COMPUTING IMPUTED INCOME FOR JOINT AND SURVIVOR ARRANGEMENTS

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WHAT IS THE APPROPRIATE WAY TO COMPUTE A JOINT AND SURVIVOR RATE FOR IMPUTED INCOME REPORTING?

A participant's split dollar economic benefit is determined by multiplying a cost per $1,000 factor (based on the participant's age) by the participant's benefit under the split dollar arrangement, divided by 1,000.[1] But how is the economic benefit determined when the arrangement involves a joint and survivor life insurance policy? We have observed diversity in practice with regard to how the economic benefit is computed for these types of arrangements. In particular, some computations include an interest rate discount factor of 2.5% when determining the cost per $1,000 rate whereas others do not. Is this factor appropriate? What is its purpose? Where did it originate?

This paper summarizes our research and findings as to whether a 2.5% discount rate factor is set forth by the IRS and/or otherwise appropriate to use. We do not provide tax or accounting advice, nor should this paper be construed as such. However, we hope this information serves as a useful starting point for employers that are required to compute and report economic benefits to participants of joint and survivor split dollar arrangements.

OVERVIEW OF PREVIOUS IRS GUIDANCE

Rev. Rul. 55-747

In Rev. Rul. 55-747, the IRS set forth a principle for computing the cost of $1,000 of life insurance protection to be included in an employee's income:

> In principle the cost of $1,000 of such protection may be considered as the one-year term premium for $1,000 insurance, computed on the following basis:
>
> > (a) The mortality rate upon which the gross contract premium is based, adjusted to conform to the basis of any element of the current dividend under the contract properly attributable to a different current actual mortality experience.

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[1] Assuming that the participant has no current access to the policy's cash surrender value and that the arrangement is not subject to the loan regime.

(b) The interest rate upon which the gross contract premium is based, adjusted to conform to the basis of any element of the current dividend under the contract properly attributable to a different current actual interest earnings rate.

(c) A loading rate consistent with the loading rate upon which the gross contract premium is based, adjusted to conform to the basis of any element of the current dividend under the contract properly attributable to different current actual expenses.

In other words, the IRS set forth three key elements upon which the gross contract premium is based: a) a mortality rate; b) an interest rate; and c) a loading rate. The IRS went on to state that, in practice, the computation described above cannot be accurately determined or applied. Therefore, the IRS set forth "Uniform One Year Term Premiums for $1,000 Life Insurance Protection." These rates are referred to as the "P.S. 58" rates. Rev. Rul. 55-747 states that these rates are "Based on Table 38…" and 2.5% interest.

In "Appendix G: One Year Term Rates" of the 2018 edition of *Tax Facts On Insurance & Employee Benefits*, the full derivation of the P.S. 58 Rates is described as follows (emphasis added).

P.S. 58 Rates Calculations

(Net annual premium per $1,000 − 1 year term)

For various tax purposes, P.S. 58 rates can be used for the net annual premium per $1,000 of one year term life insurance where there is only one insured. P.S. 58 equivalent rates (e.g., joint and joint and survivor rates) can also be determined where there is more than one insured (sometimes referred to as Table 38 rates). The derivation of such rates is described below for one and two insureds.

In each instance, the present value of $1,000 is discounted one year at 2.5% to $975.60. $975.60 is then multiplied by the probability of death of the insured(s) during the year. In each of the formulas below, substitute the appropriate q_x from Table 38 for each insured (where two insureds are involved, the second insured is referred to as y rather than x).

required interest rate $= i = 2.5\%$

$1 \div (1 + i) = 1 \div 1.025 = .97560$

$\$1,000 \times .97560 = \$975.60$

q_x — probability of dying in each year of age (from Table 38)

(e.g., q_x for person age 25 is .00198)

Where two lives are involved q_x and q_y are used

qx is probability at first person's age
qy is probability at second person's age
(e.g., qx for first person, age 35, is .00329 and qy for second person, age 45, is .00646)

ONE LIFE

P.S. 58 rate $= \$975.60 \times q_x$

(e.g., rate for person age 50 $= \$975.60 \times .00945 = \$9.22$)

TWO LIFE (Joint and Survivor, Second to Die)

P.S. 58 equivalent rate $= \$975.60 \times q_x \times q_y$

(e.g., rate for persons age 60 and 70
$= \$975.60 \times .02125 \times .04926 = \$1.02$)
after first death use one life rate

TWO LIFE (Joint, First to Die)

P.S. 58 equivalent rate $= \$975.60 \times [(q_x + q_y) - (q_x \times q_y)]$

(e.g., rate for persons age 60 and 70
$= \$975.60 \times [(.02125 + .04926) - (.02125 \times .04926)]$
$= \$67.77)$

Notably, this construction applied a 2.5% interest rate factor on both a one life and a two life (e.g., joint and survivor) basis. In effect, this is saying that a $1,000 death benefit payable at the end of the year requires $975.60 at the beginning of the year to reach $1,000 at the end of the year, if interest is 2.5%.

Rev. Rul. 64-328

Rev. Rul. 64-328 expanded upon Rev. Rul. 55-747 by including a computational table calculating the economic value provided by the employer to the employee. This computational process used the P.S. 58 rates as the "cost of insurance per $1,000." Again, the P.S. 58 rates were calculated using a 2.5% interest rate.

Rev. Rul. 66-110

In Rev. Rul. 66-110, the IRS expanded its guidance such that in addition to being able to calculate the economic benefit in accordance with Rev. Rul. 64-328 (i.e., using P.S. 58 rates), the IRS began allowing the use of "current published premium rates per $1,000," provided such rates were available to all standard risks. Specifically, Rev. Rul. 66-110 stated that, "such published rates may be used in place of the rates set forth in [Rev. Rul. 55-747] for determining the cost of insurance…"

Our view is that the substitution referenced above would substitute the lower published premium rate for the P.S. 58 rate. It is clear that published premium rates are not "mortality rates," but indeed would include interest and loading factors (as determined by the publisher of the premium rates).

Further, Rev. Rul. 66-110 does not appear to specify any requirement to adjust the premium rates further.

IRS Notice 2001-10

In Notice 2001-10, the IRS provided interim guidance on the valuation of current life insurance protection under split dollar arrangements, pending publication of further guidance. Of note, the IRS set forth a new table (Table 2001) that taxpayers could use to determine the value of current life insurance protection "on a single life provided under a split-dollar arrangement." It is not clear to us why this language specifies use for a "single life" arrangement; Notice 2001-10 does not appear to specifically address any multi-insured arrangements.

Notice 2001-10 further states (emphasis added) that "… the rates set forth in Table 2001 are provided as an interim substitute for the P.S. 58 rates that taxpayers may rely upon…" to calculate the value of current life insurance protection. Notice 2001-10 also reiterated the ability to use an "insurer's lower published premium rates that are available to all standard risks for initial issue one-year term insurance as set forth in Rev. Rul. 66-110. However, the IRS added additional requirements (e.g., that the rates had to be made known to persons applying for coverage and that the insurer had to regularly sell term insurance at those rates).

IRS Notice 2002-8

In Notice 2002-8, the IRS revoked Notice 2001-10 and announced its intention to publish "proposed regulations providing comprehensive guidance regarding the Federal tax treatment of split-dollar life insurance arrangements." Notice 2002-8 also provided "guidance regarding the valuation of current life insurance protection under a split-dollar life insurance arrangement…" For context, the IRS announced the intention to set forth two mutually exclusive regimes (an economic benefit regime and a loan regime). This paper will continue to focus on the economic benefit regime.

The interim guidance provided on the valuation of current life insurance protection included these specific points:

1. Rev. Rul. 55-747 remains revoked. However, certain arrangements that contractually provided that the P.S. 58 rates will be used remained permissible.
2. For arrangements entered into before the effective date of future guidance, taxpayers may use the premium rate table set forth at the end of this notice (republication of Table 2001) "to determine the value of current life insurance protection on a single life" that is provided under a split-dollar life insurance arrangement. Notice

2002-8 then goes on to state (emphasis added): "Taxpayers should <u>make appropriate adjustments to these premium rates</u> if the life insurance <u>protection covers more than one life</u>."

3. For arrangements entered into <u>before the effective date of future guidance</u>, to the extent provided by Rev. Rul. 66-110, taxpayers may continue to determine the value of current life insurance protection by using the insurer's lower published premium rates that are available to all standard risks for initial issue one-year term insurance. However, any arrangements entered into after 1/28/2002 are subject to the additional requirements (e.g., rates made known to applicants and regularly sold through normal distribution channels).

Notably, of the historical IRS guidance we reviewed, Notice 2002-8 was the first to specifically contemplate a joint and survivor arrangement. As it relates to computing a joint and survivor rate, we have historically interpreted the "appropriate adjustment" to be the multiplication of the individual rates divided by 1,000. The approach we have historically adopted is consistent with a computational description that Lincoln Financial Group published on its [website](#) (also shown below). Note that Lincoln Financial also caveats that its materials are not to be relied upon as authoritative.

Joint Rate Calculation:

Multiply 1st Insured rate for attained age by 2nd Insured rate for attained age and divide by 1000.

Result is the Joint Rate per thousand.

Example:

1st Insured Attained Age	42	Find the age on IRS Table 2001(Single Life)
2nd Insured Attained Age	65	Find the age on IRS Table 2001(Single Life)

Multiply 1st and 2nd Insured rates

1st Insured Rate	1.20	Find the rate on IRS Table 2001(Single Life)
2nd Insured Rate	11.90	Find the rate on IRS Table 2001(Single Life)
	= $14.28	

And divide result by 1000:
$14.28/1000 = 0.0143

Joint Rate per $1,000   0.0143

"Lincoln Financial Group IRS Survivorship Rates."
[www.lfg.com/wcs-static/pdf/IRS Survivorship Rates.pdf](#)

26 CFR 1.61-22

Final rules for the taxation of split dollar life insurance arrangements state (emphasis added): "The cost of current life insurance protection provided to the non-owner for any year (or any portion thereof in the case of the first year or the last year of the arrangement) equals the amount of the current life insurance protection provided to the non-owner…<u>multiplied by the life insurance premium factor designated or permitted in guidance published in the Internal Revenue Bulletin</u> (see § 601.601(d)(2)(ii) of this chapter)." The final rules do not appear to provide any further guidance for determining the life insurance premium factor or adjusting the premium factor for determining a joint and survivor rate.

ALTERNATIVE VIEW OF AN "APPROPRIATE ADJUSTMENT" TO THE RATES

Above, we noted that our baseline approach to joint and survivor imputed income is to multiply the individual rates together and divide by 1,000. As will be shown below, this approach does not infer an interest rate discount factor. The following is an algebraic review of the computations.

Definitions:

R1 = the cost per $1,000 premium rate of Insured 1

R2 = the cost per $1,000 premium rate of Insured 2

J = the joint and survivor cost per $1,000 premium rate of Insured 1 and Insured 2

M1 = the Table 38 mortality rate for the age of Insured 1

M2 = the Table 38 mortality rate for the age of Insured 2

1,000 = the value of 1,000 unadjusted

976 = the value of 1,000 discounted at 2.5%

First, establishing the calculations as described in Tax Facts

A single life P.S. 58 rate is computed as follows:

$R1 = M1 * 976$

A joint and survivor P.S. 58 rate is computed as follows:

$J = M1 * M2 * 976$

Next, computing a joint and survivor rate using the P.S. 58 Rates (under our approach)

This is comparable to using the methodology for Table 2001 rates or carrier-provided rates under our (and Lincoln's) approach.

$J = R1 * R2 / 1,000$

or, expanding the formula:

$J = M1 * 976 * M2 * 976 / 1,000$

Notably, this computation is not equivalent to the computation of the P.S. 58 joint and survivor cost per $1,000 rate, which uses the Table 38 mortality rates, as shown in the P.S. 58 rate calculation on page 2. (Note we would not use this method to calculate a joint and survivor P.S. 58 rate, as there is a specified methodology for this calculation.)

Finally, adjusting the formula to be equivalent to the joint and survivor computation in Tax Facts for P.S. 58 Rates

It becomes equivalent if you divide by 976, i.e., 1,000/1.025 instead of 1,000.

$J = R1 * R2 / 976$

or

$J = M1 * 976 * M2 * 976 / 976$

Multiplying by 976 and dividing by 976 effectively cancel each other, and you are left with:

$J = M1 * M2 * 976$

The math seems to prove that one should divide by $(1+i)$, where *i* is the interest rate used in calculating the premium (or in this example, P.S. 58) rate. This implies that one would divide by 1,000 if no interest rate factor is used.

In Notice 2001-10, the IRS stated that Table 2001 is based on the mortality experience reflected in the table of uniform premiums promulgated under section 79(c) of the Code (see § 1.79–(d)(2) of the regulations). We reviewed this cited regulation to see if the derivation of the Table 2001 Rates was provided (i.e., consistent with the P.S. 58 rates, where a 2.5% interest rate factor was used). We were unable to confirm the factor. It is our understanding that unless a rate is defined, standard practice is not to infer one. Therefore, dividing by 1,000 may be appropriate when using Table 2001 rates.

CONCLUSION

As described above, our review of historic IRS guidance relating to split dollar imputed income did not identify any specific instruction to apply an interest rate factor in the determination of Joint and Survivor imputed income. However, the math suggests that one would be correct in dividing by (1+i), where i is the interest rate used in calculating the premium rate. Joint and Survivor imputed income under the P.S. 58 regime used a factor of 2.5%. It is possible that Table 2001 also employs an interest rate factor, but we are unable to confirm it. Without a rate being stated by the publisher of the table, we understand that standard practice is not to infer one. Therefore, dividing by 1,000 may be appropriate when using Table 2001 rates. Using an interest rate factor would be "conservative" in that it increases (relative to no interest rate assumption) the amount of imputed income, though the overall amount is likely non-material.

We hope you find this memo useful in reviewing the topic. If you would like more information, please contact us.