SOCIETY OF ACTUARIES

Article from:

Pension Section News

January 2006 – Issue No. 60

Adjusting IRC 415 Limits for Prior Distributions

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The proposed IRC 15 regulations issued last May contained guidance regarding how to adjust the benefit limits for prior distributions. This is commendable on the part of the IRS. How to adjust the IRC 415 limits for prior distributions has long been a source of confusion even for experienced pension actuaries. The best methodology is not immediately clear, and some methods have become common practice even if they can lead to inconsistent or unreasonable results.

Comments on the proposed regulations by major organizations and others (including comments submitted by this author) have pointed out how the regulations lead to unintended, unreasonable results. Although a praiseworthy attempt to assist taxpayers and give them some reliance, the proposed regulations are inconsistent with the Internal Revenue Code (the Code). Treasury regulations are intended to carry out the statutory enactment and should not be inconsistent with the Code. Most comments submitted to the IRS stopped short of making detailed alternate proposals. Others made suggestions not on the basis of detailed arguments, but rather were made on the basis of what seems reasonable and yet remains simple. Unfortunately, these reasonable but simple suggestions can still lead to unreasonable results that are inconsistent with the Code. This paper intends to show there is a mathematical solution to the problem, and that this solution is at its core fairly simple in concept—"fill and spill" and BERF = WERF, to be explained in this article, are the basic ideas.

§415 Limit adjustments versus Plan Benefit Adjustments.

One point should be made at the outset to avoid confusion. The adjustment of the §415 limits for prior distributions is a separate process from adjustment of a participant's plan benefit for prior distributions. Adjustment of the plan's benefit for prior distributions is governed by the applicable plan document provisions (in most documents detailed provisions are not present, so amendment of the plan or adoption of an administrative procedure to be followed is advisable if adjustment for a prior distribution is necessary).

§415 Compensation Limit Adjustments

Background

§415(b)(2)(B) states that benefits with respect to a participant shall not exceed "100% of the participant's average compensation for his high 3 years," payable in the form of a straight-life annuity (sometimes referred to as the "percentage limit" or "100% compensation limit"). In contrast to the "dollar" limitation under §415(b)(2)(A), a unique feature of the compensation limit is that it is not adjusted for age of commencement of benefits. Since the analysis for the dollar limit is more complex, it makes sense to begin with the compensation limit.

Retroactive Assignments Not Allowed

First it is worth noting that the §415 limits do not allow retroactive payments to prior limitation years when applying the limits. For example, a participant retiring at age 65 and whose benefit is governed by the compensation limit cannot claim commencement of benefits at age 60 and collect five catch-up payments. This would be true even if he had retired early at age 60 and collected a payment or payments and then returned to work at age 61. To allow otherwise would permit "playing" the rules and lead to unequal treatment of participants.

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Common Proposed Methods

There are several methods that one can propose to take into account prior distributions in applying the compensation limitation. Listed below are two of the most common methods:

1. **Straight actuarial adjustment.** Under this method, the prior distribution is brought forward with actuarial adjustment for elapsed time and then added to the current benefit (or, equivalently, reduces the limit to be applied). This is generally the method used in the proposed regulations.

2. **Annuitized layer adjustment.** Under this method, the prior distribution is converted to a life-only annuity, and the amount of this annuity is added to the current benefit (or, equivalently, reduces the limit to be applied). This method was suggested in some of the comments submitted to the IRS ("percentage used"). This method is appealing in that it seems to give the correct answer if the prior distributions were already in the form of an annuity (no conversion required). For example, suppose a participant has high three-year average compensation of $50,000/year. Suppose further the participant receives, commencing at age 55, a life-only annuity of $20,000/year. Suppose at age 60 he wishes to receive the maximum benefit possible under §415 in the form of a life annuity. Under this method, the maximum additional age 60 life-only benefit would be $50,000 less $20,000 or $30,000/year. This result seems to be reasonable for the life-only annuity form of benefit, since at no point in time has his benefit exceeded the $50,000/year limit. The question is, is this method correct in its application to lump sums and other forms of distribution?

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Common Proposed Methods Are Inconsistent with the Code

Actually, neither of the above methods is consistent with the age independent nature of the compensation limitation. To get at the correct answer, some heuristic techniques can be used to simplify the discussion. Let's suppose there is no interest and everyone expires at age 85 (in actuarial terms, i=0 and all q's are zero except q_{85}=1). These assumptions will allow us to easily convert any form of payment to another equivalent form.

Another heuristic technique is to test the method on a series of distributions we know satisfies the limitation—if the method is reasonable it should not disallow such a series of distributions.

Let's look first at the "straight actuarial adjustment" method (method 1). Suppose the participant in the earlier example elects a life-only annuity of $50,000 commencing at age 55. We know this series of payments satisfies the compensation limit. Now, any series of payments can arbitrarily be divided into past and future payments by reference to a particular point in time. At age 60, the participant has had five prior yearly payments of $50,000. If we apply method 1, these five prior payments will create an offset to the limit applied to future benefits payable commencing at age 60, so we know the method fails without doing any math. But let's do the math anyway, to make this clear. The five annuity payments prior to age 60 can be viewed individually as annual lump-sum payments that are actuarially equivalent to $250,000 at age 60 (remember, we have assumed no interest). The payments commencing at age 60 are in life-only annuity form, the "normal form" for the benefit limits, so they do not need to be converted. The $250,000 is actuarially equivalent to a life-only annuity of $250,000 / 25 years commencing at age 60, or $10,000/year. The 25 years in the denominator comes from the fact that everyone expires at age 85 under our actuarial assumptions (85 – 60 = 25 future years of payments). So, under this method, the maximum benefit payable at age 60 is $40,000/year ($50,000 – $10,000 = $40,000). This result is clearly incorrect, since we know in advance the $50,000 annuity payment stream satisfies the compensation limit and should hold up to the method.

Let's now apply the annuitized layer method (method 2) to our $50,000 annuity divided into past and future payments. The five annuity payments commencing at age 55 are actuarially equivalent to a single lump sum of $250,000 payable at age 55. This lump-sum is actuarially equivalent to a life annuity equal to $250,000/30 years, or $8,333/year (85 – 55 = 30 future years of payments). So, under this method, the maximum benefit payable at age 60 is $41,667/year ($50,000 – $8,333 = $41,667). Again, this result is clearly incorrect, since we know in advance the $50,000 annuity payment stream satisfies the compensation limit and should hold up to the method.

The Cascade Method, or "Fill and Spill"

The above discussion suggests the correct method: the "cascade method" adjustment. In this method, the actual prior distributions are converted to an equivalent series of annual "cascaded" payments. The amount of each annual cascaded payment in the series is the lesser of 1) the annual compensation limit, and 2) the actual prior distribution. In other words, the prior annual payments are converted to a stream of payments with any excess over the compensation limit "cascading" to a future year (as water flows down only, cascading to a prior year is not allowed to reflect the prohibition of retroactive payments). The compensation limit is violated if this process cannot be completed without at least one of the cascaded annual payments exceeding the compensation limit.

Let's now apply the cascade method to an example. Suppose again a $250,000 lump-sum payment at age 55, in addition to a life-only annuity of $50,000 commencing at age 60. The $250,000 lump-sum payment is actuarially equivalent to five annual payments of $50,000 at ages 55, 56, 57, 58 and 59. This is followed by $50,000 lifetime payments commencing at age 60. None of these equivalent annual payments exceed the annual compensation limit in any given year, so the compensation limit is satisfied.

Suppose the lump-sum paid to our hypothetical participant at age 55 is $300,000, followed by a lump-sum of $1,000,000 at age 60. Does this exceed the compensation limit? With our zero interest rate actuarial equivalence assumptions, the $300,000 lump sum is equivalent to six payments of $50,000 each beginning at age 55 and ending at age 60, and the $1,000,000 distribution at age 60 is equivalent to 20 $50,000 distributions commencing at age 61. These payments then do not exceed the compensation limit. Note that if the lump sum at age 60 was greater than $1,200,000, then the compensation limit would have been exceeded since a lump sum of greater than $1,200,000, along with the prior $300,000 distribution, could not have been annuitized over future years (85-61=24 years) without an annual payment exceeding the participant's $50,000 compensation limit.

Real-world application of the method with a nonzero interest rate and a real mortality table is straightforward actuarial work. Since the Code defines the compensation limit in the form of a life-only annuity, the conversion of the distributions that are to be tested for §415 compliance to cascaded payments should be expressed as life contingent payments as of the annuity starting date of the distributions. Unless, of course, the distributions are in the form of a life-only annuity or QJSA, in which case no conversion is needed as per the Code.

Post-Distribution Changes to Participant Data

What if a participant's highest three-year average compensation increases after the first distribution? Should the cascaded payments then parallel this increase by bumping up the cascade payment level at the same point in time as the increase? Probably the answer is no. More thought may be needed regarding this issue, but it does not seem reasonable to allow personal events after the distribution to affect the offset at a later date. Consider this example: Two identical participants receive lump-sum distributions from a plan. One participant terminates from service shortly thereafter and the other stays employed. The participant who stays employed receives regular compensation increases, so his compensation limit increases. The terminated participant then returns to work for the employer. At the time the terminated participant returns to work, his or her offset would be greater than the offset for the participant who stayed employed, even though they had *the same* prior distributions and were identical participants at that time. Because of examples like this, it probably is not appropriate to increase the level of cascaded payments for compensation increases after a distribution. Similar arguments would apply to increases in cascaded payments based on the prorating of the compensation limit over 10 years of service.

Conclusion

Because of the age-independent nature of the compensation limit, adjustments for prior distributions to the compensation limit must be done separately rather than combined with adjustments to the dollar limit. The proposed regulations mistakenly combine the two. Use of the "straight actuarial adjustment" method is "closer" to being correct with the dollar limit since it is more age dependent, but it is inconsistent with the code to apply that method to the compensation limit. The cascade method does generate a larger compensation limit than the method given in the proposed regulations, and lump-sum distributions yield smaller offsets to the compensation limit than annuity forms of payment. Since the compensation limit is not age-dependent, it makes sense that the earlier you commence distributions, the larger your lifetime benefit will be—immediate lump-sum distributions are the "earliest" type of distribution. This "use it or lose it" nature is a consequence of the age-independent aspect of the limit as prescribed in the Code.

§415 Dollar Limit Adjustments

Dollar Limit Has a Mix of Properties

As stated earlier, the dollar limit is more complex. It has properties of the compensation limit, in that EGTRRA allows for age independence (no reduction) between age 62 and 65. It has a straight actuarial adjustment aspect, prior to age 62 and after age 65. Cost-of-living-adjustments (COLA) also enter into the analysis. And the dollar limit has an early retirement factor adjustment aspect for pre-EGTRRA limitation years (pre-2002).

Pre-EGTRRA Statute Must Be Considered for pre-EGTRRA Distributions

Why should pre-EGTRRA enter into the analysis? §415 is satisfied with respect to each limitation year in which a distribution occurs. When adjusting a present day §415 benefit limit for prior distributions when the

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prior distributions occurred in a pre-EGTRRA limitation years, pre-EGTRRA rules must be observed in the analysis. Otherwise, the principle against retroactive payments mentioned earlier would be violated. This is similar to how satisfaction of the compensation limit cannot be demonstrated by assigning payments to prior years. Here is an example to make this clear. Suppose a participant has elected to receive two life-contingent installment distributions of $160,000 commencing at age 62 on Jan. 1, 2000 (consider these the prior distributions requiring adjustment to the §415 limit). This participant cannot then continue the $160,000 payments in a life annuity form commencing at age 64 on Jan. 1, 2002—even though EGTRRA allows $160,000 payments commencing at age 62 to 65—because EGTRRA does not apply to pre-2002 limitation years. Nor could a participant receive a lump sum at age 64 in 2002 in addition to a $160,000 annuity and claim it was a retroactive catch-up payment for age 62 and 63. The method used to adjust for prior distributions must reflect the historical limits since the first distribution.

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Cost of Living Adjustments

What about COLA? Should they be incorporated into the offset calculations? Similar to the pre-EGTRRA issue, one way to look at the COLA issue is from the standpoint of parity between lump sums and installment forms of payment. This is illustrated in one of the examples at the end of this paper. The conclusion is that if offsets for prior distributions are computed without reflecting limits in historical limitation years, offsets for lump sums will not be on par with offsets for actuarially equivalent installment payments. Because of this disparity, the best conclusion in the author's opinion is that COLAs and pre-EGTRRA limits must be reflected in the offset computations.

Special Conditions for Terminated Plans

However, for terminated plans, the answer is clearly different. COLAs should not be reflected in the offset calculation after a plan is terminated since established IRS guidance does not allow COLAs to be applied to benefits from terminated plans. Similarly, a terminated plan cannot be amended for statutory limit changes since the plan no longer exists, so the offset calculation from a terminated plan should not reflect statutory changes after the plan's termination. To prevent any misunderstanding, remember we are not talking about how the current plan benefit limit is determined, which is always based on the current COLA-adjusted limit and current statutory limit (as contained in the plan document). The conclusion that terminated plans should not reflect post-termination COLAs and law is only applied with respect to the prior distribution offset calculation.

Proration of §415 Dollar Limit Over 10 Years of Participation

Similar to the previous discussion on prorating service for the §415 compensation limit, additional years of participation after a distribution has occurred should not be reflected in the offset calculation for the §415 dollar limit. To do otherwise would lead to disparity in the offset for identical participants (one who terminated and one who continued in employment). In general, personal data changes after the distribution should not be reflected in the offset calculation.

The Basic Equation: BERF = WERF

Getting back now to the main focus of our effort: to solve the §415 dollar limit adjustment problem we need more mathematical analysis. Note that the early retirement factor problem is the general case: the no-reduction case is simply where the early retirement factor is equal to one, and the straight actuarial adjustment case is where the early retirement factors are based on actuarial equivalency factors. So we need to solve the early retirement factor problem to proceed. Once this is done, it should also support our cascade method analysis on the compensation limit.

Fortunately, the necessary math has already been published in the March 1991 issue of the *Pension Section News*, in a paper by William J. Sohn and John Atteridg. (Sohn and Atteridg's paper disclosed the basic formula and was also published by Lawrence Sher in the 1982 Transcript of the Enrolled Actuaries Meeting). This 1991 paper addressed the adjustment of plan benefits for prior distributions in annuity form. It did not specifically address the adjustment of §415 limits or the treatment of lump-sum distributions. However, the formula is applicable to our needs since the §415 limit can be thought of as the "benefit" to be adjusted, and the appropriate method for lump-sums is to convert them to "cascaded" annual payments.

Here is the needed formula:
Let
x = Age at annuity distribution commencement (early retirement)
y = Age at which annuity payments stop
z = Normal retirement age (let this be later than ages x and y)
B_z = Benefit commencing at age z
W_z = B_z adjusted for prior benefit payments between ages x and y
ERF_x and ERF_y = Early retirement factors for ages x and y

(Note: I have slightly modified Sohn and Atteridg's notation.)

Then:
$B_z \times ERF_x = W_z \times ERF_y$

The formula can (almost) be derived from simple inspection. The level of annuity payments at age x is equal to $B_z \times ERF_x$. But by considering the stream of forgone payments after age y, this quantity should also equal $W_z \times ERF_y$. The underlying assumption (the "should" part) of this equation is that we are forcing the early retirement factors to be on par with actuarial equivalence. If we don't do this, we get "unfair" results involving disparity between participants in a given plan (in our case the "plan" is the Internal Revenue Code).

BERF = WERF Yields Pure Actuarial Reduction as a Special Case

Note that if the early retirement factors involve no subsidy and are actuarial reductions, then $ERF_x = N_z/N_x$. After substituting this into the above equation,

$$B_z \times ERF_x = W_z \times ERF_y$$
$$W_z = B_z \times ERF_x / ERF_y$$
$$W_z = B_z \times N_y / N_x$$
$$W_z = B_z - B_z + B_z \times N_y / N_x$$
$$W_z = B_z - B_z \times (1 - N_y/N_x)$$
$$W_z = B_z - B_z \times (N_x - N_y)/N_x$$
$$W_z \times N_z / D_z = B_z \times N_z/D_z - (B_z \times N_z/N_x) \times (N_x - N_z)/D_z$$

This last equation gives us the expected result that when the early retirement factors involve pure actuarial reduction, then the lump-sum value of the benefit is reduced by the actuarial value of the benefits already paid.

BERF = WERF Yields Cascade Method as a Special Case

Earlier it was anticipated that the general formula would be consistent with the cascade method for the compensation limit. To test this, consider there is no early retirement reduction with the compensation limit. So in this case, ERF_x and ERF_y are both equal to one, for all x and y. This then implies $W_z = B_z$. In other words, the cascaded payments (the payments between ages x and y) can be of any duration (y can be any value between x and z) without effecting a reduction in the benefit, which is consistent with the cascade method for fully subsidized early retirement.

"z" Can Be Any Age

Note that z has been defined above as the normal retirement age, but as long as the early retirement factors are with respect to age z, more generally it is the age at which benefits commence for the "current" distribution as opposed to the "prior" distributions. Or, for our topic of inquiry, z is the annuity starting date (age) for the benefit, which when added to the prior distributions, is to be tested for §415 compliance.

Application of BERF = WERF

Explanation of how the BERF = WERF equation is applied to determine the §415 dollar limit adjustment is best put into the context of examples (see below).

What interest rate and mortality assumptions should be applied to prior distributions to determine the offset to a current distribution? There may be differing points of view on this issue. One option would be to use the prior plan's actuarial equivalence assumptions, including 417(e) assumptions if they governed the benefit calculation (as in the case of a lump-sum to a younger employee). Using the prior plan's actuarial equivalence assumptions may make the most sense, since it seems inappropriate that a participant's offset for 415 should vary based on the plan an employee is participating in (another argument that post-distribution events should not influence the offset). Put another way, since we are talking about statutory limits, the statutory limit should be determinable after the distribution, rather than it being determined possibly years later based on provisions of a plan he or she has yet to enter. In cases where the benefit calculation details or the prior plan document is not available, so that the prior actuarial assumptions are unknown, the final IRS regulations could allow the use of a safe-harbor set of assumptions.

Examples

Let's look at some examples of calculations. We will use the IAM 83 mortality table and 5 percent interest. Commutation factors based on annual payments are used since the Code refers to annual payments (annual payments yield larger lump-sums).

§415 Compensation Limit Examples

Example 1

- A participant at age 50 receives a $400,000 lump-sum distribution from a terminating DB plan of his employer.
- Ten years later at age 60 he retires and is eligible for a lump-sum distribution from a replacement cash-balance plan.
- His compensation is, and has always been, $35,000.
- He completed 10 years of service prior to age 50.

What is the offset, if any, to the §415 compensation limit at age 60 due to the prior distribution? Using commutation tables and simple algebra, we find that the $400,000 distribution at age 50 is equivalent to 16 life contingent annual payments of $35,000 from 50 to age 65, plus a smaller partial payment at age 66. Since this age 66 is greater than 60, we know that there must be an

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offset. The offset at age 60 as a lump sum is then \$400,000 x D_{50}/D_{60} – (\$35,000)(N_{50} – N_{60})/D_{60} = \$199,363, or the offset as a life annuity is \$199,363 x D_{60}/N_{60} = \$13,643/year. Note that the offset decreases with increasing age. After age 66 there will be no offset.

Example 2

- Same as Example 1, but the participant's compensation increases to \$40,000 at age 56.

There is no change to the answer in Example 1, based on the discussion that cascaded payments should not increase for personal changes after the prior distribution. (Moreover, the prior distribution came from a plan which terminated, so post-termination changes would not be reflected).

Example 3

- A participant attains normal retirement age (age 60) and receives a \$200,000 lump-sum distribution from a DB plan of his employer.
- He completed seven years of service as of age 60.
- At age 63 he receives a second distribution of \$50,000.
- At age 65 he retires and is eligible for a lump-sum distribution from the plan.
- His highest consecutive three-year average compensation is, and has always been, \$35,000.

What is the offset, if any, to the §415 compensation limit at age 65 due to the prior distribution? The cascade level for the first distribution at age 60 is \$35,000 x 7/10 = \$24,500, due to the prorating of the §415 compensation limit over 10 years of service. The second distribution has cascade level of \$35,000, but 7/10 of this is used up by the first distribution. So, we start out with one layer of \$24,500 at age 60, with a second layer starting at age 63 of \$10,500. We can see from the relative magnitude that both layers will exceed age 65. The offset at age 65 for the first distribution, as a lump sum, is then \$200,000 x D_{60}/D_{65} – (\$24,500)(N_{60} – N_{65})/D_{65} = \$117,625. The offset at age 65 for the 2nd distribution, as a lump sum, is \$50,000 x D_{63}/D_{65} – (\$10,500)(N_{63} – N_{65})/D_{65} = \$33,005. The total offset as a lump sum at age 65 is then \$117,625 + \$33,005 = \$150,630.

Note: Under a different possible example, if the first cascade layer expired and the second one had not, the second layer can use the full \$35,000 from that point forward. The first layer of \$24,500 must remain fixed under the rule that post-distribution personal changes are not reflected in the cascade levels.

§415 Dollar Limit Examples

Example 4

- In 2002, a participant age 62 receives a \$300,000 lump-sum distribution from a DB plan of his employer.
- The participant completed 10 years of participation prior to age 62.
- Three years later at age 65 he retires and is eligible for a lump-sum distribution from another plan of his employer.

What is the offset, if any, to the §415 dollar limit at age 65 due to the prior distribution? 2002 is a post-EGTRRA limitation year (assuming the plan was amended for EGTRRA in 2002), so early retirement reduction factors do not apply and we would apply cascade method techniques. The §415 dollar limit in 2002 and 2003 was \$160,000, and \$165,000 for 2004. These are the cascade levels for those years. Without doing any math, we can see that there will be no offset to the §415 dollar limit, since a \$300,000 lump-sum distribution cannot "fill and spill" these three cascade levels which total (arithmetically) \$485,000. If the reader is having trouble accepting the zero offset result, consider that a participant who elected an annuity and whose benefit was governed by the §415 dollar limit would clearly have no offset at age 65 even after having received larger payments than the example above. Sohn and Atteridg gave another supporting example of unacceptable results if an offset is applied with unreduced early retirement when a retired participant returns to work for one day, then retires again (like the i=0 simplification, these "boundary" conditions are useful to test an argument).

Example 5

This is the same as example 4, but let the distribution at age 62 equal \$900,000. What is the §415 dollar limit offset at age 65? The solution would follow methods similar to the §415 compensation limit examples, with the cascade levels equal to the dollar limits for 2002, 2003 and 2004. The "spillover" at the end of 2004 is the amount of the offset. If the offset at a later age is desired, it is simply the "spillover" with actuarial equivalent increase to a later date. Similarly, assuming no pre-EGTRRA years are involved, if the distribution occurred at an age earlier than 62, the first step is to bring forward the distribution with an actuarial equivalent increase to age 62, then apply the cascade method as usual.

Example 6

- Commencing in 1998, a participant at age 62 receives life contingent installment payments of \$104,000, \$104,000 and \$108,000 in 1998, 1999 and 2000 respectively.
- The participant completed 10 years of participation prior to age 62.

What is the offset, if any, to the §415 dollar limit at age 65 applicable in 2001 due to the prior distributions? The participant's Social Security retirement age is 65

(pre-EGTRRA). The pre-EGTRRA early retirement reduction at age 62 is therefore 20 percent. The distributions in the example were chosen such that they equal the dollar limit for that year reduced for early retirement. Applying BERF = WERF equation, we have y = z, so $ERF_x = 1$. Therefore $W = ERF_x \times B_{65}$ = 80% x [§415 Limit @ Age 65] = $140,000. In other words the offset is 20 percent. This was to be expected, since we have essentially created the exact conditions for an early retirement annuity at the §415 dollar limit.

Example 7

- Same conditions as in Example 6, but only a single distribution of $104,000 is received in 1998 with none in 1999 or 2000.

In general, if the cascaded payments do not "fill" the years for which pre-EGTRRA early retirement factors apply, the offset is computed by determining age y, then the early retirement reduction at ages x and y, and finally applying BERF = WERF. In this case, y=63 and ERF_x / ERF_y = 80% / [1-(2/3) x 20%] = 0.923077. The §415 dollar limit offset at age 65 in 2001 (end of 2000) is then [1-0.923077] x $130,000 = $10,000. The §415 dollar limit in 2001 is then $140,000 - $10,000 = $130,000.

Note that the [1-0.923077] factor was not applied to $135,000 (2000) or $140,000 (2001). This is because the BERF = WERF equation was derived assuming level payments. So, when a COLA is involved, the COLA "layer" portion should be treated as a separate limit to be adjusted under BERF = WERF. In the example above, a second COLA layer was not involved, since we only "filled" the first year where the $130,000 limit solely applied, and y=63. If, for example, the prior distribution was larger and y = 64.4, we would have had to apply BERF = WERF to $130,000, and again to the $5,000 COLA layer in year 2000, and the sum would be the offset.

Example 8

- In 2000, a participant age 62 receives a partial lump sum of distribution of $800,000.
- The participant completed 10 years of participation prior to age 62.

What is the offset to the §415 dollar limit at age 65? This example involves both the pre- and post-EGTRRA statute. When confronted with a transition from pre-EGTRRA to EGTRRA, the post-EGTRRA §415 dollar limit must be determined in accordance with Revenue Ruling 2001-51. There are conditions and exceptions, but this ruling generally allows the limitation for the 2002 or later year to be computed as if EGTRRA was in effect at the time of the annuity starting date. Echoing earlier discussions in this paper, this does not mean that retroactive payments are allowed—the increases are made on a prospective basis only.

The participant's Social Security retirement age is 66. The reduction in the §415 dollar limit at age 62 is therefore 25 percent. The first cascade level, for year 2000, is then $135,000 x 75% = $101,250. The second cascade level, for year 2001, is $140,000 x 75% = $105,000. For the EGTRRA year 2002, the cascade level is $160,000, per Rev Ruling 2001-51, since under EGTRRA there is no reduction for benefits commencing at age 62. The offset expressed as a lump sum is then $800,000 x D_{62}/D_{65} – $101,250 x D_{62}/D_{65} – $105,000 x D_{63}/D_{65} – $160,000 x D_{64}/D_{65} = $537,298. The offset is then $537,298 x D_{65}/N_{65} = $40,513. The §415 dollar limit at age 65 in 2003 is then $160,000 – $40,513 = $119,487.

Similar to earlier discussions, care must be taken to make sure the plan provisions are consistent with any given approach taken in the offset calculations. The cascade method utilizes "hypothetical" cascaded payments, but in the author's opinion these payments should be permissible under the plan. For example, a prior distribution from a plan terminated before EGTRRA cannot utilize EGTRRA in the offset computations—if this were the case in Example 8 the offset above would be larger, since the third cascade level would be smaller. Another example is whether the document or EGTRRA amendment allows the benefits in pay status to be subject to the EGTRRA limits.

Final Word

If this is purely a mathematical exercise, do we need regulations from the IRS, apart from the comfort factor that reliance gives, and apart from some of the finer practical details? Well, yes I believe so, at least for the pre-EGTRRA dollar limit where indexed early retirement factors are involved. The reason is the assumption inherent in the BERF = WERF equation, that early retirement factors should define actuarial equivalence for a plan. One can argue quite convincingly that it is the only reasonable approach that consistently leads to fair results, but this assumption makes it not a purely mathematical exercise. However, with respect to the compensation limit and post-EGTRRA dollar limit, in the author's opinion logic alone requires the basic approach outlined here. Because of this the current proposed §415 regulations on prior distributions should be withdrawn and re-proposed. Also, simplified methods such as "straight actuarial equivalent offset" or "percentage used" approaches cannot be adopted in the regulations, since the regulations must be consistent with the Code. ◆

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