Creating a Reality-Based Financial Decision-Making Model For Older Americans

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Abstract

Even sophisticated financial decision-making models for retirees usually rely on constructs that bear little relationship to the circumstances of real people. A truly useful model would have characteristics very difffent from most existing models.

Where We Went Wrong (Historically)

Before 2000, the financial industry paid little attention to retiring and retired individuals. Within the sphere of retirement planning, almost all efforts targeted the accumulation phase. At the time this seemed sensible, because baby boomers were entering their peak earning and saving years. Yet even back in the early 1990s, roughly a million and a half people retired every year, most of them clueless about the risks and the decisions they faced.

Their advisers were almost equally ill informed. Some products and services were available for older consumers, of course, even 20 years ago: annuities, investment products, IRA rollovers, long-term care insurance, Medigap coverage, and estate planning for the well-heeled. "Systematic withdrawal" programs existed, though these tended just to follow the IRS rules for "substantially equal periodic payments." Two huge holes existed, however, a marketing focus on the older population, and any kind of model to help them make financial decisions.

There were scattered, abortive attempts to embrace this market. The first appears to have been an effort at Minnesota Mutual Life in the late 1980s to establish a marketing program for the older demographic, but it never got fully launched. In the early 1990s, New England Mutual also began to explore this opportunity, but its efforts made even less headway.[1]

As the millennium neared, however, and the leading edge of the baby boom generation approached its mid-50s, interest in older clients morphed from a sporadic to a strategic concern. We started to worry about what would happen when the "Me Generation" retired in force and realized it had ready access to the 401(k) and other savings it had accumulated.

Some of the major consulting firms (notably Ernst & Young, and Deloitte Touche) seized the opportunity created by this concern, with investment service and data providers (Morningstar, Ibbotson) soon hopping aboard as well. This was a win-win opportunity. If sophisticated models showed retirees could safely take only modest withdrawals from their savings to remain solvent in the face of investment and mortality risks, then two good things happened: (1) consultants could sell their models, and (2) financial companies could successfully make the case for consumers preserving their assets and, more importantly, for relying on the financial companies to help them do so.

Since the primary motivation was asset retention by financial firms, and the analytical tools were being developed by investment specialists, it was inevitable that these tools would be investment models. And since stochastic models able to handle individual investment risk already existed, it was a reasonably easy step to add mortality risk. Throughout most of the previous decade, and for the most part still today, such models were affirming and reaffirming a 4-percent withdrawal rate (or something close to it), and were being heavily marketed to and by the big financial companies.

The problem of managing one's finances in retirement had thus been effectively redefined as an investment management problem. But it had not thereby been "solved"—and not just because this viewpoint is too narrow, but because we developed it in the wrong way.

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[1] However, New England Mutual (now part of MetLife) did make one piece of history. Its *Guide to the Personal Retirement Market, 1991-1992* appears to be the first published recognition of the problem of making regular withdrawals from volatile investment funds—an issue it labeled "reverse dollar cost averaging."

Where We Went Wrong (Conceptually)

Unfortunately, most of the early thinking—and therefore the thinking that underlies most existing retirement models—was based on ideas about *saving* for retirement. We assumed that since we had been dealing with retirement (saving) for decades, we were experts in retirement. The missing premise in this syllogism is that the retirement phase is essentially the same as the accumulation phase—and this premise is false.

In *saving* for retirement, there are only three elements that have a significant impact: having a reasonable target, setting aside enough money on a regular basis, and getting a good net rate of return.

Of these three, the target itself is the least important. Despite the popularity of the question: "What's your retirement number?" the answer is both impossible to determine and, for the most part, irrelevant to the process. "The number" is impossible to determine, because the future is too unpredictable, and because people can live happily on widely varying amounts of money. During the accumulation phase, the true purpose of identifying a target is not to pinpoint the *right* amount a client needs to accumulate, but the amount that is *optimally motivating*. If the target is too high, clients despair and see no point in trying. If the target is too low, clients save, but do not benefit as much as they could.

So success in the accumulation phase boils down finally to only two critical elements: savings rate and rate of return—the two areas where financial companies have, in fact, invested most of their efforts, in the one case through marketing, and in the other through competitive portfolio management.

But this has created the mistaken impression that, when people actually do retire, accumulation simply becomes "decumulation," that we can just put a minus sign in front of the savings rate, and posit (or assume) that *withdrawal* rate and investment performance are now the two critical elements. The reality is that the financial needs of retirees are much broader than that, and investment return is no longer an overridingly critical variable, while withdrawal rate is a highly inappropriate concept that should simply be abandoned.

Before further pursuing this line of thought, let me clarify. For people who are wealthy enough to not have to worry about running out of money, investment strategy indeed remains paramount, and much of this paper is inapplicable. But the wealthy do not need to be concerned about "retirement income planning." Meanwhile, for the great majority of people who *do* risk running short of financial resources, we need an entirely different approach.

Let me propose that instead of thinking about how we can modify old methods to work for retirees, let's start instead with what retirees need in the way of financial decision making, and then determine how to supply it.

The Society of Actuaries has published a list of financial risks, which is quite admirably comprehensive.[2] Still, many retirement experts are stuck on the idea that appropriate solutions have to do mainly with investment strategy and asset management. Surely, it is true that with enough money, most problems can be coped with. But it is not true that normal retirees can solve their problems by constructing a sweeter portfolio.

Although we know that, over the long run, more aggressive investment tends to result in better returns, we also know that this is merely a statistical reality. If retirees could feel confident that they would gain substantially by taking more risk, they would be wise to do so. But in fact, the more risk they take, the more they increase the likelihood of dying wealthy, which is rarely a priority for them, or of going broke, which they dearly want to avoid. So, aggressive investment is not a suitable choice.

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[2] *Managing Post-Retirement Risks: A Guide to Retirement Planning*, October 2008 (available at: http://www.soa.org/research/files/pdf/post-retirement-charts.pdf)

If you like fancier reasons why it is not suitable, consider this: investment risk is adversely priced for retirees, so they would be irrational to "buy" it. It is adversely priced, because the risk-return trade-off is not the same for retirees as it is for institutional, wealthy, or younger investors. The risks are greater and the rewards are smaller. The risks are greater, because if retirees lose the gamble, they usually have no good options for recovery; time is working against them, not for them. The rewards are smaller, because in a scenario of withdrawals rather than deposits, the effect of compounding is reduced, so even when markets rise, retirees benefit less from it. So they lose, relative to other investors, either way, and only a risk level near zero is a "good buy" and a rational purchase for them.

Unfortunately, the more retirees reach for higher returns, the more control they *lose* over what their return will actually be. And interestingly, retirees themselves seem to grasp this instinctively, while many financial professionals look for reasons to deny it. Retirees intuit that they cannot solve the problem of having too much risk by taking on still more risk, and cannot *reliably* make up for deficits by somehow dialing in a higher return. And even if they could, such a strategy would take them only so far, since they have modest portfolios to begin with.

Hence our conclusion is that investment strategy, though still relevant in retirement, should rarely be the dominant focus.

But neither should the "withdrawal rate," because in a serious retirement plan, such a thing should rarely even be discussed.

Why? Because almost no one will need to make level (or smoothly increasing) withdrawals over the entirety of his or her retirement. Mortgages eventually get paid off, expenses in different categories change over time (some increasing faster than others, some eventually decreasing or even disappearing), inheritances or insurance death benefits are received, medical costs spike, funding for grandchildren's education begins and ends, pension and Social Security benefits change at a spouse's death, people trade down (or up) to other residences, income tax rates change, and so on.

Some of these changes are highly predictable, and while some can be estimated reasonably well, others are contingent. But pretending they don't exist is financial malpractice (not legally, of course, not yet, but don't assume the legal case could not be made). Why? Because assuming a smooth pattern of lifetime withdrawals almost always overstates or understates *significantly* the appropriate short-term withdrawal amount. Overstatement encourages clients to spend too much, and therefore risk running out of money later on. Understatement instructs clients to cramp their lifestyle during the years they are healthiest and best able to enjoy the leisure they have earned. Either result is a substantial disservice.

So if planning during retirement, and when retirement is imminent, is not primarily about investment management or about withdrawal rates, what is it about? In a single phrase, it's about cash flow. Or to express it another way, it's about *everything* that affects money.

There are five characteristics that we ought to, and can, introduce into retirement models that will reflect this perspective and thereby improve results by orders of magnitude.

Characteristic #1: Financially Comprehensive

If the object is to avoid running out of financial resources before you die (and financial legacies are provided for), then everything that affects that outcome is relevant—not just *investment* income but *all* income. And not just income, but also assets, debts, expenses, insurance coverages, government and employee benefits, family structure, and future financial goals and intentions.

Furthermore, every decision that affects any of those areas in any significant way is relevant. Of course, some matter more than others and this will differ from one situation to the next. Still, the main criteria for determining which issues are important in a retirement plan are simply: the magnitude of the impact and the degree of control the client has. And if we want to generalize the list, which is helpful for model building, we should also consider the prevalence of each item in the retiree population.

For households at risk of running out of funds, Table 1 shows a prioritized list of the main items—certainly open to amendment, but useful, I believe, in its general contours.

TABLE1
Top 16 Financial Issues for Nonwealthy Retirees and Near-Retirees, in Priority Order

	Impact	Control	Prevalence
Overall standard of living (expense management)	Very High	Very High	Universal
Moving to another residence	Very High	High	Very High
When to retire (or whether to go back to work)	High	High	Very High
Order in which assets are liquidated	Moderate	High	High
Planning for future mental incapacity	Modest	High	Very High
Planning for long-term care needs	High	Moderate	High
Annuitization	Moderate	High	High
Investment allocation / rate of return	Moderate	Moderate	High
Medical insurance options	Moderate	Moderate	High
Need for (or disposition of) life insurance policies	Moderate	High	Moderate
Debt management	Moderate	Moderate	Moderate
Optimal time to apply for Social Security benefits	Moderate	Moderate	High
Optimal retirement option to take from a DB plan	Moderate	Moderate	Moderate
Providing for dependent parents, children, siblings	High	Moderate	Modest
IRA rollovers and Roth conversions	Modest	Moderate	Moderate
Trusts and estates	Moderate	Moderate	Rare

If the list in Table 1, or something like it, reflects what most retirees need to deal with in their financial planning, then it is clear that most existing models are not even really trying to be much help in the areas where help is most needed.

It is further apparent that for a retirement model to be truly helpful, it needs to approach retirement in a comprehensive fashion; not focusing exclusively or mainly on investment decisions, or on other individual decisions, but focusing on the broad range of serious and complex real-life issues retirees and near-retirees face.

In addition, retirement models need to be comprehensive in their data collection and analysis in order to answer even one of these questions, in many cases. For instance, how does one evaluate one's current level of household expenses, or one's need to continue or resume working, without a very thorough analysis of the household financial situation—not only today, but under future expected and adverse scenarios?

Current models, with few exceptions, do not ask and answer the right questions, and do not even perform well with the questions they do try to answer. A much more comprehensive approach is needed.

Characteristic #2: Detailed

Most "retirement income models" require just a few inputs. This suits the busy financial professional and the impatient individual consumer. Since the models that compute withdrawal rates are producing mostly harmful results, as explained above, they should at least be easy to use.

But a truly beneficial model, one that addresses client concerns in a comprehensive fashion, will necessarily be more detailed. Ranging more broadly does not help, however, and actually makes things worse, if we do not go deeper at the same time.

For example, many existing retirement models don't even ask whether the client is single or married. A good model, however, certainly needs this information. What happens with pension benefits, Social Security benefits, life insurance, changes in expenses over time and at the first death, and the availability of "free" support if one (or two) needs long-term care, are only a few of the more obvious ways in which the presence of a spouse matters financially.

But we need to know more: what is the age of each spouse, and are there health issues that will affect mortality and morbidity? Are the two people legally married, or not (taxes and government benefits will be affected)? Are they both citizens (Medicare eligibility may hinge on this)?

And what about other people in the household: children or grandchildren who are temporarily getting support for tuition or other financial needs? Special-needs children or siblings who are permanent dependents? Parents or other elders who may be receiving or giving financial assistance, or who may be leaving inheritances? Ex-spouses receiving alimony or child support? Friends or relatives who are sharing living quarters and expenses?

In different households, such relationships can have no, minor, or enormous financial impact, and affect (or fail to affect) many of the decisions retirees and near-retirees face. But if a model does not even ask about such details, it cannot determine what the effects are. And if it can't do that, it should keep silent on any issues that might be seriously affected. But then, what would be left?

Similar breakdowns could be provided for all the other information that should go into a good model, but presumably the point is made: reality is messy, and an adequate model needs to reflect this.

In turn, this means that the model needs to know how to use the detailed information it collects. From the model builder's point of view, that is the hard part:

- Analysis of financial elements needs to be sufficiently *granular* to make use of important details. For example, some models ignore household expenses entirely, while others are content to lump them into two categories: necessary and discretionary.[3] The better models divide expenses into more categories, perhaps two dozen or so, which enables different patterns of future increases and decreases to be applied to each. (Mortgages and other loans, meanwhile, should reflect the actual amortization schedules, since this is such a big item, even in many retiree households.)

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[3] Division between "necessary" and "discretionary" expenses is largely wasted effort, because almost all expense categories are partly necessary and partly discretionary. For example, housing is a necessary expense, yet the amount of the housing expense could usually be reduced; so the *existence* of a housing expense is necessary, but the *amount* is discretionary. At the opposite end, gifts are highly discretionary, but few people would be willing to eliminate them completely. So in reality, there is little difference between housing and gifts in this regard. In fact, people who have to make major expense reductions often choose to move someplace cheaper before seriously cutting back on gifts to people they care about, because moving has a bigger impact, and they don't feel right making their grandchildren or other people suffer for (nor do they want to advertise) their own misfortune. The question that these models are really trying to explore is: How little could you reasonably tolerate living on, if you had to? But dividing expenses into "necessary" and "discretionary" columns doesn't answer that question.

Expenses could be dealt with in even a more sophisticated fashion if they were specific *per person* in the household. Then when children or grandchildren moved out, their expenses could be made to disappear, as could expenses related to elders, when they are assumed to die. Likewise, spouses can have very different spending patterns, and the death of a spendthrift or sickly spouse will have a different impact than the death of one who was frugal and who did not have chronic illness.

How far should a model go with this depth of detail—not only with expenses, but also with all aspects of the financial analysis? Here science gives way to art. But the relevant distinction is this: *at what point does it become likely that few, if any, households would need to make different decisions, if a certain detail were known?* Surely by that point, we can stop asking. But how long before that point? It depends on what proportion of clients we are willing to give bad advice to.

- Known, likely, and potential *future* changes must be taken into account, both singular events and gradual trends. To resume our example with expenses: we not only need to know what current expenses exist, but whether any of them are temporary, and if so, when they will end, and whether that will be gradual or all at once. We need to know what new expenses are anticipated: whether one-time expenses (a world tour), periodic expenses (an annual trip to visit the grandchildren), or both (buying a boat and keeping it going).

  More broadly, some changes are in the client's control, some are not. In either category, some can be predicted with reasonable certainty, others can be estimated, and still others are highly unpredictable in their timing, their amount, their duration, and/or whether they will even occur at all. The more detailed data the model collects, the more it can sort future events into these categories and deal with them appropriately.

- The *interactions* among all of these elements must be accurately calculated. Weak models assume that income and expenses are static or simply experience uniform inflationary increases. Smarter models can break income and expenses into more detail and project that Social Security will increase with inflation but a defined benefit pension probably will not, or that different kinds of expense will inflate at different rates. An even smarter model will know which income and expense items attach to each person in the household, and will have enough personal data to estimate life expectancies for each. Then it can process different longevity scenarios where different spouses (or other financially relevant people) die at different times, and it can project the income and expense implications of these events—including survivor benefits on pensions; annuities and Social Security; life insurance death benefits; inheritances; end-of-life medical costs and funeral costs; and elimination of future ongoing expenses tied to the decedent.

  Again, this is just an example. Another example that any model worth its salt needs to cover is the sale of a house, whether planned or forced by financial need. We need to know what the house is expected to be worth at that time, what the outstanding balance on any mortgages will be, how household expenses (or rental income) will change, and what the capital gains tax is likely to be.

Again, in principle, one can overdo this kind of intricate analysis. But today, there is little enough risk of that. Instead, there are few models that deal with such issues at all. Yet when projecting the future solvency of a family whose biggest asset is the home, and most of whose income is tied to benefits that will change at the first death (but differently, depending on who goes first), aren't we taking big risks with other people's welfare using models unable to reflect these factors?

Characteristic #3: Incorporating Scenario Testing

Scenario testing is the best of several alternatives.

The worst alternative, and the most common one in the 1990s and before, was to work from *average* assumptions. Today, everyone understands that this is wrong and dangerous.

The next-worst alternative is Monte Carlo or other stochastic modeling.[4] This is not the place for a detailed analysis of what's wrong with this approach, but to put it simply: Monte Carlo models are a black box that hides everything except the final result, a result which is unreliable. These models do a disservice by hiding the details, because the client cannot see how and why specific scenarios succeed or fail, or even whether these are scenarios he or she is concerned about. They also do a disservice in presenting the statistical analysis of the results, because they are incapable of correctly calculating the odds of success and failure. They could do so if they took into account all of the risks, and could accurately estimate how these risks would manifest themselves in the future. But in reality, these models currently ignore most risks entirely, and deal in a faulty fashion with the risks they do include.

The faultiness is unavoidable, because none of the risks that retirees face can be measured precisely, and most of them have no reliable measurements at all. Mortality risks are the best understood, but applying this understanding to individuals requires a medical exam and a professional underwriter, and even then it makes assumptions about future changes in mortality rates that themselves are risky in a way that is not readily measurable. Investment risk is based, by comparison, on a relative handful of data points; and the use of historical market data ignores that we really have no way to measure the relative probability of a robust versus languishing long-term future economy. Morbidity risk is measurable, but much more weakly than mortality risk. Worst of all, the risk of high inflation, the risk of Social Security underfunding, and many other legitimate financial risks, are known to exist but are simply not measurable. *So the overall risk of someone running out of funds before death cannot be measured or even reliably approximated, no matter how comprehensive the model.* And if a Monte Carlo model can't do that, it cannot do the one thing that would make it special.

A significantly better and simpler method for dealing with risks is to use a static model and adverse assumptions, which is what sensible people have been doing for decades. If the model is sufficiently robust, one can plug in an extra-long lifespan, an underperforming rate of investment return, a high inflation rate, higher income tax rates, future reductions in pension or Social Security benefits, higher than normal medical and/or long-term care expenses, and other adverse circumstances. These can be made as dire as one desires, and can be balanced in a way that reflects the actual concerns of the client. Also, multiple runs can be performed, showing the impact of different circumstances, which is important because, in some cases, even apparently adverse conditions can prove beneficial.[5] If the output from the model includes projections of income, expenses and assets by category, then the client can see specifically where he or she is vulnerable. Unlike stochastic modeling, this provides real insight into the financial dynamics of a particular household.

This is why an even more robust scenario-testing model is desirable. Rather than requiring the software user to fiddle with the inputs and somehow evaluate the results, the method being proposed here would automatically test the clients' situations against a variety of adverse conditions and summarize the results for them—preferably in a way they can readily, intuitively understand.

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4 I am not against Monte Carlo modeling in general. I built my own first Monte Carlo model 30 years ago, and, in retrospect, it was successful. But retirement models are an inferior application for this technique. For a more detailed explanation of why, see "Piercing the Monte Carlo Mystique in Retirement Income Planning" at http://www.stillriverretire.com/Downloads/Piercing_the_Monte_Carlo_Mystique.pdf.

5 An extra long lifespan, for example, is financially beneficial for people who spend less than they take in. A high inflation rate can benefit someone whose income is CPI-adjusted because many expenses in one's elder years tend to level off, decrease, or even disappear altogether, and the individual cost of living increases more slowly than the CPI.

A model could combine this kind of scenario-testing with stochastic processing, and if stochastic methods truly could determine the real-life probability of success, then this might be a useful strategy. But since they can't, it would do little more than add a layer of obfuscation to a set of results that is already difficult enough to deal with.[6]

Characteristic #4: Offering Specific, Integrated Advice

Let us make explicit a point implied in our discussion of a "comprehensive" model: a retirement model ought to analyze and present recommendations on *all* the key financial decisions that people make concerning their retirement. That is, it should address all 16 of the issues outlined in Table 1, and perhaps a few more.[7]

The reason it needs to address all of them is that they are interrelated. With only a few exceptions, decisions about each of these financial issues affect, and are affected by, other items on the list.

This concept is, disappointingly, something of a novelty. In favoring simplistic models, both developers and users have usually chosen to address every personal financial decision as if only that one decision were being made. But because financial decisions impinge on one another, the refusal to attack them in concert means that critical considerations are being overlooked. In turn, this means that most models routinely give out bad advice.

The need to build models that integrate multiple decisions is especially important for people approaching retirement, for two reasons. First, retirement is a time when multiple decisions are often being made, with many of them being difficult, new to the people making them, and clearly interrelated—with some of them being irrevocable. Second, since retirees often have few or no good options for recovery if time reveals them to have made poor decisions, getting it right the first time carries extra importance.

Let's consider an example: is it smart to convert traditional tax-deferred accounts to Roth accounts? As is widely known, the determining factor in this decision is usually whether you will be in a higher or lower tax bracket when you withdraw the money than you are when you make the conversion. So the decision is essentially a guess about future marginal tax rates. Part of the guess relates to future decisions of Congress (and individual state legislatures), so it is really quite hard to predict accurately. But the other part is based on one's own personal pattern of future taxable income, which we ought to be able to estimate. Most Roth conversion tools simply ask what the future marginal tax rate is expected to be. But the answer depends on other decisions being made, for instance, about pension options, and asset allocation.

But the intricacies go deeper. For example, the client may need to trade down to a smaller residence to remain solvent over the long haul. Without a thorough analysis, however, this will not be known. So the client or advisor who is guessing about future taxable income will not realize that a few hundred thousand dollars in home equity is going to be released and, probably, put into taxable savings or investments. This could easily push the client into the next tax bracket, defeating an assumption that marginal tax rates would be going down. Without the model, no one even knows that selling the house is the proper move, let alone anticipates the effect on the Roth conversion decision. Only an integrated model will bring to light connections of this sort that not only affect, but in many cases can completely reverse, what would otherwise be the standard advice.

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[6] My own company has put our money where our mouth is, on this point. We have actually developed software that wraps Monte Carlo processing around a comprehensive, detailed financial model, but it's not for sale—because it's actually a less instructive model than the nonstochastic version.

[7] Of course, not all the listed issues apply to everyone—only half might be relevant for a typical household. The ideal model could identify which issues apply, in addition to being able to produce recommendations concerning those that do.

Examples of the need for integrated decision making could be multiplied *ad nauseam*, so I will limit myself to one more: should the client annuitize some of his or her assets? Interestingly, there does not seem to be any established method of answering this question. Some models make it part of an asset allocation structure (a source of guaranteed income to offset investment risk). Others treat it as part of an expense analysis (using guaranteed income to cover "necessary" expenses, and non-guaranteed income to cover "discretionary" expenses). Others evaluate annuities as a tax shelter, or as a pure longevity hedge.

But annuitization carries an imposing downside: loss of control over one's assets—leaving them unavailable for other needs, including potentially severe ones. Granted, newer annuity products offer access to funds, but only at a pretty steep cost. So the annuitization election is nontrivial and ought to be made only when it produces a clear improvement in the odds of not running too low on money.

Annuities do not always have a highly beneficial impact, though. Many nonwealthy people have enough income and assets so that their risk is already slight, and other smaller adjustments might reduce that risk further. Others have low life expectancies because of age or illness, and so their situation is less vulnerable to the unforeseen. Many others are young enough so that their current long life expectancies mean that any annuity benefits they begin taking now are not going to be dramatically better than the traditional alternative: conserving one's principal and living off the interest.

Although one can invent rules of thumb about annuitization, only a comprehensive, detailed, and integrated financial model can legitimately analyze the risk of running out of financial resources, and determine at what age, if any, annuity purchases begin to make sense for a particular client. In fact, almost every other financial decision made at retirement—whether about other sources of income, the purchase or sale or re-allocation of other assets, the management of debt and expenses, or options concerning government, employer, or insurance benefits—has an impact on the desirability of annuitization. In turn, the annuitization decision shifts the balance between investment assets and income streams, and therefore affects other decisions, including, by the way, the Roth conversion decision, since annuity income is often nontaxable in full (if deferred) or in part (if paid out).

The importance of integrated analysis can hardly be overstated. Decisions made at retirement often determine whether the retiree (and his or her family) has a rewarding and nonstressful retirement, or whether he is plunging into disaster. Pretending that these decisions are independent of one another is virtually guaranteeing results that will be sub-optimal at best, and highly damaging at worst. Only a model that can deal with the relationships among all of these decisions has a fighting chance of doing even an adequate job, let alone a really good one.

Fortunately, since we are talking about building a comprehensive and detailed model, we already have the raw material we need to make it integrated. Figuring out precisely how to do this is admittedly difficult, but not beyond our capabilities.

Characteristic #5: Holistic

Ideally, a truly comprehensive and integrated model should also include issues traditionally considered nonfinancial, because they, too, can have deep, even determinative, effects on the long-term solvency of the household. For instance:

- Is a given person really going to be satisfied being retired, or is that itch to be productive and "in the game" going to come rushing back? If so, is a new, second career on the horizon, and what are the implications for future solvency?

- Long-standing tensions in a marriage can come to a head in retirement, when two unhappy people find themselves home alone all day, day after day. If a retired couple separates or divorces, all bets are off, and financial analysis that didn't take into account the shakiness of the marriage proves useless.

- Retirees often relocate geographically, for family reasons, or to pursue a lifestyle they prefer. Or they may become snowbirds, wintering in the south, and returning north in the spring. Such changes may significantly shift assets, increase or reduce expenses and radically change the odds of running out of money.

- The fulfillment of specific, sometimes long-held and not readily admitted, dreams can have high price tags, or result in foundational changes in lifestyle.

Personal history is like cultural history in that neither can be truly understood when split into isolated strands. We cannot understand personal finances apart from the other aspects of personal activity any more than we can understand economic history apart from politics, or medical progress, or the history of ideas. Since the plans we produce may be covering decades, blindness to "nonfinancial" factors means ignorance of some of the most important, and potentially most controllable, contingencies.

And, of course, just as financial issues affect one another, so do nonfinancial issues. A re-evaluation of one's life at retirement, for instance, may lead to changes in attitudes and relationships and diet, which will not only affect how one spends one's time and money, but may also increase life expectancy, which of course will have significant financial consequences, as well as an impact on other aspects of life.

A financial model cannot be truly reality-based unless it takes such "nonfinancial" matters into account, and does so in the same comprehensive, detailed, and integrated fashion that it handles directly financial matters.

Where Do We Draw the Line?

We have, admittedly, followed our path to just about its farthest conceivable extent. Have we gone too far? Is a retirement model that takes into account all areas of personal finance, and even all the nonfinancial decisions and changes that people face at that time of life, at all feasible?

The answer is, unequivocally, yes. I can say so because I have been involved in the construction of a comprehensive, integrated *financial* model that includes most, although not quite all, of the specific characteristics discussed here, and also in the design of *nonfinancial* extensions of this model that can probably be built in the next three or four years. This is not an advertisement, simply a fact. Models of this kind can be built and can be made usable by anyone.

What cannot be done is building such a model quickly, or without a great deal of serious thought and a significant investment of resources.

It is worth noting that nonprofessionals routinely take a very wide range of issues into account, though not necessarily well. If someone is considering retiring and wondering whether the timing is right, thoughts raised by caring friends would typically *not* concern arcane and unrealistic questions like "how much money can you afford to withdraw from your savings every year?", but instead, real and rich questions are asked such as, "are you going to start up that not-for-profit you've talked about?", "will you have to sell your summer cottage?", or "are you finally going to do something good for your health so you'll live long enough to get to know your grandchildren?"

These, and a myriad of others, are questions that may be financial or nonfinancial in their direct intent, but that mostly have important financial implications. Ordinary people already know that questions like these matter on many levels, that they connect with one another, and that all of them need to be figured out if retirement is going to be a success.

But while family and friends are smart enough to ask such questions, they do not have the means to work through the financial implications. We in the financial business have the intelligence and knowledge to model such issues, if we care enough to try.

And if we don't care enough, or perhaps don't have the resources, to develop truly robust, reality-based models, at least we should be aware that simplistic and non-integrated models are unsuited to helping most older clients, and that their use puts both our clients and our companies at risk.

The fundamental question, as noted earlier, remains: to how many people are you willing to give bad advice? No model will do right by everyone, but we surely have a long way to go, collectively, before we can feel confident that we are doing right by most. This is a goal to which we should aspire.

Biography

Chuck Yanikoski is the founder of the Association for Integrative Financial and Life Planning, and is founder and President of Still River Retirement Planning Software, Inc. Before that, he was with New England Mutual Life Insurance Company and American Financial Systems. He has been involved in retirement planning issues since 1991, and for most of those years has focused on the design of financial models for retirees and near-retirees. He has written for MarketWatch *Retirement Weekly*, the National Underwriter *Income Planning eNewsletter*, *Annuity Association News*, *DSG Dimensions,* and *The Journal of Information Ethics*. His work appears frequently in *Aging Well* and in *the Integrative Adviser*, and he is a regular columnist for the Workforce50 website. Chuck also writes the monthly *Retirement Readiness Report* for Still River's subsidiary, RetirementWORKS, Inc.