The Cost of Retirement in Financial Plans

By Jack Zook

There are many retirement articles written on the accumulation and distribution phases of retirement. Asset allocation, annuities, deferred accounts and the often debated 4 percent lifetime distributions are among the key topics. An essential component of retirement planning is undertaking a thorough analysis and forecast of what expenditures will be in the retirement life of a client. This is essential to estimate the amount of funds required to be available once the client retires.

This article will provide guidance to those financial planners who provide advice on retirement to their clients. It will look at the matrix of retirement costs in terms of categories and duration, and provide a methodology to determine the present value of those expenditures, as well as an example of using that methodology. When done correctly, it will put in place objectives that financial planners must meet to provide the greatest level of assurance to their clients that they will not run out of money in their lifetimes. It may also provide insight as to postponing retirement, if possible, such that their accumulation phase is properly aligned with their future anticipated expenditures.

Factors to Consider

An analysis of some key factors will provide the background necessary to formulate any client's expected expenditures in retirement. The key factors are as follows.

a.) Inflation. Inflation is the hidden danger that is often forgotten given its benign behavior for the past 25 years.

However, inflation could be the one factor that crashes many financial plans unless it is provided for properly.

The effect of inflation on retirees is significant. In fact, for over three decades, the Bureau of Labor Statistics (BLS) has maintained an experimental CPI for the elderly (CPI-E)[1]. The CPI-E from December 1982 through December 2011 exceeded the basic CPI index by about 7 percent. The increased inflation for the elderly results from increased spending on health care and housing – both of which have inflation rates that exceed the overall rate of inflation.

To be conservative, financial plans that are projecting out 30 years should provide for an inflation rate that reflects changing economic conditions over an extended period of time. For the example provided herein, the CPI for the 50-year period 1965-2015 was applied.

b.) Life Expectancy. Life expectancy is the unknown variable that plays havoc with all financial plans. Everyone wants to live a long life, and modern medicine is providing great assistance in doing so. However, longer life spans weigh heavily on financial planning computations.

Based on statistical data provided by the Society of Actuaries, at age 65, a woman has a 45 percent and 23 percent probability of living to age 90 and 95, respectively; a man has a 34 percent and 17 percent probability of living to age 90 and 95, respectively; and if a woman and man are married at age 65, there is a 63 percent and 36 percent chance that one of them will live to age 90 and 95, respectively.

c.) Retirement Age. The average age of retirement in the United States is age 62.[2] However, the average age at which non-retirees *expect* to retire is age 66.

Based on factors in b.) and c.) above, there is an approximate 30-year life span for retirees. This span should be viewed in three 10-year phases: the Go-Go Phase (age 66-75); the Slow-Go Phase (age 76-85); and the No-Go Phase (age 86-95 or above). A client's needs change during each phase; similarly, the costs associated with those needs also change. Therefore, it is essential to look beyond the initial years of retirement (i.e., the Go-Go Phase ((age 66-75)) to properly estimate a client's total retirement expenditures.

Lifestyle in Retirement

As part of the expenditure plan, it is important to ascertain a client's expected lifestyle during retirement. Does the client intend to maintain the same lifestyle as in pre-retirement years? Expenditures for country clubs, new cars, expensive vacations, a second home, etc., are important factors in determining future needs. Additionally, how long does the client expect to continue any of the aforementioned expenses? When, if ever, will the client choose to simplify his/her lifestyle, limiting or eliminating the aforementioned expenses?

Answers to the above questions will assist in developing a forecast of expenditures. A helpful exercise is to ask the client to list categories of all expenditures for the past three years (a software like Quicken would be great for this task). Once the categories are determined, separate them into nondiscretionary, discretionary and unexpected/extraordinary expenses (see below). The client should review the categories and determine whether they will remain in place upon retirement or be replaced with other expenditures. The client should determine whether the level of expenditures is expected to increase, decrease or remain constant, as well as the approximate timing of such changes (i.e., in which years will these changes occur).

Developing these categories of expenditures may be difficult to do as a client does not know what tomorrow may bring, let alone the next 30 years. However, the client will have an appreciation for the categories of expenditures and the amount of expenditures he/she will face in retirement. This exercise is very worthwhile.

Once this forecast is in place, the client should give retirement a trial run well in advance of making the almost irrevocable decision to retire. It is a good idea for a client to test this forecast of expenses for at least three years before retirement. If actual spending data materially differs from what was projected, the client needs to re-evaluate what was established for the next 30 years.

Spending in Retirement by Phase

Financial planners need to assume that their clients will live for 30 years during retirement. This 30-year life expectancy will be broken into three phases: the Go-Go Phase, the Slow-Go Phase and the No-Go Phase.

Go-Go Phase. The Go-Go Phase, encompassing years 66-75, is the most active in terms of travel and entertainment. Still young and mobile enough to enjoy what the world has to offer, the cost of this additional fun would more than replace the cost of going to work, so there is essentially no savings during this phase. Therefore, most debt obligations should be completed before the start of this phase.

There is always the possibility of children and/or grandchildren returning to the nest, particularly during this phase. Financial planners should query whether this is a possibility for their clients, to make sure they have taken this into account when planning. In addition, their clients may need to fund a parent who is ill or needs financial assistance during this phase. Again, financial planners should query whether this is a possibility for their clients, to make sure the expense of caring for a parent has been factored into the plan.

Slow-Go Phase. The Slow-Go phase of retirement, encompassing years 76-85, would likely involve less travel and a more sedentary lifestyle. As such, this phase tends to be the least costly phase of retirement. Members of the Slow-Go Phase may be downsizing a residence, reducing the amount of charitable giving and realizing a lesser need for material items.

No-Go Phase. The No-Go Phase of retirement, encompassing years 86-95 and beyond, will most likely be the most costly for any client. The No-Go Phase poses the

continued on next page

potential for significant medical bills, nursing home expenses and costs of caregivers. Determining an approximate amount of available funds to see a client through this phase is critical to the success of the entire financial plan.

Spending in Retirement by Major Category

Financial planners must identify their clients' spending patterns as they now exist and use this information to project what the next 30 years will bring. Figure 1, the Matrix of Retirement Spending, provides an analysis of the direction (increase/decrease) of various spending categories over time. Within each category exists subsets that should be used to identify the expected costs through the respective phases. Certainly, these categories will present differently for each client. Figure 2 includes an overview of health care costs in retirement. Accompanying Excel worksheets on retirement spending and planning are available on the TSCPA website. To access the worksheets, go to tscpa.org and click on *Today's CPA* magazine.

Nondiscretionary. Nondiscretionary expenses (e.g., housing, utilities, food and clothing) will always be present. The one factor that will change dramatically over time is the housing component. A client may decide to sell the large residence and downsize to a smaller residence or rent in lieu of ownership.

The major nondiscretionary costs are likely to come in the No-Go Phase when decisions have to be made about whether clients can stay in their existing confines or whether they need to make major renovations to their homes for handicap access. Most of these basic costs may be inclusive within the total cost of assisted living facilities, or an independent living complex, as part of a continuing care community. However, circumstances may require extended time in a skilled nursing facility or a memory care facility, as well.

Discretionary. Discretionary expenses (e.g., expenses for travel, vacations, automobiles, entertainment, transportation, charitable contributions and gifts to family) will be present at the different phases of retirement. During the Go-Go Phase, there probably will be a significant amount spent on vacations and family reunions. Otherwise, most expenditures in this phase will be declining. Financial planners need to determine their clients' wishes and desires relative to each component of discretionary expenses. Keep in mind that gift giving and charitable contributions may be modified from current giving to deferred giving via their estates.

Unexpected/Extraordinary. This category is the most difficult to predict. Circumstances that trigger unexpected/extraordinary expenses may include the financial need of a child or grandchild; a family member moving back into a home; the financial support of an aging parent; nursing home costs for clients and/or their spouses; extended assistance for a client or spouse with Alzheimer's, a stroke or a major protracted illness; and out-of-pocket costs for prescription drugs related to any medical condition or illness. It is helpful to consider health care costs and life insurance costs when analyzing this category of expenditures.

The cost of health care is a critical component of all three phases. Health insurance usually consists of Medicare Part B and prescription drug coverage premiums, which are determined by reference to a client's modified adjusted gross income from income tax returns two years prior and a Medicare supplemental insurance policy.[3] These costs can be significant and most likely will always be increasing in retirement. Potential co-pays and deductibles must be considered, the costs of which will be the client's responsibility. A careful examination of the policies will be invaluable in assisting a client's insurance selection.

To illustrate, it is estimated that a client at age 65, with an average life span of 20 years, would incur health care costs of about $146,400 over that period, which amount includes health care costs not covered by the federal government (i.e., Medicare).[4] If the client's life expectancy at age 65 is increased to 25 years (or age 90), then the costs are estimated to be $220,600. These estimated costs do not include any expenditures for long-term care that some retirees may incur. Retirees suffering from certain chronic conditions (e.g., cancer, circulatory conditions, etc.) may end up with health care costs not covered by Medicare that may exceed $300,000.

Life Insurance – The cost and number of life insurance premiums to be paid will depend on the type of insurance issued, either term or whole life and the term of the policy. For whole life policies, the premiums should remain constant or end if that is a provision of the policy. On the other hand, term insurance premiums will continue to increase with age and the policy coverage may end with the attainment of a specific age.

Methodology

Financial planners need to develop a detailed projection of expenditures for the next 30 years. While this may sound staggering to do, with the following suggested methodology, anyone should be able to properly advise clients on financial planning.

a.) Determine Net Disposable Income. A client's net disposable income prior to retirement must be determined. This can be done by calculating the post tax and retirement savings funds that are available based on their final year(s) of earned income. Keep in mind a client's lifestyle will probably not change immediately for most expenditures other than travel, which will increase during the Go-Go Phase.

b.) Categorize Expenditures. Obtain a breakdown by category of the client's annual expenditures at the time of retirement and determine if there are any expected major changes going forward. Estimate the length of time the client will incur each category of expenditures and when the expenditures will increase, decrease or be eliminated (e.g., life insurance premiums may only last 10 years, while health insurance premiums will last a lifetime). Consider major changes, such as downsizing a residence or moving into a continuing care community. This

Figure 1. Matrix of Retirement Spending

	Go-Go Phase	*Slow-Go Phase*	*No-Go Phase*	*Notes*	*Summation*
NONDISCRETIONARY					
Housing and Utilities	Possibly mortgage payments; real estate taxes, maintenance (interior and exterior); insurance. **INCREASING COSTS**	Disposition of primary home; possible downsizing or move to adult community or continuing care retirement community. **DECREASING** or **CONSTANT COSTS.**	Final move into assisted living facilities or nursing home. **INCREASING COSTS THAT MAY BE EXTRAORDINARY.**	Downsizing in the Go-Go or Slow-Go, but may require modification to existing home for health issues. Final move to a continuing care retirement community, an assisted living facility, or a nursing home in the No-Go Phase.	CHANGING COSTS IN THE Go-Go and Slow-Go Phases, THEN **INCREASING** IN THE No-Go Phase.
Food, Clothing & Personal Expenditures	**INCREASING COSTS** for food; clothing and personal expenditures should remain constant or **decrease**.	**INCREASING COSTS** for food; clothing and personal expenditures should remain constant or **decrease**.	**INCREASING COSTS** for food unless they are included in costs of assisted living or nursing facilities.	No-Go Phase may require additional costs for personal expenditures and special clothing for medical reasons.	Mixed costs with some **INCREASING** and some **DECLINING**.
DISCRETIONARY					
Travel, vacations, auto, transportaion, charitable contributions, gifts to family	**INCREASING COSTS** in the Go-Go Phase with travel plans and entertainment being a major expenditure.	**DECLINING COSTS** as lifestyle and travel become more restricted.	Dependent on family circumstances and wherewithal to make gifts.	Transportation costs may be supplemented by continuing care retirement community, but usually a distance limitation. Spending on grandchildren and large family milestone vacations may increase spending.	**DECLINING**
"UNEXPECTED/ EXTRAORDINARY"					
Health Care Costs	**INCREASING**	**INCREASING**	**INCREASING** with the most significant costs occur in the No-Go Phase.	BIGGEST ISSUE ON THE BOARD.	**INCREASING**
Life Insurance	Life insurance premiums may continue. Constant if whole life, increasing if term.	Life insurance premiums may continue. Constant if whole life and term will end.	Life insurance premiums may end.	Viatical settlement utilization.	**MAY INCREASE OR REMAIN CONSTANT UNTIL THE No-Go Phase.**

analysis should be done with each category of expenditures.

c.) Establish a CPI. Establish a cost of living factor (CPI) to be used. Determine different CPI rates for different types of expenditures (e.g., medical costs will probably increase at a greater rate than the normal CPI). Project these expenses forward for a 30-year period. Once the amount and period of duration for these expenditures is established, apply the CPI factor to each category. This will result in inflation-adjusted expenses for the client projected out for the next 30 years.

d.) Determine Fixed Income Stream(s). Determine any fixed income stream of payments that a client expects to receive upon retirement (e.g., Social Security, defined benefit plans, annuities, etc.). Then, apply the inflation factor to that stream for the next 30 years or the time frame of the fixed payment (i.e., a period certain annuity).

e.) Net Inflation-Adjusted Stream of Expenditures. Subtract the inflation-adjusted stream of income in section d.) above from the inflation-adjusted stream of expenditures in section c.) above to determine the net inflation-adjusted expenditures for the 30-year period.

f.) Present Value. Once the net inflation-adjusted expenditures in section e.) above has been determined, discount them back to the expected retirement date. The discount rate to be used will depend on the estimated rate of return on a client's investments. If a client has an estimated 6 percent IRR, then use this as the discount rate. (In essence, it is the client's

continued on next page

Figure 2. Health Care Costs in Retirement for Single Retiree, 2013

Current age		65		Cash flow	-
Life expectancy		85		—PV	-
Discount rate		0.00%			
Trend rates:					
Year 1	3.1%	Year 6	5.3%		
Year 2	3.4%	Year 7	5.0%		
Year 3	2.9%	Year 8	5.2%		
Year 4	6.4%	Year 9	5.5%		
Year 5	4.7%	Year 10	5.8%		
		Year 11+	5.7%		
Starting costs:					
Pre-65 total	4,838		Post-65		
			Medical		2,033
			Part B premium		1,259
			Drugs		741
			Part C premium		371
			Total post-65		4,404
Retirement Age	Life Expectancy				
-	75	80	85	90	95
55	$206,200	$276,300	$372,400	$501,500	$672,500
60	123,400	176,500	249,300	347,200	476,800
65	50,900	91,200	146,400	220,600	318,800
70	23,000	53,700	95,500	151,800	226,200

opportunity cost.) This will determine the amount of funds a client will need at retirement to meet future expenditures.

Example

The following example applies the above methodology to various assumptions. The assumptions contained herein were designed to provide a conservative approach, as the goal is not to outlive your retirement funds. Naturally, assumptions may vary depending on individual circumstances.

a.) Net Disposable Income Determined. Assume a married couple at 66 years of age (full retirement age for Social Security) with a final year gross compensation of $150,000. Their *disposable income* (i.e., post federal income tax, Social Security tax and retirement savings) is $112,795 in their final year of employment prior to retirement. No state tax was deducted, based on the assumption the couple resides in Texas.

b.) Expenditures Categorized. The assumption is that the spending allocation of their *disposable income* will be in line with the spending allocation for 65-year-olds based on the BLS 2013 data[5]. For instance, housing and utilities represent 25.9 percent of disposable income for a 65-year-old individual, while food represents 12.5 percent.

Each category of expenditures was evaluated for duration, increases, decreases, changes in lifestyle and location of living. Spending for housing and most other nondiscretionary expenditures decreased by 30 percent in the Slow-Go Phase. Most spending decreased by 30 percent at age 75, as evidenced by the BLS 2013 data. For the housing category, it was assumed downsizing in 10 years to 70 percent of what current costs would be then.

For the Go-Go Phase, it is assumed the retired couple will spend between $10,000 to $20,000 per year for the next nine years on travel, vacations and family reunions. Those expenditures then decline in the Slow-Go Phase to a range of $5,000 to $7,500 per year. There are no expenditures for travel or entertainment in the No-Go Phase.

The most significant changes were expected to occur in the No-Go Phase. It was assumed that one spouse would need assisted care at various stages beginning at age 85 (year 2035). Current costs were obtained for adult day care for two years ($18,200 per year), a home health aide for the next two years ($41,610 per year), assisted living for three years ($47,688 per year)[6] and ultimately a nursing home for the final three years ($78,475 per year)[7]. The current costs for this assistance and these facilities for the state of Texas at Austin for 2013 were based on data from John Hancock Insurance.[8]

c.) CPI Applied. Once the amounts and duration of the expenditures were completed, apply a CPI of 4.2 percent[9] for all expenditures except medical insurance and out of pocket medical costs, adult day care, home health aides, assisted living and nursing homes, where a 7.5 percent CPI is applied.[10] The result was an inflation-adjusted stream of yearly expenditures for the next 30 years.

d.) Fixed Income Stream Determined. It was assumed that the couple had only one future stream of fixed income, Social Security, for which they would begin at age 66 (full retirement age) with one spouse receiving the maximum per year of $31,956 and the other receiving a spousal benefit of 50 percent of $15,978, total of $47,934.[11] This could be adjusted for payments from a defined benefit plan, an annuity, or any other fixed stream of payments that would be available. This future stream of income was adjusted for inflation at 4.2 percent for the next 30 years.

e.) Net Inflation-Adjusted Expenditures Determined. The amount of inflation-adjusted future stream of income in section d.) above was then subtracted from the inflation-adjusted future stream of expenditures in section c.) above. This provides a net future stream of expenditures that would have to be paid for from other funds.

f.) Present Value Applied. Using a discount rate of 6.7 percent[12], the net future stream of expenditures was discounted to today's dollars and arrived at an amount of $1,488,768. This number represents the amount of funds that the couple would need to have at retirement to meet the future cost of retirement under the assumptions that have been set forth.

With data in place, financial planners are able to determine possible scenarios and adjust their assumptions accordingly.

Options to Consider

The above example omits the option for either a long-term care insurance policy or annuities, or both. These options would assist in reducing the future impact of retirement expenditures by providing some form of income. These alternative funding sources should be considered well in advance of retirement.

Long-term care insurance is a hedge against the potentially significant costs of various stages of assisted care as seen in the above example. These policies are expensive and the premium costs are continuing to increase. The overall costs of long-term care insurance coverage increased by 8.6 percent over the past year according to the 2015 Long-Term Care Insurance Price Index.[13] These insurance products are complicated and contain many alternatives that need to be examined prior to committing any money. There is also concern in the long-term care industry that more companies are withdrawing from the marketplace due to higher than expected costs and lower returns on investments. In addition, underwriting standards are being tightened for new buyers.[14]

Annuities, while fee-loaded and expensive, are a means by which clients can obtain some degree of guaranteed income. They are complicated contracts with many alternative components that may produce thousands of different types of products that need to be evaluated prior to investing.[15]

A Thorough Analysis

Following the above methodology, financial planners should be able to determine the estimated present value of the amount of funds needed to be acquired during the accumulation phase. The result of this analysis may be: the need to maintain active income for a longer period of time (i.e., push back the retirement age); to realign the future savings stream; adjust the portfolio strategy; rethink lifestyle in retirement; or any combination thereof.

The need for financial planners to provide their clients with assurance that they will not run out of money in their lifetimes is predicated on the ability to appropriately project future expenditures over several decades. While it is impossible to predict all future expenditures in retirement, a sound and thorough analysis should maximize the ability of your clients to succeed in not outliving their money. ■

Jack Zook is a retired assistant professor of accounting at La Salle University (Philadelphia, Pennsylvania) and managing director, Zook Dinon PA, Certified Public Accountants, Moorestown, New Jersey.

Footnotes

1. See United States Department of Labor, Bureau of Labor Statistics, "Focus on Prices and Spending, Consumer Price Index: Fourth Quarter 2011," Feb. 2012, Vol. 2, No. 15, pp. 1-3. See also "The Experimental Consumer Price Index for Elderly Americans (CPI-E): 1982-2007," *Monthly Labor Review,* April 2008, pp. 19-20. (Providing the BLS cautions users of the CPI-E that there are methodological limitations of the index due to a number of factors.) at www.forbes.com/sites/howardgleckman/2013/08/08/more-bad-news-for-long-term-care-insurance-a-major-carrier-reassess-the-business-amidst-more-rate-hikes, (August 2013).
2. Gallup Economy and Personal Finance Survey, *Average U.S. Retirement Age Rises to 62,* April 28, 2014.
3. United States Social Security Administration, *Medicare Premiums: Rules for Higher Income Beneficiaries,* available at www.ssa.gov, (last accessed April 2015).
4. Dale H. Yamamoto, *Healthcare Costs – From Birth to Death,* Part of the Health Care Cost Institute's Independent Report Series, Report 2013-1, Sponsored by the Society of Actuaries (June 2013).
5. United States Department of Labor, Bureau of Labor Statistics, "Data, Tables and Calculators by Subject," available at www.bls.gov, (last accessed April 2015).
6. Public Policy Institute, *Assisted Living in the United States: Fact Sheet,* October 2004, at p. 1 (assuming the average length of stay in an assisted living facility is three years).
7. National Care Planning Council, *Guide to Long Term Care Planning: About Nursing Homes,* available at www.longtermcarelink.net, (last accessed March 2015) (assuming a stay of three years in a nursing home while the average length of stay is 835 days).
8. John Hancock, Long Term Care Insurance, available at www.johnhancockinsurance.com/long-term-care, (last accessed March 2016).
9. Bureau of Labor Statistics, Consumer Price Index: All Urban Consumers, All Items, available at www.bls.gov, (last accessed March 2016).
10. Bureau of Labor Statistics, Consumer Price Index: All Urban Consumers, Medical Care, available at www.bls.gov, (last accessed March 2016).
11. United States Social Security Administration, Estimated Benefits, available at www.ssa.gov, (last accessed April 2015).
12. NYU Stern School of Business, "Historical Returns: Stocks, T-Bonds, & T. Bills," available at www.stern.nyu.edu/-adamodar/New_Home_Page/data.html, (last updated Jan.15, 2015) (assuming an allocation of 35 percent equities; 55 percent bonds and 10 percent cash for the discount rate applied).
13. American Association for Long Term Care Insurance, *Average Costs for Long Term Care Insurance Rise 8.6 Percent*, available at www.aaltci.org/news/long-term-care-insurance-association-news/average-costs-for-long-term-care-insurance-rise-8-6-percent (January 2015).
14. *Forbes*, "More Bad News for Long Term Care Insurance: A Major Carrier Reassess The Business Amidst More Rate Hikes," available at www.forbes.com/sites/howardgleckman/2013/08/08/more-bad-news-for-long-term-care-insurance-a-major-carrier-reassess-the-business-amidst-more-rate-hikes, (August 2013).
15. PICPA, "Annuities Offer Retirees Money Like Clockwork," available at www.picpa.org/content/45615.aspx, (Winter 2013).