identifying the optimal time to annuitize retirement savings is a subject of both academic and practical interest. However, attempts to define the perfect time are doomed to failure, because the optimal moment can be identified only in retrospect, when you’re already dead. Spreading annuitization out over a fairly large number of years is preferable – not only for risk management reasons, but for psychological reasons as well.

This paper explores some little-noticed patterns in the timing of annuitization, and provides a simple, coherent, sales-sensitive strategy for dealing with the uncertainties of the problem as they occur in real life.

Our analysis falls into four parts:

1. The impact of investment returns.
2. The impact of annuity prices.
3. The impact of longevity.
4. The psychological aspect.
5. A simple, coherent strategy.

The impact of investment returns

It seems obvious that there should be an ideal time to buy an immediate annuity, or annuitize an existing account. Annuity rates go up with age, so the longer you wait the higher the rate. But if you wait too long (say, for example, until the year before you

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* A condensed version of this paper appears in the National Underwriter Income Planning eNewsletter for October (www.nationalunderwriter.com/income_planning/articles/2004_10_income_right_time.asp).

Part 1 of this series discussed the urgent and wide-ranging planning needs of people facing retirement, and concluded that if financial companies and employers want to serve this demographic group, they need to address all these planning needs. In Part 2 we further explored the follow-up question: can a comprehensive financial planning approach really work for retirees and, if so, how? Part 3 examined investment risks and strategies, and argued that most retirees should be investing conservatively rather than for asset growth. Part 4 identified serious problems with the use of Monte Carlo models in retirement income planning, and suggested an alternative approach.
die), then you have waited too long. Your payments may be bigger, but you don’t get as many of them. Somewhere between starting too soon and starting too late, there ought to be a perfect moment.

And there is, but only in retrospect – because all of the key factors that determine the optimal annuitization age can be known only once the annuitant has died.

Let’s start with the investment returns the consumer can receive from alternative investments. If those returns are high, then it makes sense to postpone annuitization. If returns are low, then early annuitization makes more sense. Table 1 gives three examples of this.

<table>
<thead>
<tr>
<th>Annual rate of return</th>
<th>Optimal age to annuitize</th>
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<tbody>
<tr>
<td>4%</td>
<td>50</td>
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<tr>
<td>5%</td>
<td>55</td>
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<tr>
<td>6%</td>
<td>60</td>
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<td>7%</td>
<td>65</td>
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<tr>
<td>8%</td>
<td>70</td>
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<tr>
<td>9%</td>
<td>75</td>
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<tr>
<td>10%</td>
<td>80</td>
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Table 1. Based on illustrative annuity rates using the RP-2000 Annuity Table for Healthy Annuitees with Medium Benefit Amounts, and a net interest rate (after all contract expenses) of 5.0%. Assummes death at normal life expectancy, using the 1990-1995 Individual Life Insurance Experience table. These results will reflect the trend but not the actual ages that apply to any particular annuity product or buyer.

The table shows that, regardless of the kind of annuity purchased, lower consumer investment results outside the annuity mean a lower optimal age to annuitize. More importantly, the difference between a low return and a high return is about 15 years in the optimal annuitization age.

Unfortunately, the actual investment returns that the consumer can receive cannot be known in advance. These will fluctuate quite a bit, even under conservative management. The consumer may aim for higher returns by investing more aggressively and thereby increase the probable optimum annuitization age, but this also increases the range of uncertainty.

* Scholarly analyses of annuitization sometimes work on the assumption that risk-taking retirees can annuitize later because they will get a higher return on their investments. If only life were that simple! One recent study that also provides many references to earlier studies is by Irena Dushi and Anthony Webb (“Annuitization: Keeping Your Options Open,” published by the Center for Retirement Research at Boston College). Investment risk-takers do increase their odds of higher returns and therefore increase their odds of having a higher optimal annuitization age. But they also increase their odds of poor investment results, and the lower optimal annuitization age that would result.
The impact of annuity prices

Table 1 also suggests that the optimal age depends on annuity prices. There is roughly a ten-year spread in the optimal age between an individual male buyer (who gets relatively favorable annuity rates) and a married couple of the same age (who get relatively unfavorable rates). In the table, the different rates are due to the different mortality of the three types shown. But immediate annuity rates are also influenced very strongly by interest rates. The two go up and down together.

This movement, too, is unpredictable. All that consumers (and their advisors) can do is say that at any current moment rates seem to be above or below normal. They cannot predict, however, what rates will be at the theoretically ideal annuitization age. If rates happen to be low at that time, then it was not the optimal age after all.

The impact of longevity

Table 2 illustrates what happens to a person (or couple) age 62, earning 6% on their outside investments, if they do not happen to die at life expectancy. What the table shows is that if they die early, they should have annuitized immediately (or, frankly, not at all, but we are not considering here whether someone should annuitize, but only when). More significantly, if they die late, then they are better off having waited longer.

Table 2. Based on illustrative annuity rates using the RP-2000 Annuity Table for Healthy Annuitants with Medium Benefit Amounts, and a net interest rate (after all contract expenses) of 5.0%. Assumes current age of 62 and annual investment earnings (outside the annuity) of 6.0%. These results will reflect the trend but not the actual ages that apply to any particular annuity product or buyer.

This result is very important, because living too long is exactly the situation that annuitants are trying to insure against.
Even more significant is the extraordinary range of optimal annuitization ages revealed in this table. In Table 1, where we looked at the impact of investment returns, the total range of optimal ages extended from a low of 52 to a high of 78. Table 2 extends this range to age 88. (Note that males are subject to this entire range; for females it is somewhat less, and somewhat less again for joint annuitants, though even in this best case it covers 25 years – or more, if Table 2 had used a consumer interest rate greater than 6%).

The variability that stems from the actual timing of death is about twice as great as the variability that stems from investment returns, and it is far less predictable.

The overall conclusion has to be: nobody knows when the optimal purchase date for an annuity will be, and nobody can even give you a reasonable guess. *

The psychological aspect

Potential annuitants have demonstrated great reluctance, so far, to actually purchase annuities. Much of this clearly has to do with lack of knowledge about annuities. But even when consumers understand the concept, they often are very hesitant to give up control of their assets, and often fear that they will “lose” by dying too young, thereby depriving their heirs.

The best solution to these sales obstacles may also be the best solution to the problem of identifying the best age to annuitize: spread out the annuitization over time.

Since an optimal age cannot be pinpointed, because of various risk factors, the safest strategy is to spread the process out over the range of years that includes those most likely to have proved optimal when the game is over. Only a gambler would want to play his whole stake on one number – but gamblers don’t buy annuities anyway.

This works psychologically as well. People do not like giving up control of their assets, but they sure do like getting a check in the mail every month. Spreading out the annuitization process makes the initial sale much easier, because the commitment is much smaller, and it also establishes a pattern of success that can facilitate later sales.

Here’s the scenario: a divorced managerial employee retires at age 62 with $400,000 in assets she controls. After doing whatever calculation magic you have available to you, you determine that she should annuitize 25%, or $100,000. She hesitates, because that’s a big chunk of money to give up. So you come back and explain that even if she agrees to the $100,000 annuitization, it should be spread out so that only one-fifth of that amount is annuitized at a time, and that this should be done at four-year intervals. So all she is really committing up front is $20,000 (just 5% of her total nest-egg), and she

* We have highlighted only three issues here that make up the bulk of the uncertainty. There are others. For example, annuity taxation is back-end loaded, making an annuity a partial tax-shelter and therefore arguing for earlier rather than later annuitization, making the optimal age somewhat lower than illustrated here, at least in some cases. But again, the magnitude of this effect depends on future tax policy and tax rates, both of which are unpredictable.
agrees that this isn’t very much to experiment with. So she signs the papers and from then on gets, say, $120/month from the insurance company.

In four years she is very likely still alive, and assuming her financial situation has not materially changed, it’s time to annuitize another $20,000. This time it’s even easier, because:

- She really likes getting a check every month, especially knowing that she will get it for as long as she lives.
- By now she has already gotten back almost $6,000 of the $20,000 she put into the first annuity, and she’s only 66 years old. This could go on for another 20 or 30 years. The annuity is looking like a terrific bargain and a really smart choice.
- The fear of “losing” by dying right away is much less now, because she’s already had the experience of annuitizing once and feeling like a winner.
- Since she’s four years older, the annuity rates are going to be more favorable to her (assuming interest rates have not gone down), and so her second monthly check will be bigger than the first one.
- Another $20,000 is still a modest amount

By the time our sample client is age 70 she will have so bought into the concept that you may have to restrain her from annuitizing the whole thing!

A simple, coherent strategy

All of this assumes, of course, that you have already determined that annuitization is appropriate, and in what amount. But having made that decision, the strategy we recommend is:

- For clients in their sixties or younger, spread annuitization out in four or five stages, each stage being three-to-five years apart, ending sometime in their late seventies or early eighties (or mid-eighties, for joint annuities; keep in mind that if one of them dies, the survivor will get an even better rate as an individual).

- For clients in their seventies, spread annuitization out in three or four stages, each stage being three-to-five years apart, ending sometime in their early-to-mid eighties (or late eighties or even early nineties for joint annuities).

- For clients in their eighties, spread annuitization over two or three stages, each stage being two-to-four years apart. However, if the client is willing, and interest rates are at an unusually favorable level, it may make more sense to annuitize all at once rather than take a chance on a big drop in rates.

* For discussion of the problem of whether to annuitize, see our earlier paper “A Needs-Based Approach to Decisions to Annuitize at Retirement. December, 2002” available, like all our papers, at: www.StillRiverRetire.com/SRRPS_FinancialTopics.asp
• Don’t be too rigid about timing. Watch interest rates and annuitize a year or so early or a year or so late rather than locking in a clearly adverse rate. Selecting a variable annuity, of course, can mitigate concerns about interest rate fluctuations as far as timing goes, if such a product is appropriate for the retiree.

Employing such a strategy** requires a certain amount of restraint on the part of the annuity salesperson, of course. One accepts a lower commission today in the expectation that there will be additional commissions down the road. But considering how few retirees are willing to annuitize large amounts all at once, this may be the only effective strategy anyway. It’s better for everyone to spread the process out over time than to frighten the consumer away altogether. It’s better to devise a strategy that benefits the retiree both financially and psychologically, than to offer one that benefits the salesperson but that the retiree will feel unhappy about accepting and probably not happy about rejecting, either.

To continue the conversation…

We are in the process of building these and other insights into a comprehensive planning model for retirees that will be available for review early in 2005. If you are interested in pursuing this topic or learning more about how this analysis fits into the broader picture, we’d love to hear from you.

Still River Retirement Planning Software, Inc., provides both web-based and desktop software offering specialized calculations related to retirement plans and retirement planning.

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** We would like to give credit here to one of our competitors, Jerome S. Golden, of Golden Retirement Resources, Inc. In a recent article (“How to Add Payout Annuities to the Retirement Mix,” National Underwriter, September 6, 2004), Golden uses a Monte Carlo model to show that spreading annuitization over a 15-year period is better than waiting until the last minute, or only partially annuitizing. He does not compare it to fully annuitizing up-front however, so the question he addresses is somewhat different from ours. Also, as is typical with Monte Carlo analyses, the results compare outcomes but don’t explain why they come out that way. We have tried to do a more detailed analysis in this paper. Still, it is comforting to see different approaches arriving at similar results.