

## Instructor's Tutelage

### Hot summer nights; cool summer savings!

Here's a couple of easy and painless tips that can help keep money in your pocket during this sizzling time of year!

- Reduce your air conditioning bill. Draw the curtains and shades during the day while you are out and about or at work, and make sure to replace your filter often to ensure your unit is most efficient.

- Hosting a BBQ? Use a slow cooker and batch-cook something that guests can help themselves to in a buffet. Slow cooked pulled pork in a roll never disappoints, and pork shoulder is more affordable than filets and strip steaks. Plus, using the slow cooker means there's very little effort put in to try to cook steaks perfectly for each guest, so you've got more time to enjoy the party yourself.

- Save on produce by growing your own. Gardening is fun with the family, gets you outdoors, and provides a sense of responsibility and accomplishment. And the good news is...plants can produce vegetables and tomatoes well into the month of October in most gardening zones in the U.S.
- If you skipped spring cleaning, it's not too late. Plan a summer garage sale now, simplify your life, and make some extra cash.



### Doing the math: Help clients plan for 35 years of retirement Financial Planning, By Craig L. Israelsen, May 2016

In a world where it seems that every client aims to have a portfolio that holds up through at least 35 years of retirement, it would be helpful to have some principles and mathematical measures to use as a guide in accumulating and dispersing retirement funds.

There is one principle that practically everyone knows: A retirement portfolio is likely to last longer if the withdrawal rate is lower. In other words, if the initial withdrawal rate is 4% from a retirement portfolio, the probability is lower that the portfolio will last at least 35 years than if the initial withdrawal rate is 3%.

But there are several other aspects of retirement portfolio survival that may not be quite as obvious.

For example, how much is needed in the portfolio to produce a sufficient level of retirement income? Equally compelling is the issue of retirement portfolio design: How have different portfolio models behaved in the past?

Let's explore those questions and a few more.

#### RETIREMENT ACCOUNT MULTIPLE

The first key principle in the mathematics of retirement portfolios is the retirement account multiple. RAM is the size of the retirement account balance as a multiple of the retiree's final annual salary.

So if the final salary was \$100,000 and the new retiree has a retirement account balance of \$700,000, he has a RAM of 7.

Once the RAM is known, calculating the income replacement ratio is



## ISSUE GUIDE

PAGE 1	<ul style="list-style-type: none"> <li>• Instructor's Tutelage</li> <li>• Doing the math: Help clients plan for 35 years of retirement</li> </ul>
PAGE 2	<ul style="list-style-type: none"> <li>• Doing the math: Help clients plan for 35 years of retirement (cont.)</li> </ul>
PAGE 3	<ul style="list-style-type: none"> <li>• Doing the math: Help clients plan for 35 years of retirement (cont.)</li> <li>• Advisers Urged to Help Aging Clients Plan For "Leisure Boom"</li> </ul>
PAGE 4	<ul style="list-style-type: none"> <li>• Advisers Urged to Help Aging Clients Plan For "Leisure Boom" (cont.)</li> <li>•</li> </ul>

## Doing the math: Help clients plan for 35 years of retirement (cont.)

straightforward:  $\text{RAM} \times \text{withdrawal rate} = \text{income replacement ratio}$ . So let's go back to the retiree who earned \$100,000 in his final year of work and has a retirement account balance of \$700,000, which means his RAM is 7.

Multiplying that RAM by an initial withdrawal rate of 5% produces the following equation:  $7 \times 5 = 35\%$  income replacement. In other words, the retiree withdraws 5% of \$700,000, which is \$35,000; \$35,000 is 35% of his final working salary of \$100,000.

Income replacement as a percentage of final working salary is simply a mathematical relationship between RAM and the withdrawal rate percentage.

Next, let's consider the performance of the retirement portfolio. This is, understandably, a somewhat more complicated process.

Two retirement portfolios will be evaluated for illustrative purposes. The first is a 25% stock/75% fixed-income portfolio. This portfolio consists of 15% large-cap U.S. stocks, 10% small-cap U.S. stocks, 55% U.S. bonds and 20% cash.

### PORTFOLIO SURVIVAL

To measure the performance of these various elements, some common-place indexes were used.

Large-capitalization U.S. stocks were represented by the S&P 500; small-cap U.S. stocks by the Ibbotson Small Stock Index in 1926-1978 and the Russell 2000 Index in 1979-2015; U.S. bonds by the Ibbotson U.S. Intermediate Government Bond Index in 1926-1975 and the Barclays Capital Aggregate Bond Index in 1976-2015; and U.S. cash was represented by 90-day Treasury bills.

The second retirement model was a 65% stock/35% fixed-income portfolio. This consists of 40% large-cap U.S. stocks, 25% small-cap U.S. stocks, 25% U.S. bonds and 10% cash.

In both cases, the portfolios were rebalanced annually.

### 90-YEAR ANALYSIS

The time frame of this retirement portfolio survival analysis was the 90-year period from January 1926 through December 2015. Over this time, there were 56 rolling 35-year periods to analyze.

Success is defined as having the portfolio survive (not run out of money) for at least 35 years, which simulates a retiree from age 65 to 100.

One analysis is based on a retiree who selected about 50% income replacement during retirement. For example, if the retiree has a RAM of 7, he will need to invoke a 7% withdrawal rate to create a 49% income replacement ( $7 \times 7\% = 49\%$  income replacement ratio).

At a 7% withdrawal rate and a 3% annual cost-of-living adjustment, the 25/75 portfolio lasted at least 35 years in just 21% of the 56 rolling 35-year periods between 1926 and 2015. The more growth-oriented 65/35 retirement portfolio model had a historical success rate of 71%.

If, however, the retiree had a RAM of 10, he needed only a 5% withdrawal rate to produce the 50% income replacement ratio. At the lower withdrawal rate of 5%, the 25/75 portfolio had a success rate of 59%, whereas the 65/35 portfolio had a survival success rate of 91%.

### LOWER WITHDRAWAL RATE

Here, we clearly see the relationship between a lower withdrawal rate and enhanced retirement portfolio survival. The luxury of using a lower withdrawal rate is created by having a larger RAM.

The goal of every retiree should be to have a high enough RAM to permit a withdrawal rate of 4% or lower.

Of course, that won't always be possible. Life happens.

Many retirees may have experienced events that impaired their ability to save enough for retirement. Medical situations, divorce, job loss and many other challenging situations can, unfortunately, ravage a retirement account.

### OTHER SCENARIOS

We can also assess other retirement scenarios.

For example, perhaps a retiree wants a 70% income replacement during retirement and has a RAM of 10. We know that this particular scenario will require a 7% withdrawal rate, inasmuch as a RAM of 10 requires a 7% withdrawal rate to produce a 70% income replacement.

A 7% withdrawal rate is associated with a 21% success rate if employing a 25/75 portfolio and a 71% success rate with a 65/35 portfolio, where the success rate is defined as the retirement portfolio lasting at least 35 years.

Alternatively, if this same retiree had a RAM of 14 and wanted a 70% income replacement, he would implement a 5% withdrawal rate ( $70\% \text{ income replacement} \div 14 \text{ RAM} = 5\% \text{ withdrawal rate}$ ).

This is a much more encouraging situation, inasmuch as a 5% withdrawal rate is associated with a much higher success rate for the two retirement portfolio models (59% for the 25/75 model and 91% for the 65/35 model).



## Doing the math: Help clients plan for 35 years of retirement (cont.)

The basic relationships between RAM, withdrawal rate and portfolio success rate that are illustrated in the table can be interpolated to provide guidance for a variety of retirement scenarios.

The retirement income replacement ratios used in this analysis assume that the needed retirement income is coming solely from the investment portfolio. But often this won't be the case for any individual retiree.

Clearly, there will be situations where the retiree will have other retirement income sources. For example, if the retiree is hoping for 75% income replacement during retirement and has 25% coming from other sources, then the investment portfolio has to produce only a 50% income replacement.

This will, naturally, take some pressure off the investment portfolio, which will allow for a slightly lower RAM or a lower withdrawal rate.

Of course, we want to encourage retirees to have a large RAM, because the ultimate goal is to lower the portfolio withdrawal rate as much as possible.

### DIVERSIFICATION

This analysis also illustrates the importance of staying diversified during retirement. Portfolio diversification is a lifelong strategy, not just during the pre-retirement years.

Whether a 65/35 portfolio or a 25/75 portfolio (or some other asset allocation model) is appropriate for a retiree is largely determined by the RAM.

For instance, if a person at the moment of retirement has a RAM of 18 and needs a 50% income replacement from his investment portfolio, the needed withdrawal rate is only 3%. In this case, 25/75 might be the appropriate asset allocation model based on its 100% success rate over the past nine decades.

In short, there is no reason to take on more portfolio risk than is needed during retirement. A large RAM combined with a modest income replacement goal generally leads to a lower required

withdrawal rate, and this, in turn, permits retirees to have a portfolio design that can be a bit more on the conservative side.

The freedom to have a conservative retirement portfolio is, for many, earned by being good savers during their careers. But, as noted previously, many people have been good savers and were then blindsided by unfortunate life events that affected their retirement savings balance.

In the end, we can only try to do our very best in life. And in order to get the best results for clients during their retirement years, it is important that we all know — and then do — the math.



## Advisers Urged to Help Aging Clients Plan For “Leisure Boom”

Financial Planning, By Kenneth Corbin, May 2016

As waves of baby boomers head into retirement, a new report suggests that advisers might start talking more with their clients about how they plan to spend their leisure time — and plan for how they will fund the activities they look forward to after they exit the workforce.

The new survey from Merrill Lynch and research firm Age Wave highlights how, for all the optimism boomers bring to the prospect of retirement, large numbers of Americans haven't thought through how they will spend their time during what Merrill is calling a "leisure boom." Funding Retirement Dreams- Most retirees have not planned or budgeted for their leisure activities according to a Merrill Lynch Age Wave Study.

58% Do not know how much is needed

45% Have not estimated how much is needed

The survey, which polled more than 3,700 Americans above the age of 25, found that 53% of respondents say

that they have "hardly planned at all" for how they will spend their time in retirement.

"The boomers have hit every phase of life like a sledgehammer — they've reinvented it, and it's no surprise they're going to do the same for leisure and retirement," says Andy Seig, head of global wealth and retirement solutions for Bank of America Merrill Lynch. When considering how they will spend their retirement, for instance, many people will look ahead vaguely to travel. This is all well and good, says Lorna Sabbia, head of retirement and personal wealth solutions for Bank of America Merrill Lynch, but of an average retirement, travel might only take up about 100 days.

"What about the other 7,200 days in a 20-year retirement?" Sabbia asks. "Many people could be doing more to think about how to fill their abundant time in retirement."



## Advisers Urged to Help Aging Clients Plan For “Leisure Boom” (cont.)

### THE HEARTLAND INSTITUTE OF FINANCIAL EDUCATION

8301 E Prentice Ave.  
Ste. 312  
Greenwood Village, CO 80111

Phone: (303) 597-0197  
Fax: (303) 369-3900  
Email: [info@hife-usa.org](mailto:info@hife-usa.org)  
[www.hife-usa.org](http://www.hife-usa.org)

The survey calls attention to the role that advisers can play, both in helping clients prepare financially for retirement, and working with them to navigate what Sabbia calls the "significant reorientation" entailed in the transition to retirement when leisure time abounds. In the survey, 58% of respondents say that they don't know how much money they will need to fund leisure activities in retirement, and 40% say that they are concerned they won't have enough. Another 45% of respondents say that a fear of outliving their money will compel

them to limit their spending on leisure activities.

"As more and more people move into retirement, we anticipate that planning for both every-day and those special occasion leisure [activities] will become an increasingly important part of the retirement preparation discussion," Sabbia says. "Many Americans could be doing a better job at planning ahead to fill two decades or more of time in this life stage as well as planning and funding their retirement dreams," she adds. "So having more conversations to help people better prepare for the challenges, surprises, and priorities could help retirees achieve their leisure dreams, and actually have a more fulfilling retirement."

### HIFE Financial Wellness

The Heartland Institute partners with colleges and universities throughout the United States to provide financial education courses to businesses and their employees, organizations and their members, and even civic and community groups who desire this type of purely educational coursework and information. These courses are taught by CFE Certified Financial Educators® who have both instructional and practical business experience. Our team of certified Instructors work with organizations and their employees to outline financial training that best suits the organization and its needs.

The results of these non-solicitous classes have been amazing. Employees and private citizens who would never take the time to attend a course in financial education are joining their colleagues for class at the community center, office or plant after work. As a further incentive, spouses/partners are invited to join the class for no additional cost. Whether your employees need help with retirement planning, cash flow planning, debt management, investment planning or other important areas of financial education, we can help.

For more information, please visit our website at [www.hife-usa.org](http://www.hife-usa.org)



Empowering Organizations and Their People Through Financial Education