

CAN THEY MAINTAIN THEIR LIFESTYLE?

RETIRED COUPLE SEEKS ASSURANCE

By Loyd J. Stegent

A few minor changes right now in their current spending can help a retired couple ensure that their savings will last them through age 95 without any drastic changes in their lifestyle later on, according to an analysis by financial planner Loyd Stegent.

INVESTOR PROFILE

- Mr. and Mrs. Zephyr are a retired couple, both aged 66.
- Mr. Zephyr is an MBA and former executive with a multi-national information technology company. He has an above-average degree of financial savvy. Mrs. Zephyr is a housewife with no investment knowledge or interest in managing their personal finances.
- Risk tolerance range is low to moderate.
- Both are in excellent health and, with a family background of mixed longevity, expect that at least one of them will live to age 95.
- Mr. Zephyr's parents are alive and self-sufficient. None of the Zephyr's four children are financially dependent on their parents.

FINANCIAL GOALS

- Desire a 98% level of confidence that they can afford their lifestyle to age 95.
- Want to sell their current home and move to a retirement community at age 80.
- Would prefer to self-insure for potential long-term care needs.

LIKES AND DISLIKES

- Prefer individual stocks to mutual funds.
- Want to keep approximately two years' worth of living expenses in cash and eight years' worth in low-risk bonds.

The Zephyrs are retired and living on a fixed income. Their investment portfolio is presented in Table 1. They desire a low-to-moderate level of risk in their portfolio and a 98% level of confidence that their portfolio will last them 20 more years. The analysis here tests their likelihood of success, and offers suggested ways to improve the aftertax rate of return on their portfolio while maintaining or reducing the level of risk.

To: George and Rita Zephyr
The East Coast, U.S.A.

Dear Mr. and Mrs. Zephyr:

You indicated to me that your biggest concern is ensuring that your portfolio will provide you with sufficient supplemental income for at least the next 20 years.

Loyd J. Stegent, CPA/PFS, CFP, is the director of financial planning and a founding director of Cornelius, Stegent & Price, LLP, 24 Greenway Plaza, Suite 515, Houston, Texas 77046; 713/840-9300.

FINANCIAL SUMMARY

Annual Income: \$78,000

- Annual pension income: \$46,000
- Social Security benefits: \$29,000
- Dividend and interest income: \$3,000

Annual Expenses: \$103,500

- Annual household expense budget: \$44,000
- Mortgage principal and interest: \$12,700
- Term life insurance premiums: \$3,300
- Federal and state income taxes, and property taxes: \$19,200
- Travel, entertainment, home improvement and vehicle depreciation allowance: \$21,000
- Miscellaneous gifts and charitable contributions: \$3,300

Financial Assets: \$430,090

- Annual withdrawals of \$25,500 (5.9%) to cover excess spending goals.

So that you can better understand our analysis of this issue, I'd first like to explain to you our planning approach.

Financial planning is all about balance: balance between the desired income level and the comfort that significant risks will not be needed to attain such income. In other words, minimizing the investment risk while maximizing the confidence in goal achievement.

To determine if such balance exists, we must make certain assumptions about the future. On a macro level, we must assume that the future will hold at least as much opportunity for U.S. investors as has the past.

On a micro level, we must make estimates about future average long-run performance and standard deviation (risk level) for each major asset class.

Planning Assumptions

Table 2 provides the estimates that we used in this projection. These estimates are forward-looking long-term projections of expected asset class performance. They are not simply the historical average performance. The time period they cover encompasses full economic and market cycles. As a general rule, the projected returns assume a period of time covering at least the next 10 years.

These estimates also represent an average return (income plus appreciation) over the long term. In any one year, the actual performance of the asset class will be above or below the long-term average. The average does not try to incorporate a specific year-by-year economic forecast or market scenario. Estimates of expected return are based on projected inflation, asset

class risk premiums and on more subjective considerations that involve economic forecasting.

In addition to expected return, an investment's expected risk is a critical variable. The risk for an asset class represents the investment's estimated average annual level of volatility. Volatility is based on the notion of uncertainty. If there is less certainty that the asset class will be at or near the expected return, then more volatility and short-term risk is contained in that asset class.

Statistically, risk is measured by standard deviation. Standard deviation is an estimate of the possible future range of actual returns above or below the expected return to be generated by the asset class. The higher the standard deviation, the greater the range of return possibilities and therefore the less certainty about the outcome. This means a higher probability of failure to achieve financial goals based on expected return assumptions.

TABLE 1. THE ZEPHYRS' BALANCE SHEET

Taxable Accounts

Cash	\$26,944
Various individual stock positions	76,827
Templeton Dragon Fund (emerging market int'l stock)	1,800
Royce Value Trust (mid-cap stock)	83
Templeton Global Income (int'l bond)	22,417
Taxable Account Totals	\$128,071

Tax-Deferred Accounts

Cash	\$13,297
Various individual stock positions	19,361
Templeton Emerging Markets Income (int'l emerg mkt)	17,250
Berger Small Cap Value (small-cap stock)	6,158
Pimco Total Return (corp bond)	45,306
Stable Value Fund (cash, gov't & corp bond)	125,058
Inflation Protected Bonds (gov't bond)	9,909
Total International Stock Market Index (int'l stock)	2,133
Vanguard Small Cap Value Index (small-cap stock)	10,171
Tax-Deferred Account Totals	\$248,643

After-Tax Variable Annuities

Swiss Franc Fixed Rate (gov't bond)	\$21,240
Alger American Growth (large cap stock)	4,681
Vanguard REIT Index (real estate)	6,555
USAA Life Divers Asset (corp bond, large-cap stock)	13,742
Aftertax Variable Annuity Account Totals	\$46,218

Roth IRA Accounts

Pimco High Yield (high-yield bond)	\$3,528
Oakmark Equity & Income (corp bond, mid-cap stock)	1,917
Marshall Midcap (mid-cap stock)	1,713
Roth IRA Account Totals	\$7,158

Total Investment Assets \$430,090

Each fund's asset class is indicated in parentheses; note some are invested in several asset classes.

Setting investment objectives and asset allocation strategy is a dynamic process because future investment returns and inflation rates will fluctuate from year to year. As a consequence, when your investment objectives are stated as a target return objective, or as a target level of future asset value, the actual value will likely differ from the target value in any one year.

Simulating Possible Outcomes

To help quantify this uncertainty, financial planners use a technique called Monte Carlo simulation to predict a range of future outcomes and a probability of success. This is done to subject the financial plan to different market conditions that might actually be experienced. In this way, Monte Carlo simulation tries to replicate financial market processes for evaluation of the merits of alternative asset allocation strategies.

This simulation process makes it relatively easy to test the financial consequences of alternative asset allocation strategies. Long-term investment objectives can be efficiently evaluated and refined, as the same financial forecast process is repeated many times using random rates of investment return for any given year. The results of these experiments produce a range of key financial parameters.

The range of results will demonstrate the likely probability of meeting the investment objectives of your plan and assist in modeling and quantifying the dynamic and uncertain nature of the asset allocation strategy we help you develop. In the end, it will produce a good estimate of the range of possible future outcomes under a particular set of investment objectives.

CURRENT ASSET ALLOCATION

Your current asset allocation, as broken down by asset class, is a relatively conservative mix: 12.5% cash, 53.5% bonds and 34% equities. The term “conservative” is used due to the relatively low weighting in equities.

Your modest exposure to equities has been a huge plus over the last three years, as other investors learned the hard way that a prevention for bear markets is yet to be discovered. However, given enough time the Federal Reserve’s stimulate medicine will eventually cure what ails the economy and those bear market losses will become bull market gains.

The fact is, through all the depressions/recessions, world wars, oil shortages, terrorist acts, nuclear near misses, and stock market crashes since 1925, stocks have returned about 11%, while bonds have returned about 5.5%. So, being an owner of great businesses has been worth twice as much as being a loaner to those same businesses. However, if you adjust those returns for the 3% average inflation rate since 1925, you get real (inflation-adjusted) returns of 8% for stocks and 2.5% for bonds. Or in real dollars, more than three times the return for being the owner versus the loaner.

TABLE 2. ASSET ALLOCATION AND INVESTMENT ANALYSIS ASSUMPTIONS

	Current Analysis Assumptions:		
	Asset Allocation (%)	Expected Return (%)	Expected Risk (%)
Cash			
Money Markets	12.6	2.00	2.00
Total Cash Allocation	12.6%		
Bonds			
Government Bonds	17.1	6.25	6.00
Corporate Bonds	28.0	7.00	8.50
International Bonds	7.6	7.50	13.00
High-Yield Bonds	0.8	9.75	16.00
Total Bond Allocation	53.5%		
Equities			
Real Estate	1.5	8.00	14.00
Large-Cap Stocks	7.7	10.50	14.75
Mid-Cap Stocks	7.3	11.25	18.25
Small-Cap Stocks	5.3	12.00	20.25
International Stocks	4.2	11.50	22.25
Commodity/Natural Resources	1.7	8.50	30.00
Venture Capital	1.7	13.00	35.25
Emerging Markets	4.4	12.25	40.25
Total Stock Allocation	33.9%		
Total Portfolio	100.0%	7.65	6.57

Asset Allocation by Tax Status

	Cash Allocation (%)	Bond Allocation (%)	Stock Allocation (%)
Taxable Accounts	50	10	54
Tax-Deferred Accounts	50	76	31
After-Tax Variable Annuities	—	12	13
Roth IRA Accounts	—	2	2

Your primary goal is very long term. However, your portfolio is heavily weighted toward shorter-term assets. As a result, the expected return on your current portfolio is a conservative 7.6%. The question is this: Will a 7.6% return be high enough to achieve your long-term financial goal?

FINANCIAL GOALS

You have indicated that you would like—quite understandably—to maintain your current standard of living until age 95. Right now, you have an annual spending need of \$90,000 before inflation and income taxes. However, you expect to reduce your expenses by about \$10,000 per year beginning in 2007 because of your current vehicle depreciation allowance, and your 2007 car purchase is expected to be the last. In 2017, you

expect to move into a retirement community for the military, which will result in an increase in living expenses of \$48,000 per year. Removing the ownership costs of your current home will save \$28,000, for a net increase in living expenses of \$20,000 per year.

Your move into the retirement community will require a down payment of \$268,000 in today's dollars. Those funds will come from the sale of your current home, for projected net proceeds of \$600,000 (assuming a compounded appreciation rate equal to the inflation rate of 3%). The excess monies will be added to your investable assets and assumed to grow at 7.6% per year.

PROJECTED RESULTS

Now the good news. Based on a linear projection using an average annual return of 7.6% and an inflation rate of 3% during your retirement years, you will have enough resources to achieve your goal of funding living expenses through age 95. A complete cash flow projection over these years is shown in Table 3.

Even better, the projected ending value of your portfolio is a fairly sizeable \$670,000 (\$285,000 in today's dollars, or about 66% of the current value of your portfolio), which provides you with a very comfortable margin of safety.

Simulated Scenarios

Since actual year-by-year returns vary greatly from the average return due to volatility, the specific sequence of returns you are lucky (or unlucky) enough to get will affect your ability to achieve your financial goals. For that reason, Monte Carlo simulation has been used to calculate how variations in rates of return each year will affect the results.

By running up to 10,000 iterations of your financial plan, a range of possibilities is produced and measured as to the number of successful versus unsuccessful outcomes in the plan. This measurement is converted into a percentage that provides a confidence level in the achievability of your plan.

Now the bad news: Monte Carlo simulation predicts a 75% chance of success for your plan.

How to Get More Certainty

I call this "bad" news because you indicated that you want a 98% level of confidence that you will not run out of assets before age 95.

However, there are only two certainties in life (death and taxes). The highest degree of confidence attainable through Monte Carlo simulation is 95%.

But we're back to the good news: To go from a 75% to a 95% chance of success requires a surprisingly small 2% reduction in your spending goals. The small adjustment necessary today is evidence of the power of compounded earnings. Many years of saving just a small amount will grow into a significantly larger sum in the

future.

The bottom line: The surest way for you to achieve your long-term goal of complete certainty that your investment portfolio will sustain your spending needs for the next 20 years is to make a modest adjustment in your current living expenses, reducing them by a little less than \$2,000.

SUGGESTED POSITIONING

Overall, you have a very diverse portfolio with a mix between stocks and bonds that creates the desired balance between the amount of investment risk you said you could stomach and your financial goals. However, there is some asset repositioning available that will result in higher aftertax returns without additional investment risk.

As a general rule, the lower taxable yield on stocks as compared to interest-bearing investments and REITS, as well as the opportunity to take capital gains and losses on stocks, make taxable accounts the best vehicle for holding equities. Tax-sheltered accounts should be used for high income-generating assets. And with the recent passage of the Jobs and Growth Tax Relief Reconciliation Act of 2003, this strategy is even more valuable due to the 15% tax rate on dividends and capital gains. Interest income and REIT dividends continue under the new law to be taxed at ordinary income rates that are as high as 35%.

Another asset positioning strategy is to keep international equities in taxable accounts. Doing so will allow you to take a tax credit against the foreign taxes paid by international mutual funds. The credit is not allowed for

		Beginning	Cash Flow	Addi
Ages	Year	Portfolio Value	Pension/Soc Sec Benefits	Assets
66/66	2003	\$430,090	\$74,868	
67/67	2004	\$432,407	\$76,678	
68/68	2005	\$435,457	\$78,543	
69/69	2006	\$439,223	\$80,464	\$600,000
70/70	2007	\$450,410	\$82,442	
71/71	2008	\$455,631	\$84,480	
72/72	2009	\$473,847	\$86,579	
73/73	2010	\$493,309	\$88,740	
74/74	2011	\$515,747	\$90,967	
75/75	2012	\$539,640	\$93,260	
76/76	2013	\$565,054	\$95,623	
77/77	2014	\$592,057	\$98,056	
78/78	2015	\$620,747	\$100,562	
79/79	2016	\$651,164	\$103,143	
80/80	2017	\$683,416	\$105,802	\$600,000
81/81	2018	\$889,141	\$108,540	
82/82	2019	\$899,202	\$111,361	
83/83	2020	\$908,091	\$114,266	
84/84	2021	\$915,658	\$117,258	
85/85	2022	\$921,743	\$120,341	
86/86	2023	\$926,249	\$123,515	
87/87	2024	\$929,006	\$126,785	
88/88	2025	\$929,837	\$130,153	
89/89	2026	\$928,552	\$133,622	
90/90	2027	\$924,948	\$137,195	
91/91	2028	\$918,939	\$140,875	
92/92	2029	\$910,329	\$144,666	
93/93	2030	\$898,920	\$148,570	
94/94	2031	\$884,504	\$152,592	
95/95	2032	\$867,048	\$11,616	

TABLE 3. CASH FLOW PROJECTIONS FOR CURRENT FINANCIAL PLAN

v Additions	Cash Flow Subtractions									Ending Portfolio Value	
	Asset Liquidation	Living Expenses	Gifts & Charitable Donations	Term Life Insure	Vacation & Entertain	Home Improve/Repair	Vehicle Deprec Allow	Military Retire Comm	Income Tax Expenses		Invest Earnings @7.6%
	\$0	\$62,400	\$3,300	\$3,348	\$5,000	\$6,000	\$10,000	\$0	\$13,321	\$30,818	\$432,407
	\$0	\$63,552	\$3,339	\$3,348	\$5,150	\$6,180	\$10,300	\$0	\$12,757	\$30,998	\$435,457
	\$0	\$64,739	\$3,379	\$3,348	\$5,305	\$6,365	\$10,609	\$0	\$12,253	\$31,221	\$439,223
\$6,377	\$65,961	\$3,421	\$3,348	\$5,464	\$6,556	\$10,927	\$0	\$11,951	\$31,974	\$450,410	
\$0	\$67,220	\$3,463	\$3,348	\$5,628	\$6,753	\$11,255	\$0	\$11,873	\$32,319	\$455,631	
\$0	\$68,516	\$0	\$3,348	\$5,796	\$6,956	\$0	\$0	\$15,267	\$33,619	\$473,847	
\$0	\$69,852	\$0	\$3,348	\$5,970	\$7,164	\$0	\$0	\$15,782	\$34,999	\$493,309	
\$0	\$71,227	\$0	\$1,764	\$6,149	\$7,379	\$0	\$0	\$16,377	\$36,594	\$515,747	
\$0	\$72,644	\$0	\$1,764	\$6,334	\$7,601	\$0	\$0	\$17,025	\$38,294	\$539,640	
\$0	\$74,103	\$0	\$1,764	\$6,524	\$7,829	\$0	\$0	\$17,730	\$40,104	\$565,054	
\$0	\$75,606	\$0	\$1,764	\$6,720	\$8,063	\$0	\$0	\$18,495	\$42,028	\$592,057	
\$0	\$77,155	\$0	\$1,764	\$6,921	\$8,305	\$0	\$0	\$19,296	\$44,075	\$620,747	
\$0	\$78,749	\$0	\$1,764	\$7,129	\$8,555	\$0	\$0	\$20,194	\$46,246	\$651,164	
\$0	\$80,392	\$0	\$1,764	\$7,343	\$8,811	\$0	\$0	\$21,131	\$48,550	\$683,416	
\$600,000	\$58,083	\$0	\$1,764	\$0	\$0	\$0	\$477,978	\$25,655	\$63,403	\$889,141	
\$0	\$59,826	\$0	\$1,764	\$0	\$0	\$0	\$74,782	\$26,209	\$64,102	\$899,202	
\$0	\$61,621	\$0	\$1,764	\$0	\$0	\$0	\$77,026	\$26,778	\$64,717	\$908,091	
\$0	\$63,469	\$0	\$1,764	\$0	\$0	\$0	\$79,337	\$27,365	\$65,236	\$915,658	
\$0	\$65,373	\$0	\$1,764	\$0	\$0	\$0	\$81,717	\$27,968	\$65,649	\$921,743	
\$0	\$67,335	\$0	\$1,764	\$0	\$0	\$0	\$84,168	\$28,517	\$65,949	\$926,249	
\$0	\$69,355	\$0	\$1,764	\$0	\$0	\$0	\$86,693	\$29,068	\$66,122	\$929,006	
\$0	\$71,435	\$0	\$1,764	\$0	\$0	\$0	\$89,294	\$29,619	\$66,158	\$929,837	
\$0	\$73,578	\$0	\$1,764	\$0	\$0	\$0	\$91,973	\$30,164	\$66,041	\$928,552	
\$0	\$75,786	\$0	\$1,764	\$0	\$0	\$0	\$94,732	\$30,702	\$65,758	\$924,948	
\$0	\$78,059	\$0	\$1,764	\$0	\$0	\$0	\$97,574	\$31,108	\$65,301	\$918,939	
\$0	\$80,401	\$0	\$1,764	\$0	\$0	\$0	\$100,501	\$31,476	\$64,657	\$910,329	
\$0	\$82,813	\$0	\$1,764	\$0	\$0	\$0	\$103,516	\$31,794	\$63,812	\$898,920	
\$0	\$85,297	\$0	\$1,764	\$0	\$0	\$0	\$106,622	\$32,052	\$62,749	\$884,504	
\$0	\$87,856	\$0	\$1,764	\$0	\$0	\$0	\$109,821	\$32,073	\$61,466	\$867,048	
\$0	\$90,492	\$0	\$1,764	\$0	\$0	\$0	\$113,115	\$50,420	\$47,525	\$670,398	

foreign taxes paid inside tax-sheltered accounts, like IRAs, 401(k)s, or variable annuities.

With these principles in mind, you have \$22,500 in international bonds in a taxable account and \$20,000 in international/emerging market equities in various tax-sheltered accounts. The international bonds could be moved to a tax-sheltered account and replaced in the taxable accounts with the international equities for higher aftertax returns and foreign tax credit utilization. In addition, the individual stock holdings could be moved to your taxable accounts, while your mutual funds could be moved to tax-sheltered accounts. However, you should first consider the immediate tax consequences of selling any investment in a taxable account before making any changes.

Another suggestion is for you, George, to roll your 401(k) over from your former employer into an IRA

rollover account. Even though you are not paying any fees to retain the assets inside your 401(k), your investment choices are limited and Rita may have fewer distribution options available to her should you die before rolling over the balance.

CONCLUSION

Overall, you have done a terrific job of planning, saving and investing for retirement. Now that you are in your golden years, you should enjoy all that you have worked and sacrificed long and hard to achieve.

In so doing, I would like for you to consider one other suggestion: George, try to reduce some of your portfolio management responsibilities by hiring a professional investment counselor. I suggest this in particular because Rita has no experience or interest in managing your

finances. If you were suddenly unable to continue in your current role, she would be left to explore an unfamiliar world or hire an advisor without any experience in how to evaluate the prospects. In fact, in all likelihood, Rita will have total financial responsibility at some point in her life.

So, I have to ask you: What better way to know that your family's financial interests are in the hands of an ethical and competent financial advisor than for the two of you to begin the selection process together, while you still can?

Sincerely,
Lloyd J. Stegent

Subscribe to *Computerized Investing* ...

And every other month you'll receive the best, most comprehensive newsletter of its kind. For 20 years, our editors have brought investors like yourself news, reviews, features, and comparison charts on every aspect of investing with your PC. You can be confident that if it's worth knowing, *Computerized Investing* will tell you all about it first

A wide range of educational and informative articles

With a *Computerized Investing* subscription, as with all AAI publications, our goal is to make you a better investor. So we don't just preach—we teach. Articles are designed to expand your knowledge and improve your skills at tasks such as stock screening, charting, portfolio analysis, and navigating the Web.

Keep in the know about new products and services

You'll always be fully briefed on software updates, site launches, introductory offers, and product improvements.

Meaningful comparisons and ratings in every issue

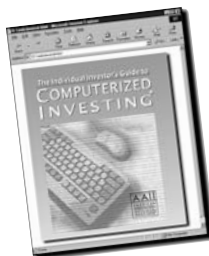
To help you make buying decisions quickly and accurately, we regularly analyze the pros and cons of products and services like these:

- Personal Finance Programs
- On-Line Services
- On-Line Discount Brokers
- Fundamental Analysis Programs
- Portfolio Management Programs
- Technical Analysis Programs
- Mutual Fund Screening Systems

Included With Your *CI* Subscription: 400-page On-Line Guide to *Computerized Investing*

A treasure trove of timely, useful, absolutely accurate information—from software to hardware, from the Internet to on-line services.

- Unbiased ratings of software and information services.
- Comparisons of screening tools for fundamental and technical analysis.
- Special alerts to tell you what to consider and what to avoid.



Exclusive *CI* Subscribers Area at AAI.com

- Access past *Computerized Investing* articles
- Link with other AAI-member, computer-savvy investors
- Help yourself to valuable freeware and shareware

Also: Free E-Mail Newsletter Every Two Weeks

- Ground-breaking news stories
- Question & answer sessions from *CI* members
- Powerful Web links and software downloads handpicked by *CI* editors



1-Year Subscription—Just \$30

- 400-page On-Line Guide
- Six issues of the newsletter
- Access to the private Web site area

2-Year Subscription—Just \$55

- Includes all of the above PLUS ...
- AAII's Spreadsheet Collection CD-ROM
 - More than 50 powerful templates covering portfolio management and investment analysis
 - Spreadsheets for IBM and Mac
 - Valued at \$19.95, yours FREE

**Order Today, Call
800-428-2244**

Orders can also be placed by fax at
312-280-9883, by E-mail at
members@aaii.com or by mail using
the enclosed post-paid envelope.