



AMERICAN ACADEMY *of* ACTUARIES

**Interim Report of the EMO Work Group
To the Innovative Products Working Group Life and Health Actuarial
(Technical) Task Force (LHATF)
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The Academy's Extended Maturity Options (EMO) Work Group of the Committee on State Life Insurance Issues prepared this report.

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June 2000 Report to LHATF
Extended Maturity Options Work Group

I. Overview of Project

At the request of the NAIC's Life and Health Actuarial (Technical) Task Force (LHATF), the American Academy of Actuaries formed the Extended Maturity Options Work Group (EMO Work Group) in January 2000 to study reserve and nonforfeiture issues pertaining to Extended Maturity Options (EMOs) written with life insurance policies.

This report summarizes the fact-finding and research conducted by the EMO Work Group to date, and does not contain any conclusions or recommendations. The sections of this report includes:

- A definition of EMOs;
- A market profile describing current types of EMOs;
- A market profile describing current practice for reserve and nonforfeiture;
- A description of the current regulatory environment; and
- A discussion of research on current model laws and regulations.

II. Definition of Extended Maturity Options

Extended Maturity Options (EMOs) are provisions included with life insurance policies that allow the policy to stay inforce beyond a specified period, typically defined as an attained age. Such provisions may be offered with a variety of life insurance forms, including fixed and variable traditional life policies (whole life), and fixed and variable universal life. The specified ages to which these provisions apply include the maturity age stated in the contract (typically 99) or the highest age of the underlying mortality table (e.g., age 99 for 80 CSO). A common but not universal feature of EMOs is to substantially reduce or eliminate required premiums or cost of insurance charges beyond the extended maturity age.

III. Market Profile - Current Types of Extended Maturity Options

Overview

This section is based primarily on information contained in FULL DISCLOSURE by Blease Research, which reports on insurance industry activities. Company responses to surveys were used to supplement this report information. In total, this section covers 77 products containing EMOs written by 46 companies. See Appendix I for more detailed information.

Extended Maturity Options (EMOs) appear to be prevalent in the life insurance market. Thirty-nine of the forty-six companies reviewed offer these benefits on at least one product in their portfolio. Extended Maturity Options are found on most permanent life insurance product types, including universal life, variable UL, survivorship UL, survivorship WL,

variable survivorship and traditional whole life. They are either included in the base policy or offered through policy riders.

Key variations related to EMOs include:

- The relationship between the death benefit and the cash value on and after the maturity age,
- The maturity age,
- Charges assessed for the EMO prior to the maturity age, and
- Charges assessed for the EMO on and after the maturity age.

Relationship between the death benefit and the cash value on and after the maturity age

There are three types of EMOs currently being offered, each type being differentiated by the way in which the death benefit and cash value are related:

- The death benefit is reduced to the cash value. Interest continues to be credited to the cash value, but there are no further charges for mortality or expenses. The policy stays in force until death (Type I).
- The full death benefit continues in force provided the cash value is positive at the maturity age or the policy has a secondary guarantee to the maturity age. In some cases, insurance and expense charges continue to be assessed and loan interest is charged so that coverage could lapse if the cash value is reduced to \$0 (Type II).
- The death benefit reduces to the cash value plus a minimum corridor amount. As with Type I EMOs, interest continues to be credited to the cash value, there are no further charges for mortality or expenses, and the policy stays in force until death (Type III).

Most fixed premium life products, such as traditional whole life or fixed premium universal life, typically only offer Type I Options. A few companies, however, also offer a small additional net amount at risk (e.g., 1% of cash value) and no mortality charges beyond the maturity age.

Flexible premium UL and VL products may contain any one of the three types described above.

Additional notes:

Type I, II and III account for 35%, 44% and 8%, respectively, of the policy forms reviewed.

Some of the Type II Options reviewed also provide for a minimum corridor amount of insurance.

A small number of the Type II Options reviewed permit additional premiums after the maturity age.

A few of the Type II Options reviewed include the death benefit on term riders in the amount of death benefit extended.

One of the Type II Options reviewed pays a surrender benefit after the maturity age equal to the greater of the cash value and death benefit.

Since death benefits for Type I and Type III options are based directly on the policy cash value, when these type of EMOs are offered with variable life products the death benefit after the maturity age may fluctuate as a result of the performance of the underlying separate account funds.

Maturity Ages

Among the 77 products offering EMOs reviewed, the contractually stated maturity age varies:

- age 115 (1)
- age 100 (48)
- age 99 (1)
- age 95 (7)
- no maturity age stated (20)

A maximum extension of maturity (to age 110 or 115) existed for 8 of the 77 products reviewed.

Among the Survivorship products reviewed, the maturity age is typically based on a joint equivalent age, the younger insured age, or the older insured age.

Some of the products reviewed allow requests for extension of the maturity age to be made at issue, any time during the life of the contract, prior to a given age (typically 90), or within a certain number days from maturity. Two of the products offering Type II options reviewed provided the option automatically.

Charges For the Extended Maturity Option Prior to the Maturity Age

None of the Type I or Type III Options reviewed charged for the EMO prior to the maturity age.

The following practice currently exists for charges prior to the maturity age on the 34 Type II EMO Options reviewed:

- An explicit charge is assessed (8)
- No explicit charge is assessed (14)
- No charge was mentioned (12)

Charges assessed prior to the maturity age are either an annual charge per \$1,000 of net amount at risk, typically for a specified period (e.g., ages 90 to 99) or a one-time charge at the maturity age. Note that charges assessed prior to the maturity age will reduce the cash value versus a policy that does not contain an EMO.

Charges for Extended Maturity Options On or After the Maturity Age

The following practice currently exists for charges on or after the maturity age for the options reviewed:

- No mortality or expense charges are assessed (most common)
- Expense charges, but no mortality charges, are assessed (occasionally)

- Both expense charges and morality charges are assessed (occasionally)
- Loan interest is charged, and loan repayments are permitted on a number of Type II Options

For variable products, asset based charges, such as M&E charges frequently continue after the maturity age.

IV. Market Profile – Current Practice for Reserve and Nonforfeiture

The Extended Maturity Options Work Group surveyed several companies to help identify how companies treat these benefits with respect to reserves and nonforfeiture values.

Although this survey was sent to approximately 25 companies that are believed to either write or provide consulting services for these benefits, only 9 responses were received. While we believe that the summary of the responses below is a representation of industry practice, there may be other practices used by companies that are not reflected in this survey.

Current Practice – Reserves

For policies at and beyond the maturity age, all nine of companies responding indicated that they intend to hold a reserve equal to the death benefit available at these ages. Some intend to discount this reserve for a half-year of interest at the valuation rate. At least one company will hold reserves equal to a discounted net single premium reserve.

For policies prior to the maturity age, five of the nine of companies responding indicated that they intend to pre-fund reserves during the years prior to the maturity age (e.g., ten years) by grading into a reserve equal to the full death benefit by the maturity age. At least two of these companies have policy provisions that fund the benefit by charging a specific additional charge during the years over which these reserves are intended to be pre-funded. Two companies with Type II Options suggested that no additional reserves in excess of CRVM (with a cash value floor) are required before age 100.

Current Practice – Nonforfeiture

Current practice differs between fixed and flexible premium policies. With respect to fixed premium policies, most respondents indicated that EMOs which offer death benefits greater than the cash value at the maturity age (such as Type II EMOs described above) are not typically offered. One company that does offer a Type II Option with a fixed premium policy, however, indicated that it intends to offer a cash value after the maturity age equal to the extended face amount at the maturity age, accumulated with interest.

Regarding flexible premium policies, most respondents indicated that they intend to offer cash value equal to the standard retrospective accumulation fund, less any surrender charges, both prior to and after the maturity age. No respondent indicated it would offer an additional nonforfeiture benefit for those policyholders that paid additional charges for the benefit prior to maturity age.

All of the companies responding with respect to flexible premium UL policies indicated that they intend to credit interest to cash value after the maturity age. Some plan to charge

administration fees. Several indicated that cash values are guaranteed not to go below the cash value at the maturity age.

V. Regulatory Environment

The Extended Maturity Options Work Group surveyed members of LHATF and a few additional regulatory actuaries representing approximately 20 insurance departments to determine if there are any formal positions regarding reserve and nonforfeiture values for Extended Maturity Options. Actuaries representing 13 states responded to this survey. The responses appeared to be based on the respondent's interpretation of requirements coupled with judgement as to what was reasonable.

The EMO Work Group notes the following from the review of this survey:

- None of the respondents indicated that their state has a formal written position beyond the NAIC Model SVL and SNFL regarding the determination of reserve and nonforfeiture values for Extended Maturity Options.
- Respondents describing how their state determines compliance with statutes and regulations varied. Respondents were generally consistent, however, in indicating that their state requires traditional level premium, level death benefit coverage to have reserves and nonforfeiture values equal to the death benefit at the maturity age.
- For flexible premium UL products, about half of the respondents indicated their state requires reserves and nonforfeiture values to be equal to the death benefit at maturity. In addition, over half of the respondents indicated their state does not allow mortality and expense charges past age 100, although a couple noted their state allows a minimal policy fee or administrative charge.
- For traditional products, over half of the respondents indicated that their state does not allow premiums past age 100.

For more detail, refer to Appendix II for the actual responses.

VI. Research on Model Laws and Regulations

The Extended Maturity Options Work Group reviewed the NAIC model laws and regulations that are currently in place which may have an impact on reserve and nonforfeiture requirements for EMOs. In addition, NY Regulation 147, which contains a reserve requirement for policies with EMOs, was reviewed. This section discusses the work group's observations.

NAIC Model SVL and SNFL

In reviewing these model laws, the EMO Work Group notes the following:

- Both the NAIC Model SVL and the SNFL clearly require the use of a prospective approach to determine reserve and nonforfeiture values for fixed premium, fixed benefit products.
- Both model laws specify, however, that for plans of insurance which are of such a nature that minimum values cannot be determined by the standards set forth in these model

laws, reserves and nonforfeiture values, respectively, are required to be computed in a manner that is “consistent with the principles” of these model laws. Such requirements are found in Section 9(B) of the NAIC Model SVL and in Section 6(C) of the NAIC Model SNFL.

- One example of the application of the “consistent with the principles concept” noted above is in Actuarial Guideline XXII. This guideline specifies that the “minimum nonforfeiture values for an “indeterminate premium policy” are the greater of those assuming that the gross premiums for the policy are (i) those according to the schedule of gross premiums based on current assumptions at issue and illustrated to prospective policyholders, or (ii) those according to the schedule of maximum gross premiums included in the policy.” In this situation, a prospective approach that is consistent with the NAIC Model SNFL is used. In summary, even though future premium payments are not known at issue, minimum nonforfeiture values are established at issue. It is important to note that this guideline specifically excludes flexible premium UL policies.
- For life insurance policies required to use 1980 CSO, it is impossible to literally apply the prospective approach in the NAIC Model SVL and SNFL to determine reserves and nonforfeiture values beyond age 99, because there are no specified mortality rates at those ages.

Universal Life Insurance Model Regulation

In reviewing this model regulation and other documents discussing the concepts of this regulation, the EMO Work Group notes the following:

- The UL Model Regulation requires a retrospective approach for determining nonforfeiture values for flexible premium UL policies, and a traditional prospective approach for determining nonforfeiture values for fixed premium UL products. The Model Regulation requires a prospective approach for reserves for both fixed and flexible premium policies, but one that has modifications from the approach required in the NAIC Model SVL.
- The UL Model Regulation does not specifically address the determination of reserves or nonforfeiture values for EMOs offered with either fixed or flexible premium UL policies. It is also unclear whether EMOs were contemplated in the development of this model regulation.
- A 1983 report on this matter from the ACLI states the following: “The main reason for this preference (i.e., retrospective in lieu of prospective) is that it is easier to calculate, and understand, retrospective cash values than prospective ones.”

NAIC Valuation of Life Insurance Policies Model Regulation (XXX) and NY Regulation 147

- NAIC Model Regulation XXX contains reserve requirements for secondary guarantees, including guarantees to age 100, but does not address reserves for EMOs.
- New York Regulation 147 does address reserves both before and after age 99 with respect to policies providing EMOs. Section 98.7(c) requires that “reserves for any policy that guarantees other than payment of cash surrender values at age 100 shall be

calculated, before and after age 100, assuming the policy endows at age 100 for the greater of the cash surrender value or the death benefit at age 100.”

VII. Next Steps

The EMO Work Group will update the above report, if necessary, to reflect any additional information it receives. The work group asks LHATF for input in determining its future direction in considering potential reserve and nonforfeiture issues pertaining to EMOs.

If there are questions or comments, please address them to either Thomas Campbell, chair of the EMO Work Group, or Damien McAndrews of the American Academy of Actuaries.