

TRANSACTIONS OF SOCIETY OF ACTUARIES 1985-87 REPORTS

III. 1986-87 LONG-TERM ORDINARY LAPSE SURVEY IN CANADA*

PREFACE

This report was prepared in 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. A report on lapse rates on whole life insurance policies in Canada for 1983-84, 1984-85, and 1985-86 appears as Part IV. The United States versions of these studies appear as Parts I and II.

INTRODUCTION

This annual long-term lapse study examines the lapsation of ordinary insurance in Canada between 1986 and 1987 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 percentages of face amounts in force at the beginning of 1986 policy anniversaries that lapse on or before 1987 policy anniversaries. (See the Appendix for the definitions used in this study.)

Face-amount lapse rates are measured for five types of ordinary insurance plans:

- Traditional whole life
- Five-year renewable term (5-YRT)
- Level term (excluding 5-YRT)
- Interest-sensitive whole life
- Permanent term (sometimes referred to as Term to 100).

Lapse rates are measured for policy years 1, 2, 3-5, 6-10, and 11 and over. These policy years correspond to issue years 1986, 1985, 1984-1982, 1981-1977, and 1976 and earlier.

This report touches on each of the five products, highlighting certain details. The report also examines trends in whole life and term lapse rates for a constant group of companies that participated in both this year's and

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last year's studies, as well as variations of lapse rates by company for whole life and yearly renewable term. The end of the report has detailed tables showing various statistics for each product. The Appendix supplies definitions of in-force business, lapses, and products.

As a quick overview, Table A summarizes the products by showing the individual median lapse rates by policy year. Whole life continues to have the best lapse rates. Five-year renewable term has an unusual lapse pattern; lapse rates are lowest in the first two policy years and highest in policy years 3-10.

TABLE A
SUMMARY OF MEDIAN LAPSE RATES BY PRODUCT

Policy Year	Traditional Whole Life	Level Term		Interest-Sensitive Whole Life	Permanent Term
		5-YRT	Other		
1	11.1%	12.8%	12.5%	12.4%	8.3%
2	11.7	12.8	15.5	13.0	9.4
3-5	10.8	17.6	14.3	—	—
6-10	9.2	17.0	13.8	—	—
11+	6.7	14.0	11.0	—	—

—Insufficient data.

About the Sample

Nine companies participated in the study. Table B shows the total face amount in force at the beginning of the 1986-1987 policy year.

TABLE B
FACE AMOUNT IN FORCE ON 1986 ANNIVERSARIES (BILLIONS)

Issue Year	Traditional Whole Life	Level Term		Interest-Sensitive Whole Life	Permanent Term
		5-YRT	Other		
1986*	\$ 3.8	\$ 3.5	\$1.4	\$ 6.1	\$0.8
Before 1986	23.4	11.5	5.1	10.7	1.4
Total in force	\$27.2	\$15.0	\$6.5	\$16.8	\$2.2

*For issue year 1986, face amount in force on 1986 anniversaries corresponds to face amount sold during that year.

Highlights

Figure 1 shows median lapse rates for *traditional whole life*. This product's first-year lapse rate is 11.1 percent. Thereafter, lapse rates increase slightly to 11.7 percent at policy year 2 and then progressively decrease, ending at policy years 11 and over with a 6.7 percent lapse rate.

Figure 1 – Median Lapse Rates for Traditional Whole Life

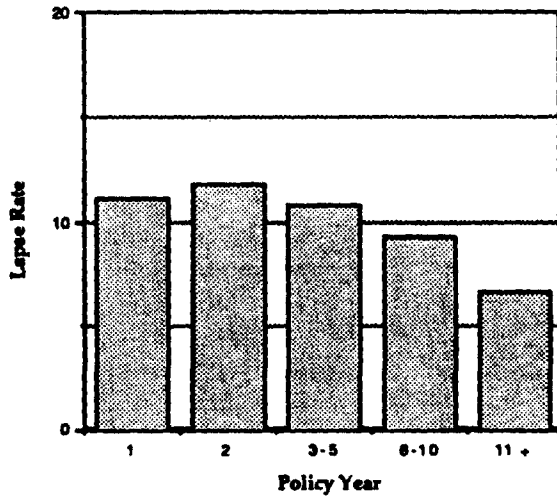


Figure 2 shows median lapse rates for *five-year renewable term* insurance. Lapse rates range from 12.8 percent in policy years 1 and 2 to 17.6 percent in policy years 3-5; they peak unexpectedly in these policy years. Note that a policy not renewing in the first month of the premium increase (61st month) is considered a fifth-policy-year lapse, not a sixth-policy-year lapse (see the Appendix for definitions of lapses).

Figure 2 – Median Lapse Rates for Five-Year Renewable Term

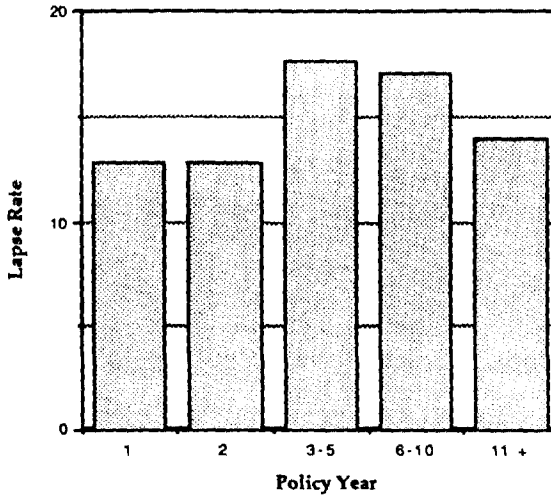


Figure 3 shows median lapse rates for *level term (excluding 5-YRT)*. Lapse rates begin at 12.5 percent in the first policy year and stay between 13.8 and 15.5 percent throughout the next nine years. Policy years 11 and over have an 11.0 percent median lapse rate.

Figure 3 – Median Lapse Rates for Level Term (excluding 5-YRT)

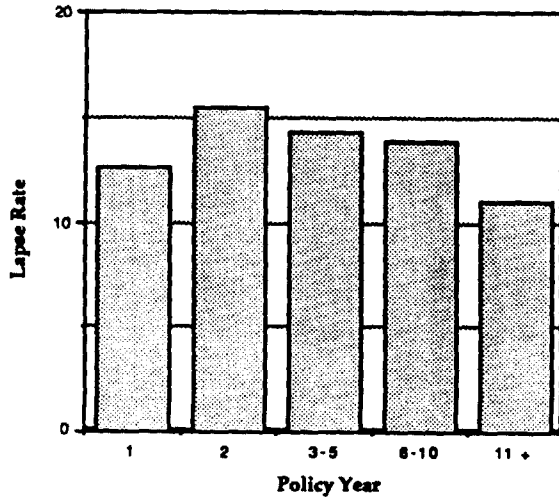


Figure 4 shows median lapse rates for *interest-sensitive whole life*. There are sufficient data only for the first two durations. The median rate is slightly higher in the second than in the first policy year.

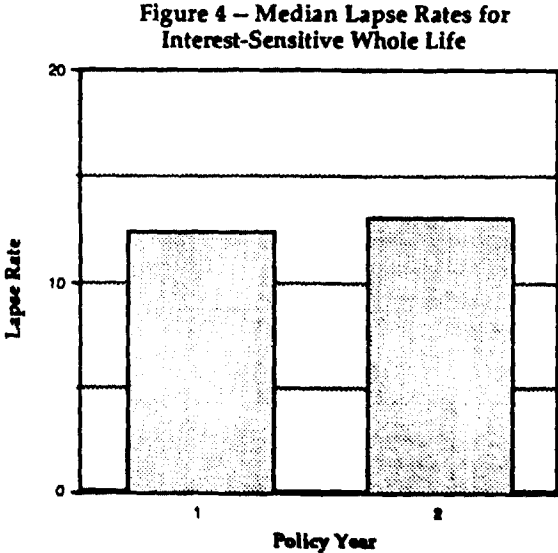
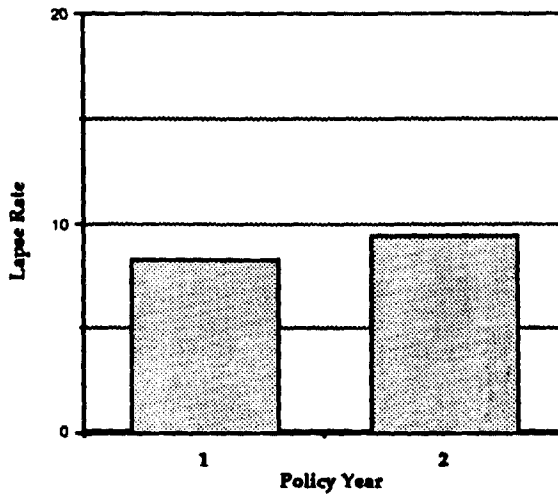


Figure 5 shows selected median lapse rates for *permanent term* insurance (sometimes referred to as term to 100). Sufficient data are only available for the first two policy years. The first-year lapse rate is 8.3 percent, increasing to 9.4 percent in policy year 2.

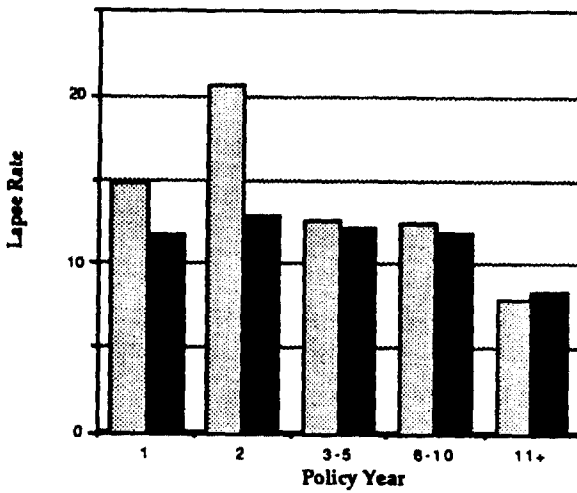
Figure 5 -- Median Lapse Rates for Permanent Term



Trends in Whole Life Lapse Rates

Figure 6 shows 1986 and 1987 whole life lapse rates for a constant group of companies. The average lapse rates for this group of companies have decreased from 1986 in all durations with the exception of policy years 11 and over where there was a small increase. Policy year 2 experienced the biggest decrease.

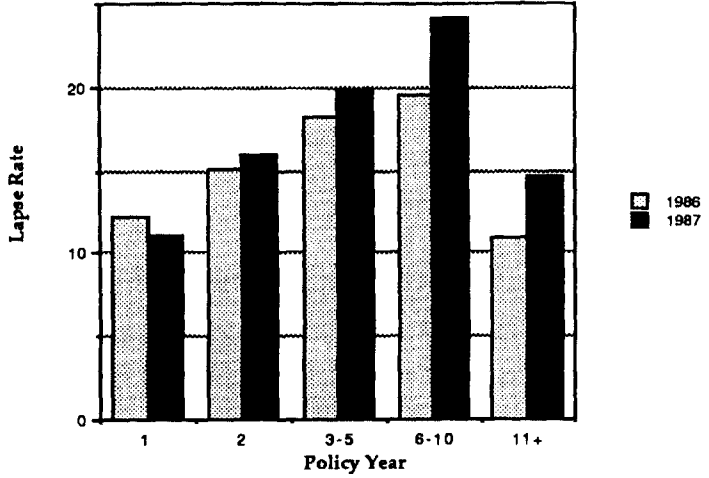
Figure 6 -- Whole Life Lapse Rates for Constant Group



Trends in Term Lapse Rates

Figure 7 shows 1986 and 1987 term lapse rates. Term lapse rates have decreased only in policy year 1; all other durations experienced increases. The most substantial increases occur in the later durations, policy years 6 and over.

Figure 7 -- Term Lapse Rates for Constant Group



Variations among Companies' Lapse Rates

Table C shows the lapse rate variations across companies for whole life insurance. For policy year 1, two-thirds of the companies have lapse rates between 10 percent and 15 percent. For policy years 3-5, eight companies have lapse rates under 15 percent. For policy years 11 and over, all but two companies have lapse rates lower than 10 percent.

TABLE C
VARIATIONS OF WHOLE LIFE LAPSE RATES

Lapse Rate	Policy Year		
	1	3-5	11 -
20% and over ..	0	1	0
15-19.99%.....	1	0	0
10-14.99%.....	6	5	2
Under 10.00%..	2	3	7
Total.....	9	9	9

Table D shows the variations among companies' lapse rates for five-year renewable term insurance. For policy year 1, six companies have lapse rates between 10 percent and 15 percent. Experience worsens in policy years 3-5; four companies have lapse rates greater than 15 percent. For policy years 11 and over, half of the companies fall in the 15-percent-or-higher category and the other half fall below 10 percent.

TABLE D
VARIATIONS OF FIVE-YEAR RENEWABLE TERM
LAPSE RATES

Lapse Rate	Policy Year		
	1	3-5	11 -
20% and over ..	0	2	2
15-19.99%.....	1	2	1
10-14.99%.....	6	3	0
Under 10.00%..	1	0	3
Total.....	8	7	6

FACE AMOUNT LAPSE RATES

TABLE 1

TRADITIONAL WHOLE LIFE
(NINE COMPANIES)

Policy Year	Low	Median	High	Average*
1.....	7.7%	11.1%	16.7%	11.8%
2.....	6.4	11.7	22.0	11.9
3-5.....	5.7	10.8	21.6	11.5
6-10.....	5.7	9.2	20.4	11.2
11+.....	3.8	6.7	13.2	7.8

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

TABLE 2

FIVE-YEAR RENEWABLE TERM
(EIGHT COMPANIES)

Policy Year	Low	Median	High	Average*
1.....	6.4%	12.8%	16.8%	12.4%
2.....	11.5	12.8	22.1	14.7
3-5.....	11.3	17.6	45.5	20.1
6-10.....	10.4	17.0	57.6	22.4
11+.....	8.1	14.0	21.7	14.4

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

TABLE 3

LEVEL TERM (EXCLUDING 5-YRT)†
(EIGHT COMPANIES)

Policy Year	Low	Median	High	Average*
1.....	9.5%	12.5%	40.8%	18.2%
2.....	8.4	15.5	21.4	15.7
3-5.....	10.2	14.3	24.3	15.1
6-10.....	6.8	13.8	36.2	17.0
11+.....	4.8	11.0	21.1	11.9

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

†One company's data were excluded because of atypical experience.

TABLE 4
INTEREST-SENSITIVE WHOLE LIFE
(SEVEN COMPANIES)

Policy Year	Low	Median	High	Average*
1.	5.1%	12.4%	16.9%	11.9%
2.	10.7	13.0	17.6	13.6

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

TABLE 5
PERMANENT TERM
(FIVE COMPANIES)

Policy Year	Low	Median	High	Average*
1.	2.7%	8.3%	16.6%	8.4%
2.	7.3	9.4	16.2	10.8

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

APPENDIX
DEFINITIONS OF IN-FORCE POLICIES AND LAPSES

In Force

A policy is considered in force if the first premium for the new policy year starting in 1986 is paid.

In-force business includes:

- Policies issued in 1986.
- Policies issued before 1986 where the premium due on the 1986 policy anniversary date is paid before the end of the grace period.

In-force business excludes:

- Policies that lapse before their 1986 anniversaries and are on extended-term or reduced-paid-up status.
- Limited premium payment policies that are paid up.
- Single premium policies.

Examples of policies in force are:

- A policy issued in 1986 and the first premium is paid.
- A policy issued in 1985 and the premium due in the 13th policy month is paid.
- A policy issued in 1984 and the premium due in the 25th policy month is paid.

Lapse

A policy is considered a lapse if the first premium for the new policy year starting in 1986 is paid, but not all of the premium that comes due after the 1986 anniversary and before or on the 1987 anniversary date is paid.

Lapsed business includes:

- Policies surrendered after their 1986 anniversaries and before or on their 1987 anniversaries.
- Policies where a premium due after the 1986 anniversary and before or on the 1987 anniversary date is not paid by the end of the grace period.
- Term policies with renewal provision that do not renew.
- Policies that are on extended term or reduced paid-up status.

Lapsed business excludes:

- Death claims.
- Automatic premium loaned policies.
- Expires and maturities.
- Conversions.
- Policies that lapse during this policy year but are reinstated before the end of the policy year.
- Policies not taken.

Examples of policies that lapse are:

- A policy issued in 1986 and the policyowner has paid the first premium. 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 1985 and the policyowner has paid the 13th policy-month premium. 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 1984 and the policyowner has paid the 25th policy-month premium. If any premium for policy-months 26 through 37 is not paid by the end of the grace period, the policy is a lapse.

Example of a policy that does not lapse is:

- A policy issued in 1985 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: ● Level premium whole life; continuous-pay and limited pay.
- Excludes: ● Universal life
● Graded-premium whole life
● Interest-sensitive whole life
● Endowments
● Policies that are combinations of whole life and term plans
● Whole life plans used to fund a registered pension plan.

Five-Year Renewable Term

- Includes: ● Level five-year term.
- Excludes: ● Nonlevel term
● Permanent term insurance
● Term riders.

Level Term (Excluding 5-YRT)

- Excludes: ● Nonlevel term
● Permanent term insurance
● Term riders.

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.

Permanent Term

- Includes: ● Plans that provide coverage to age 100 and feature initial level death benefits and level premiums. Death benefits or premiums for these plans may be adjusted periodically (for example, every five years) to reflect changes in interest rates, mortality, and expenses. Typically the plans build no (or little) cash value and their only nonforfeiture value may be reduced paid-up coverage.

PARTICIPATING COMPANIES

Canada Life
COLONIA Life
Commercial Union Life of Canada
Confederation Life
Great-West Life
Industrial-Alliance Life
Metropolitan Life
Standard Life (Canada)
Sun Life of Canada

