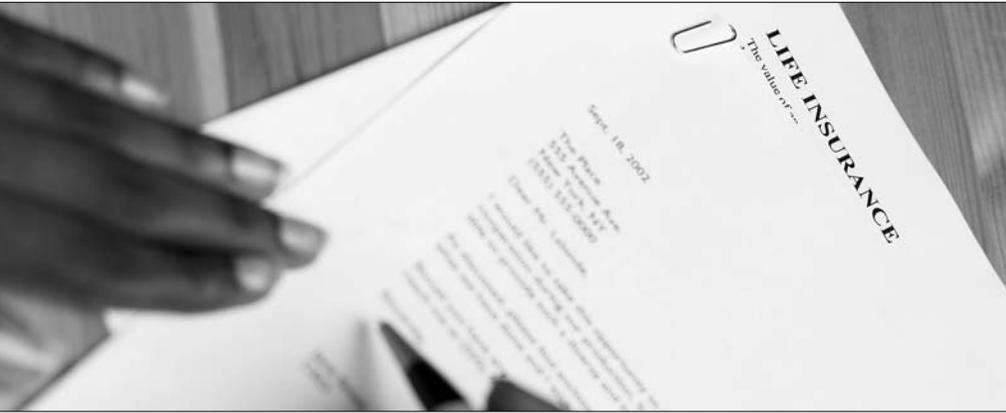Article from:

Taxing Times

December 2005 – Volume 1, No. 3

Determining Guideline Premiums for Fixed-Premium Universal Life Insurance Contracts

by John T. Adney, Brian G. King and Craig R. Springfield

O ver the past few years, the Internal Revenue Service has issued two private letter rulings waiving the failure of certain fixed-premium universal life insurance (FPUL) contracts to satisfy the guideline premium test (GPT) under section 7702 of the Internal Revenue Code [*see* PLR 200328027 (Apr. 10, 2003) and PLR 200230037 (Apr. 30, 2002)]. More specifically, the IRS concluded that the errors that caused such contracts to fail were reasonable errors, which is part of the standard that must be satisfied in order for errors to be waivable under section 7702(f)(8).

FPUL contracts, sometimes called interest-sensitive whole life contracts, are hybrid contracts, combining features of both universal life insurance and whole life insurance. Similar to whole life insurance, FPUL contracts require the payment of fixed premiums and provide guaranteed minimum cash values (or tabular cash values) based on Standard Nonforfeiture Law (SNFL) requirements. In addition, these types of contracts provide for a universal life insurance type accumulation account, which reflects current assumptions for interest, mortality and expenses. The cash value structure of this type of contract design creates what has been referred to as a dual or secondary cash value guarantee, whereby the contract cash-value is based on the greater of the accumulation account value or the tabular cash value.

Life insurance contracts can satisfy the requirements of section 7702, so that the contracts are considered as life insurance for federal tax purposes–by satisfying either (a)

the GPT and cash value corridor, or (b) the cash value accumulation test (CVAT). Because of the existence of dual cash surrender values, each of which typically is subject to its own set of guarantees, the treatment of FPUL contracts under section 7702 can be complicated. Section 7702 generally requires that guideline premiums be based on the interest rate(s), mortality rate(s) and expenses specified in the contract. In addition, for those contracts issued after Oct. 21, 1988, there are further restrictions on the allowable mortality and expense assumptions, both of which must be "reasonable" according to standards set forth in section 7702(c)(3)(B)(i) and (ii).

On a guaranteed basis, the accumulation account value and the tabular cash value are generally derived using different assumptions for interest, mortality and expense. The complexity of the cash value structure under FPUL contracts, particularly as it relates to the determination of the interest and expenses that must be reflected in guideline premiums, appears to have been the root of the problem that resulted in the inadvertent failure of FPUL contracts under section 7702 in the waiver rulings previously cited. This article explores the derivation of guideline premiums for a FPUL product with level annual premiums, focusing particularly on the derivation of assumptions used in the determination of guideline premiums.

Treatment of secondary guarantees in calculating guideline premiums. As FPUL plans generally have fixed annual premiums, it is important that the guideline level premium (GLP) for a given policy be no less than the corresponding gross annual premium. To calculate the GLP, a determination first must be made as to the rate or rates guaranteed on issuance of the contract with respect to interest, mortality and expenses. Because of the dual cash value guarantees, should one look to the accumulation account guarantees, the tabular cash value guarantees, or some combination of the two? The Joint Committee on Taxation's General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984 (the DEFRA Bluebook)[1] provides guidance, saying

---

[1] Staff of the J. Comm. on Taxation, 98th Cong., General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984, 649 (Comm. Print 1984).

in particular that so-called secondary guarantees must be taken into account in calculating guideline premiums:

> "Also, if the contract's nonforfeiture values for any duration are determined by a formula that uses the highest value produced by alternative combinations of guaranteed interest rate or rates and specified mortality (and other) charges, the combination of such factors used, on a guaranteed basis, in the highest cash surrender value for such duration should be used for such duration in determining either the net single premium or the guideline premium limitation."

Significantly, the DEFRA Bluebook then expands upon this comment in footnote 53 (FN 53), which is appended to the text just quoted:

> "For example, under a so-called fixed premium universal life contract, if the cash surrender value on a guaranteed basis (ignoring nonguaranteed factors, such as excess interest) is not determined by the guaranteed interest rate and the specified mortality and expense charges used to determine the policy value for some duration, but is instead determined by a secondary guarantee using the guaranteed interest rate and specified mortality and expense charges associated with an alternate state law minimum nonforfeiture value for such duration, the guaranteed interest rate and the mortality and expense charges for the secondary guarantee are to be used with respect to such duration in determining either the net single premium or the guideline premium limitation."

By following the FN 53 approach, it appears possible to design a FPUL contract so that, by its terms, it complies with the GPT. In this regard, such a contract is able to comply with section 7702 in a manner similar to that of life insurance contracts that are designed to comply with the CVAT. In reality, even under this FN 53 approach, it still is generally necessary to monitor premiums because of the possibility that premiums received and credited to the accumulation account value before an anniversary may cause "premiums paid" to exceed the sum of guideline level premiums then applicable. The fact that such premium would be permitted, if paid on the upcoming anniversary, does not prevent the early premium from causing the contract to fail under the GPT.

In order to apply the FN 53 logic to the calculation of a guideline premium, the guaranteed accumulation

If, on the other hand, the contract premiums were set at a level that matured the contract and provided a guaranteed accumulation account value that was the prevailing cash value for all durations, the tabular values would be irrelevant to the calculation of guideline premiums.

account value resulting from the payment of the gross premium must be projected based on the guarantees applicable to such accumulation account value. Such guaranteed accumulation account values then must be compared with the contract's guaranteed tabular values on a duration-by-duration basis. Typically, based on this comparison at the issuance of a contract, the accumulation account values will be prevailing for some initial period of time, and the tabular values will become the prevailing cash value at some point (the cross-over point) and thereafter until the contract's maturity date. In this circumstance, the contract guarantees relating to interest, mortality and expenses pertinent to the prevailing cash value form the basis for determining the appropriate actuarial assumptions to use in the determination of guideline premiums under the FN 53 methodology. Thus, in calculating the guideline premiums at issue in the typical case, it is necessary to take into account guarantees applicable to the accumulation account value for those durations when the accumulation account value is prevailing on the guarantees, and it is necessary to take into account the guarantees applicable to the tabular value for those durations after the cross-over point when the tabular value is prevailing on the guarantees. (If, on the other hand, the contract premiums were set at a level that matured the contract and provided a guaranteed accumulation account value that was the prevailing cash value for all durations, the tabular values would be irrelevant to the calculation of guideline premiums.)

Identification of the appropriate guarantees is at the heart of the FN 53 process. This process can best be illustrated by way of examples.

Example 1: Universal Life Contract Design
The first example focuses on the derivation of the GLP for a universal life (UL) insurance contract. The sample contract underlying Example 1 is later modified in Examples 2 and 3, changing the form of the contract to a FPUL design, i.e., with a fixed annual premium and a secondary cash value guarantee in the form of tabular cash values.

Sample Policy Characteristics:

|	
Insured:	35 year old female
Face Amount:	$100,000
DBO:	Level

Accumulation Account Value Guarantees:

Mortality:	1980 CSO ALB Female
Interest:	4% all years
Expense:	$60 annual administrative fee

Basic Actuarial Principles. Using basic actuarial principles, the GLP for a UL contract can be determined by dividing the sum of the present value of future benefits and expenses (PVFB and PVFE) by a life annuity, where all calculations are based on the accumulation account value guarantees. This results in a GLP of $1,110.04.

Projection-Based Methodology. A similar result could be obtained by solving for the level annual premium that would endow the contract for its face amount, assuming successive cash values were projected using a 4 percent interest rate, 1980 CSO mortality and the assessment of a $60 expense charge each year. The resulting cash value scale under the projection-based approach is illustrated in Figure 1.

Figure 1
UL Contract: GLP = $1,110.04
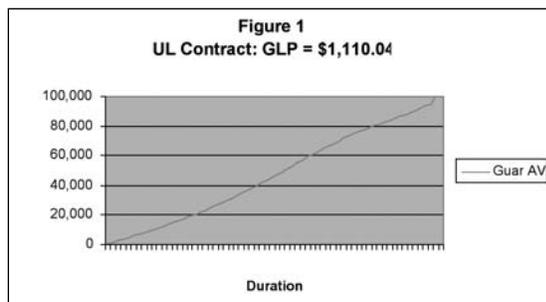
As expected, the calculation of the GLP under both the projection method and the basic actuarial principles approach produces the same result.

Example 2: FPUL Contract
(Fixed Annual Premium = $1,000)
If the form of our contract changes from UL to FPUL, there are several changes that must be reflected in the determination of guideline premiums to account for the fact that the contract requires the payment of a fixed annual premium and provides a secondary cash value guarantee in the form of tabular cash values, as required by the SNFL for fixed premium contracts. In this example, the fixed annual premium is $1,000 per year and the tabular cash values are based on the following assumptions:

Tabular Cash Value Assumptions

SNFL Mortality	1980 CSO ALB Female
SNFL Interest	6% all years
SNFL Adjusted Premium	$860.31
SNFL Annual Expense	$139.69 (excess of $1,000 over SNFL Adjusted Premium)[2]

Application of the FN 53 process. As discussed above, where contracts have both an accumulation account value and a secondary guarantee in the form of tabular cash values, FN 53 requires that secondary guarantees be considered in selecting the appropriate policy guarantees of interest, mortality and expense that are recognized in the determination of values under section 7702. This process requires a projection of both the guaranteed accumulation account value and the tabular cash values. The assumptions with respect to interest, mortality and expense charges (applying the restrictions of section 7702 applicable to these assumptions, such as the reasonable expense charge rule of section 7702(c)(3)(B)(ii)) pertaining to the prevailing cash value as determined for each duration then need to be reflected in the calculation of guideline premiums under section 7702. Figure 2 on page 15 illustrates the projection of both the guaranteed accumulation account value and the tabular cash values.

Figure 2 typifies the result of most FPUL designs in that the accumulation account dominates at the start, but, by design, cannot mature the contract on its guarantees. The tabular cash values eventually prevail and mature the contract on a guaranteed basis. Since the contract guarantees continuation of coverage as long as the fixed premiums are paid, the reduction of the fixed premium below the amount necessary to mature the contract under accumulation account guarantees (e.g., the premium of $1,110.04 in Example 1) effectively increases the economic value of the life insurance coverage provided by the

---

[2] Tabular cash values are typically defined on the basis of a net premium, adjusted premium or nonforfeiture factor. Recognition of the nonforfeiture expense charge, identifiable from the fixed premium and tabular cash values (or nonforfeiture factor) that are stated on the contract specifications page, as an expense charge in the development of guideline premiums is necessary in order to establish the intended equivalence between the GLP and the gross premium.

Figure 2
$1,000 Fixed Annual Premium
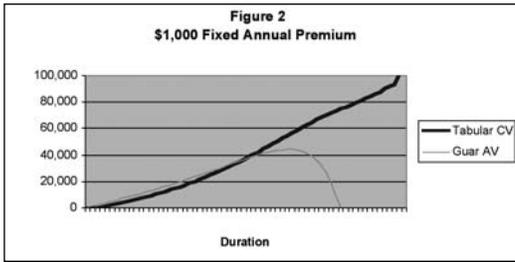
contract to the policyholder, i.e., it is reflective of interest, mortality and expense guarantees provided by the tabular value that are more favorable in at least some durations. Defining these guarantees, as well as those relating to the accumulation account when its value is prevailing, is at the heart of the FN 53 process.

In this example, the accumulation account value prevails for the first 33 years, with the tabular cash values prevailing thereafter. Table 1 details the applicable guarantees for this contract.

Table 1: Guaranteed Assumptions under FN 53

Prevailing CV	Accumulation Account	Tabular Cash Value
Durations	1-33	34-65
Mortality	1980 CSO ALB Female	1980 CSO ALB Female
Interest	4%	6%
Expense	$60 annually	$139.69 annually

FN 53 provides the means for determining policy guarantees for a FPUL contract. Once determined, the same principles would apply to the determination of the GLP as illustrated in Example 1. Put differently, if a UL contract were designed with the guarantees outlined in Table 1, the resulting GLP would be identical to the GLP for the ISWL contract defined in this Example 2.

Basic actuarial principles. Not surprisingly, the determination of the GLP using basic actuarial principles and the assumptions defined in Table 1 is $1,000.00.

Projection-based methodology. In applying the projection-based approach for determining the GLP, the process involves solving for the premium that will endow the contract for the original specified amount using the assumptions set forth in Table 1. For the first 33 contract years, the projection will be based on the accumulation account guarantees. For the remaining durations, the projection will be based on the tabular value assumptions. Under this assumption set, the projected

cash value will exactly mirror the set of prevailing cash values on the guarantees, and thus the GLP under the projection-based approach is also $1,000.

Example 3: FPUL Contract (Fixed Annual Premium = $1,100)

Example 3 follows the contract design in Example 2, except the gross premium is set at $1,100. Changing the premium will result in certain changes to the contract guarantees, as both the crossover duration and the "expense charges associated with an alternate state law minimum nonforfeiture value" will be different.

Application of the FN 53 process: Figure 3 illustrates the projection of both the accumulation account value and the tabular cash values for this example. Because of the higher fixed premium in this example, the accumulation account will prevail for a longer period of time (51 years vs. 33 years). In addition, the higher fixed premium will necessarily result in higher expense charges associated with the SNFL, which effectively acts as a balancing item in the process.

Figure 3
$1,100 Fixed Annual Premium
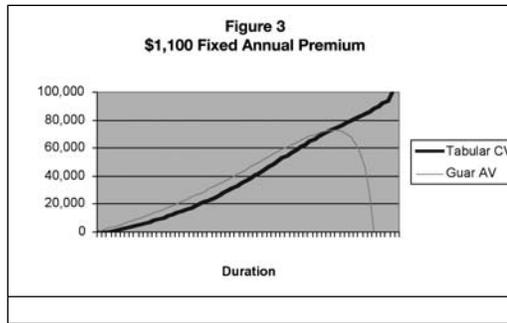
As described above, applying basic actuarial principles to the determination of the GLP using the assumptions defined in Table 2 will return a GLP equal to $1,100 (the fixed premium for the contract). Similarly, under a projection-based approach, the accumulation of $1,100 annually using the Table 2 assumptions will exactly endow the contract for its original specified amount, resulting in a set of cash values equal to the prevailing cash values illustrated in Figure 3.

Table 2: Guaranteed Assumptions under FN 53

Prevailing CV	Accumulation Account	Tabular Cash Value
Durations	1-51	52-65
Mortality	1980 CSO ALB Female	1980 CSO ALB Female
Interest	4%	6%
Expense	$60 annually	$239.69 annually

Comment on statutory requirements. As illustrated in Examples 2 and 3, the FN 53 process generally results in the equivalence between the gross premium and the GLP. This equivalence will hold true, however, only if the policy guarantees of interest, mortality and expenses, as determined by the FN 53 process, are not in conflict with the statutory requirements that restrict the allowable assumptions for computing guideline premiums. Assuming this to be the case, the upper limit on the allowable premium under the GPT for a level premium ISWL design is the GLP based on accumulation account guarantees ($1,110.04 in Example 1). With such a premium, the accumulation account would constitute the prevailing cash value for all durations in the above examples, and the tabular value thus would be irrelevant under FN 53. Any higher-level gross premium would over-endow the contract on a guaranteed basis. Any gross premium below this amount arguably results in the equivalence between the GLP and the gross premium, the intended result of FN 53.

This equivalence between the gross premium and the GLP does not necessarily guarantee compliance under the GPT, a common misconception of ISWL contracts. The process of monitoring the relationship between premiums paid and the guideline premium limitation is still necessary, particularly for those product designs that apply premiums to the accumulation account when received. The early payment of premiums, particularly those received (and applied) in one contract year, that are otherwise due in the following contract year, can result in premiums exceeding the guideline premium limitation, albeit for a short period of time. Nonetheless, these early premium payments can create contract failures under the GPT if the prevailing guideline premium

limitation is based on the sum of GLPs (i.e., where the cumulative GLP exceeds the guideline single premium).

Concluding Thoughts

This article regarding FN 53 and the text of the DEFRA Bluebook associated with this footnote has largely focused on the application of these provisions to FPUL contracts, and indeed the footnote expressly speaks just to such contracts. That said, the requirement of comparing alternative prevailing cash values is much broader, and as companies consider new designs, especially some intended to protect against various types of investment risk, one needs to consider whether alternative cash values are involved with such designs that give rise to a need to perform the duration-by-duration analysis to determine prevailing cash values.

With respect to FPUL contracts, FN 53 offers the benefit of allowing a contract to be designed in a manner similar to contracts governed by the CVAT. However, given the concerns described above, considerable care needs to be taken before relying on the FN 53 approach. Arguably, companies would be better served by avoiding the common misperception that this type of contract design will result in automatic compliance under the GPT requirements. ◂

John T. Adney is a partner with the Washington, D.C. law firm Davis & Harman LLP. He may be reached at *jtadney@davis-harman.com.*

Craig R. Springfield is a partner with the Washington, D.C. law firm Davis & Harman LLP. He may be reached at *cspringfield@davis-harman.com.*

Brian G. King, FSA, MAAA, is a vice president with Aon Consulting in Avon, Conn. He may be reached at *brian_king@aon.com.*