount lapsing in all policy years. For yearly renewable term, average face amount persisting exceeds the average face amount lapsing in the first two policy years only.

TABLE E

AVERAGE FACE AMOUNT PERSISTING AND LAPSING
FOR TRADITIONAL WHOLE LIFE AND YEARLY RENEWABLE TERM

		le Life	Yearly Renewable Term	
Policy Year	Persisting	Lapsing	Persisting	Lapsing
1	\$57,988	\$68,262	\$174,244	\$150,799
2	50,468	52,797	179,242	163,733
3-5	43,438	49,328	156,462	163,517
6-10	30,419	35,182	113,997	117,185
11 and Over	9,187	12,552	79,487	85,704

TRENDS IN WHOLE LIFE LAPSE RATES

Figure 8 shows face amount lapse rates for a constant group of companies from 1987 to 1989. Lapse rates in 1989 for policy years 3 and over are less than the prior two years' rates. In the first year, the lapse rate for 1987 was 19.8 percent, which decreased to 17.7 percent in 1988 and increased to 18.0 percent in 1989. Lapse rates followed a similar pattern in year 2; the lapse rate was 13.9 percent in 1987, 11.3 percent in 1988, and 14.3 percent in 1989.

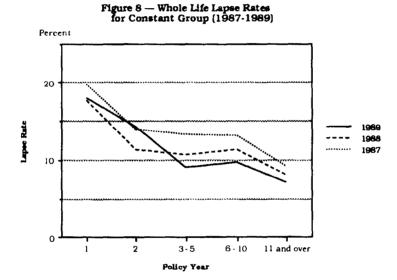


Table F summarizes the participating companies' increases and decreases in face amount lapse rates.

TABLE F
INCREASES AND DECREASES IN WHOLE LIFE LAPSE RATES

	Number of	Average I	.apse Rate
	Companies	1988	1989
Policy Year 1			
Increase	8	18.9%	24.9%
Decrease	14	17.6	15.0
All	22	18.1	18.6
Policy Year 2		1	1
Increase	12	10.1	14.0
Decrease	10	12.7	11.5
Ali	22	11.3	12.8
Policy Years 3-5		ļ	i
Increase	5	11.4	14.0
Decrease	18	9.9	8.0
All	23	10.2	9.3
Policy Years 6-10]	}
Increase	4	10.1	13.7
Decrease	19	11.0	8.6
All	23	10.9	9.5
Policy Years 11 and Over			
Increase	1	8.2	9.6
Decrease	21	8.6	7.1
All	22	8.6	7.3

TRENDS IN YEARLY RENEWABLE TERM LAPSE RATES

Figure 9 shows 1987 to 1989 yearly renewable term face amount lapse rates for a constant group of companies. Lapse rates have remained relatively consistent from year to year.

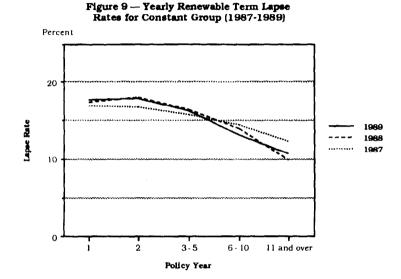


Table G summarizes the participating companies' increases and decreases in face amount lapse rates.

TABLE G
INCREASES AND DECREASES IN YEARLY RENEWABLE TERM
LAPSE RATES

	Number of	Average I	apsc Rate		
	Companies	1988	1989		
Policy Year 1					
Increase	9	14.7%	17.5%		
Decrease	11	18.1	15.8		
Aii	20	16.6	16.6		
Policy Year 2					
Increase	9	18.2	20.6		
Decrease	12	19.1	16.8		
All	21	18.7	18.4		
Policy Years 3-5	-				
Increase	10	15.3	16.9		
Decrease	11	17.6	15.7		
All	21	16.5	16.3		
Policy Years 6-10			1		
Increase	6	13.5	14.8		
Decrease	16	16.1	12.5		
All	22	15.4	13.1		
Policy Years 11 and Over					
Increase	9	8.6	10.5		
Decrease	6	12.7	11.0		
All	15	10.2	10.7		

VARIATION OF LAPSES AMONG COMPANIES

Figure 10 shows median face amount lapse rates for traditional whole life by how much the company writes. In all durations, companies writing large amounts of whole life insurance (face amount in force of \$10 billion or more) have lower lapse rates than small writers. In the middle durations, lapse rates for large writers are about 60 percent of those of small writers. The first-year lapse rates for large and small writers are 14.9 percent and 17.7 percent, respectively. Policy years 11 and over have rates of 5.8 percent and 7.6 percent for large and small writers, respectively.

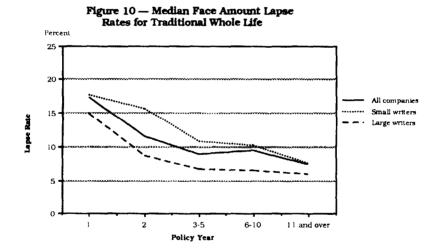


Figure 11 shows median face amount lapse rates for yearly renewable term insurance by how much the company writes. Companies writing a large amount of YRT insurance (face amount in force of \$5 billion or more) have between 10 percent and 20 percent lower lapse rates than companies writing smaller amounts. For large writers, rates fluctuate between approximately 15 percent and 16 percent in the first five policy years. In policy years 6–10, the lapse rate for large writers is 10.8 percent, and 10.1 percent in policy years 11 and over. For small writers, the range of lapse rates is 17.5 percent in the first year and 12.3 percent in policy years 11 and over.

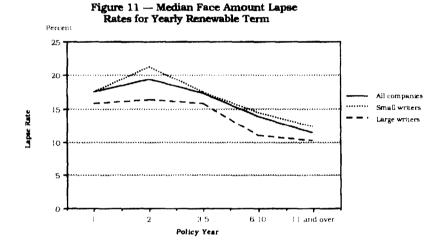


Figure 12 shows the variations of face amount lapse rates by companies for *traditional whole life* insurance. In policy year 1, 4 of 10 companies' lapse rates exceed 20 percent. Eighteen of the 30 companies have lapse rates lower than 10 percent in policy years 3–5. The majority of the companies in policy years 11 and over have lapse rates under 10 percent.

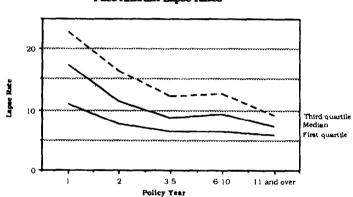


Figure 12 — Variations of Whole Life Face Amount Lapse Rates

Figure 13 shows the variations of face amount lapse rates by companies for *yearly renewable term* insurance. Slightly more than half of the companies in policy year 1 and policy years 3–5 have lapse rates between 15 percent and 20 percent. By policy years 11 and over, all but one company have lapse rates below 15 percent.

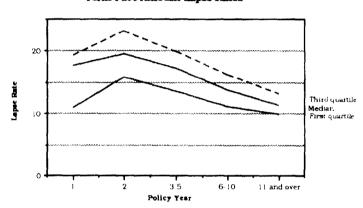


Figure 13 — Variations of Yearly Renewable Term Face Amount Lapse Rates

A DETAILED LOOK AT LAPSE RATES (INDIVIDUAL PRODUCTS)

Lapse Rates by Face Amount

TABLE 1
TRADITIONAL WHOLE LIFE (30 COMPANIES)

Policy Year	First Quartile	Median	Third Quartile	Average*
1	10.9%	17.3%	22.8%	17.3%
2	7.6	11.5	16.3	12.3
3–5	6.3	8.8	12.2	9.6
6–10	6.5	9.4	12.7	9.7
1 and Over	5.8	7.3	9.0	7.6
All [7.5%	8.9%	11.5%	9.4%

^{*}All companies receive equal weight; company size does not affect the results.

TABLE 2
Interest-Sensitive Whole Life (12 Companies)

Policy Year	Median	Average*
1	16.9%	18.3%
2	16.0	15.1
3-5	8.7	9.4
6-10	9.2	8.6
All	11.7%	12.3%

^{*}All companies receive equal weight; company size does not affect the results.

TABLE 3
INDIVIDUAL PENSION TRUST
(18 COMPANIES)

Policy Year	First Quartile	Median	Third Quartile	Average*
1	7.7%	14.5%	16.7%	12.6%
2	10.7	16.7	19.7	16.3
3–5	9.7	12.5	22.1	15.8
6–10	10.0	12.7	15.9	13.8
11 and Over	8.4	11.1	14.8	12.7
All	11.2%	13.7%	15.4%	14.1%

^{*}All companies receive equal weight; company size does not affect the results.

TABLE 4
GRADED-PREMIUM WHOLE LIFE—TYPE 1
(11 COMPANIES)

Policy Year	Median	Average*
6–10	10.8%	12.0%
11 and Over	7.1	8.0
All	9.7%	11.6%

^{*}All companies receive equal weight; company size does not affect the results.

TABLE 5
GRADED-PREMIUM WHOLE LIFE—TYPE 2
(9 COMPANIES)

Policy Year	Median	Average*
3–5 6–10	17.0% 16.4	19.5% 15.6
All	17.9%	16.8%

^{*}All companies receive equal weight; company size does not affect the results.

TABLE 6
YEARLY RENEWABLE TERM
(29 COMPANIES)

Policy Year	First Quartile	Median	Third Quartile	Average*
1	10.8%	17.5%	19.2%	15,6%
2	15.7	19.4	23.1	19.5
3-5	13.5	17.1	19.7	16.9
6-10	11.1	13.7	16.2	13.9
11 and Over	9.9	11.4	13.2	11.6
All 🗀	15.7%	16.7%	18.2%	16.4%

^{*}All companies receive equal weight; company size does not affect the results.

TABLE 7
LEVEL FACE AMOUNT TERM (EXCLUDING YRT)
(21 COMPANIES)

Policy Year	First Quartile	Median	Third Quartile	Average*
1	14.1%	17.4%	25.6%	19.1%
2	13.0	17.2	23.1	17.5
3-5	12.8	15.3	20.5	16.1
6-10	9.3	12.1	13.9	12.0
11 and Over	5.9	9.7	11.7	9.3
All	9.7%	13.8%	17.1%	13.8%

^{*}All companies receive equal weight; company size does not affect the results.

Lapse Rates by Number of Policies

TABLE 8
TRADITIONAL WHOLE LIFE
(29 COMPANIES)

Policy Year	First Quartile	Median	Third Quartile	Average*
1	9.9%	17.5%	20.7%	17.0%
2	7.9	10.9	15.2	12.1
3-5	5.9	7.5	10.8	8.0
6-10	5.8	7.9	10.2	8.2
11 and Over	4.7	5.3	6.9	5.8
All	5.8%	6.7%	8.8%	7.1%

^{*}All companies receive equal weight; company size does not affect the results.

TABLE 9
INTEREST-SENSITIVE WHOLE LIFE (11 COMPANIES)

Policy Year	Median	Average*	
1	17.1%	17.9%	
2	14.1	15.6	
3-5	9.1	9.2	
6-10	8.4	8.4	
All	11.3%	12.4%	

^{*}All companies receive equal weight; company size does not affect the results.

TABLE 10
INDIVIDUAL PENSION TRUST (16 COMPANIES)

Policy Year	First Quartile	Median	Third Quartile	Average*
1	11.2%	17.3%	19.4%	15.8%
2	14.7	18.9	21.1	20.3
3–5	15.5	16.5	21.6	20.6
6-10	11.7	14.7	22.8	19.0
11 and Over	10.1	12.6	17.2	14.0
All	13.7%	15.6%	17.6%	17.5%

^{*}All companies receive equal weight; company size does not affect the results.

TABLE 11
GRADED-PREMIUM WHOLE LIFE—TYPE 1
(9 COMPANIES)

Policy Year	Median	Average •
6-10	10.4%	12.6%
11 and Over	5.1	6.4
All	8.8%	11.2%

^{*}All companies receive equal weight; company size does not affect the results.

TABLE 12

GRADED-PREMIUM WHOLE LIFE—TYPE 2

(7 COMPANIES)

Policy Year	Median	Average*
3–5 6–10	21.5% 17.8	22.5% 17.5
All	19.6%	18.2%

^{*}All companies receive equal weight; company size does not affect the results.

TABLE 13
YEARLY RENEWABLE TERM
(28 COMPANIES)

Policy Year	First Quartile	Median	Third Quartile	Average*
1	11.3%	17.5%	20.8%	17.2%
2	16.6	19.0	24.0	20.4
3-5	13.4	16.8	18.8	16.4
6-10	10.9	13.7	15.4	13.7
11 and Over	8.5	11.1	12.1	10.8
All	15.2%	16.9%	17.7%	16.2%

^{*}All companies receive equal weight; company size does not affect the results.

TABLE 14
LEVEL FACE AMOUNT TERM (EXCLUDING YRT)
(19 COMPANIES)

Policy Year	First Quartile	Median	Third Quartile	Average*
1	14.0%	18.2%	29.1%	21.2%
2	13.9	18.3	22.3	17.9
3-5	12.7	15.7	20.9	16.4
6-10	9.4	11.7	14.0	11.9
11 and Over	5.3	8.6	10.1	8.5
All 🗀	8.8%	13.1%	17.7%	13.6%

^{*}All companies receive equal weight; company size does not affect the results.

IN-DEPTH SURVEY-YEARLY RENEWABLE TERM

Lapse Rates by Policy Year

TABLE 15
PERCENTAGE OF POLICIES LAPSING
(21 COMPANIES)

Policy Year	First Quartile	Median	Third Quartile	Average*
1	11.2%	17.9%	20.4%	16.7%
2	16.2	18,4	23.6	19.2
3	13.6	17.6	20.4	16.5
4	12.3	15.8	17.6	15.1
5	11.9	15.3	16.5	14.4
6	10.8	13.0	15.6	13.6
7	10.2	13.5	15.0	13.4
8	10.5	13.2	15.5	13.6
9	8.2	11.4	14.6	12.2
10	8.8	10.3	12.3	10.9
11 and Over	7.9	10.0	12.0	10.5

^{*}All companies receive equal weight; company size does not affect the results.

TABLE 16
PERCENTAGE OF FACE AMOUNT LAPSING (22 COMPANIES)

Policy Year	First Quartile	Median	Third Quartile	Average*
1	10.4%	17.5%	19.0%	15.3%
2	15.0	18.0	22.1	18.9
3	13.0	16.9	19.0	16.8
4	12.1	15.6	18.6	15.4
5	12.4	14.7	18.2	15.1
6	9.6	13.0	16.1	13.2
7	9.8	12.8	16.6	13.4
8	10.7	13.0	16.5	13.7
9	9.4	11.5	14.9	12.3
10	7.5	10.9	13.6	11.2
11 and Over	9.5	10.1	12.8	11.1

^{*}All companies receive equal weight; company size does not affect the results.

TABLE 17
PERCENTAGE OF ANNUALIZED PREMIUM LAPSING (17 COMPANIES)

Policy Year	First Quartile	Median	Third Quartile	Average*
1	11.3%	15.8%	19.5%	15.4%
2	15.8	17.1	20.3	17.9
3	13.6	17.2	20.1	16.8
4	11.3	14.5	21.3	15.8
5	11.0	13.4	18.1	15.0
6	9.5	12.5	15.1	12.9
7	8.8	12.0	16.5	12.5
8	9.7	13.2	17.6	13.5
9	9.2	12.7	18.1	13.8
10	7.4	13.4	15.0	13.1
11 and Over	8.4	11.4	15.9	12.4

^{*}All companies receive equal weight; company size does not affect the results.

Median Lapse Rates by Issue Age

TABLE 18
PERCENTAGE OF POLICIES LAPSING

	Issue Ages			
Policy Year	20-29	30-39	40-49	50-59
1	24.6%	17.9%	15.4%	14.9%
2	22.4	18.9	17.1	15.5
3	20.1	16.6	14.8	16.7
4	17.8	14.4	15.7	15.8
5	15.2	14.1	14.6	14.4
6	12.9	14.1	13.8	14.4
$\tilde{\gamma}$	12.0	11.8	12.2	
8	12.2	12.3	14.0	_
9	9.8	11.1	12.2	_
o l	9.5	9.8		
1 and Over	7.6	8.6	6.8	_

⁻Insufficient data.

TABLE 19
PERCENTAGE OF FACE AMOUNT LAPSING

		Issue	Ages	
Policy Year	20-29	30-39	40-49	50-59
1	23.5%	16.7%	14.0%	13.1%
2	21.6	18.0	16.7	16.5
3	19.1	16.4	14.4	19.6
4	17.1	14.5	14.7	17.5
5	15.2	13.6	15.7	15.7
6	12.4	13.1	12.3	14.3
7	11.2	11.6	11.1	
8	13.4	13.7	11.5	
9	10.9	11.0	13.4	-
0	10.2	10.1	13.0	
ll and Over	8.1	9.2	10.2	

⁻Insufficient data.

TABLE 20
PERCENTAGE OF ANNUALIZED PREMIUM LAPSING

	Issue Ages			
Policy Year	20-29	30-39	40-49	50-59
1	23.9%	17.8%	15.5%	13.4%
2	22.3	16.7	16.8	16.0
3	18.9	16.5	13.0	16.9
4	17.1	16.4	13.6	17.4
5	16.0	13.6	14.7	14.7
6	12.7	11.1	11.2	15.3
7	11.5	10.4	11.4	14.2
8	11.4	12.4	12.7	12.8
9	8.8	10.0	16.9	10.4
0		10.4	16.6	
1 and Over	9.2	9.6	10.6	11.0

⁻⁻ Insufficient data.

Average Size Lapsing and Persisting

TABLE 21
FACE AMOUNTS
(21 COMPANIES)

	Mc	Median		Average*	
Policy Year	Lapsing	Persisting	Lapsing	Persisting	
1	\$139,204	\$163,748	\$142,214	\$163,332	
2	152,890	152,700	148,962	157,017	
3	154,293	144,194	147,459	145,000	
4	142,045	130,146	135,602	134,011	
5 İ	120,343	123,899	132,035	127,457	
6	102,039	127,397	111,171	115,497	
7	87,407	94,001	94,310	98,964	
8	93,264	92,460	99,089	94,083	
9	94,906	83,539	87,480	85,099	
10	83,901	85,510	85,153	87,726	
11 and Over	96,429	82,943	91,049	85,648	

^{*}All companies receive equal weight; company size does not affect results.

TABLE 22
Annualized Premiums (17 Companies)

	Med	lian	Average*	
Policy Year	Lapsing	Persisting	Lapsing	Persisting
1	\$288	\$335	\$325	\$350
2	343	379	356	385
3	401	376	390	366
4	315	363	415	363
5	423	444	428	405
6	332	433	407	419
7	438	437	456	465
8	525	492	545	464
9	570	427	547	443
10	575	471	598	486
11 and Over	587	498	626	500

^{*}All companies receive equal weight; company size does not affect results.

Distribution of In Force and Lapses

TABLE 23

Distribution of In Force by Number of Policies,
Face Amount, and Annualized Premium

Policy Year	Number of Policies	Face Amount	Annualized Premium
1 2	25.0%	27.2%	20.6%
	17.6	20.9	16.8
3	17.3	18.3	15.0
	12.5	11.9	11.3
5	9.6	8.7	11.4
6	7.5	6.7	9.8
7	4.0	3.0	6.4
8	2.1	1.5	3.2
9	1.1	0.7	1.6
10	0.7		1.2
11 and Over	2.6 100.0%	0.7	2.7

TABLE 24
DISTRIBUTION OF LAPSES BY NUMBER OF POLICIES,
FACE AMOUNT, AND ANNUALIZED PREMIUM

	Number of	Face	Annualized
Policy Year	Policies	Amount	Premium
1	30.4%	30.0%	23.6%
2	20.4	22.5	17.1
3	16.0	17.2	13.6
4	10.9	11.1	12.7
5	8.3	8.1	11.3
6	6.3	5.9	8.8
7	3.3	2.6	5.8
8	1.7	1.3	2.8
9	0.8	0.5	1.2
10	0.5	0.3	1.1
11 and Over	1.4	0.5	2.0
	100.0%	100.0%	100.0%

Lapse Rates of Companies Reporting All Three Measures TABLE 25

Comparison of Median Lapse Rates by Unit of Measure (17 Companies)

		Lapse Rates by:	
Policy Year	Number of Policies	Face Amount	Annualized Premium
1	18.9	17.6	17.6
2	18.4	16.3	16.3
3	15.4	16.1	16.1
4	15.0	15.4	15.4
5	15.3	15.0	15.0
6	13.0	13.2	13.2
7	12.6	12.1	12.1
8	13.0	13.0	13.0
9	11.8	11.5	11.5
10	10.6	11.3	11.3
11 and Over	10.7	10.1	10.1

Lapse Rates for Constant Companies

TABLE 26
PERCENTAGE OF POLICIES LAPSING (16 COMPANIES)

_	Me	Median		Average*	
Policy Year	1988	1989	1988	1989	
1	19.1%	18.9%	17.9%	17.1%	
2	17.2	18.0	18.9	18.1	
3	17.0	16.5	17.1	15.9	
4	14.4	15.4	14.5	14.3	
5	14.7	15.0	13.8	13.9	
6	13.6	13.9	13.5	13.2	
7	13.3	13.0	13.5	13.0	
8	12.0	13.3	12.5	13.4	
9	10.2	11.8	11.8	12.0	
10	11.6	10.3	13.1	10.3	
11 and Over	9.8	9.3	10.4	9.3	

^{*}All companies receive equal weight; company size does not affect results.

TABLE 27
PERCENTAGE OF FACE AMOUNT LAPSING
(17 COMPANIES)

	Med	Median		Average"	
Policy Year	1988	1989	1988	1989	
1	17.1%	17.8%	16.3%	16.0%	
2	18.5	16.3	18.7	17.5	
3	16.2	16.5	16.5	16.3	
4	13.8	15.2	17.3	14.6	
5	13.3	14.2	14.1	14.3	
6	13.4	12.4	14.3	12.6	
7	12.8	12.5	13.1	13.3	
8	13.2	13.7	13.1	13.8	
9	12.4	11.5	12.8	12.0	
10	11.5	10.7	14.1	10.0	
11 and Over	9.4	10.1	16.1	9.9	

^{*}All companies receive equal weight; company size does not affect results.

TABLE 28
PERCENTAGE OF ANNUALIZED PREMIUM LAPSING (13 COMPANIES)

<u></u>	Med	Median		Average*	
Policy Year	1988	1989	1988	1989	
1	17.4%	17.6%	16.7%	16.5%	
2	16.8	16.7	18.1	17.0	
3	17.0	15.1	18.9	16.2	
4	14.5	14.4	17.1	15.6	
5	15.6	13.4	14.8	14.1	
6	13.0	12.5	14.2	12.3	
7	13.9	12.6	13.4	12.0	
8	12.9	13.7	13.1	13.9	
9	13.7	13.3	15.3	14.7	
10	12.9	11.6	14.6	10.6	
11 and Over	10.3	11.4	18.2	11.3	

^{*}All companies receive equal weight; company size does not affect results.

Average Size Lapsing and Persisting for Constant Companies

TABLE 29

Median Face Amounts per Policy (15 Companies)

	1988 M	ledians	1989 N	Aedians
Policy Year	Lapsing	Persisting	Lapsing	Persisting
1	\$137,323	\$161,075	\$139,204	\$164,986
2	163,704	164,083	153,023	165,792
3	148,119	148,274	162,315	152,971
4	134,886	137,005	146,766	144,177
5	131.081	129,649	136,223	133,498
6	105,637	103,944	107,936	130,477
7	105,317	95,788	98,208	99,078
8	96,563	90,136	94,453	90,991
9	92,896	85,297	95,557	86,943
10	94,459	87,283	83,901	85,510
11 and Over	65,814	95,483	108,070	98,509

TABLE 30

AVERAGE FACE AMOUNTS PER POLICY (16 COMPANIES)

Policy Year	1988 Averages*		1989 Averages*	
	Lapsing	Persisting	Lapsing	Persisting
1	\$143,779	\$167,643	\$147,596	\$168,754
2	155,785	162,082	158,157	170,915
3	143,197	146,535	160,733	158,528
4	134,797	144,313	146,071	145,372
5	124,331	128,017	140,902	138,991
6	109,806	108,887	118,812	125,168
7	102,652	101,151	100,226	104,263
8	97,219	91,334	102,780	94,826
9	97,562	89,836	89,408	88,529
10	106,430	92,594	83,131	90,991
11 and Over	81,818	86,276	93,829	89,536

^{*}All companies receive equal weight; company size does not affect results.

Average Size Lapsing and Persisting for Constant Companies

TABLE 31

MEDIAN ANNUALIZED PREMIUMS PER POLICY
(12 COMPANIES)

Policy Year	1988 Medians		1989 Medians	
	Lapsing	Persisting	Lapsing	Persisting
1	\$302	\$364	\$290	\$335
2	376	379	343	379
3	388	352	404	376
4	367	408	339	363
5	433	406	439	444
6	393	402	332	433
7	465	494	395	396
8	511	436	525	497
9	639	476	590	430
10	548	491	517	471
11 and Over	497	486	696	500

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11 and Over

(12 Companies)								
	1988 Averages"		1989 Averages*					
Policy Year	Lapsing	Persisting	Lapsing	Persisting				
1	\$341	\$359	\$326	\$344				
2	372	381	372	389				
3	381	373	411	370				
4	402	384	445	370				
5	449	418	448	414				
6	461	435	431	429				
7	500	488	459	449				
8	483	468	573	485				
9	594	478	587	461				

TABLE 32

Average Annualized Premiums per Policy
(12 Companies)

585

APPENDIX A DEFINITIONS

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In-Force Policies

A policy is considered in force if the first premium for the new policy year starting in 1988 is paid.

In-force business includes:

- Policies issued in 1988
- Policies issued prior to 1988 where the premium due on the 1988 policy anniversary date is paid before the end of the grace period.

In-force business excludes:

- Policies that lapse prior to their 1988 anniversary and that are on extended term or reduced paid-up status
- Limited premium payment policies that are paid up
- Single premium policies.

Examples of in-force policies are:

- A policy issued in 1988 with the first premium paid
- A policy issued in 1987 with the premium due in the 13th policy month paid
- A policy issued in 1986 with the premium due in the 25th policy month paid.

^{*}All companies receive equal weight; company size does not affect results.

Lapses

A policy is considered a lapse if the first premium for the new policy year starting in 1988 is paid, but not all of the premium that comes due after the 1988 anniversary and before or on the 1989 anniversary date is paid.

Lapsed business includes:

- Policies surrendered after their 1988 anniversaries and before or on their 1989 anniversaries
- Policies where a premium due after the 1988 anniversary and before or on the 1989 anniversary date is not paid by the end of the grace period
- Term policies with renewal provisions that do not renew
- Policies that go on reduced paid-up or extended-term status.

Lapsed business excludes:

- · Death claims
- Automatic premium loaned policies
- Expiries and maturities
- Conversions
- Policies that lapse during the 1988–1989 policy year but are reinstated before or on their 1989 anniversaries
- Policies not taken
- Policies where the waiver of premium provision applies.

Examples of lapsed policies are:

- A policy issued in 1988 with the first premium paid. If any premium for policy months 2 through 13 is not paid by the end of the grace period, the policy is a lapse.
- A policy issued in 1987 with the 13th policy month premium paid. If any premium
 for policy months 14 through 25 is not paid by the end of the grace period, the policy
 is a lapse.
- A policy issued in 1986 with the 25th policy month premium paid. If any premium
 for policy months 26 through 37 is not paid by the end of the grace period, the policy
 is a lapse.

An example of a policy that is not lapsed is:

• A policy issued in 1987 is not considered a lapse if the 13th policy month premium and all premiums for policy months 14 through 25 are paid.

PRODUCT DEFINITIONS

Traditional Whole Life

Includes: • Fixe

 Fixed cash value products including continuous pay and limited pay plans with permanent protection. Premiums may be level or indeterminate.

Excludes: • Interest-sensitive whole life

- Universal life
- Variable life with flexible premiums (VUL)
- Variable life with fixed premiums
- Endowments
- Policies that are combinations of whole life and term plans
- Individual pension trust plans.

Yearly Renewable Term (YRT)

Includes:

Level face amount products with annually increasing premiums. This
includes (1) nonparticipating products with indeterminate premiums
that have two schedules of premiums—current and guaranteed, (2)
nonparticipating products with guaranteed premiums, and (3) participating products paying dividends.

Excludes:

- Graded-premium whole life—Types 1 and 2
- Term riders
- Nonlevel face amount term (for example, decreasing term).

Level Face Amount Term (excluding YRT)

Includes:

Level face amount products. This includes (1) nonparticipating products with indeterminate premiums that have two schedules of premiums—current and guaranteed, (2) nonparticipating products with guaranteed premiums, and (3) participating products paying dividends.

Excludes:

- Yearly renewable term
- Nonlevel face amount term (for example, decreasing term)
- Term riders.

Individual Pension Trust

Includes: • All policies sold on a pension trust basis.

Interest-Sensitive Whole Life

Includes:

Whole life plans that credit cash values with current interest rates.
 Premiums may be level, may vanish, or may be adjusted periodically.

Excludes:

Universal life

• Individual pension trust.

Graded-Premium Whole Life—Type 1

Includes:

• Traditional graded-premium whole life. The premium may increase annually for five to 10 years and then level off at a premium comparable to a whole life continuous-pay plan. A typical graded-premium whole life policy for a male age 30 would have a \$6 initial premium per \$1,000, gradually increasing over 10 years to a final premium of \$16 per \$1,000.

Excludes:

- Graded-premium whole life—Type 2
- Individual pension trust.

Graded-Premium Whole Life-Type 2

Includes:

Nontraditional graded-premium whole life. The initial premium is competitive with yearly renewable term policies. The premium increases annually for 10 to 20 years and then becomes level. Usually, the policy has no cash value for the first 10 years. A typical modified term policy for a male age 30 would have an initial premium of less than \$2 per \$1,000 and a final premium after 11 years of \$25 per \$1,000.

Excludes:

- Graded-premium whole life—Type 1
- Individual pension trust.

APPENDIX B
PARTICIPATING COMPANIES

Aetna Life & Casualty*

Alfa Life*

American General Life (Texas)

American United Life*

Baltimore Life*

Business Men's Assurance

Canada Life*

Connecticut Mutual Life*

Country Life

Equitable Life of the United States*

Great-West Life*

Guardian Life of America*

Horace Mann Life*

IDS Life (Minnesota)*

Jefferson-Pilot Life*

John Hancock Mutual Life*

Kansas City Life*

Lutheran Brotherhood*

Manufacturers Life*

Metropolitan Life (New York)*

Mutual Life of New York*

Mutual of Omaha*

New England Life*

Northwestern National Life

Penn Mutual

Principal Mutual Life

Prudential of America*

Security-Connecticut Life*

Sun Life of Canada*

The Travelers*

^{*}Company participated in both this year's and last year's studies.