Retirees Need Conservative Planning

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I'm getting tired of looking at forecasts by professional planners based on unrealistic returns, no contingencies, and very large stock allocations for retired people. Major flaws include:

- Ignoring security costs, even their own fees,
- Ignoring reverse-dollar-cost-averaging,
- Basing retirement returns on 50% (or less) chance of success.

In order to demonstrate some of these points, I'm going to use analyses of three different allocation strategies.

- 70% stocks, 20% bonds, 10% money markets
- 50% stocks, 40% bonds, 10% money markets
- 30% stocks, 50% bonds, 10% money markets

The underlying returns are based on S&P 500 stocks, long-term corporate bonds, and short-term treasury bills from Global Financial Data. The returns are adjusted each year for the CPI-U inflation, and the portfolios are rebalanced at the end of each year. Results are based on fifty historical scenarios. Each scenario is a twenty year case with the first from1927 to 1946. The next from 1928 to 1947, etc. The last case starts in 1976 and ends in 1995, just before the period of irrational exuberance is evident. (After we finish the 1996-2001+ cycle, I'll extend the results.)

To add some realism we're going to include some representative costs:

- 1.5% for stocks
- 0.5% for bonds
- 0.3% for treasury bills

It requires some selection skill to get costs as low as this, especially if the professional money manager charges 1% for his/her own take.

These are not fake Monte Carlo simulations based on contrived statistical models of each security type and arbitrary correlation coefficients with the other securities and inflation. These are honest pieces of actual history and represent the real histories of people retiring in each of those years who would have maintained those allocations throughout.

Everyone knows that, on the average, savers who make regular deposits benefit from dollar-cost-averaging that effectively gives the saver a higher return in a varying market. Unlike savers, retirees take money out on a regular basis. This means that they suffer from reverse-dollar-cost-averaging. Instead of a benefit, they get hurt by varying markets. When the security prices are low, they are taking money out. This leaves permanent damage.

Unlike savings scenarios, it is a tedious process to get the real returns when trying to find how big an inflation adjusted withdrawal will deplete the funds in twenty years. As in any case, you have to compute the balance each year using the individual real returns of each year. The difficult part is to find the inflation adjusted withdrawal that would produce a zero balance at the end of the last year. (We do this using Microsoft's Goal Seek.) Then we compute the real return that would correspond to those conditions. For those who want to duplicate these results, we assume all withdrawals are in the middle of the year. This is very close to answers for withdrawals spread uniformly through each year.

Figure 1 shows the results which are sorted so that the lowest return scenarios are at the top of the figure. This puts the returns into percentiles so that we can look at the results statistically. If you wanted 100% success rate, you'd have to use the returns at the top of the figure. You might suspect that returns often used for planning would be near the 50th percentile. Wrong!--even if the returns would be adjusted for costs. The average cost-adjusted real returns for 30%, 50% and 70% stocks from 1927 to 1995 are 3.8%, 4.8% and 5.8%, respectively. The planner who ignores costs likely would use historical values of 4.6%, 5.8%, and 7.0%. Compare those to the 50th percentile real returns of 1.6%, 2.4% and 3.3%. Maybe you'll start to think reverse-dollar-cost-averaging is real.

In fact planners who ignore costs have far less than a 20% chance of success, while those who include costs but fail to look at reverse-dollar-cost-averaging consequences have much less than a 30% chance of success. Such plans are unacceptable gambles.

I like to look at 80% success rates for retirees because if situations worse than that start to develop, the logical thing to do is to lighten up on withdrawals. In the thousands of cases I have looked at (using conservative returns in the Retirement Autopilot Pro program from www.analyzenow.com) it seldom takes a large reduction to preserve funds till death. However, planners who use high real returns for retirees subject their clients to very large withdrawal reductions later in life. Theses retirees end up paupers.

In fact, I believe that, for most people, it makes sense to use 0% real return when determining budgets for retirees. Zero percent real return means that in the long run, the retiree' returns will just be able to keep up with inflation. Figure 1 shows that this corresponds to about the 80th percentile of real world conditions even with stock allocations up to 70%. With 0% return, the retiree's annual budget is just last year's ending portfolio balance divided by the number of years the retiree expects to live. Any retiree can do this with an ordinary calculator at the beginning of the year using a conservative guess for how long he/she/both will live.

Professional planners base their projections on some interpretation of historical results, just as in the analysis here. It's extremely unlikely that the stretch of history ahead of you will be just like the past, and it's equally unlikely that you'll be able to predict retiree's future physical needs. I like the idea of looking at two or three possible future situations to gain some perspective. Then choose a retirement budget that provides a chance of surviving some potential adversities. Most of the planning programs on www.analyzenow.com let you run three cases simultaneously to gain this perspective.

Let's turn to the subject of an appropriate allocation for a retired person. There have been a number of publications recommending 100% stock allocations. People who listened to this advice a couple of years ago are now in dire straights, particularly if they continue spending at the projected levels until now. They desperately need to ratchet their budgets downward and not just hope for huge future returns.

As retirees get up in age, they don't gain a lot from extra return, but they can lose a lot in an adverse market with the securities that have the high return potential. Add to that the fact that late retirement can have a lot of unexpected extra costs from medical and support service needs. This points to the need to develop a surplus balance early, if possible, and conservative use of funds late in retirement. There is no best answer to this situation, but the approach I have used for many years has served me well. I try not to let my stock allocation get below 100 less my age, so that now at age 68, I don't let my stock get below 32%. On the other hand, I don't let it get above 110 less my age. At age 68, that's 42%. For the most part, I've been able to dispose of stock in good markets while acquiring it in bad markets. Each year I get 1% more conservative which has removed much of the sting from the recent market declines. With this mechanical method, I don't have to debate about my stock allocations. However, I have to admit to slow stock buying when market declines have driven me below my minimums.

I do one other thing to build a kitty for future financial unknowns. When my annual budget calculation shows that my investments grew so much in the past year that I now could spend a lot more, I don't increase my budget that much. I only increase it by the amount of inflation. The "autopilot" feature of my programs does this same thing plus adds some other feedback that improves results for retirees over a lifetime.

Summary

Before you select a return and inflation for your retirement planning, make sure that it accounts for security costs, reverse-dollar-cost-averaging, and gives you a better than 50% chance of success. Optimistic plans with large initial withdrawals exacerbate adverse circumstances later in life. Realistic plans recognize that you cannot predict the future accurately and must include conservative returns and some reserves for contingencies.

Fig. 1. Cost and Inflation Adjusted Returns for fifty 20 year rolling retirement periods.

	Stock Allocation		
Percentile	**30%**	**50%**	**70%**
100	-1.4%	-1.4%	-1.5%
98	-1.2%	-1.1%	-1.5%
96	-0.8%	-1.1%	-1.3%
94	-0.8%	-1.0%	-1.0%
92	-0.7%	-0.5%	-0.9%
90	**-0.7%**	**-0.4%**	**-0.4%**
88	-0.5%	-0.3%	-0.3%
86	-0.4%	-0.3%	-0.2%
84	-0.3%	0.0%	-0.1%
82	-0.3%	0.3%	0.0%
80	**0.0%**	**0.3%**	**0.1%**
78	0.0%	0.5%	0.3%
76	0.0%	0.6%	0.4%
74	0.1%	0.6%	0.8%
72	0.4%	0.8%	1.2%
70	**0.4%**	**1.0%**	**1.2%**
68	0.5%	1.3%	1.3%
66	0.6%	1.6%	1.3%
64	0.9%	1.7%	1.8%
62	1.0%	1.7%	2.0%
60	**1.1%**	**1.9%**	**2.2%**
58	1.2%	2.1%	2.4%
56	1.4%	2.2%	2.6%
54	1.4%	2.3%	2.9%
52	1.5%	2.4%	3.0%
50	**1.6%**	**2.4%**	**3.3%**
48	1.6%	2.6%	3.4%
46	1.6%	2.8%	3.5%
44	1.7%	2.9%	3.6%
42	1.9%	3.3%	3.7%
40	**1.9%**	**3.4%**	**3.7%**
38	2.5%	3.7%	4.2%
36	2.5%	3.8%	5.3%
34	2.9%	3.9%	5.3%
32	3.2%	4.0%	5.6%
30	**3.4%**	**4.1%**	**5.7%**
28	3.4%	4.2%	5.7%
26	3.7%	4.3%	5.8%
24	3.8%	4.8%	6.2%
22	3.8%	4.9%	6.4%
20	**3.9%**	**5.2%**	**6.4%**
18	3.9%	5.8%	6.7%
16	4.0%	6.1%	7.3%
14	4.2%	6.5%	8.2%
12	4.2%	6.5%	8.8%
10	**4.3%**	**6.8%**	**9.1%**
8	4.6%	6.8%	9.3%
6	4.9%	6.9%	9.5%
4	5.0%	6.9%	9.9%
2	6.5%	7.6%	10.7%