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FAS No. 97 – Handling Persistency Kicker Features

by Bradley M. Smith

The release of FAS No. 97, dealing with the prescribed accounting treatment for universal life and limited payment contracts, investment contracts and the reporting of realized capital gains and losses in the income statement, presents many ramifications for life insurance companies. Among these is the expected emergence of earnings on new universal life business. This article will examine the emergence of earnings for the most recent versions of this product, those with interest rate and return of load kickers.

These products reward persisting policyholders with either additional credited interest (interest kicker) or a return of loads (either level or front end) after a certain time period. The kickers are generally not guaranteed but are projected on a current basis. The products can have front end loads or surrender charges.

These products have risen in popularity for many reasons. They illustrate very well on a current basis, projecting extremely competitive values in the later policy years after the return of loads or interest rate kicker is effective. Required statutory reserving of these products is unclear at this time. However, many companies do not accrue a current reserve for the nonguaranteed kicker to be enjoyed by policyholders who persist the required time period. Thus, the company's required statutory investment is reduced and its return on investment is increased. Statutory earnings are reported earlier using this methodology. This is critical for companies whose production is limited by the amount of their statutory surplus or for companies which require current statutory earnings to pay off debt undertaken in a leveraged buyout. These products also avoid the provisions of the universal life model regulation limiting the amount of the surrender charge and prohibiting the forfeiture of credited interest for a period in excess of 12 months. Thus, these products can be designed with surrender values reflecting the policyholder's underlying equity. These products are successful because they

fulfill the needs of policyholders and producers while meeting the profitability requirements (overall level and pattern of emergence) of the company selling them.

The methodology prescribed by FAS No. 97 will affect the pattern of reported GAAP earnings on these products. A typical universal life product will be used in the examination of the emergence of GAAP earnings prescribed by FAS No. 97. The product has an attained-age cost of insurance schedule, with a level per policy and percent of premium load guaranteed in all years. It also has surrender charges for the first 11 years. The kickers for each product accrue to those policyholders persisting 15 years. The pre-tax profit margin after 20 years for the products is shown in the following table:

	Profit Margin(20)*
Interest Rate Kicker	6.84%
Return of Loads Kicker	5.05%

*Present value of pre-tax statutory book profits divided by the present value of premiums, measured over the first 20 policy years. Present values discounted to issue at the assumed investment rate.

The level of profits shown is illustrative only and is not necessarily indicative of the relative profitability.

Although there will be many different interpretations of the appropriate method of accounting for these products, most will be variations of the three methods described in the following sections:

- **Full Reserve Method:** The accumulation value including the kicker (i.e., crediting the higher interest rate or without deducting loads that may be returned if the policyholder persists the required time period) is held as the benefit reserve for all policies.

This very conservative method holds an increased reserve for those policyholders who will not persist the required time period. Although the amortization of deferred acquisition costs is somewhat delayed due to the deferral of profits in the gross profit stream used to amortize these costs, the higher benefit reserve will cause GAAP earnings to be deferred to later policy years.

- **Cliff Reserve Method:** The accumulation value excluding any accrual of the kicker is held as the benefit reserve for all policies until the persistency requirement has been met and the kicker benefit has been granted by the company. This very aggressive method does not accrue any reserve for the kicker benefit until it has been earned and granted. The amortization of deferred acquisition costs is accelerated due to the upfronting of profits in the gross profit stream used to amortize these costs. However, GAAP earnings will be upfronted due to the lower benefit reserve.

- **Graded Reserve Method:** The number of policyholders who will persist the time period required to earn the kicker is projected, and the increased accumulation value is held as a benefit reserve for these policies. The actual accumulation value is held for those not projected to persist the required time period. Thus, the blended benefit reserve grades into the accumulation value increased for the kicker over the period required to earn the kicker. The amortization of deferred acquisition costs is quicker under this method than under the full reserve method, but is slower than under the cliff reserve method. The emergence of GAAP earnings falls between these two methods (i.e., faster than the full reserve method but slower than the cliff reserve method). This method most closely follows the underlying fundamentals of the product and, if practical, should be used to account for these types of products:

Some would argue that the kicker need not be reserved for due to its nonguaranteed status. Although kickers are generally not guaranteed in the policy, it seems inappropriate to assign a probability of not granting the kicker since it is unclear what contingencies would prohibit the company from doing so. Even if such contingencies could be identified, it is doubtful that their occurrence has been projected in the development of the gross profit stream used to amortize deferred acquisition costs. If this

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Kicker Features cont'd.

is the case, it would be inappropriate to consider the occurrence of the contingency in assigning a probability of not granting the kicker benefit to those policyholders who have met the

Interest Rate Kicker Pre-Tax GAAP Book Profits

Year	Full Reserve	Graded Reserve	Cliff Reserve	FAS No. 60
1	\$63.53	\$64.01	\$68.77	\$82.04
2	67.66	68.28	73.49	58.99
3	65.15	65.82	71.04	47.56
4	50.32	51.00	55.52	40.95
5	39.52	40.22	44.32	36.06
10	19.04	18.68	23.15	23.15
14	15.34	12.59	18.60	16.44
15	15.15	11.58	-128.27	15.07
20	10.69	10.66	11.47	9.70

Return of Loads Kicker Pre-Tax GAAP Book Profits

Year	Full Reserve	Graded Reserve	Cliff Reserve	FAS No. 60
1	\$38.95	\$50.95	\$73.03	\$67.26
2	50.40	55.63	77.92	48.36
3	51.82	54.00	75.22	39.00
4	40.40	41.09	58.73	33.58
5	31.76	31.78	46.82	29.56
10	18.77	14.27	24.14	18.98
14	19.12	10.48	19.01	13.48
15	19.72	10.05	-459.12	12.36
20	12.08	11.79	15.65	7.95

The cliff reserving method results in substantial upfronting of earnings in the early years, as well as significant negative earnings in the year that the kicker is finally accrued. As shown in the tables, the earnings reported in the early years using this method exceed those that would have been reported using the traditional policy methodology delineated in FAS No. 60. This is clearly undesirable and may result in a loss recognition problem in the years just prior to accruing the kicker benefit, even if actual results were as anticipated in the calculation of the deferred acquisition cost amortization schedule.

Additionally, technical problems arise in the calculation of the amortization schedule using the cliff reserving method. The gross profit stream used in the calculation of the amortization schedule has a large negative component in year 15 due to the accrual of the kicker benefit. A negative gross profit in any year cannot result in a recapitalization of acquisition costs. The negative result must be eliminated (forced to zero) or a different basis must be used for the calculation of the amortization schedule. The previous examples eliminate the negative gross profit result in year 15 in the calculation of the amortization schedule.

persistence requirement.

Results for the two sample products under these three accounting approaches as well as the FAS No. 60 approach that releases profits as a level percentage of premiums are shown in the accompanying tables.

Another technical issue arises in the calculation of the amortization schedule of the product with the interest rate kicker. FAS No. 97 states "Present value of estimated gross profits shall be computed using the rate of interest that accrues to policyholder balances." For products with interest rate kickers, the question of what rate accrued to the policyholder arises. Although an argument can be made for using a composite rate weighted for those projected to persist the required period of time with those who will not, a simpler (and by definition more conservative) approach is to use the credited rate not increased by the amount of the kicker. In reality, the resulting differences in the emerging earnings using either rate are insignificant.

The key result illustrated in these examples is that FAS No. 97, while prescribing a specific methodology to be used when accounting for universal life type products, does not impose any unacceptable hardship upon such contracts with credited interest rate or return of load kickers. The emergence of earnings looks quite reasonable and should not impede the continued growth in sales of these types of products.

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Dear Editor:

SOA Fellowship Exams

In taking the Part 8 exam in November of last year, I somehow got the impression the authors of the (written) exam were trying to test my understanding of the subject matter and not just my ability to memorize facts. These questions, I think, were a step in the right direction in training future actuaries.

However, I would like to criticize the exam committee on not preparing the candidates appropriately for these types of questions. The study materials are geared toward memorization, and not many sample questions require thinking (as opposed to remembering). These past exams and solutions are mere repetitions of the study material.

I agree with the new direction being taken in the education of students regarding Future Education Methods/Flexible Education System. I also agree with the introduction of the Fellowship Admission Course.

However, if the Fellowship exams are just going to be split into more manageable pieces without a change in the type of educational material and approach to education, then I believe little will be accomplished.

I have not yet done any of the more advanced exams (Parts 9, 10), but I hope the approach is different.

Andrew S. Gooden

Glenn Helped DoD Stay on Target

I recently learned of the death of Joseph B. Glenn. Joe was the Chief Actuary of the Department of Defense (DoD) from 1943 to 1975. He was a pioneer in actuarial programming and was associated with all military personnel legislation passed during this long and formative time.

I was hired as the DoD Chief Actuary in 1979 and, while I never met Joe, I quickly developed a lot of respect for his past work. In 1985, I wrote Joe a letter.

I explained to him that I had found a 100-year projection that he made of the military retirement system in 1963. In 1963 (pre-Vietnam buildup) there were 378,509 military retirees. Joe estimated the number of retirees in 1985 to be 1,373,640. I

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