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Funding Offers in Compromise From the Taxpayer's Retirement Plans: How Much Is Enough?

PROCEDURE

Funding Offers in Compromise From the Taxpayer's Retirement Plans: How Much Is Enough?

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When a taxpayer with an outstanding tax liability depends on a retirement plan account to cover basic living expenses, it may be difficult to determine how much to offer in compromise of that liability without putting the taxpayer at risk of economic hardship. Factors that must be taken into account include the probability of the taxpayer's survival and the probability that the retirement fund will not be depleted in the taxpayer's lifetime.

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Offers to compromise tax liabilities of taxpayers who are retired and whose primary source of income is a retirement account, such as a **Section 401(k)** plan account or an IRA, involve special considerations. Typically, these accounts are invested in portfolios of securities.[1]

In ordinary circumstances in considering an appropriate amount to be offered by a taxpayer in an offer in compromise, the practitioner and the IRS would look to the entire value of a retirement account as being potentially available and includable in the calculation of a taxpayer's "ability to pay." One must consider, however, whether depletion of a retirement account will cause an economic hardship to the taxpayer in his or her retirement years, given the taxpayer's other available assets.

In the circumstances described in this article, where a taxpayer's retirement account may constitute the entirety or bulk of the taxpayer's available assets to fund an offer, most assuredly depletion of the account in order to fund an offer would cause an economic hardship. The probabilities to be considered in determining whether an economic hardship might result from a depletion of a retirement account are analyzed below. We set forth simple calculations to be made in determining the appropriate amount of funds that can be made available from a retirement account to fund the taxpayer's offer while ensuring that sufficient funds remain available in the account for the taxpayer's necessary living expenses throughout the remainder of his or her life.

Three current trends are leading to an increasing number of offers in compromise being made in which such accounts are the primary source of the taxpayers' income and also the potential source of the funds for their offers:

> (1) The increasing prevalence of individual account retirement plans, also called defined contribution plans, in place of traditional defined benefit pension plans.
>
> (2) The demographic of the Baby Boomer generation reaching retirement, i.e., over 60 million individuals are expected to retire during the next 15 to 20 years, with many or most of them drawing a sizable portion of their retirement income from individual accounts.
>
> (3) Increasing longevity, leading to longer periods during which a retirement account will be the most significant (and perhaps the only) source of income for the retiree.[2]

The impact on offers in compromise occurs, and will increasingly occur, because the retirement account will be, in an ever-increasing number of cases, the largest (and perhaps the only) asset from which the funds can be drawn to make the payment offered in

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compromise. Thus it is important to determine how much can be removed from such an account to pay a tax liability, without diminishing it to the point where an economic hardship is created for the retiree.

In the cases we are considering, the economic hardship, if it occurs at all, is likely to occur in later years, if and when the account becomes exhausted while the retiree is still living. Whether the account will become exhausted while the retiree is still living depends on how long the retiree lives and how well the account's investments perform. Of course, there is uncertainty as to both of these contingencies. Thus, in order to determine the likelihood of economic hardship, we are required to consider the probabilities, both of the individual's survival and of the account's survival as a source of income. The focus of this article is on both of these probabilities.

COMPROMISING A LIABILITY

Section 7122 allows the IRS to compromise a taxpayer's liabilities. **Reg. 301.7122-1(b)** specifies that there are three bases for compromise:

- Doubt as to liability.
- Doubt as to collectibility.
- The promotion of "effective tax administration."

We are considering only cases where it is assumed that there is no doubt as to liability.

Reg. 301.7122-1(b)(2) provides that "[d]oubt as to collectibility exists in any case where the taxpayer's assets and income are less than the full amount of the liability." Furthermore, determination of "doubt as to collectibility" will include a determination of ability to pay. Therefore, if the taxpayer has assets and/or income sufficient to pay the full tax liability, but the payment would result in the taxpayer's no longer having assets and/or income sufficient to pay basic living expenses, a "doubt as to collectibility" would exist.[3]

The "effective tax administration" basis for compromise also involves the question of the taxpayer's having assets and/or income sufficient to pay basic living expenses. In particular, a compromise may be entered into to promote effective tax administration where "collection in full could be achieved, [but] collection of the full liability would cause the taxpayer economic hardship...." "Economic hardship is defined as the inability to pay reasonable basic living expenses."[4]

Thus, there is some overlap between the second and third bases for compromise. The Service will consider all bases the taxpayer indicates, but will determine only one basis for accepting the offer.[5]

Reg. 301.7122-1(c)(3)(iii), Example 2 , sets out explicitly the issue considered in this article: "The taxpayer is retired and his only income is from a pension. The taxpayer's only asset is a retirement account, and the funds in the account are sufficient to satisfy the liability. Liquidation of the retirement account would leave the taxpayer without an adequate means to provide for basic living expenses. The taxpayer's overall compliance history does not weigh against compromise."

Although this example sets out the issue, a question immediately arises. The third sentence of the example seems to assume that a determination can readily be made as to whether the amount remaining in the retirement account is, or is not, an "adequate means to provide for basic living expenses." This begs the question of *how* such a determination is made, a question not answered in the example.

The *Internal Revenue Manual* states that the Service will make its determination to accept a particular amount "by analyzing the taxpayer's financial information and the hardship that would be created if certain assets, or a portion of certain assets, were used to pay the liability."[6] In this context, the IRM provides the following example:

"The taxpayer has a $100,000 liability and a [Reasonable Collection Potential] of $125,000. To avoid economic hardship, it is determined that the taxpayer will need $75,000. The remaining $50,000 should be considered in determining an acceptable offer amount."[7]

Even in this more quantitative context, there is no indication of *how* the amount the taxpayer will need, stated simply as $75,000, was determined. It is reasonable to assume, however, that the notion of the amount "needed" by the taxpayer means the amount that, along with the income it generates, will be consumed by the taxpayer to pay (in whole or in part) basic living expenses over some predetermined period. For a retired taxpayer, the period presumably would be the remainder of the taxpayer's lifetime. In the next section we examine the probabilities of the taxpayer's living for various additional periods of years.

To address the question of the amount a retired taxpayer needs to retain in order to meet basic living expenses, we need to know not only the allowable basic living expenses, but also how much the amount retained in an account can provide as annual retirement income, and over

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how many years. The issue of the allowable basic living expenses is amply dealt with in the IRM.[8] The issues of how much an amount retained by a retiree (typically invested in a securities portfolio) can provide as annual retirement income, and over how many years, do not appear to be dealt with in a quantitative manner in the *Manual* or in the Regulations. They have, however, been dealt with, and are the subject of much discussion, in financial planning literature.[9]

This article is intended to offer to the tax professional some useful insights from the financial planner's quantitative perspective. After discussing the probability of the taxpayer's survival, we will examine the financial planners' basic premises and techniques for determining how much can be distributed annually from an account, i.e., from a securities portfolio, and for how many years. The analysis of these issues is based, necessarily, on probabilities, since it relates to the future longevities of the retirees and the future performance of securities portfolios.

The applicability of the concept of probabilities is implicitly recognized by the IRS in the context of offers in compromise. For example, **Reg. 301.7122-1(c)(3)(i)(A)** states that a factor that would support a finding of economic hardship would exist if the taxpayer were ill and "incapable of earning a living" and "it is *reasonably foreseeable* that the taxpayer's financial resources will be exhausted in providing for care and support..." (emphasis added).[10] In this context, the phrase "reasonably foreseeable" clearly suggests the concept of probability.

The following examination of the quantitative aspects of the probabilities of taxpayer and portfolio survival is meant to assist and guide the judgment of tax attorneys, accountants, and IRS agents, and not to replace or supplant that judgment.

PROBABILITY OF THE TAXPAYER'S SURVIVAL

The probability of the taxpayer's survival, as used in this article, is the probability that the taxpayer will survive for a stated number of years, measured from the date as of which the offer in compromise is to be effective. It depends, obviously, on the taxpayer's age at that effective date. If the taxpayers are a couple, the relevant probability is the joint and survivor probability, i.e., the probability that one or both members of the couple will survive for a particular number of years.

The Service publishes mortality tables for a variety of purposes. For the purposes of distributions from securities portfolios (many of which are held by **Section 401(k)** plan accounts or IRAs), the mortality tables that relate to distributions from retirement plans seem most

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appropriate. Tables applicable to such distributions are included in **Notice 2008-85, 2008-42 IRB 905** , which contains mortality tables for 2009 through 2013.[11] A table for calculating survival probabilities, derived from these mortality tables, is set out in Exhibit 1.[12]

Exhibit 1. 2011 Unisex Mortality Table from IRS Notice 2008-85

Age	lx	qx
60	1,000,000	0.004701
61	995,299	0.005462
62	989,863	0.006274
63	983,652	0.007300
64	976,472	0.008247
65	968,419	0.009324
66	959,389	0.010666
67	949,156	0.011884
68	937,877	0.013056

69	925,632	0.014455
70	912,252	0.015829
71	897,812	0.017422
72	882,170	0.019407
73	865,050	0.021476
74	846,472	0.023950
75	826,199	0.026703
76	804,137	0.029667
77	780,280	0.033502
78	754,140	0.037510
79	725,852	0.042016
80	695,354	0.047073
81	662,622	0.052986
82	627,512	0.059630
83	590,094	0.066362
84	550,934	0.074594
85	509,838	0.083549
86	467,241	0.093568
87	423,522	0.105854
88	378,691	0.118716
89	333,734	0.132472
90	289,524	0.147696
91	246,762	0.161428
92	206,928	0.177261
93	170,248	0.192881
94	137,410	0.206912
95	108,978	0.222824
96	84,695	0.235983
97	64,709	0.250319
98	48,511	0.264810
99	35,665	0.275786
100	25,829	0.285818

The computation of a single taxpayer's survival probability is straightforward: Exhibit 1 begins with a notional cohort of one million people at age 60. Corresponding to each age in the first column is the number in the second column (labeled "lx"), which is the number of people from that cohort still living at the age specified. To determine the probability that a person who has reached a particular age (the "initial age") will survive to a more advanced particular age (the "later age"), one simply divides the number who have reached the later age by the number who have reached the initial age.

Thus, to determine the probability that a person who has reached age 65 will survive 25 years to age 90, simply divide the number who have reached age 90 (289,524) by the number who have reached age 65 (968,419). Accordingly, the probability that a person age 65 will survive for 25 years is 29.9%. Similarly, the probability that a person age 65 will survive 30 years, to age 95, is 108,978/968,419, or 11.3%.

The computation of the joint and survivor probability of a couple is a bit more complicated. The joint and survivor probability for a given number of years is the sum of three probabilities:

(1) The probability that both members of the couple will survive; plus

(2) The probability that the husband will survive but the wife will not survive; plus

(3) The probability that the wife will survive but the husband will not survive.

Several examples illustrating the computation of joint and survivor probabilities are given in Exhibit 2.[13]

Exhibit 2. Joint and Survivor Probability

As stated in the article, the joint and survivor probability of a couple, for a given number of years, is equal to the sum of three probabilities:

(1) The probability that both members of the couple will survive that number of years; plus

(2) The probability that the husband will survive but the wife will not survive; plus

(3) The probability that the wife will survive but the husband will not survive.

The probability that both members of the couple will survive is equal to the product of multiplying the two single life probabilities.

The probability that one member will survive and the other will not is equal to the product of multiplying the probability that one member will survive by a factor equal to (1 minus the probability that the other member will survive).

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These probabilities are most conveniently expressed in terms of the "lx" numbers from the table in Exhibit 1. For example, the symbol "lx(65)" means the lx number corresponding to age 65 in Exhibit 1. To illustrate that notation in an example, the single life survival probability, for 25 years, for a person 65 years old, is lx(90)/lx(65) = 289,524/968,419 = 29.9%. (The easiest way to compute these joint and survivor probabilities is to put the lx numbers into a spreadsheet and program the formula into the spreadsheet.)

The calculation of the joint and survivor probability for 27 years for a couple whose members are ages 73 and 68 is as follows:

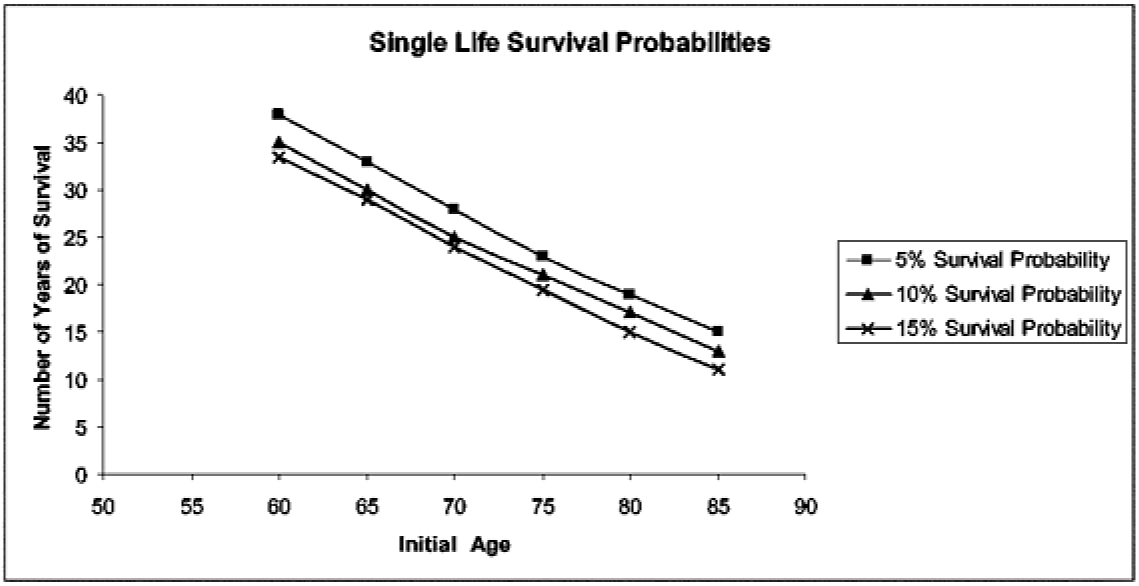
```
(lx[73+27]/lx[73]) x (lx[68+27]/lx[68])
+ (lx[73+27]/lx[73]) x (1-(lx[68+27]/lx[68]))
+ (1-(lx[73+27]/lx[73])) x (lx[68+27]/lx[68])
```

Putting the lx numbers (from Exhibit 1) into the formula, we find:

```
.35% + 2.64% + 11.27% = 14.26%
```

A convenient way to set out the single-life survival probabilities is shown in Exhibit 3. Each line on the graph is a "probability" line. That is, each line represents a specific probability that a person living at an initial age (specified on the horizontal axis) will still be living a certain number of years later (specified on the vertical axis).

Exhibit 3.



For example, the middle line shown is the 10% probability line. This line shows that a person age 70 has a 10% probability of still being alive 25 years later. Similarly, the uppermost line is the 5% probability line. It shows, for example, that the same 70-year-old has only a 5% probability of being alive 28 years later. As one more example, a person age 75 has a 10% probability of being alive 21 years later.

These probabilities are important in the context of offers in compromise because they provide some guidance as to how many years the taxpayer's securities portfolio should be counted on to provide retirement income, and hence avoid economic hardship. As already noted, neither the taxpayer's lifetime nor his or her portfolio's duration can be predicted with certainty, so we must work with probabilities.

Although somewhat arbitrary, we have selected the range of 10% to 15% as the range of the taxpayer's survival probability at or above which it seems reasonable to consider survival as being "reasonably foreseeable" within the meaning of **Reg. 301.7122-1(c)(3)(i)(A)** . Thus, if a taxpayer has a survival probability for a given number of years equal to or greater than 10% to 15%, *and* his or her portfolio has a survival probability equal to or less than 85% to 90% for that same number of years, it seems "reasonably foreseeable" that the person will experience economic hardship. (Again we note that these probabilities are meant to guide and assist the judgment of the tax attorneys, accountants, and IRS agents, not to replace or supplant that judgment.)

DISTRIBUTING RETIREMENT INCOME FROM A SECURITIES PORTFOLIO

The issue of sustainable, inflation-adjusted, distributions from a securities portfolio, over lengthy periods, has been studied in great depth by financial planning professionals. The basic premises underlying the majority of their studies are:

> (1) The distributions are for necessary living expenses, hence not discretionary;
>
> (2) Because the expenses are not discretionary, they are essentially the same each year, increased only for cost-of-living adjustments; and
>
> (3) For a portfolio to make distributions that keep up with cost-of-living increases over a period of two or three decades, the portfolio must have a substantial portion of its assets invested in equities. This asset allocation gives rise to some degree of volatility, but regular distributions from the portfolio must be made despite the volatility, i.e., irrespective of whether the portfolio has had investment gains or losses.

The widely accepted consensus is that, for a portfolio to make such regular distributions and survive approximately 30 years before being exhausted, the "maximum safe" initial year's distribution is in the range of 4% to 4.5% of the amount in the portfolio in the initial year. After the initial year's distribution, the dollar amounts of future years' distributions are then adjusted only for cost-of-living increases. Such a distribution rate has a reasonable probability of lasting 30 years before the portfolio is exhausted. [14]

The choice of 30 years is somewhat arbitrary, but not completely so. The choice reflects the relatively low probability, i.e., only 11.3% (as derived above), that a person who retires at age 65 will still be living 30 years later at age 95. The same analysis can be done for any other number of years, and can be done for periods beginning at ages other than 65.

Some Additional Aspects

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This "maximum safe" distribution rate has been derived using two very different approaches. One approach is called the "historical" (or "deterministic") approach. The other is called the "stochastic," or "Monte Carlo," approach.

The historical approach. A leading authority, William Bengen, discusses the historical approach at length.[15] This approach uses empirical data, examining a series of actual 30-year periods. It begins each period with a hypothetical portfolio of assets, draws a certain amount from the portfolio at the end of each year, adjusts the portfolio for the actual investment performance of the portfolio during the year, and rebalances the portfolio at the beginning of the next year.

Because of the rebalancing, the asset allocation remains the same for each year in the 30-year period. This approach considers 30-year periods with retirement dates (i.e., the first year of the 30-year period) going all the way from 1926 through 1975. (Bengen's chapter was written in 2005; hence, the last 30-year period he could consider began in 1975.) He shows that for every one of the fifty 30-year periods in the range beginning in 1926 through 1975, a 4.15% initial distribution rate would have resulted in portfolio survival in the 30-year period.

It turns out that the survival probability of a portfolio is very sensitive to the initial distribution rate. For example, as Bengen shows, a 6% initial distribution rate would have resulted in portfolio survival in only about one-half of the 30-year periods, while a 4.15% initial distribution rate would have resulted in portfolio survival in *all* of the 30-year periods.

The reason that some 30-year periods yield better results than other 30-year periods is two-fold: One part is that some 30-year periods have had better investment results than other 30-year periods. That is the obvious part, but, it turns out, the less important part. The more important part is the *sequence* of the years' investment returns—in particular, if, for a given average return, the earlier years' returns are *poorer* than the later years' returns, the result is likely to be a lower portfolio survival probability. Alternatively, if the earlier years' returns were *better* than the later years' returns, the result was a greater portfolio survival probability.

This is understandable, since poor investment performance in the earlier years, coupled with the distributions taken in those years, depletes the portfolio, leaving less of the portfolio to grow and support the later years' distributions. Just a small difference in the amount distributed in those early years can have a very significant impact on the long-term survival of a portfolio. And the longer the term in question, the greater the difference in survival probability made by a small difference in initial distribution amount. This will all be shown quite vividly in the section on "Representative Results," below.

The Monte Carlo approach. The other approach, often referred to as the "stochastic" or "Monte Carlo" approach, is based on the premise that no past sequence of portfolio investment returns is likely to occur in the future, but the *proportion* of years with investment returns in any particular range is likely to be the same in the future as in a past "representative" period.[16]

The representative period is an actual period for which we know the actual investment return in each year. The representative period can include any number of years, but it makes sense for it to have at least as many years as the period over which portfolio survival is being considered. Thus, if we are considering the probability of 30-year portfolio survival, it would be advisable to use a 30-year or longer representative period.

The Monte Carlo approach begins with the construction of a mathematical model of the process under consideration. The model is set up on a spreadsheet, and consists of the following calculations: Consider a hypothetical 30-year period. Each year of the period is represented by a row on the spreadsheet. At the beginning of the period, we have a specified initial portfolio value. For each year in the hypothetical 30-year period, a distribution amount is subtracted from the value of the portfolio. The initial year's distribution amount is selected as a percentage of the initial portfolio value, and each subsequent year's distribution amount is equal to the previous year's distribution amount, increased by the previous year's inflation rate. The inflation rate for each year is selected at random from the rates that occurred during the representative period.

Also, for each year in this hypothetical 30-year period, an investment return is selected at random from the representative period, and the gain (or loss) is added to (or subtracted from) the previous year's post-distribution value of the portfolio. The investment return selection being random, the investment returns are going to occur in the hypothetical period in roughly the same proportion as they occurred in the representative period (but not in the same sequence).

The calculation is performed for each year in the 30-year period. In the course of the calculations, the portfolio either survives (i.e., has

some value remaining at the end of the 30-year period) or it does not survive (i.e., it runs out of value in some year before the end of the 30-year period). Suppose that the 30-year calculation is repeated 1,000 times. In a certain number of those repetitions, the portfolio will survive for 30 years, and in the other repetitions it will not. (As noted above, the two most significant determinants of survival are the amount of the initial distribution and whether the higher investment earning years occur early or late in the 30-year sequence. In each of the 1,000 repetitions, the initial distribution amount is the same, but the sequence of investment returns, being randomly selected, is not the same in each repetition of the calculation.) The percentage of the repetitions that the portfolio survives is termed the portfolio's "survival probability."[17]

This can be illustrated with a concrete example. Suppose the initial portfolio value is $1 million, and the initial distribution rate is 4.5%. The first year's distribution from the portfolio is thus $45,000. This leaves $955,000 to increase (or decrease) by the first year's investment gain (or loss). In each subsequent year, the distribution will be the same dollar amount but increased by the previous year's inflation rate. If we perform 1,000 repetitions of the 30-iteration calculation just described, we find that about 900 of the repetitions show some value in the portfolio at the end of 30 years. In other words, with an initial distribution rate of 4.5%, we find the portfolio with a 30-year survival probability of 90%.

We also can look more closely at the computer's output, and find that at the end of 25 years, there is value in the portfolio in 950 of those 1,000 calculations. Thus, with an initial distribution rate of 4.5%, we find a 25-year portfolio survival probability of 95%. This means that 50 of the 1,000 calculations show the portfolio "running out of money" during the years 26 through 30.

Asset Allocation Considerations

The reader has no doubt observed that, up to this point, there has been no discussion of the particular asset allocation of the securities portfolio. Surprisingly, both in Bengen's work using the historical approach and in the authors' work using the stochastic approach, the portfolio's survival results are *not* very sensitive to the portfolio's asset allocation, within a rather wide range of stock percentages. Bengen states that "for a wide range of stock allocations—between 40% and 70%—the safemax is virtually constant."[18] We have found a similar constancy of portfolio survival probability in an equally wide asset allocation range.

The "representative period" of investment returns in our stochastic approach is the 32-year period from 1973 through 2004. We believe that this period is more likely to represent the next 30 years than is a period that includes the extreme bubble-and-burst events of 2005 through 2009. But, to allow for the possibility of a "low return environment," we have added a parameter to our stochastic approach. This parameter is somewhat simplistic, but it has the advantage of being easy to use. The parameter is a percentage decrease in the mean investment performance of every asset class in the portfolio. (The same percentage is applied to every asset class, throughout the 30-year period and throughout the 1,000 repetitions of the calculations.) In the examples below, the effect of varying this parameter will be shown.

REPRESENTATIVE RESULTS

We now consider some situations in which the calculations outlined above are applied to offers in compromise.

Example 1: We begin with an illustrative situation quite similar to one that has been submitted to the IRS and accepted as part of an offer in compromise.

(1) *Taxpayer's age, asset value, and tax liability.* A 64-year-old widow, Mrs. W., had an IRA valued at $450,000. The IRA was her only asset from which a payment could be made. Her tax liability was approximately $90,000.

(2) *Income sources and amount needed.* Mrs. W.'s only sources of income were Social Security ($16,000 per year) and her distributions from the IRA. Her basic living expenses were approximately $34,000 per year, and these could be expected to increase with inflation. Therefore, she needed approximately $18,000 per year distributed from her IRA. This amount is 4% of the value of the IRA.

(3) *Taxpayer's survival probability.* Using the graph in Exhibit 3 or the table in Exhibit 1, we find that Mrs. W.'s probability of living 30 years or more is between 10% and 15%. (From the table in Exhibit 1, her probability of 30-year survival is calculated to be 14.07%.) Therefore, it is reasonable to retain enough in her IRA to have a reasonable probability of 30-year portfolio survival.

(4) *Portfolio amount needed; amount offered in compromise.* As noted above, an initial year's distribution rate of 4.5% of a portfolio's value (with subsequent years' distributions equal to the same dollar amount, adjusted for inflation) yields a 90% probability that the portfolio will survive for 30 years.[19] If 4.5% of the amount that will remain in the portfolio is

$18,000, then the amount that will be required to be retained in the portfolio in year 1 to ensure its survivability for 30 years is $400,000 (i.e., $18,000/.045). Thus, Mrs. W. can withdraw $50,000 from the IRA to make the payment on the offer in compromise. The withdrawal from the IRA, however, is taxable. If we assume a marginal tax rate of 15%, the amount of Mrs. W.'s offer in compromise is $42,500 (i.e., 85% of $50,000).

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Example 2: In this illustration, similar to an offer recently submitted to the IRS, the taxpayers are a couple.

(1) *Taxpayers' ages, asset value, and tax liability.* The husband's age is 73 and the wife's age is 68. Their only liquid asset is a **Section 401(k)** plan account with a value of $580,000. Their tax liability is approximately $100,000.

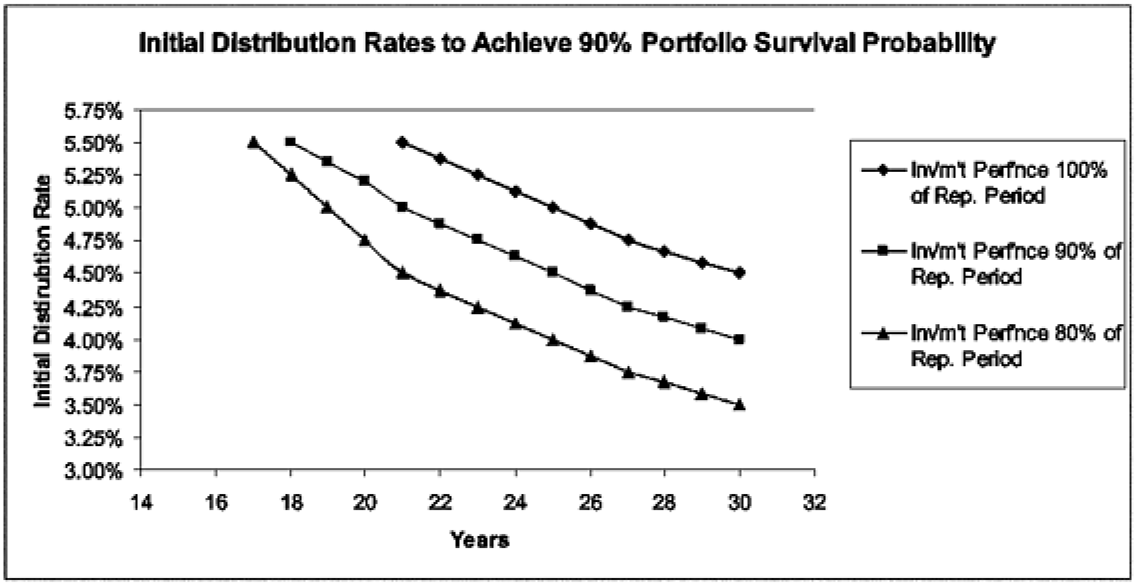
(2) *Income sources and amount needed.* Both members of the couple are retired. The couple's only sources of income are Social Security ($20,000 per year) and the distributions from the **Section 401(k)** plan account. Their basic living expenses are determined to be $43,750 per year, which can be expected to increase with inflation. Therefore, they need $23,750 per year in distributions from the **Section 401(k)** plan account.

(3) *Taxpayers' survival probability.* Using the table in Exhibit 1 and the method described in Exhibit 2, we find that the joint and survivor probability for 27 years is 14.26%, and for 28 years is 9.03%. Since the 27-year joint and survivor probability is between 10% and 15%, and the 28-year joint and survivor probability is less than 10%, it is reasonable to select 27 years as the appropriate time frame over which to consider the taxpayers' survival and hence to measure the likelihood of their portfolio's survival.

(4) *Portfolio amount needed; amount offered in compromise.* The annual amount that must be provided by the **Section 401(k)** plan account is $23,750. This equals 4.1% of the value of the **Section 401(k)** plan account. As is evident both from the discussion above and from the graph in Exhibit 4, the **Section 401(k)** plan account has a high probability (greater than 90%) of being able to pay this amount for at least 27 years. The question, which is our central question, is how much can be withdrawn from the account,

to pay with an offer in compromise, and still avoid a reasonably foreseeable economic hardship for the taxpayer.

Exhibit 4.



Referring to the top line on the graph in Exhibit 4, we see that a 27-year portfolio survival probability of 90% can be achieved with an initial distribution rate of 4.75%, if the investment performance of the **Section 401(k)** plan account's portfolio during that 27-year period has the same average as during the representative period. If 4.75% of the amount that will remain in the portfolio is $23,750, then the amount that will be required to be retained in the portfolio in year 1 to ensure its survivability for 30 years is $500,000 (i.e., 23,750/.0475). Thus, the

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couple could withdraw $80,000 from the **Section 401(k)** plan account to make the payment on the offer in compromise. As noted in Example 1, the withdrawal is taxable. If we assume a marginal tax rate of 20%, the amount of the couple's offer in compromise would be $64,000 (i.e., 80% of $80,000).

Suppose that the average investment performance of the **Section 401(k)** plan account's portfolio were to be 10% *less* than the performance during the representative period, i.e., 90% of representative period's performance. In that event, the portfolio would have to be larger than

$500,000 to have a 90% probability of survival for 27 years. Turning to the middle line on the graph in Exhibit 4, we see that the $23,750 initial distribution amount must constitute a smaller initial distribution rate, approximately 4.25%, rather than 4.75%. This means that the portfolio value must be approximately $559,000, rather than $500,000. In that event, the withdrawal amount would be approximately $21,000, and (again assuming a 20% marginal tax rate) the amount offered would be approximately $17,000.

More General Results, Graphically Represented

The graph in Exhibit 4 provides the taxpayer's advisor with an easy mechanism to estimate how much must remain in the taxpayer's portfolio, in order to avoid a "reasonably foreseeable economic hardship."

The graph shows the initial distribution rates necessary to obtain a 90% portfolio survival probability for a stated number of years. The three lines are for three different levels of anticipated investment returns (100%, 90%, and 80% of the average returns of the representative period).

Procedure. The following steps should be used to minimize the risk of reasonably foreseeable economic hardship.

(1) Start with the amount the taxpayer needs to distribute each year from the account to meet basic living expenses. (As seen in the examples above, it is the difference between the basic living expenses and other sources of income.) This is the "initial distribution amount."

(2) From the taxpayer's age, find the number of years for which the taxpayer has a 10% to 15% probability of surviving. For a single taxpayer, this can be found directly from the graph in Exhibit 3, or from the table in Exhibit 1. For a couple, the process described in Exhibit 2 must be used, to find the number of years for which the joint and survivor probability will be equal to an amount between 10% and 15%.

(3) Next, go to the graph in Exhibit 4. Find, on the horizontal axis, the number of years determined in step 2, above. Then move up on the graph and select one of the three lines: Select the top line if you're an optimist; select the middle line if you're cautious; select the bottom line if you're a pessimist. The value (seen from the vertical axis) where

the selected line and the number of years intersect is the applicable initial distribution rate.

(4) From the initial distribution rate, the initial portfolio amount follows directly: Simply divide the initial distribution amount (from step 1, above) by the applicable initial distribution rate (from step 3, above). The result is the initial portfolio amount that has a 90% portfolio survival probability, and hence avoids a "reasonably foreseeable economic hardship" for the taxpayer.

(5) The amount that can be withdrawn from the account, therefore, is the difference between the actual account value and the initial portfolio amount calculated in step 4, above.

Required minimum distribution. There is no inherent relationship between the distribution program from a taxpayer's account, described in this article, and the required minimum distribution (RMD) mandated by **Section 401(a)(9)** after age 701/2. For any year when the program distribution exceeds the RMD, there is no problem. If, however, any year's program distribution is less than the RMD, the taxpayer would simply take the RMD and retain the excess for future years' needs.

CONCLUSION

A taxpayer would have a "reasonably foreseeable economic hardship" if:

- The taxpayer has a probability of survival for a particular number of years (based on age) that is between 10% and 15% or more; *and*
- The taxpayer depends on retirement income from a portfolio that has a probability of survival for that same number of years that is between 85% and 90% or less (based on the distributions from the portfolio).

This article has described the processes for determining these probabilities. We have then set out a simple procedure, using a graph, for estimating the initial distribution rate from the portfolio. Finally, we have shown how to determine the maximum amount that can be withdrawn from the portfolio to make a payment with an offer in compromise without diminishing the probability of portfolio survival to a point where the taxpayer has a reasonably foreseeable economic hardship.

We again reiterate that these calculations are meant to guide and assist the judgment of the tax attorneys, accountants, and IRS agents, and not to replace or supplant that judgment.

Practice Notes

Current guidance does not clearly specify how to determine if the taxpayer's funds are adequate to provide for basic living expenses. Nevertheless, it seems reasonable to assume that the notion of the amount "needed" by the taxpayer means the capital fund, along with the income it generates, that will be consumed by the taxpayer in paying such expenses over the remainder of the taxpayer's lifetime. Accordingly, the use of probability tables seems appropriate.

[1] Since the retirement accounts are almost always invested in portfolios of securities, and since our analysis is based on the behavior of securities portfolios, the terms "account" and "portfolio" can be considered interchangeable in this context.

[2] An additional factor is that individual retirement accounts do not require withholding of tax on distributions. Therefore, there may be an increasing number of retirees who are spending their entire distributions, with neither taxes having been withheld nor estimated tax payments having been made, *and* without having put aside any money for the payment of tax on the amounts distributed.

[3] **Reg. 301.7122-1(c)(2)** .

[4] **Rev. Proc. 2003-71, 2003-2 CB 517** , section 4.02(3)(a), citing **Reg. 301.6343-1(d)** .

[5] See **CCA 200123059** .

[6] IRM 5.8.11.4.3.

[7] *Id.*

[8]

IRM 5.8.5. (In this article we include income tax as part of basic living expenses.)

9

See, e.g., Moisand, "Withdrawal Rates: Rules of Thumb to Spend Wisely," J. Financial Plan. (December 2009); Guyton, "Decision Rules and Portfolio Management for Retirees," J. Financial Plan. (October 2004); Sacks, "Retirement Income—Will It Last a Lifetime?," J. Retirement Plan. (January 2004); Bengen, "Determining Withdrawal Rates Using Historical Data," J. Financial Plan. (October 1994). See also Quinn, "Make Your Savings Last a Lifetime," AARP Bulletin (December 2010).

10

It also seems clear that a taxpayer who is retired and is of an age where he or she is very unlikely to be able to return to work would be as "incapable of earning a living" as would a taxpayer who is too ill to work.

11

The applicable tables are "unisex" tables. In Arizona v. Norris, **52 AFTR 2d 83-5292** , 463 US 1073 , 77 L Ed 2d 1236 , 4 EBC 1633 (1983), the Supreme Court held that the application of sex-distinct actuarial tables to employees based on their gender in calculating the amount of retirement benefits violated Title VII of the Civil Rights Act of 1964.

12

The table in Exhibit 1 is derived from the unisex mortality table for the year 2011. The mortality figures for the other years differ by only about 1% from those of the preceding and succeeding years.

13

To minimize cumbersome phraseology, "survival probability" will be used in this article to refer equally to the survival probability of a single taxpayer and to the joint and survivor probability of a couple, except where additional clarification is necessary.

14

The leading authorities on this issue include, among others, William Bengen. See, for example, Bengen's chapter entitled "Sustainable Withdrawals," in the reference book *Retirement Income Redesigned* (Evensky and Katz, eds.; Bloomberg Press, 2006).

15

See note 14, *supra.*

16

The use of Monte Carlo simulation in financial and tax matters has long been accepted by the courts and the Service. See, e.g., Ruppert v. Alliant Energy Cash Balance Plan, 50 EBC 1929 (DC Wis., 12/29/10); Stobie Creek Investments, LLC, **102 AFTR 2d 2008-5442** , 82 Fed Cl 636 (Fed. Cl. Ct., 2008); Boca Investerings Partnership, **88 AFTR 2d 2001-6252** , 167 F Supp 2d 298 (DC D.C., 2001); Dockery, **TC Memo 1998-114** , RIA TC Memo ¶98114 . See also **Ltr. Rul. 200033015** .

17

In some of the repetitions, the portfolio survives with very substantial value at the end of the 30-year period, and in others the portfolio survives with very little value at the end of the period.

18

See Bengen, "Sustainable Withdrawals," *supra* note 14.

19

In this situation, we have not considered the possibility of the IRA's investment performance being, on average, lower than during the representative period. That possibility will be considered in Example 2, as well as in the more general results set out later in the text.