

**TRANSACTIONS OF SOCIETY OF ACTUARIES  
1991-92 REPORTS**

**III. 1989-90 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 1988-89 version of this study appears as Part I; the 1988-89 Canadian version appears as Part II; and the 1989-90 Canadian version 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 section of the report examines the lapsation of ordinary insurance in the U.S. between 1989 and 1990 policy anniversaries. It is designed to help companies develop new products and monitor marketing and product performance.

Lapse rates in this report are percentages of face amounts, policies, and annualized premiums in force on 1989 policy anniversaries that lapse on or before 1990 policy anniversaries. (See Appendix A for definitions of terms used in this report.) For new issues in 1989, amounts in force on 1989 anniversaries correspond to amounts sold during 1989.

Lapse rates are measured for policy years 1, 2, 3-5, 6-10, and 11 and over. These policy years correspond to issue years 1989, 1988, 1987-1985, 1984-1980, and 1979 and earlier. Lapse rates by face amount, number of policies, and annualized premium are measured for six types of ordinary life insurance plans:

- Traditional whole life
- Interest-sensitive whole life

\*Copyright © 1992 Life Insurance Marketing and Research Association, Inc.

- Individual pension trust
- Graded-premium whole life
- Yearly renewable term (YRT)
- Level face amount term (excluding YRT).

### *In-Depth Survey*

An in-depth look at lapse rates for YRT based on number of policies, face amount, and annualized premium begins on page 867. For each of these measures, the in-depth section shows lapse rates by specific issue age categories and policy year. Issue age categories are 20-29, 30-39, 40-49, 50-59, and all issue ages combined (including issue ages below age 20 and issue ages over age 59). Policy years include individual years 1-10 and combined policy years 11 and over.

### *Definitions*

#### *Example of a First-Year Lapse*

A new policy is issued and the first 12 months of premium are subsequently paid and the premium due in policy month 13 is not paid by the end of the grace period (this is a first-year lapse, not a second-year lapse).

#### *Unweighted Average Lapse Rate*

This rate equals the mean of individual company lapse rates; therefore, company size does not affect the results.

#### *Weighted Average Lapse Rate*

This rate equals the mean of individual company lapse rates weighted by the amount of in force; therefore, company size does affect the results.

### *About the Sample*

Thirty-one companies participated in the study. Twenty-five of these companies provided face amount lapsing, number of policies lapsing, and annualized premium lapsing. Five companies provided only face amount lapsing and number of policies lapsing, while one company provided only face amount lapsing. Tables A, B, and C show face amount, number of policies, and annualized premium in force, respectively.

**TABLE A**  
**FACE AMOUNT IN FORCE (BILLIONS) ON 1989 ANNIVERSARIES**  
**(31 COMPANIES)**

Issue Year	Traditional Whole Life	Interest-Sensitive Whole Life	Individual Pension Trust	Graded-Premium Whole Life	Level Term	
					YRT	Other
1989*	\$ 44.2	\$17.0	\$1.3	\$ 1.1	\$ 57.5	\$ 8.6
1988	34.9	13.6	1.3	1.8	41.1	6.0
1985 to 1987	66.0	47.0	2.8	3.5	79.6	11.2
1980 to 1984	69.9	17.4	1.9	3.1	39.0	6.8
Before 1980	82.0	0.0	1.7	1.5	2.9	4.4
<b>Total</b>	<b>\$297.0</b>	<b>\$95.0</b>	<b>\$9.0</b>	<b>\$11.1</b>	<b>\$220.1</b>	<b>\$37.0</b>

\*For issue year 1989, amounts in force on 1989 anniversaries correspond to amounts sold during the year.

**TABLE B**  
**NUMBER OF POLICIES IN FORCE (THOUSANDS) ON 1989 ANNIVERSARIES**  
**(30 COMPANIES)**

Issue Year	Traditional Whole Life	Interest-Sensitive Whole Life	Individual Pension Trust	Graded-Premium Whole Life	Level Term	
					YRT	Other
1989*	841.0	245.8	25.9	9.2	319.5	93.6
1988	694.5	202.7	21.9	14.7	225.0	68.3
1985 to 1987	1,630.7	744.6	46.6	31.1	493.7	146.9
1980 to 1984	2,886.5	255.0	48.5	35.5	310.1	166.5
Before 1980	9,277.2	0.5	86.2	85.1	49.9	200.2
<b>Total</b>	<b>15,329.8</b>	<b>1,448.6</b>	<b>229.1</b>	<b>175.6</b>	<b>1,398.2</b>	<b>675.6</b>

\*For issue year 1989, amounts in force on 1989 anniversaries correspond to amounts sold during the year.

**TABLE C**  
**ANNUALIZED PREMIUM IN FORCE (MILLIONS) ON 1989 ANNIVERSARIES**  
**(25 COMPANIES)**

Issue Year	Traditional Whole Life	Interest-Sensitive Whole Life	Individual Pension Trust	Graded-Premium Whole Life	Level Term	
					YRT	Other
1989*	\$ 498.3	\$ 47.1	\$ 19.0	\$ 8.9	\$ 83.7	\$ 6.1
1988	384.6	54.1	17.9	17.0	69.1	3.1
1985 to 1987	705.1	329.9	45.5	39.9	151.8	11.4
1980 to 1984	908.6	328.6	38.1	53.0	117.4	12.7
Before 1980	1,411.0	0.8	32.8	30.0	19.0	12.6
<b>Total</b>	<b>\$3,907.5</b>	<b>\$760.5</b>	<b>\$153.3</b>	<b>\$148.7</b>	<b>\$441.0</b>	<b>\$45.9</b>

\*For issue year 1989, amounts in force on 1989 anniversaries correspond to amounts sold during the year.

## LAPSE RATES BY PRODUCT TYPE

Median lapse rates for the 25 companies that supplied data for face amount, policy count, and annualized premium are shown in Tables D, E, and F, respectively.

TABLE D  
PERCENTAGE OF FACE AMOUNT LAPSING BY PRODUCT TYPE

Issue Year	Traditional Whole Life	Interest-Sensitive Whole Life	Individual Pension Trust	Graded-Premium Whole Life	Level Term	
					YRT	Other
1	13.5%	18.2%	16.2%	—	15.7%	15.2%
2	11.3	14.1	12.4	—	18.0	16.7
3-5	7.1	8.7	14.7	—	16.2	16.1
6-10	7.8	9.2	13.0	12.8%	12.6	11.2
11 and Over	6.2	—	10.2	6.5	10.6	10.1
Total	7.7%	10.8%	13.7%	11.1%	15.7%	13.7%

—Insufficient data.

TABLE E  
PERCENTAGE OF POLICIES LAPSING BY PRODUCT TYPE

Issue Year	Traditional Whole Life	Interest-Sensitive Whole Life	Individual Pension Trust	Graded-Premium Whole Life	Level Term	
					YRT	Other
1	14.0%	17.8%	17.3%	—	17.7%	15.5%
2	10.8	13.3	21.4	—	18.8	17.3
3-5	6.6	7.8	21.3	—	15.6	14.9
6-10	7.1	7.7	15.0	12.0%	11.9	10.1
11 and Over	4.8	—	11.9	5.7	9.3	7.8
Total	5.6%	9.7%	15.1%	7.3%	15.6%	11.1%

—Insufficient data.

TABLE F  
PERCENTAGE OF ANNUALIZED PREMIUM LAPSING BY PRODUCT TYPE

Issue Year	Traditional Whole Life	Interest-Sensitive Whole Life	Individual Pension Trust	Graded-Premium Whole Life	Level Term	
					YRT	Other
1	14.0%	17.4%	15.1%	—	16.4%	15.5%
2	9.2	11.8	16.0	—	18.3	18.1
3-5	6.9	7.6	18.3	—	16.6	14.3
6-10	7.2	6.0	14.2	9.6%	13.2	11.1
11 and Over	6.3	—	12.0	6.1	10.8	8.9
Total	7.4%	9.5%	13.5%	8.5%	15.9%	13.2%

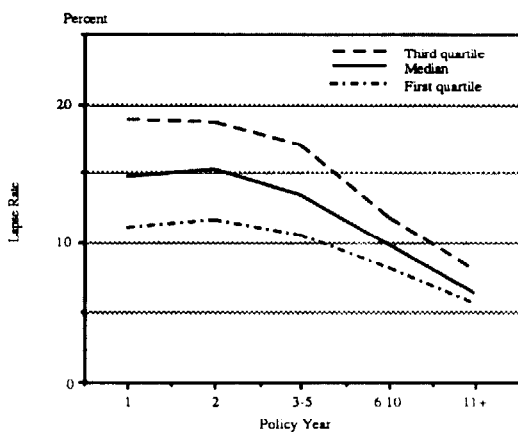
—Insufficient data.

## SUMMARY OF LAPSE EXPERIENCE

Figures 1-5 summarize patterns in lapse experience based on the median face amount lapsing. Figures 6-11 show results using experience from 25 companies supplying data for all three measures: face amount, number of policies, and annualized premium.

Figure 1 shows variations in company face amount lapse rates for all product types combined. Median lapse rates range from 14.7 percent in policy year 1 to 6.4 percent in policy years 11 and over. Lapse rates vary the most in the earlier durations but begin to converge in later durations. In policy years 11 and over, the middle 50 percent of the companies have lapse rates between 5.6 percent and 7.9 percent.

**Figure 1 — Variations in Face Amount Lapse Rates**



The term marketplace has seen increased activity in non-YRT products, which include products with premiums increasing every 3, 5, 7, 10, 15, or 20 years. Figure 2 shows median lapse rates by face amount for YRT products and other level face amount term products of companies selling both product types. Lapse rates are higher for YRT than for non-YRT in all durations. First-year lapse rates for the two types of products, however, are quite similar.

**Figure 2 — Comparison of Lapse Rates for Term Insurance**

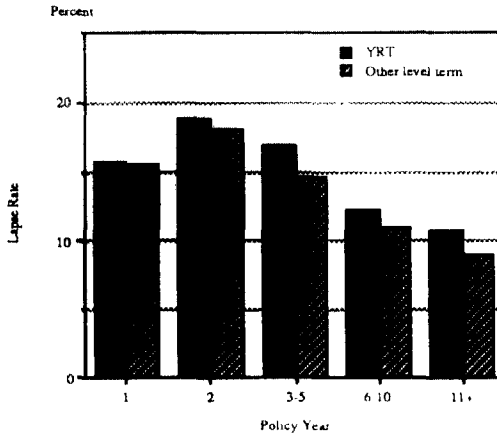


Figure 3 shows the differences in lapse rates for permanent insurance (traditional whole life, interest-sensitive whole life, and graded-premium whole life) and term insurance (YRT and other level term). Permanent insurance continues to have better persistency than term insurance. However, term insurance has a slightly lower first-year lapse rate (15.2 percent) than permanent insurance (15.6 percent). The differences in lapse rates are substantial in the remaining durations.

**Figure 3 — Permanent Insurance vs. Term Insurance Lapse Rates**

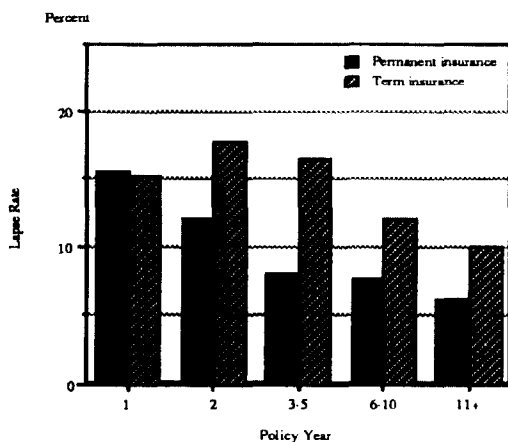


Figure 4 shows median face amount lapse rates for permanent insurance (traditional whole life, interest-sensitive whole life, and graded-premium whole life) by company size. Company size has little effect on median first-year lapse rates. However, in all other durations, large companies (greater than \$10 billion in force for the six products in this study) have lower lapse rates. Large companies' lapse rates range from 11.1 percent in policy year 2 to 5.8 percent in policy years 11 and over. Smaller companies' rates range from 14.3 percent to 6.2 percent over the same time period.

**Figure 4 — Permanent Insurance Lapse Rates by Company Size**

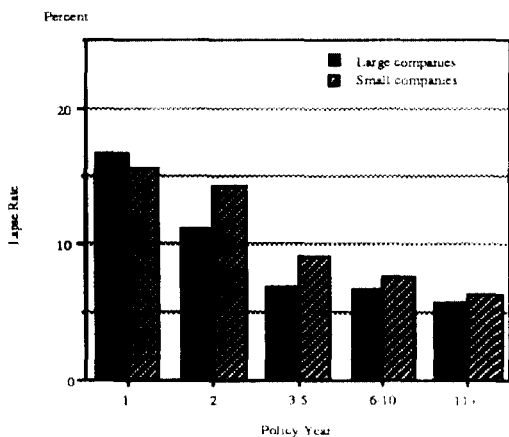




Figure 5 shows median face amount lapse rates for term insurance (YRT and other level term) by company size. Company size does not affect first-year lapse rates and lapse rates in policy years 6-10. Large companies experience better lapse rates in policy years 2 to 5 and policy years 11 and over. Lapse rates for large companies range from 15.2 percent in policy year 1 to 8.8 percent in policy years 11 and over, while lapse rates for small companies range from 15.1 percent to 11.1 percent.

**Figure 5— Term Insurance Lapse Rates by Company Size**

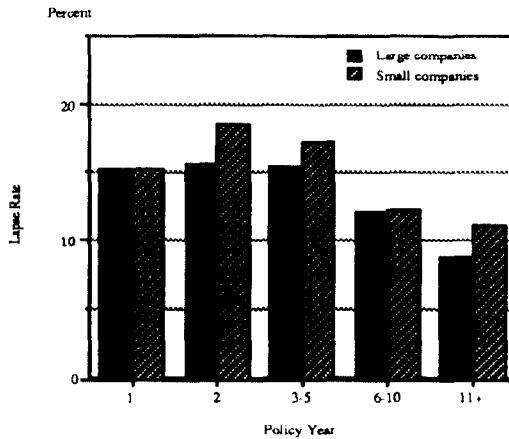


Figure 6 shows median lapse rates by face amount, number of policies, and annualized premium for traditional whole life. Lapse rates for all three measures decline through the first five policy years, increase slightly in policy years 6-10, and decline again in policy years 11 and over.

**Figure 6 — Traditional Whole Life Lapse Rates**

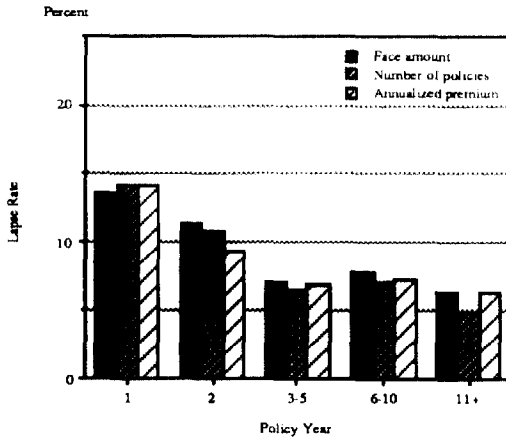


Figure 7 shows median lapse rates by face amount, number of policies, and annualized premium for interest-sensitive whole life. Lapse rates for policy years 11 and over are not shown because of limited data. In all durations, face amount lapse rates exceed both policy count lapse rates and annualized premium lapse rates.

**Figure 7 — Interest-Sensitive Whole Life Lapse Rates**

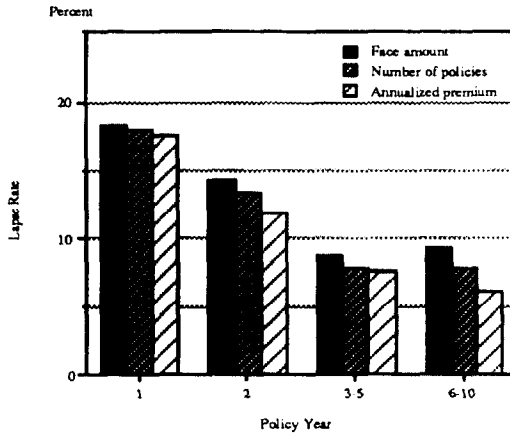


Figure 8 shows median lapse rates by face amount, number of policies, and annualized premium for individual pension trust. Face amount lapse rates tend to be lower than policy count lapse rates and premium lapse rates, especially in policy years 2-5.

**Figure 8 — Individual Pension Trust Lapse Rates**

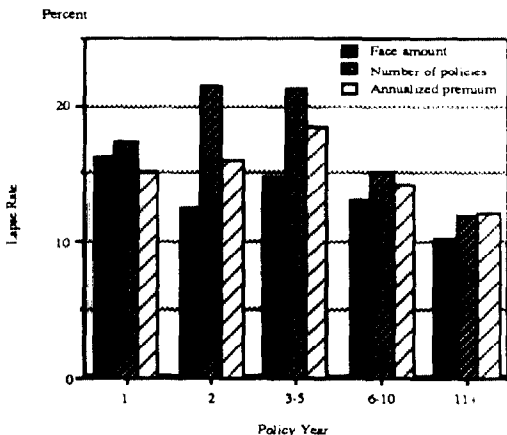


Figure 9 shows median lapse rates by face amount, number of policies, and annualized premium for graded-premium whole life. Because of insufficient data in the first five policy years, data are shown only for policy years 6 and over. In policy years 6 and over, face amount has the highest lapse rate at 12.8 percent. In policy years 11 and over, lapse rates range from 5.7 percent (by policy count) to 6.5 percent (by face amount).

**Figure 9 — Graded-Premium Whole Life Lapse Rates**

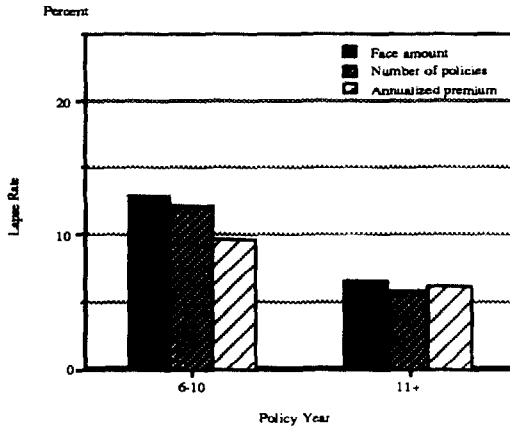


Figure 10 shows median lapse rates by face amount, number of policies, and annualized premium for YRT. All three measures exhibit the same pattern: Lapse rates peak in the second policy year and start to decline in the next year. The face amount lapse rate is 15.7 percent in policy year 1; in the last duration, the face amount lapse rate is 10.6 percent.

**Figure 10 — Yearly Renewable Term Lapse Rates**

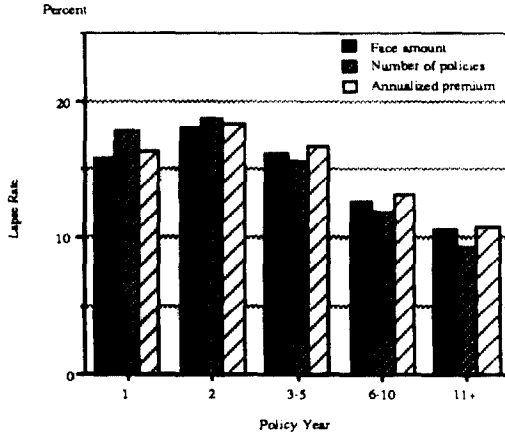
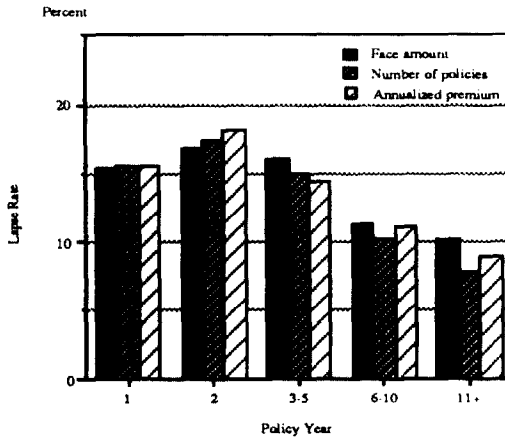


Figure 11 shows median lapse rates by face amount, number of policies, and annualized premium for level face amount term (excluding YRT), which follows the same pattern as YRT. Face amount lapse rates are 15.2 percent in the first policy year. By policy years 11 and over, lapse rates have dropped to 10.1 percent.

**Figure 11 — Other Level Term (excluding YRT)  
Lapse Rates**



## TRENDS IN LAPSE RATES

*Traditional Whole Life*

Figure 12 shows whole life face amount lapse rates for a constant group of companies in 1989 and 1990; Table G summarizes companies' increases and decreases in face amount lapse rates. Lapse rates have declined in all durations since 1989. In 1989 lapse rates ranged from 17.7 percent in policy year 1 to 7.4 percent in policy years 11 and over. In 1990 lapse rates ranged from 16 percent to 6.3 percent over the same durations.

**Figure 12 — Whole Life Lapse Rates  
for a Constant Group of Companies**

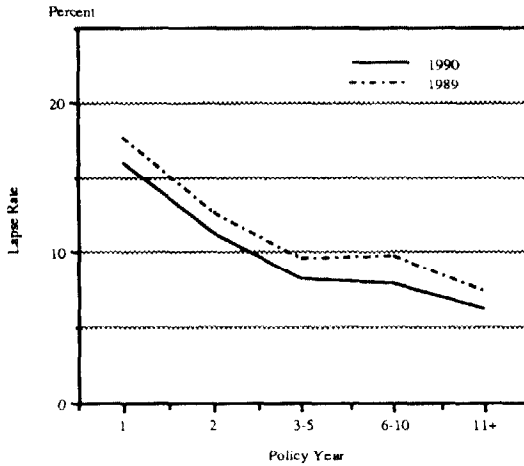




TABLE G  
INCREASES AND DECREASES IN WHOLE LIFE LAPSE RATES

	Number of Companies	Unweighted Average Lapse Rate	
		1989	1990
Policy Year 1			
Increase	11	12.7%	14.3%
Decrease	15	21.3	17.3
All	26	17.7	16.0
Policy Year 2			
Increase	13	11.0%	12.5%
Decrease	13	14.4	10.2
All	26	12.7	11.3
Policy Years 3-5			
Increase	9	7.9%	9.4%
Decrease	20	10.3	7.7
All	29	9.5	8.2
Policy Years 6-10			
Increase	2	7.4%	8.5%
Decrease	27	9.9	7.9
All	29	9.7	7.9
Policy Years 11+			
Increase	2	7.6%	8.2%
Decrease	25	7.3	6.2
All	27	7.4	6.3

*Yearly Renewable Term*

Figure 13 shows 1989 and 1990 YRT face amount lapse rates for a constant group of companies; Table H summarizes companies' increases and decreases in face amount lapse rates. Since 1989, lapse rates have decreased in policy year 2 and in policy years 6 and over. First-year lapse rates and lapse rates in policy years 3-5 have remained relatively constant.

**Figure 13 — YRT Lapse Rates  
for a Constant Group of Companies**

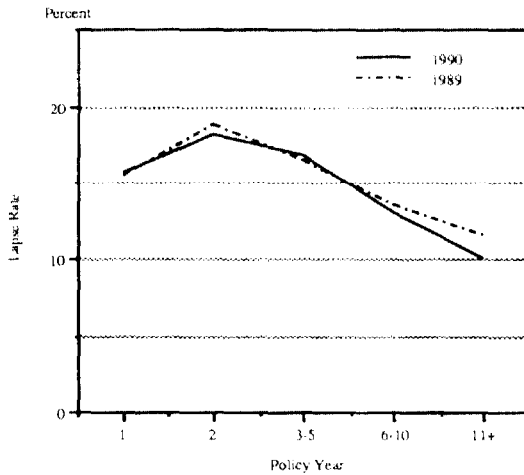


TABLE H  
INCREASES AND DECREASES IN YRT LAPSE RATES

	Number of Companies	Unweighted Average Lapse Rate	
		1989	1990
Policy Year 1			
Increase	9	13.4%	16.7%
Decrease	16	16.7	15.1
All	25	15.5	15.7
Policy Year 2			
Increase	8	16.6%	20.2%
Decrease	17	19.9	17.1
All	25	18.8	18.1
Policy Years 3-5			
Increase	14	16.4%	19.0%
Decrease	14	16.5	14.7
All	28	16.5	16.8
Policy Years 6-10			
Increase	11	15.0%	16.6%
Decrease	17	12.8	10.8
All	28	13.6	13.1
Policy Years 11 +			
Increase	6	9.2%	10.3%
Decrease	15	12.3	9.9
All	21	11.4	10.0

*Other Level Term*

Figure 14 shows level term face amount lapse rates for a constant group of companies in 1989 and 1990; Table I summarizes companies' increases and decreases in face amount lapse rates. Lapse rates have remained consistent since 1990; however, 1990 lapse rates have increased slightly in policy years 3 and over.

**Figure 14 — Other Level Term Lapse Rates  
for a Constant Group of Companies**

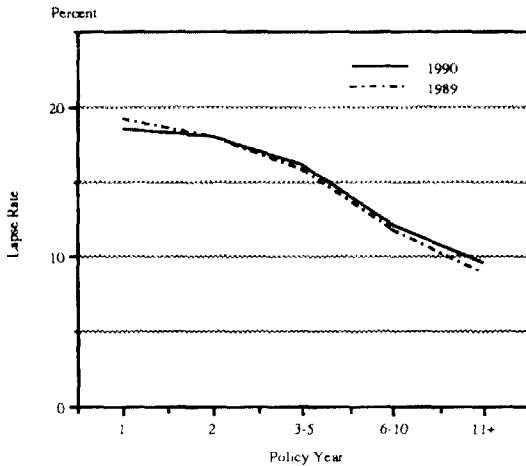


TABLE I  
INCREASES AND DECREASES IN OTHER LEVEL TERM  
LAPSE RATES

	Number of Companies	Unweighted Average Lapse Rate	
		1989	1990
Policy Year 1			
Increase	5	16.1%	18.8%
Decrease	4	23.0	18.1
All	9	19.2	18.5
Policy Year 2			
Increase	6	14.0%	15.5%
Decrease	4	23.9	21.8
All	10	18.0	18.0
Policy Years 3-5			
Increase	3	17.4%	22.5%
Decrease	9	15.2	14.1
All	12	15.8	16.2
Policy Years 6-10			
Increase	6	13.0%	16.5%
Decrease	10	11.1	9.5
All	16	11.8	12.1
Policy Years 11 +			
Increase	9	8.2%	10.5%
Decrease	7	9.9	8.3
All	16	8.9	9.5

*Individual Pension Trust*

Figure 15 shows unweighted individual pension trust face amount lapse rates for a constant group of companies in 1989 and 1990; Table J summarizes companies' increases and decreases in face amount lapse rates. First-year lapse rates in 1990 are substantially higher than 1989 first-year lapse rates. Lapse rates in 1990 started off high at 19.0 percent and have declined in following years.

**Figure 15 — Individual Pension Trust Lapse Rates for a Constant Group of Companies**

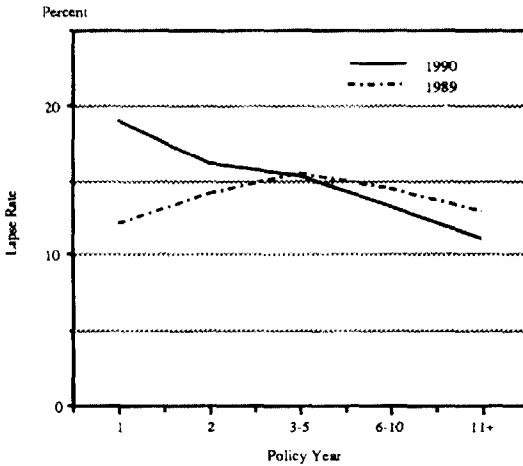


TABLE J  
INCREASES AND DECREASES IN WHOLE LIFE LAPSE RATES

	Number of Companies	Unweighted Average Lapse Rate	
		1989	1990
Policy Year 1			
Increase	7	11.6%	19.6%
Decrease	1	15.8	14.6
All	8	12.1	19.0
Policy Year 2			
Increase	7	14.5%	17.7%
Decrease	2	13.2	11.0
All	9	14.2	16.2
Policy Years 3-5			
Increase	7	11.9%	17.3%
Decrease	5	20.5	12.8
All	12	15.5	15.4
Policy Years 6-10			
Increase	5	13.9%	16.6%
Decrease	10	14.9	11.8
All	15	14.5	13.4
Policy Years 11+			
Increase	5	13.2%	15.1%
Decrease	9	12.9	8.7
All	14	13.0	11.0

A DETAILED LOOK AT LAPSE RATES BY PRODUCT

*Traditional Whole Life*

TABLE 1  
PERCENTAGE OF FACE AMOUNT LAPSING  
(31 COMPANIES)

Policy Year	In Force (Billions)	First Quartile	Median	Third Quartile	Unweighted Average	Weighted Average
1	\$ 44.2	9.2%	14.5%	20.1%	16.0%	16.1%
2	34.9	6.9	11.3	15.7	11.3	9.8
3-5	66.0	6.2	7.1	11.4	8.1	6.8
6-10	69.9	6.0	7.4	9.7	7.9	6.5
11 and Over	82.0	5.3	6.1	7.3	6.4	5.9
All	\$297.0	6.5%	7.6%	9.4%	8.0%	8.2%

TABLE 2  
PERCENTAGE OF POLICIES LAPSING  
(30 COMPANIES)

Policy Year	In Force (Thousands)	First Quartile	Median	Third Quartile	Unweighted Average	Weighted Average
1	841.0	10.0%	14.7%	23.4%	16.8%	20.5%
2	694.5	8.4	10.2	13.5	11.4	12.1
3-5	1,630.7	5.4	6.9	9.2	7.5	7.4
6-10	2,886.5	5.4	6.8	8.6	7.0	6.1
11 and Over	9,277.1	4.3	4.7	5.9	5.2	4.7
All	15,329.8	5.1%	5.7%	7.2%	6.4%	6.5%

TABLE 3  
PERCENTAGE OF ANNUALIZED PREMIUM LAPSING  
(25 COMPANIES)

Policy Year	In Force (Millions)	First Quartile	Median	Third Quartile	Unweighted Average	Weighted Average
1	\$ 498.3	8.4%	14.0%	16.9%	13.7%	14.2%
2	384.6	7.1	9.2	11.7	9.8	8.8
3-5	705.1	5.1	6.6	10.0	7.4	7.7
6-10	908.6	5.6	7.3	9.4	7.7	7.1
11 and Over	1,411.0	5.4	6.4	7.4	6.4	6.3
All	\$3,907.5	6.5%	7.4%	9.0%	7.5%	8.0%



TABLE 4

## MEDIAN FACE AMOUNT AND ANNUALIZED PREMIUM PERSISTING AND LAPSING

Policy Year	Face Amount*		Premium†	
	Persisting	Lapsing	Persisting	Lapsing
1	\$41,000	\$37,000	\$650	\$530
2	37,000	32,000	550	470
3-5	24,000	26,000	460	440
6-10	24,000	24,000	390	450
11 and Over	8,000	11,000	170	230

\*Rounded to the nearest thousand dollars.

†Rounded to the nearest ten dollars.

*Interest-Sensitive Whole Life*

TABLE 5

PERCENTAGE OF FACE AMOUNT LAPSING  
(10 COMPANIES)

Policy Year	In Force (Billions)	Median	Unweighted Average	Weighted Average
1	\$17.0	17.8%	19.0%	20.1%
2	13.6	14.1	14.2	13.8
3-5	47.0	9.6	9.2	9.8
6-10	17.4	7.9	8.7	9.2
All	\$95.0	11.9%	11.7%	12.1%

TABLE 6

PERCENTAGE OF POLICIES LAPSING  
(9 COMPANIES)

Policy Year	In Force (Thousands)	Median	Unweighted Average	Weighted Average
1	245.8	18.5%	19.6%	21.1%
2	202.7	13.2	13.4	13.5
3-5	744.6	8.6	8.7	9.1
6-10	255.0	7.3	8.1	7.7
All	1,448.6	10.2%	11.3%	11.5%

TABLE 7  
 PERCENTAGE OF ANNUALIZED PREMIUM LAPSING  
 (8 COMPANIES)

Policy Year	In Force (Millions)	Median	Unweighted Average	Weighted Average
1	\$ 47.1	17.4%	17.9%	21.1%
2	54.1	11.8	11.4	11.9
3-5	329.9	7.6	7.3	7.6
6-10	328.6	6.0	7.9	6.0
All	\$760.5	9.5%	9.4%	8.0%

TABLE 8  
 MEDIAN FACE AMOUNT AND ANNUALIZED PREMIUM PERSISTING AND LAPSING

Policy Year	Face Amount*		Premium†	
	Persisting	Lapsing	Persisting	Lapsing
1	\$53,000	\$59,000	\$620	\$590
2	55,000	58,000	880	640
3-5	53,000	59,000	900	790
6-10	64,000	69,000	920	970

\*Rounded to the nearest thousand dollars.

†Rounded to the nearest ten dollars.

*Individual Pension Trust*

TABLE 9  
 PERCENTAGE OF FACE AMOUNT LAPSING  
 (17 COMPANIES)

Policy Year	In Force (Billions)	First Quartile	Median	Third Quartile	Unweighted Average	Weighted Average
1	\$1.3	13.4%	18.0%	23.9%	18.6%	15.7%
2	1.3	10.3	12.6	23.3	16.2	15.0
3-5	2.8	8.4	14.4	23.7	15.4	12.5
6-10	1.9	10.5	12.5	18.3	14.3	12.9
11 and Over	1.7	7.5	10.2	13.7	10.9	9.7
All	\$9.0	9.6%	13.5%	16.8%	13.5%	12.9%

TABLE 10  
PERCENTAGE OF POLICIES LAPSING  
(15 COMPANIES)

Policy Year	In Force (Thousands)	First Quartile	Median	Third Quartile	Unweighted Average	Weighted Average
1	25.9	16.8%	21.4%	28.8%	24.2%	20.5%
2	21.9	17.1	21.4	27.2	21.5	22.6
3-5	46.6	15.0	19.0	26.8	21.6	20.0
6-10	48.5	13.2	15.0	23.0	17.7	17.3
11 and Over	86.2	7.2	11.2	14.1	11.4	11.1
All	229.1	12.0%	15.1%	19.9%	16.7%	16.4%

TABLE 11  
PERCENTAGE OF ANNUALIZED PREMIUM LAPSING  
(12 COMPANIES)

Policy Year	In Force (Millions)	First Quartile	Median	Third Quartile	Unweighted Average	Weighted Average
1	\$ 19.0	10.3%	15.1%	19.3%	15.5%	11.9%
2	17.9	—	16.0	—	15.6	13.9
3-5	45.5	9.9	18.3	25.5	17.6	12.2
6-10	38.1	10.2	14.2	19.7	16.4	13.7
11 and Over	32.8	7.8	12.0	13.6	11.6	10.6
All	\$153.3	12.5%	13.5%	17.6%	14.9%	12.4%

—Insufficient data.

TABLE 12  
MEDIAN FACE AMOUNT AND ANNUALIZED PREMIUM PERSISTING AND LAPSING

Policy Year	Face Amount*		Premium†	
	Persisting	Lapsing	Persisting	Lapsing
1	\$46,000	\$36,000	\$700	\$390
2	49,000	36,000	740	500
3-5	53,000	40,000	670	490
6-10	36,000	31,000	870	580
11 and Over	18,000	17,000	490	420

\*Rounded to the nearest thousand dollars.

†Rounded to the nearest ten dollars.

*Graded-Premium Whole Life*

TABLE 13  
PERCENTAGE OF FACE AMOUNT LAPSING  
(12 COMPANIES)

Policy Year	In Force (Billions)	Median	Unweighted Average	Weighted Average
6-10	\$ 3.1	10.5%	12.0%	11.0%
11 and Over	1.5	6.4	6.4	6.9
All	\$11.1	9.3%	10.4%	9.1%

TABLE 14  
PERCENTAGE OF POLICIES LAPSING  
(10 COMPANIES)

Policy Year	In Force (Thousands)	Median	Unweighted Average	Weighted Average
6-10	35.5	11.6%	12.4%	8.5%
11 and Over	85.1	6.0	5.8	5.5
All	175.6	7.2%	9.5%	7.3%

TABLE 15  
PERCENTAGE OF ANNUALIZED PREMIUM LAPSING  
(9 COMPANIES)

Policy Year	In Force (Millions)	Median	Unweighted Average	Weighted Average
6-10	\$ 53.0	9.6%	11.8%	10.2%
11 and Over	30.0	6.1	6.2	6.8
All	\$148.7	8.5%	9.9%	8.8%

TABLE 16  
MEDIAN FACE AMOUNT AND ANNUALIZED PREMIUM PERSISTING AND LAPSING

Policy Year	Face Amount*		Premium†	
	Persisting	Lapsing	Persisting	Lapsing
6-10	\$59,000	\$60,000	\$1,560	\$1,260
11 and Over	16,000	20,000	410	470

\*Rounded to the nearest thousand dollars.

†Rounded to the nearest ten dollars.

*Yearly Renewable Term*

TABLE 17  
PERCENTAGE OF FACE AMOUNT LAPSING  
(30 COMPANIES)

Policy Year	In Force (Billions)	First Quartile	Median	Third Quartile	Unweighted Average	Weighted Average
1	\$ 57.5	12.2%	15.7%	18.9%	15.7%	15.6%
2	41.1	15.1	18.0	19.9	18.1	15.7
3-5	79.6	13.7	16.7	19.9	17.5	14.3
6-10	39.0	10.2	12.2	16.9	13.4	11.5
11 and Over	2.9	8.0	10.4	12.1	10.6	8.9
All	\$220.1	14.7%	15.6%	18.1%	16.4%	14.3%

TABLE 18  
PERCENTAGE OF POLICIES LAPSING  
(29 COMPANIES)

Policy Year	In Force (Thousands)	First Quartile	Median	Third Quartile	Unweighted Average	Weighted Average
1	319.5	13.4%	17.3%	20.9%	17.0%	17.8%
2	225.0	15.3	18.6	22.0	19.2	17.4
3-5	493.7	13.9	15.9	19.0	16.9	13.9
6-10	310.1	10.2	11.7	16.2	12.9	10.8
11 and Over	49.9	8.3	10.3	12.3	10.5	8.4
All	1,398.2	13.8%	15.6%	16.7%	15.9%	14.5%

TABLE 19  
PERCENTAGE OF ANNUALIZED PREMIUM LAPSING  
(24 COMPANIES)

Policy Year	In Force (Millions)	First Quartile	Median	Third Quartile	Unweighted Average	Weighted Average
1	\$ 83.7	12.6%	16.4%	19.7%	16.2%	17.8%
2	69.1	15.9	18.3	20.6	19.0	16.6
3-5	151.8	14.1	16.6	20.9	17.5	15.6
6-10	117.4	11.3	13.2	18.2	14.2	13.3
11 and Over	19.0	8.6	10.8	13.4	11.8	10.8
All	\$441.0	13.8%	15.9%	18.6%	16.5%	15.3%

TABLE 20

## MEDIAN FACE AMOUNT AND ANNUALIZED PREMIUM PERSISTING AND LAPSING

Policy Year	Face Amount*		Premium†	
	Persisting	Lapsing	Persisting	Lapsing
1	\$208,000	\$172,000	\$420	\$340
2	168,000	165,000	400	350
3-5	157,000	163,000	470	500
6-10	118,000	119,000	510	530
11 and Over	86,000	85,000	520	620

\*Rounded to the nearest thousand dollars.

†Rounded to the nearest ten dollars.

*Other Level Term (Excluding YRT)*

TABLE 21

PERCENTAGE OF FACE AMOUNT LAPSING  
(22 COMPANIES)

Policy Year	In Force (Billions)	First Quartile	Median	Third Quartile	Unweighted Average	Weighted Average
1	\$ 8.6	11.0%	15.4%	21.3%	18.6%	24.7%
2	6.0	15.1	18.0	22.2	18.0	18.5
3-5	11.2	11.5	14.5	19.2	15.7	19.9
6-10	6.8	9.1	10.9	12.8	12.0	10.9
11 and Over	4.4	6.4	8.9	11.1	9.0	7.1
All	\$37.0	8.6%	13.1%	17.2%	12.8%	17.6%

TABLE 22

PERCENTAGE OF POLICIES LAPSING  
(20 COMPANIES)

Policy Year	In Force (Thousands)	First Quartile	Median	Third Quartile	Unweighted Average	Weighted Average
1	93.6	11.1%	16.7%	24.1%	17.6%	28.4%
2	68.3	15.1	17.9	24.1	18.5	20.0
3-5	146.9	10.5	13.9	18.4	15.7	14.8
6-10	166.5	8.9	10.0	12.8	11.1	9.3
11 and Over	200.2	5.8	7.3	10.1	7.6	6.5
All	675.6	7.5%	11.0%	18.4%	12.3%	13.4%

TABLE 23  
PERCENTAGE OF ANNUALIZED PREMIUM LAPSING  
(15 COMPANIES)

Policy Year	In Force (Millions)	First Quartile	Median	Third Quartile	Unweighted Average	Weighted Average
1	\$ 6.1	13.3%	15.5%	19.6%	15.8%	16.6%
2	3.1	13.3	18.1	23.1	17.9	19.2
3-5	11.4	10.5	13.5	18.8	14.6	19.5
6-10	12.7	9.1	10.3	12.5	11.4	13.9
11 and Over	12.6	3.9	7.8	10.6	7.6	10.5
All	\$45.9	8.2%	12.7%	16.1%	12.3%	15.0%

TABLE 24  
MEDIAN FACE AMOUNT AND ANNUALIZED PREMIUM PERSISTING AND LAPSING

Policy Year	Face Amount*		Premium†	
	Persisting	Lapsing	Persisting	Lapsing
1	\$114,000	\$123,000	\$330	\$330
2	76,000	77,000	260	240
3-5	87,000	105,000	280	300
6-10	40,000	36,000	230	210
11 and Over	20,000	22,000	130	130

\* Rounded to the nearest thousand dollars.

† Rounded to the nearest ten dollars.

IN-DEPTH SURVEY—YEARLY RENEWABLE TERM

*YRT Lapse Rates by Policy Year*

TABLE 25  
PERCENTAGE OF POLICIES LAPSING  
(23 COMPANIES)

Policy Year	First Quartile	Median	Third Quartile	Unweighted Average	Weighted Average
1	13.0%	16.8%	20.8%	16.4%	17.8%
2	15.0	18.4	22.6	19.1	17.4
3	14.0	16.0	19.5	17.6	14.8
4	12.7	15.7	19.3	16.5	12.8
5	11.7	14.4	17.8	14.9	13.0
6	10.5	12.0	15.8	12.8	11.2
7	9.3	11.2	14.6	12.0	10.6
8	9.1	11.2	13.7	11.8	10.0
9	8.5	10.9	12.6	10.7	9.2
10	8.7	11.1	13.0	11.5	9.6
11 and Over	8.6	10.3	12.3	10.7	8.2

TABLE 26  
 PERCENTAGE OF FACE AMOUNT LAPSING  
 (24 COMPANIES)

Policy Year	First Quartile	Median	Third Quartile	Unweighted Average	Weighted Average
1	11.9%	15.6%	18.9%	15.3%	15.6%
2	14.7	17.5	19.5	17.8	15.6
3	13.8	17.1	20.7	19.1	14.8
4	11.8	15.4	21.1	17.1	13.6
5	11.0	14.9	19.7	15.5	13.8
6	9.9	12.1	17.4	13.9	11.5
7	9.5	11.3	17.1	13.2	11.5
8	8.1	11.3	13.3	11.7	10.6
9	7.7	10.7	13.3	11.4	9.5
10	9.1	11.0	13.6	11.6	9.9
11 and Over	8.0	10.4	12.1	10.7	8.5

TABLE 27  
 PERCENTAGE OF ANNUALIZED PREMIUM LAPSING  
 (19 COMPANIES)

Policy Year	First Quartile	Median	Third Quartile	Unweighted Average	Weighted Average
1	10.7%	16.1%	19.7%	15.7%	17.8%
2	15.7	17.6	20.0	18.5	16.4
3	13.6	17.1	24.5	19.1	15.2
4	10.9	15.1	20.2	16.5	15.3
5	10.9	14.0	18.2	15.4	15.6
6	11.0	12.8	18.5	14.0	13.0
7	10.2	11.8	18.9	13.5	12.8
8	7.1	11.4	15.5	12.6	13.1
9	7.5	10.5	13.8	11.7	11.0
10	9.1	11.1	16.0	13.3	12.9
11 and Over	8.6	11.2	13.4	12.0	10.6



*YRT Median Lapse Rates by Issue Age*

TABLE 28  
 PERCENTAGE OF POLICIES LAPSING  
 (21 COMPANIES)

Policy Year	All Ages* (23 Cos.)	All Ages (21 Cos.)	Issue Ages			
			20-29	30-39	40-49	50-59
1	16.8%	17.7%	22.2%	16.2%	15.8%	15.9%
2	18.4	18.5	23.8	17.8	16.6	17.4
3	16.0	16.1	20.2	15.3	15.3	15.8
4	15.7	15.7	16.6	15.4	13.8	15.3
5	14.4	14.6	15.6	13.8	15.1	15.3
6	12.0	12.1	14.7	11.8	11.6	11.7
7	11.2	11.1	11.2	11.7	11.4	13.5
8	11.2	11.8	9.5	10.5	9.7	—
9	10.9	11.0	9.6	10.9	11.3	—
10	11.1	11.1	9.7	10.4	10.7	—
11 and Over	10.3	10.3	8.4	10.7	11.3	—

\* Includes companies that did not supply data by issue age.  
 — Insufficient data.

TABLE 29  
 PERCENTAGE OF FACE AMOUNT LAPSING  
 (22 COMPANIES)

Policy Year	All Ages* (24 Cos.)	All Ages (22 Cos.)	Issue Ages			
			20-29	30-39	40-49	50-59
1	15.6%	15.6%	23.6%	15.2%	14.0%	13.7%
2	17.5	18.0	21.7	17.3	15.5	18.1
3	17.1	17.9	19.0	14.5	15.8	17.3
4	15.4	15.4	16.2	14.7	14.8	19.3
5	14.9	14.9	15.7	12.9	16.5	15.2
6	12.1	12.1	13.7	11.9	11.2	14.4
7	11.3	11.3	10.3	11.3	12.2	15.3
8	11.3	11.3	9.1	11.1	9.8	—
9	10.7	10.8	8.6	10.7	11.3	—
10	11.0	11.0	9.2	9.8	13.3	—
11 and Over	10.4	10.4	8.7	10.3	11.0	—

\* Includes companies that did not supply data by issue age.  
 — Insufficient data.

*YRT Median Lapse Rates by Issue Age*

TABLE 30  
 PERCENTAGE OF ANNUALIZED PREMIUM LAPSING  
 (17 COMPANIES)

Policy Year	All Ages* (19 Cos.)	All Ages (17 Cos.)	Issue Ages			
			20-29	30-39	40-49	50-59
1	16.1%	16.9%	24.2%	16.1%	15.4%	15.2%
2	17.6	17.6	22.1	16.3	15.7	18.4
3	17.1	17.6	18.2	16.0	14.7	16.1
4	15.1	15.2	16.0	14.5	13.8	17.5
5	14.0	14.2	15.5	12.9	16.2	12.4
6	12.8	12.7	13.9	10.5	11.6	15.0
7	11.8	12.1	10.2	10.2	11.2	—
8	11.4	11.2	9.5	9.9	8.6	—
9	10.5	10.6	9.1	11.6	10.3	—
10	11.1	11.8	11.6	10.6	15.7	—
11 and Over	11.2	11.7	10.1	9.6	11.5	—

\* Includes companies that did not supply data by issue age.

— Insufficient data.

*YRT Distribution of In Force and Lapses*

TABLE 31  
 DISTRIBUTION\* OF IN FORCE

Policy Year	Number of Policies	Face Amount	Annualized Premium
1	23.8%	29.7%	27.1%
2	16.5	20.0	19.1
3	12.4	12.8	13.8
4	12.7	11.2	12.6
5	9.4	8.5	8.4
6	7.1	5.6	6.2
7	6.6	4.9	5.6
8	4.4	3.1	3.3
9	2.5	1.6	1.8
10	1.5	1.0	1.0
11 and Over	3.0	1.7	1.2
	100.0%	100.0%	100.0%

\*Includes companies that supplied data for all policy years.

TABLE 32  
DISTRIBUTION\* OF LAPSES

Policy Year	Numbers of Policies	Face Amount	Annualized Premium
1	30.1%	19.7%	23.5%
2	21.1	16.0	17.4
3	14.1	12.2	12.1
4	11.9	11.1	11.1
5	8.2	10.2	10.5
6	5.1	8.5	7.3
7	4.5	8.2	6.9
8	2.5	5.5	4.8
9	1.2	3.1	2.2
10	0.7	1.8	1.6
11 and Over	0.7	3.7	2.6
	100.0%	100.0%	100.0%

\* Includes companies that supplied data for all policy years.

*YRT Lapse Rates of Companies Reporting All Three Measures*

TABLE 33  
COMPARISON OF MEDIAN LAPSE RATES BY UNIT OF MEASURE  
(19 COMPANIES)

Policy Year	Number of Policies	Face Amount	Annualized Premium
1	17.3%	15.6%	16.1%
2	18.3	17.1	17.6
3	16.0	16.7	17.1
4	14.7	15.1	15.1
5	14.6	15.0	14.0
6	12.1	12.1	12.8
7	11.2	11.3	11.8
8	11.8	11.3	11.4
9	10.9	10.5	10.5
10	11.6	11.4	11.1
11 and Over	10.3	10.6	11.2

TABLE 34  
 COMPARISON OF UNWEIGHTED AVERAGE LAPSE RATES  
 BY UNIT OF MEASURE  
 (19 COMPANIES)

Policy Year	Number of Policies	Face Amount	Annualized Premium
1	16.3%	15.0%	15.7%
2	19.4	17.8	18.5
3	17.9	19.5	19.1
4	16.3	16.8	16.5
5	15.0	15.8	15.4
6	12.7	13.9	14.0
7	12.1	13.2	13.5
8	12.1	11.9	12.6
9	10.7	11.5	11.7
10	12.0	12.4	13.3
11 and Over	10.7	10.6	12.0

*Two-Year YRT Trends for a Constant Group of Companies*

TABLE 35  
 PERCENTAGE OF POLICIES LAPSING  
 (20 COMPANIES)

Policy Year	Median		Unweighted Average	
	1989	1990	1989	1990
1	17.5%	17.3%	16.6%	16.8%
2	18.4	18.3	19.3	18.9
3	16.5	15.9	16.3	17.0
4	15.4	14.6	14.8	15.3
5	15.0	13.4	14.0	14.1
6	13.0	11.8	12.9	12.2
7	12.6	11.1	12.7	11.4
8	12.9	10.4	12.8	11.3
9	11.4	10.9	11.5	10.8
10	10.0	10.7	10.3	11.4
11 and Over	10.0	10.3	10.5	9.7

TABLE 36  
 PERCENTAGE OF FACE AMOUNT LAPSING  
 (21 COMPANIES)

Policy Year	Median		Unweighted Average	
	1989	1990	1989	1990
1	17.5%	15.7%	15.2%	15.7%
2	16.3	17.0	18.4	17.6
3	16.5	16.7	16.5	18.0
4	15.2	15.4	15.0	15.9
5	14.2	13.7	14.5	14.8
6	12.3	11.7	12.5	13.2
7	12.1	10.9	12.2	12.0
8	13.0	10.5	13.0	11.1
9	10.7	10.6	11.7	11.9
10	10.7	11.0	10.6	11.8
11 and Over	10.3	10.2	11.1	9.8

TABLE 37  
 PERCENTAGE OF ANNUALIZED PREMIUM LAPSING  
 (16 COMPANIES)

Policy Year	Median		Unweighted Average	
	1989	1990	1989	1990
1	14.9%	16.8%	15.2%	16.2%
2	16.7	17.0	17.3	18.2
3	17.2	16.2	16.7	18.2
4	14.5	14.1	15.6	14.8
5	13.3	12.6	15.0	13.9
6	11.9	12.3	12.4	13.4
7	12.0	11.5	12.7	12.5
8	13.7	11.2	14.5	11.8
9	12.7	10.5	14.2	11.5
10	13.4	11.1	12.9	13.2
11 and Over	11.8	11.0	13.0	10.9

## APPENDIX A DEFINITIONS

### *In-Force Policies*

A policy is considered in force if the first premium for the new policy year starting in 1989 is paid.

In-force business includes:

- Policies issued in 1989.
- Policies issued prior to 1989 whose premiums due on their 1989 policy anniversary dates are paid before the end of the grace period.

#### In-force business excludes:

- Policies that lapse prior to their 1989 anniversaries 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 1989 with the first premium paid.
- A policy issued in 1988 whose premium due in policy month 13 is paid.
- A policy issued in 1987 whose premium due in policy month 25 is paid.

#### *Lapses*

A policy is considered a lapse if the first premium for the new policy year starting in 1989 is paid, but not all of the premium that comes due after the 1989 anniversary and before or on the 1990 anniversary date is paid.

#### Lapsed business includes:

- Policies surrendered after their 1989 anniversaries and before or on their 1990 anniversaries.
- Policies whose premiums due after their 1989 anniversaries and before or on their 1990 anniversaries are 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 1989-1990 policy year but are reinstated before or on their 1990 anniversaries.
- Policies not taken.
- Policies whose waivers of premium provision apply.

#### Examples of lapsed policies are:

- A policy issued in 1989 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 considered a first-year lapse.
- A policy issued in 1988 with the premium for policy month 13 paid. If any premium for policy months 14 through 25 is not paid by the end of the grace period, the policy is considered a second-year lapse.

- A policy issued in 1987 with the premium for policy month 25 paid. If any premium for policy months 26 through 37 is not paid by the end of the grace period, the policy is considered a third-year lapse.

Example of a policy that is not lapsed is:

- A policy issued in 1988 is not considered a lapse if the premium for policy month 13 and all premiums for policy months 14 through 25 are paid.

### *Annualized Premium*

- The value of premiums that would be paid if a policy remained in force for a full policy year, for example, 12 times the monthly premium or four times the quarterly premium.

### *Unweighted Average Lapse Rate*

- This rate equals the mean of individual company lapse rates; therefore, company size does not affect the results.

### *Weighted Average Lapse Rate*

- This rate equals the mean of individual company lapse rates weighted by the amount of in force; therefore, company size does affect the results.

### *Traditional Whole Life*

Includes: ● 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  
 ● Individual pension trust.

### *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*

**Includes:** ● Traditional graded-premium whole life. The premium may increase annually for 5 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 has a \$6 initial premium per \$1,000, gradually increasing over 10 years to a final premium of \$16 per \$1,000.

**Excludes:** ● Individual pension trust.

### *Individual Pension Trust*

**Includes:** ● All policies sold on a pension trust basis, including universal life policies  
● Graded-premium whole life with YRT-type premiums.

### *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 that pay dividends.

**Excludes:** ● Term riders  
● Nonlevel face amount term  
● Graded-premium whole life with YRT-type premiums.

### *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 that pay dividends.

**Excludes:** ● YRT  
● Nonlevel face amount term  
● Term riders.



APPENDIX B  
PARTICIPATING COMPANIES

*Large Companies (at least \$10 billion in force\*)*

Aetna Life & Casualty  
Connecticut Mutual Life  
Equitable Life of the United States  
Guardian Life of America  
John Hancock Mutual Life  
Manufacturers Life  
Metropolitan Life  
Mutual Of New York  
Provident Mutual of Philadelphia  
Prudential of America  
Sun Life of Canada  
The Travelers

*Small Companies (less than \$10 billion in force\*)*

Alfa Life  
American General Life (Texas)  
American United Life  
Baltimore Life  
Canada Life  
Country Life  
Great-West Life  
Horace Mann Life  
IDS Life (Minnesota)  
Jefferson-Pilot Life  
Kansas City Life  
Lutheran Brotherhood  
Mutual of Omaha  
Northwestern National Life  
Pacific Mutual Life†  
Penn Mutual  
Principal Mutual Life  
Security-Connecticut Life  
Southern Farm Bureau Life†

\*Includes whole life, interest-sensitive whole life, graded-premium whole life, individual pension trust, YRT, and other level term.

†New participant (not included in trend tables).

